

Building Business-driven Data Products

From Silos to Semantics and
how this supports AI Projects

Kirk Thieme
May 12th, 2026







Accelerating **AI Projects** and **Data Products**

by enabling
Business Data Teams

Speaker Introduction

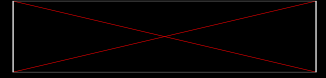


Kirk Thieme

Head of Data Product Management

CRM Excellence – Our purpose

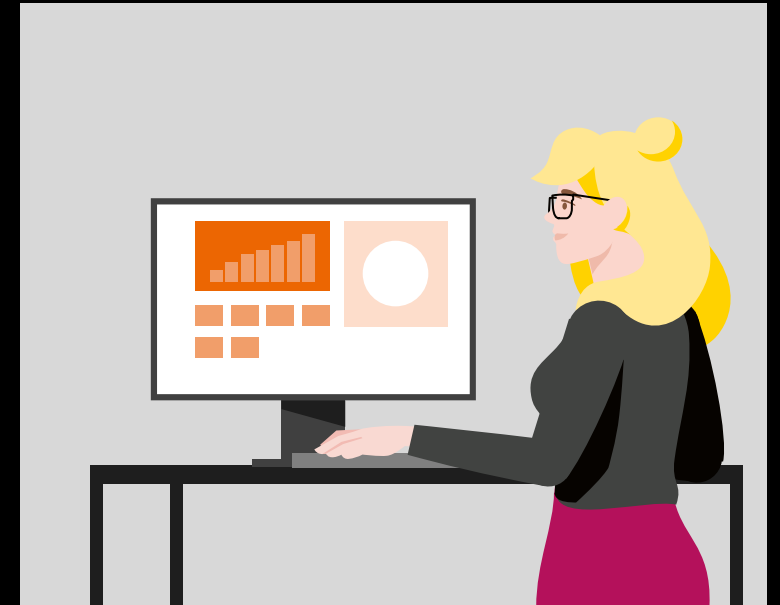
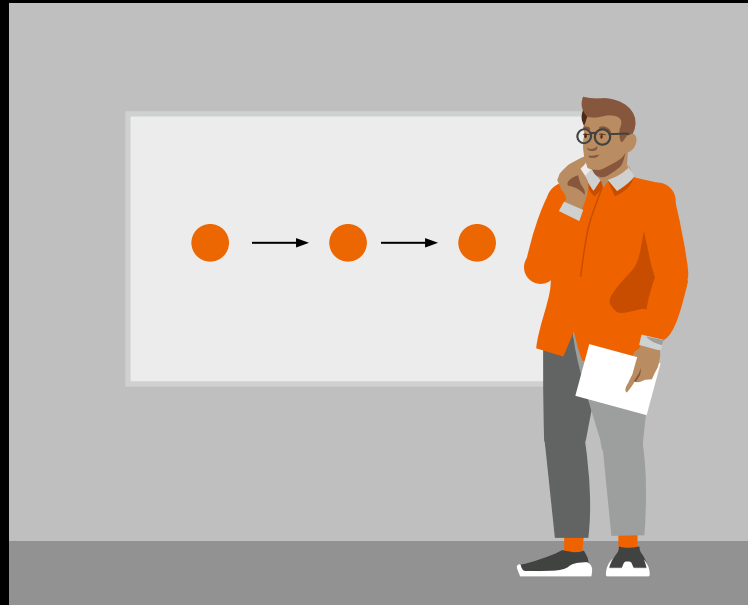
How we drive Excellence for our Sales operations



We strive to make every Sales operation excellent – enabling great customer experiences.

We help our Sales force stand out at every step of the Sales process.

We build a strong foundation of processes and tools, developing our Sales force's capabilities and skills.



One of our strategic pillars for the next years



Enabling AI augmented seller



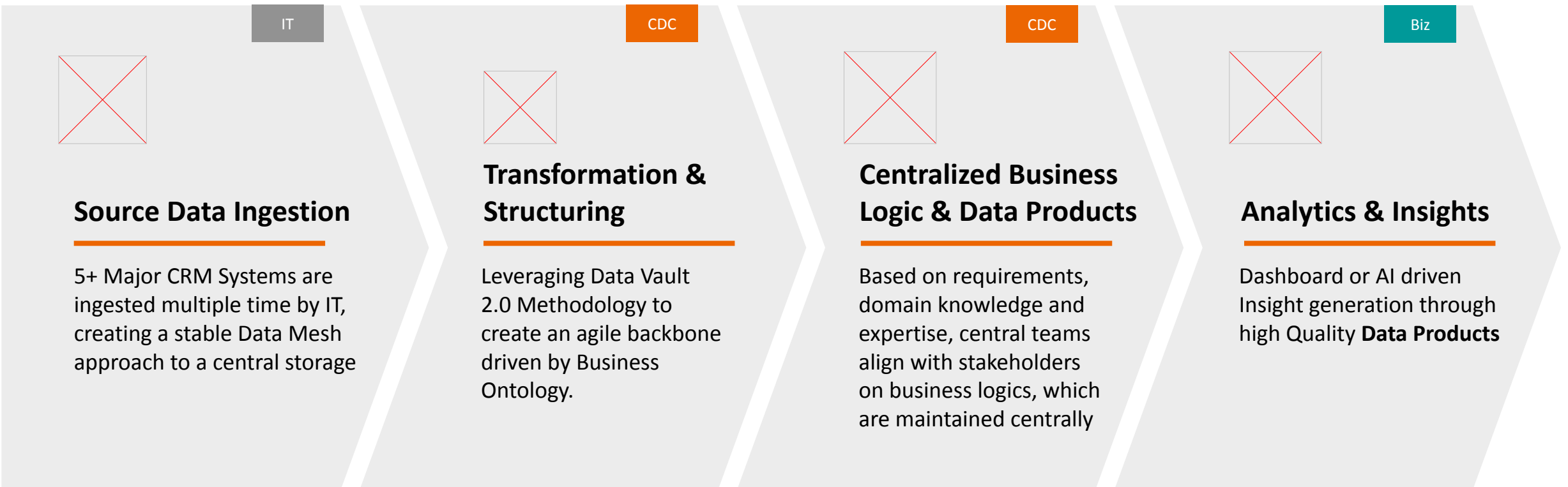
- The hypothesis is sales staff gain from personal AI agents.
- These agents save time through proactive and reactive support.
- They improve employees' grasp of customer data.



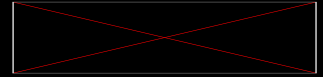
Breaking the Silos

Architectural Principles of CRM Data Platform

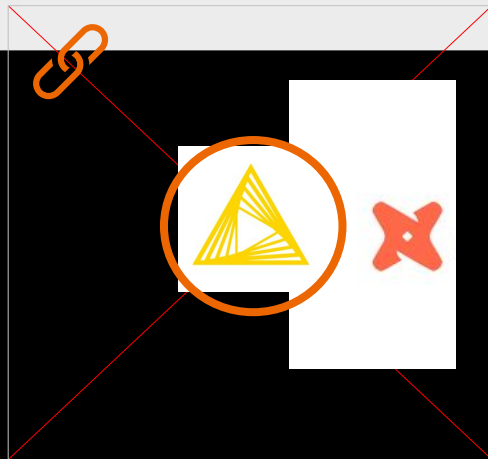
End-to-end overview to break Silos into Insights and collaboration along the Pipeline



CRM Data Cloud architecture & technology



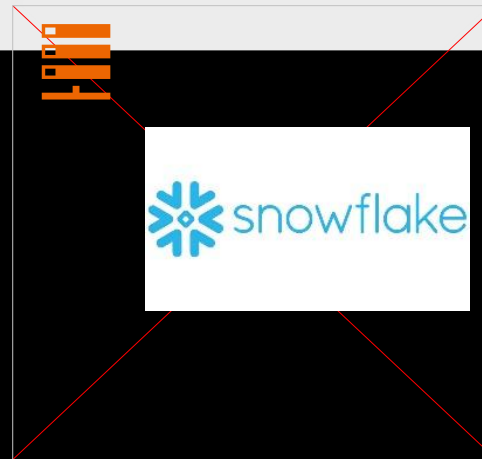
Layer 01



Data transformation

- Involves steps like data cleansing, enrichment and profiling
- This ensures **high data quality, usability and literacy**

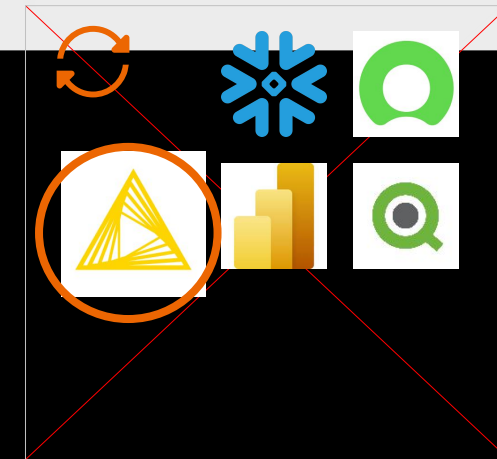
Layer 02



Data products

After the transformation, the CRM data cloud provides you with **reliable and interconnected data products**

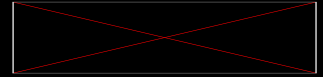
Layer 03



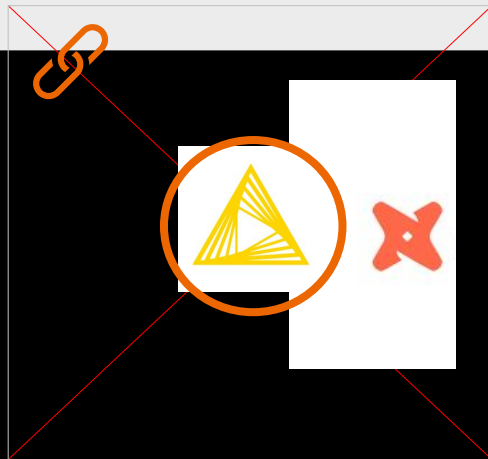
Data connection

- Simply connect to our data products with your technology of choice (Excel, PowerBI ... etc.)
- Gain the **insights you need to drive your business forward**

CRM Data Cloud architecture & technology



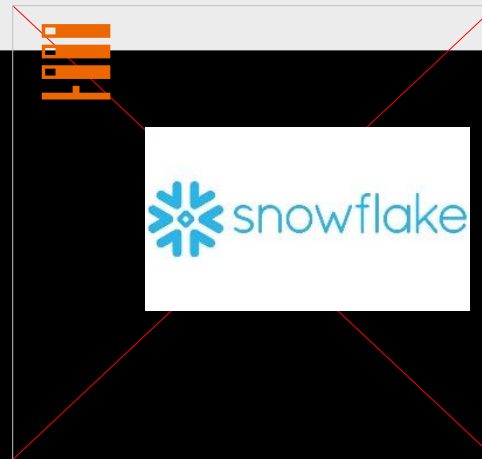
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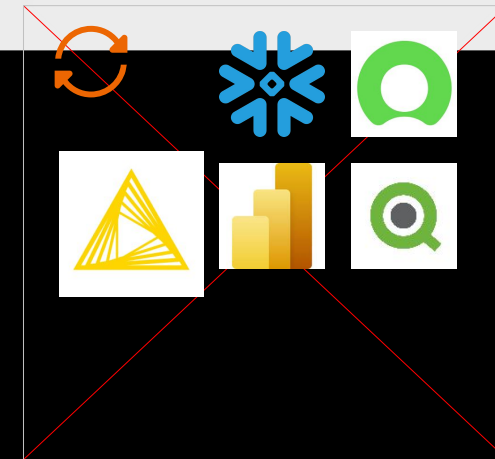
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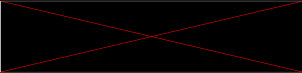


Data connection

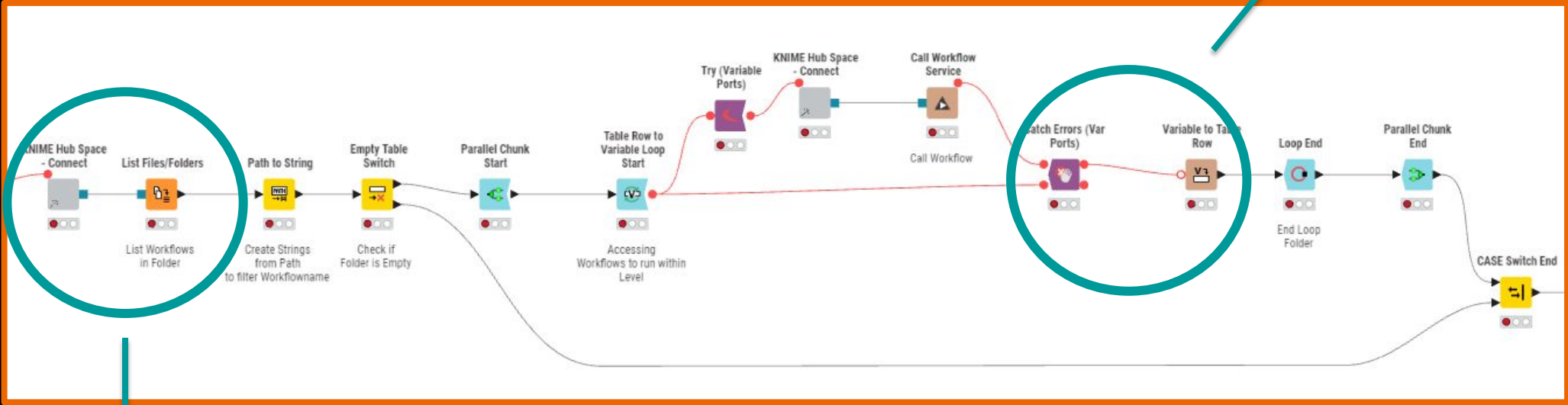
- Simply connect to our data products with your technology of choice (Excel, PowerBI ... etc.)
- Gain the **insights you need to drive your business forward**

We can use KNIME to orchestrate our Workflows

~600 Workflows that are orchestrated

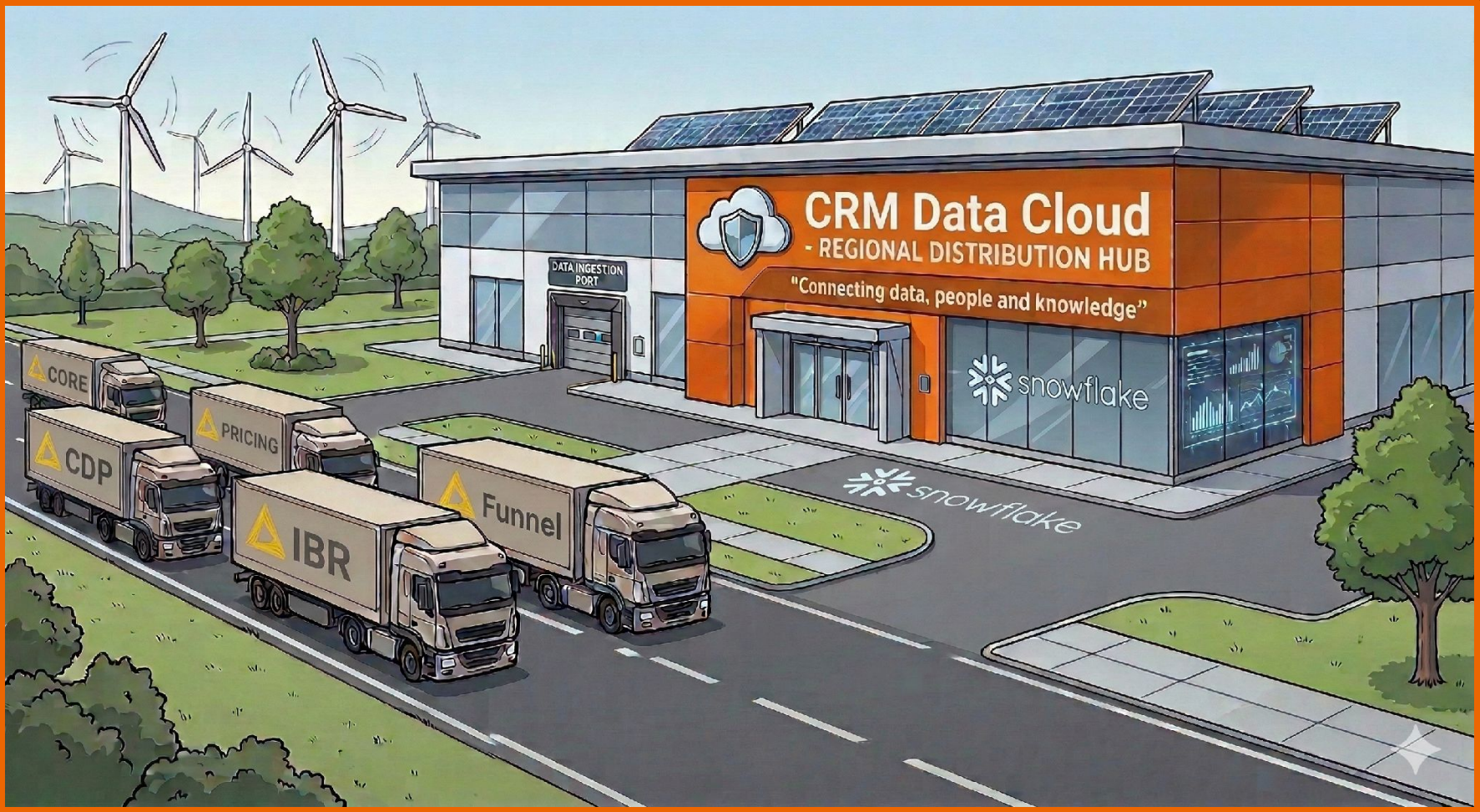
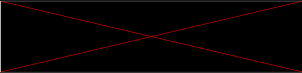


Logs Error or Success of called Workflow



Reads all Workflows from Folder

Shipping Data Products to an accessible Layer on the Central Data Platform



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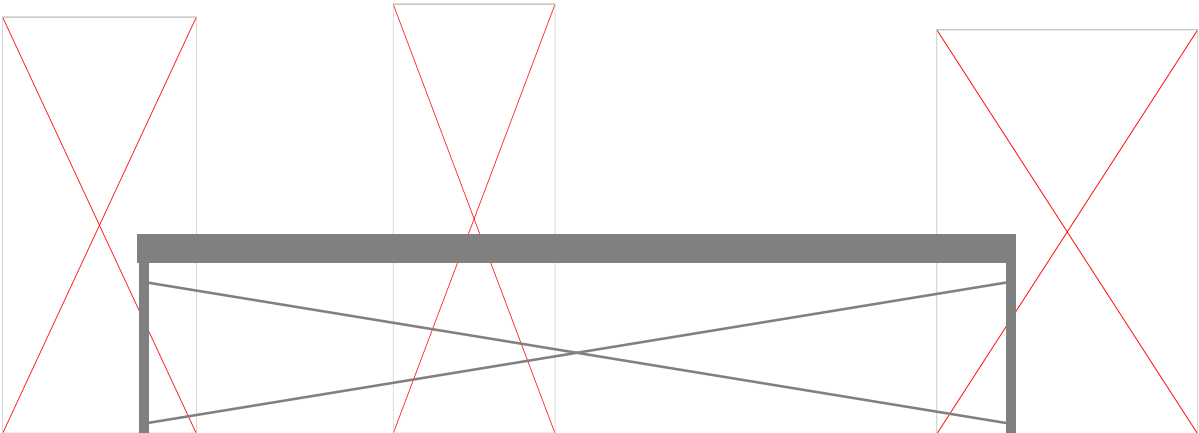
No matter what question you have about our customers and your funnel CRM Data Cloud will provide you with the answer



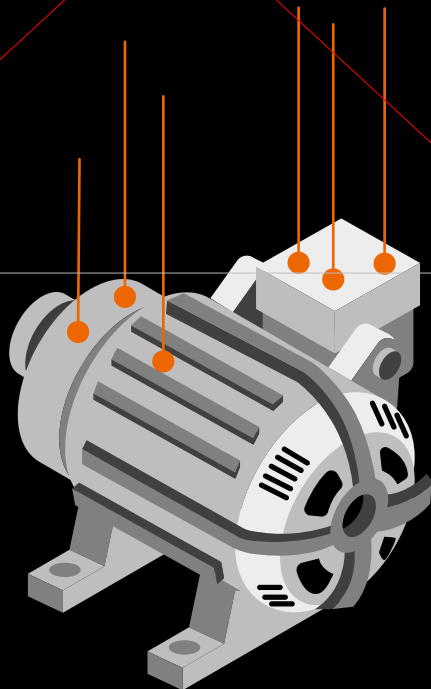
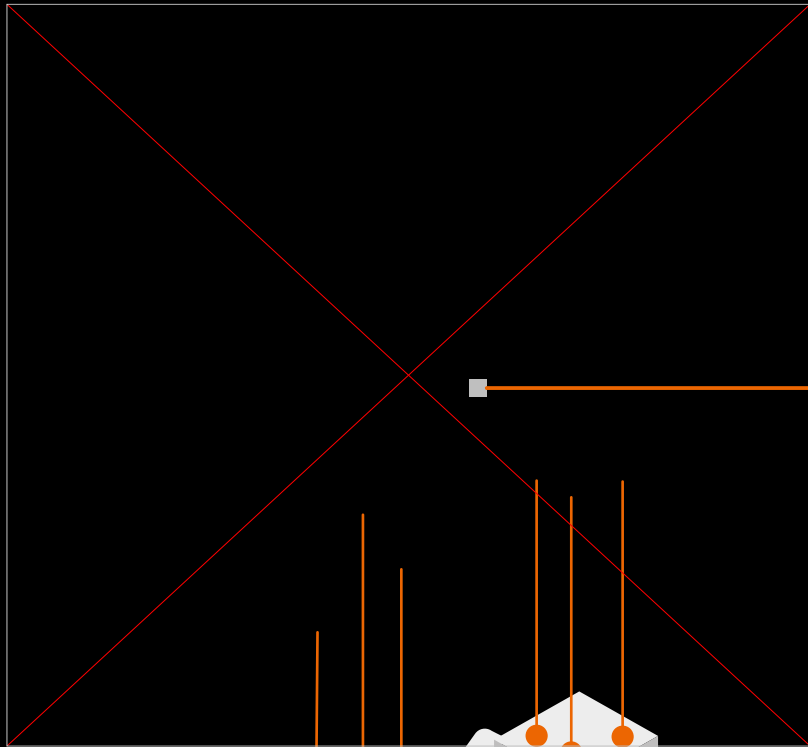
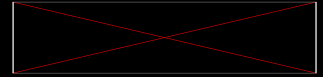
How can I **determine the price quality** of our customer offers?
Pricing

Which existing systems are expiring soon but **still don't have opportunities** for replacement?
IBR

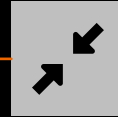
Can I track the customer contact journey to identify which **customers are interested in our products but have not yet been identified as opportunities?**
CDP/Marketing



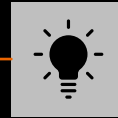
CRM Data Cloud is THE central engine for CRM Reporting



Democratizing CRM Data to **6,000+** users



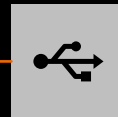
Central source of truth for aligned business logics



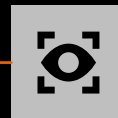
Innovation in Data Management/Engineering/AI



Drives **100+** analytical use cases

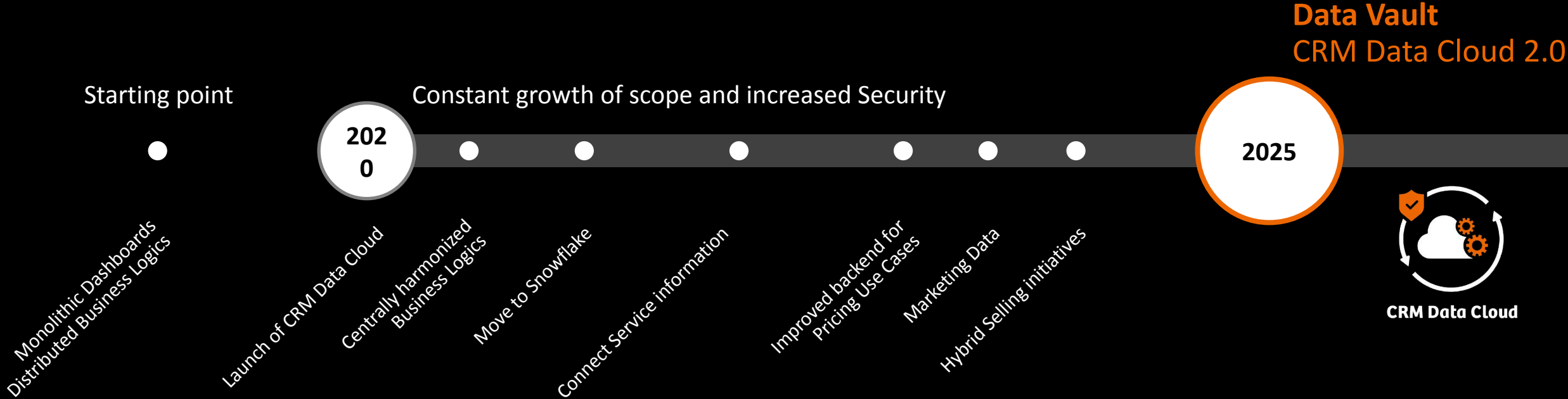
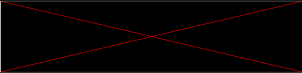


Connects multiple data sources to break data silos. Focus on CRM data but not limited to it.

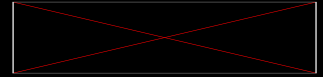


Secured access enforces access policy

The Evolution and Advancements of the CRM Data Cloud Over Time



And we are currently serving a constant high demand



6k+

Users

Democratizing the data with a mature Access Intelligence process, to enable all CRM related functions

~900k

Monthly Queries

Scalable backend allows multiple connections to be orchestrated. Powers Dashboards and ad-hoc requests

100+

Use Cases

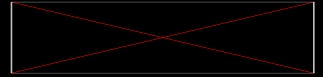
All global and many local data initiatives are built on the strong foundation of CRM Data Cloud



From Silos to Semantics

Business-driven Data Management

Using the Data Vault Methodology our backend already provides an intermeshed set of information



Hubs

- Business Concepts

Links

- Hierarchies
- "Same-As"
- Relationships

Satellites

- Descriptive Attributes

Opportunities

Accounts

System

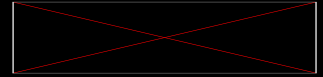
Quotes

Material

Why Data Vault?

- Tracks Changes – Auditable
- Agile Loading Patterns
- Clear Relationships

Data Vault Loading Patterns were re-created with KNIME to create Business driven Data model



Hub Creation



- Creates the HUB Tables
- Ensures insert only and deduplication
- Allows "Status Tracking"

Relationship Creation



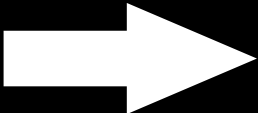
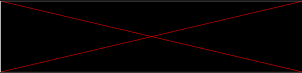
- Creates the Relationship Tables
- Ensures insert only and deduplication
- Allows "Effectivity Evaluation"

Satellite Creation



- Based on selected business Key automatically detects payload changes
- Delta insert to Data Vault Table

Example Configuration: Satellite Writer Component



Dialog - 5:4 - DV SAT WRITER (Satellites)

File

Options | Flow Variables | Memory Policy | Job Manager Selection

Data Base Selection
Data Vault Layer

Schema
PLAYGROUND

Satellite Table Name (SAT_ will be prefixed to the table name)
[Empty text box]

Business Key Selection
CARD_NUMBER

Record Source
[Empty text box]

Please select the satellite attributes

Manual Selection Wildcard/Regex Selection Type Selection

Exclude

Filter
No columns in this list

Enforce exclusion

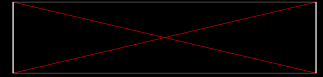
Include

Filter
No columns in this list

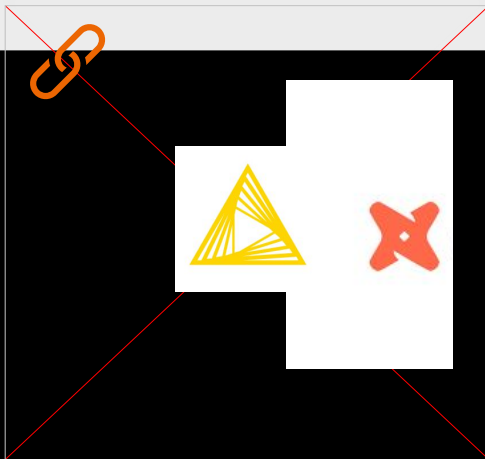
Enforce inclusion

OK Apply Cancel ?

CRM Data Cloud architecture & technology



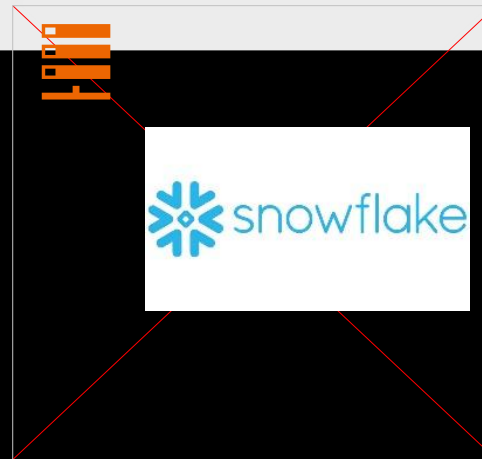
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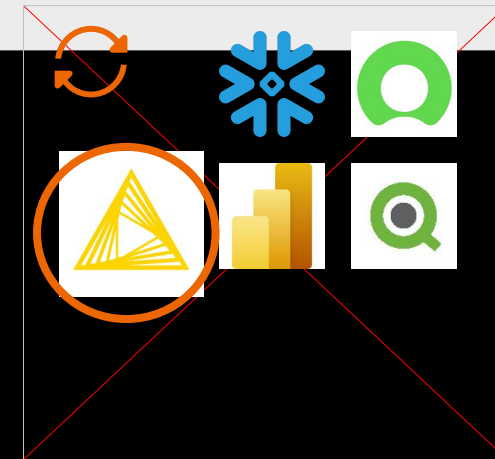
Layer 02



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After the transformation, the CRM data cloud provides you with **reliable and interconnected data products**

Layer 03



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- Simply connect to our data products with your technology of choice (Excel, PowerBI ... etc.)
- Gain the **insights you need to drive your business forward**



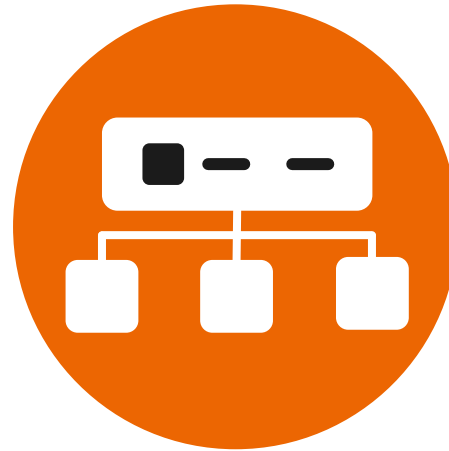
Addressable & Discoverable



Every data product has a distinct, permanent URI for straightforward access.

A central catalog with detailed metadata allows users to search and find data assets on their own.

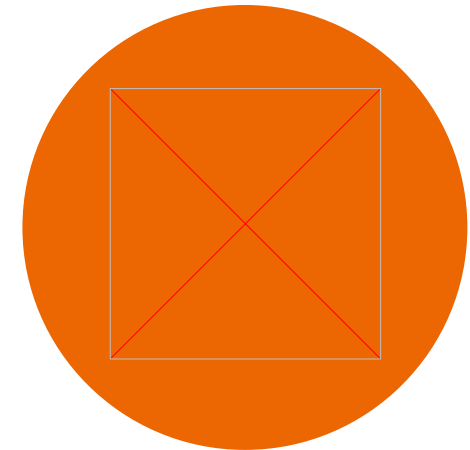
Trustworthy & Self-Describing



Accurate and timely information relies on quality data, clear lineage, and set Service Levels.

Clear column names and detailed documentation enable effective data use.

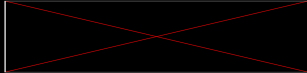
Interoperable & Secure



Data products use standards and common protocols to operate across various systems, ensuring smooth integration with others.

Build-in Access Policies (Row, Column, Data Product) are enforced

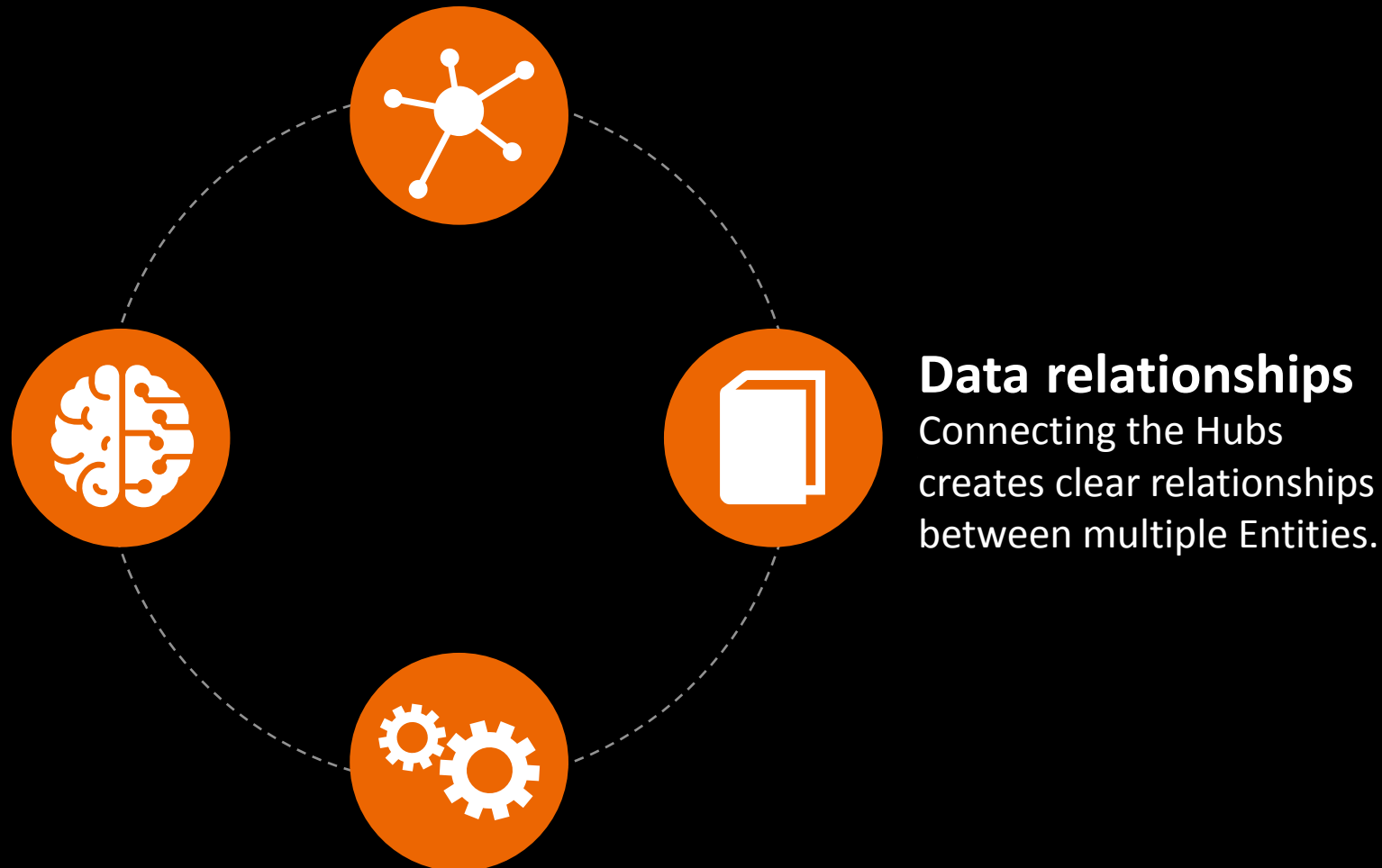
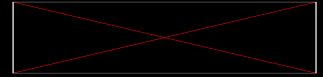
Package Data Products for specific selected Use Cases, maintaining interoperability and Security



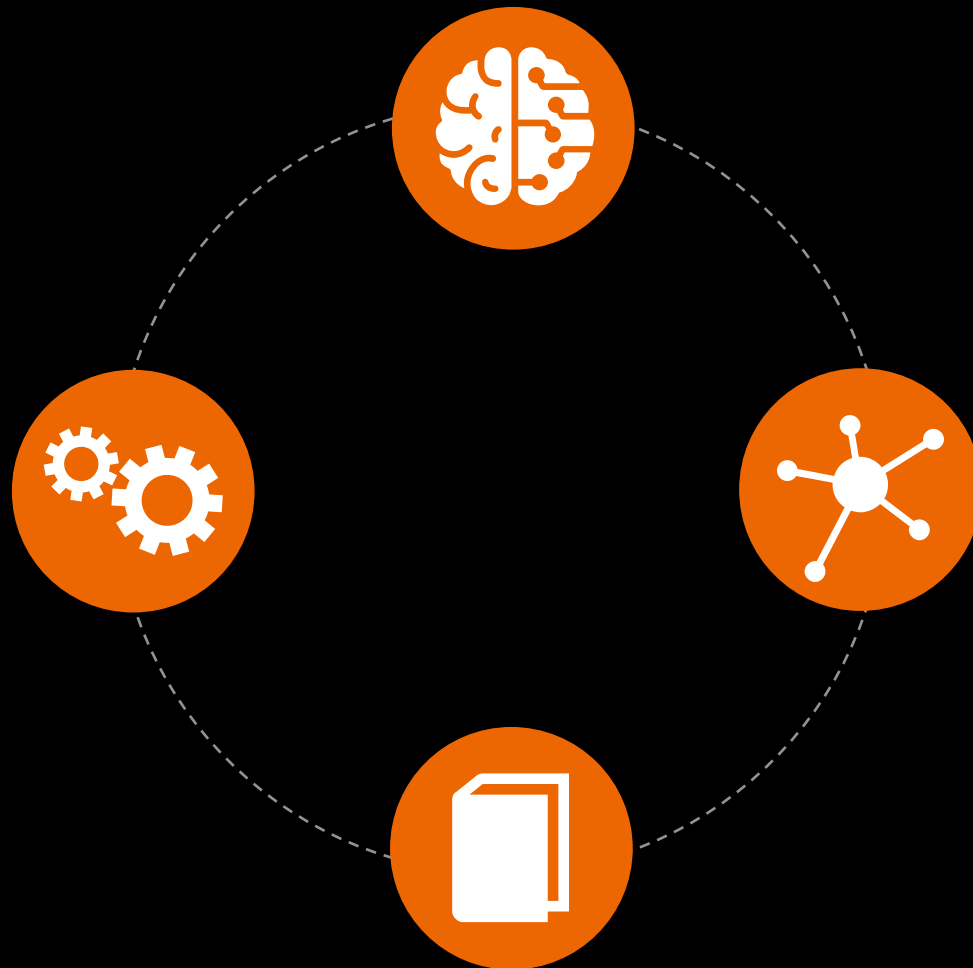
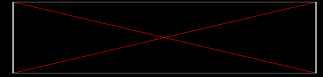
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Value of Business-Driven Data Management using Concept-first modelling and Data Vault



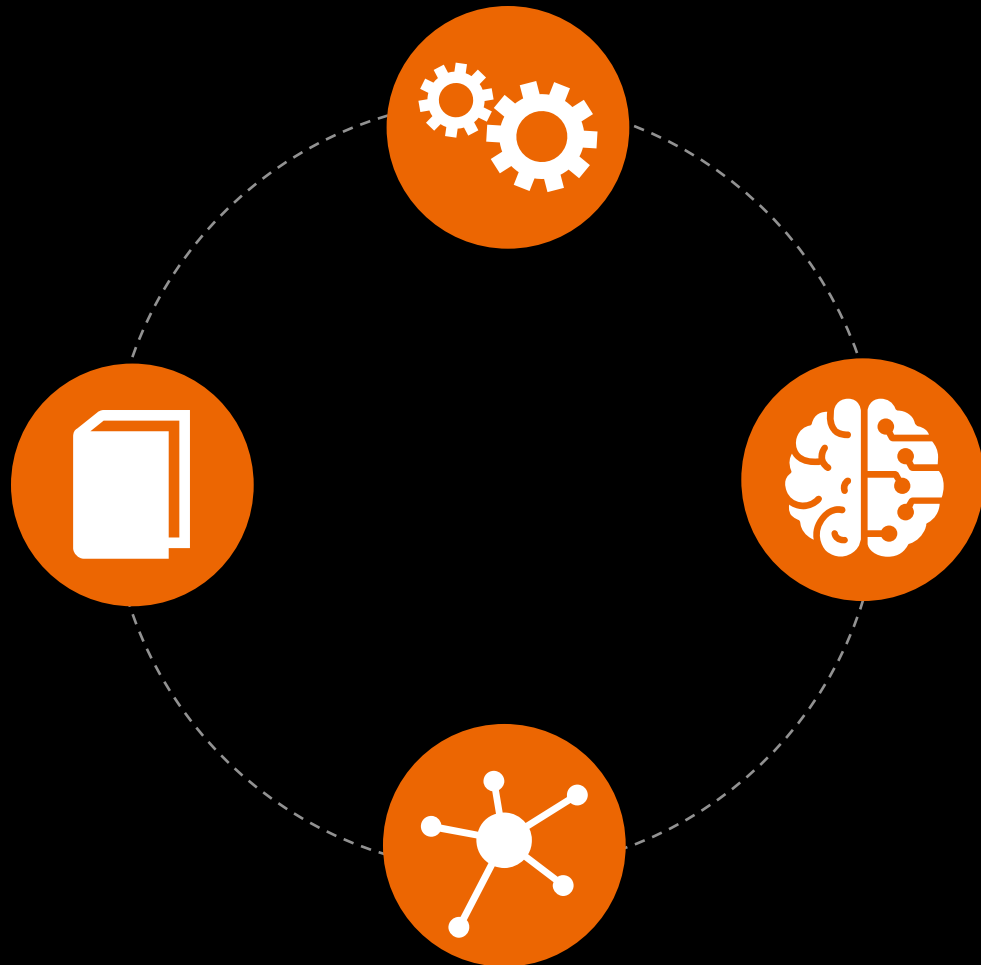
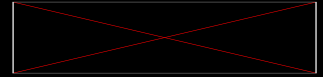
Value of Business-Driven Data Management using Concept-first modelling and Data Vault



Data relationships

Connecting the Hubs
creates clear relationships
between multiple Entities.

Value of Business-Driven Data Management using Concept-first modelling and Data Vault



Centralized Business Logics

Centralized Business Logics are created leveraging the Relationships, and are allocated to the right Entities

Combining the benefits for the AI Future



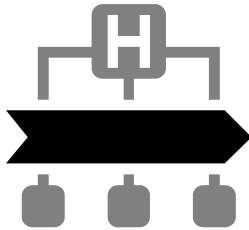
- **Expertise**
Solid expertise in Business supported by Data Product and Domain insights
- **Reusability**
The development of semantics utilized by AI agents and tools to generate context and comprehension is powered by the Data Vault models
- **Innovation**
Powered by an IT-Driven Technology Stack, enabling IT Security, composability, and alignment with overall IT strategy



Derive strategic customer segments

Enriching the Customer Ontology using KNIME

Structurally enrich internal knowledge by leveraging the Ontology



From Research to Business

Started as a Master Thesis we are aiming to operationalize Ontology Driven Customer Insights

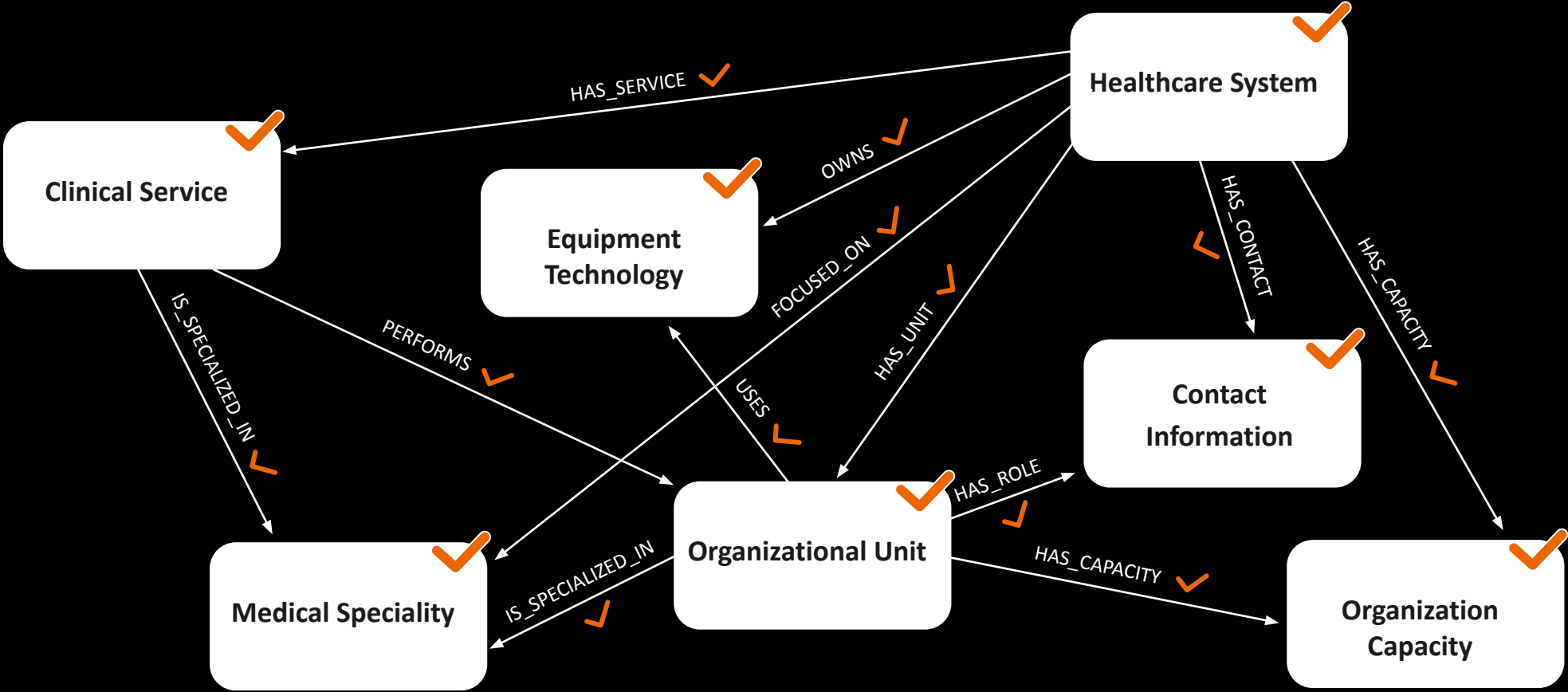
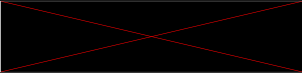
Hospital Ontology

Research based Ontology, to understand Hospital structures, supports structured data retrieval

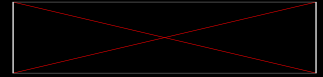
Answering Business Questions

The Ontology supports answering Business related questions by leveraging the Ontology Relationships and supports clever segmentation

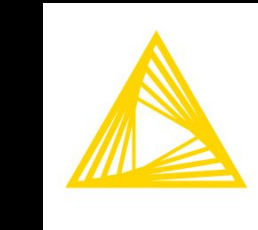
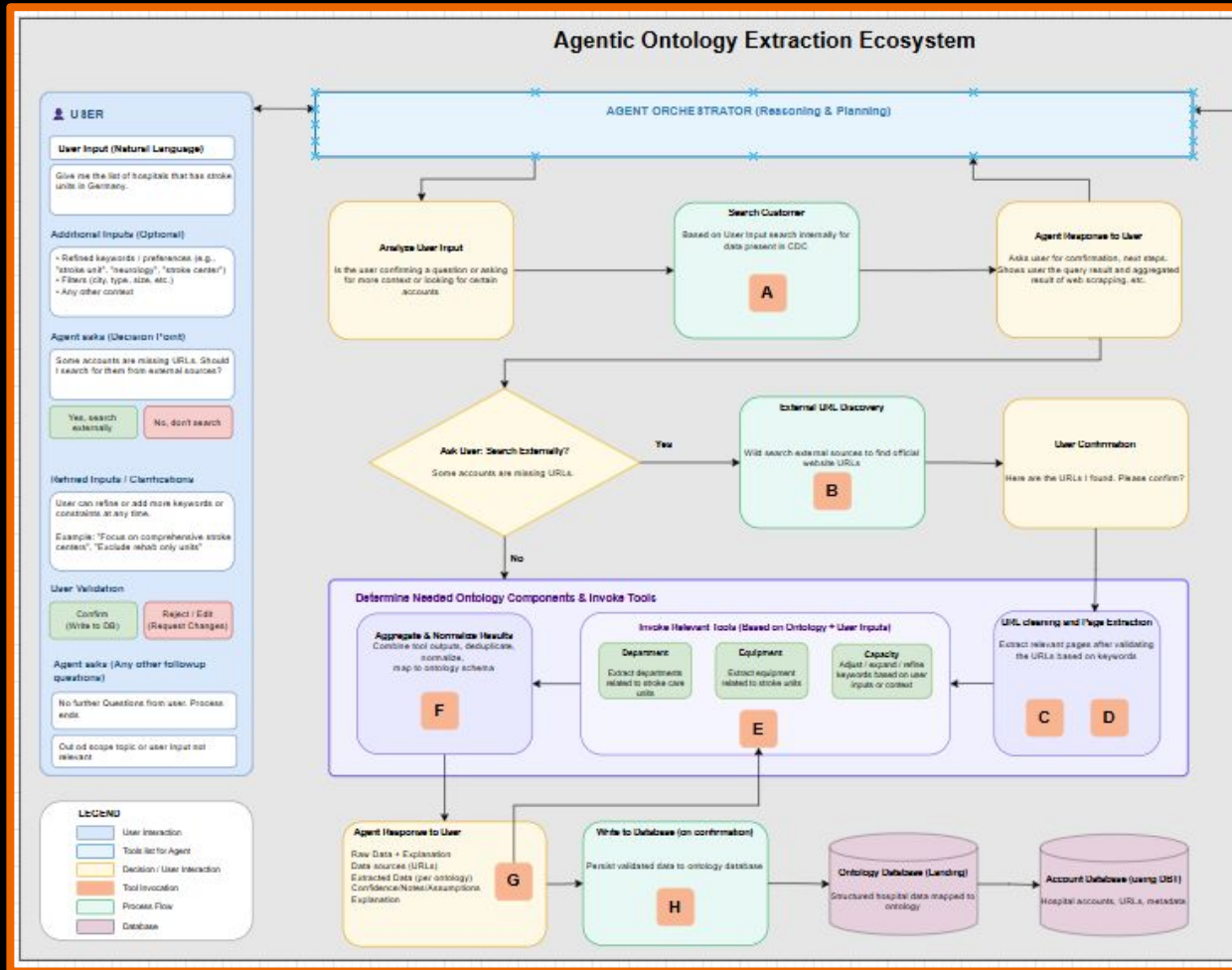
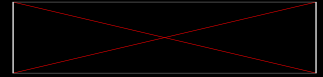
The main Hospital Ontology covers most aspects, and can be enlarged by Business specific Entities



Web scraping-based data extraction framework



Identifying the Tools we need, by mapping out a standard process



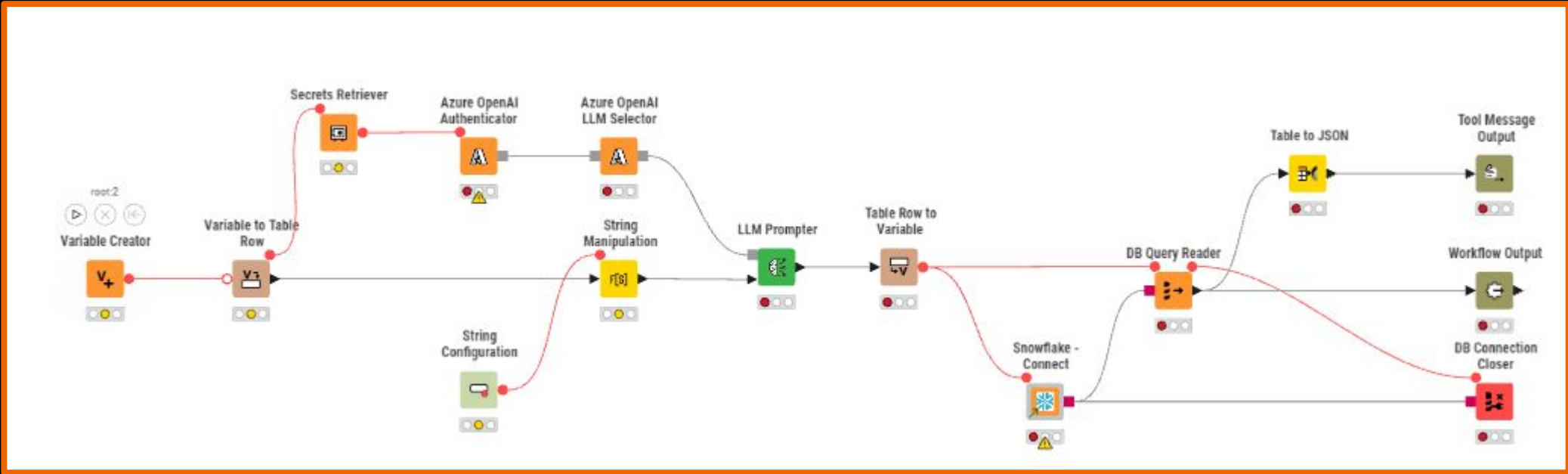
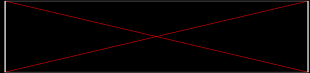
Customer Search Tool

URL Discovery Tool

Ontology Extraction Tool

Keyword Adjustment Tool

Example Workflow, that queries the URLs for the prompted customer Scope

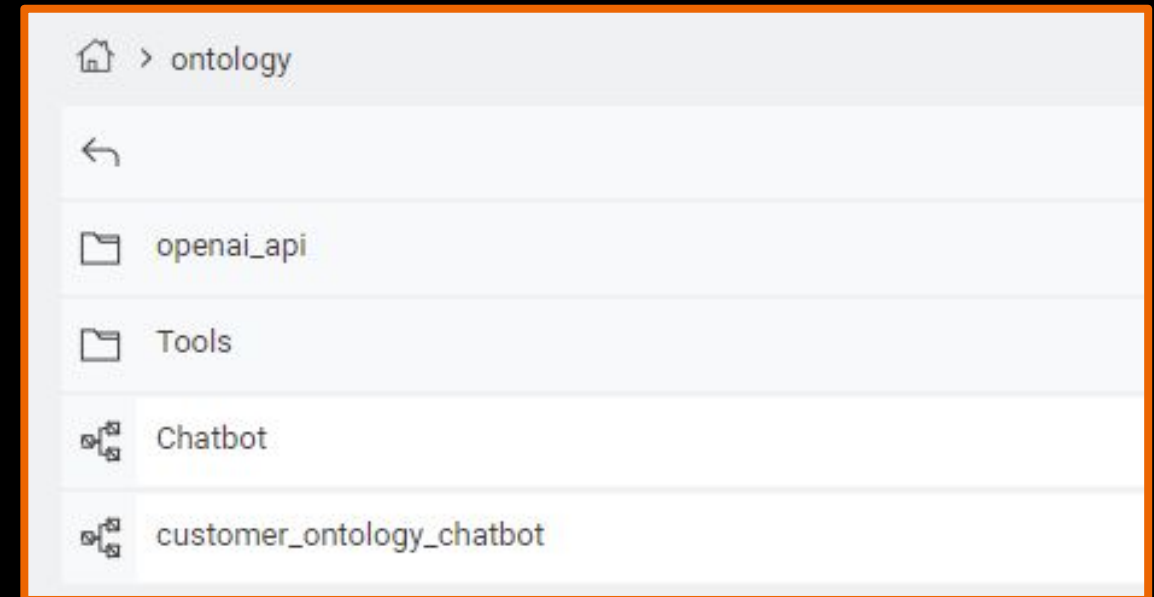


Full flexibility with KNIME, build with domain knowledge not with technical knowledge



We can realize this concept from a business perspective

- Robust foundation underpinned by IT
- Rapid adaptation to business requirements by enabling iterative and agile processes
- **Collaborative methodology**
 - Various teams and specialists can develop tools that integrate seamlessly
 - Domain expertise can be directly incorporated





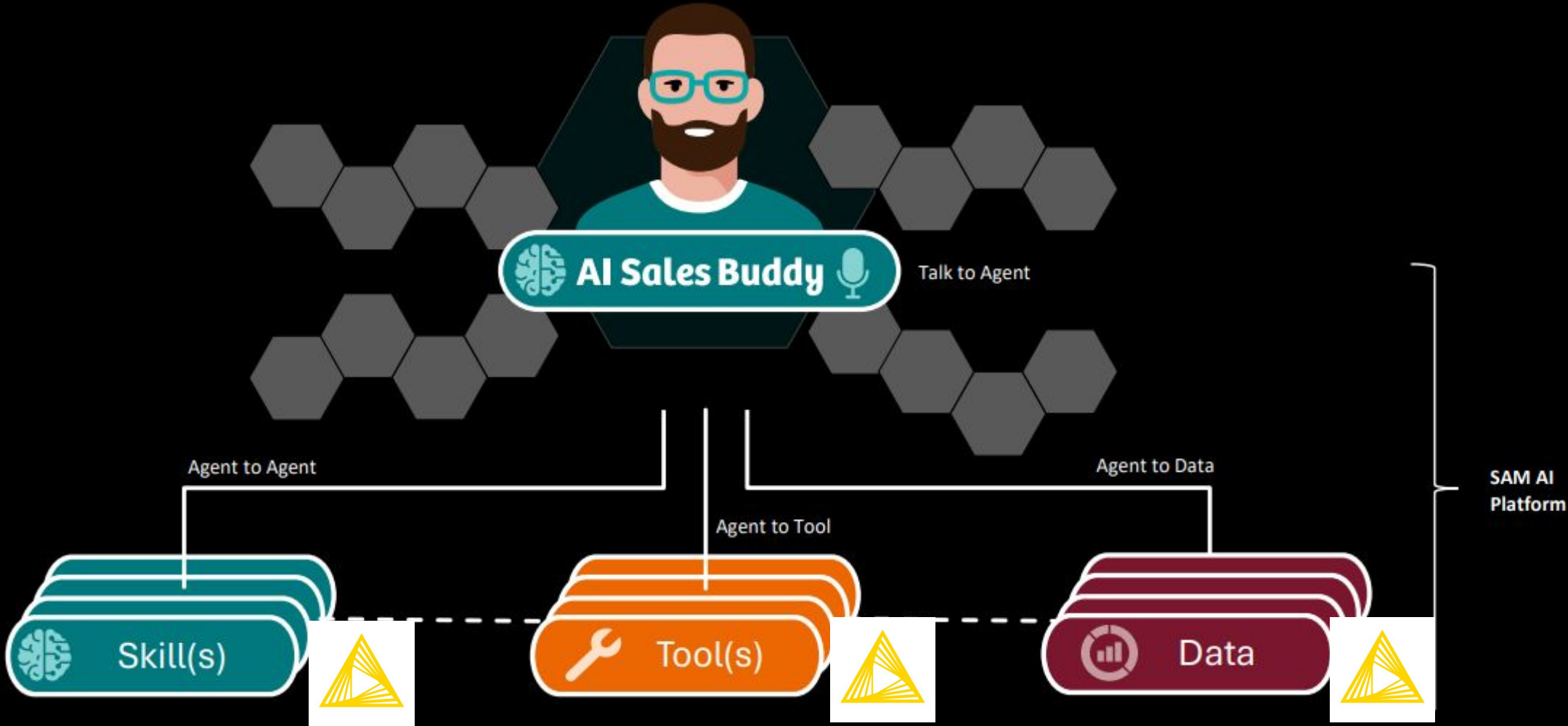
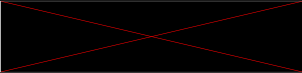
Our Vision

“AI Sales Buddy”

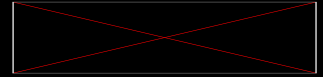
An integrated and embedded Buddy, that Support our Sales Executives holistically.

Our Vision: An everyday buddy

“AI Sales Buddy Initiative”



The main principles that accelerate AI Projects, all supported by KNIME's capabilities

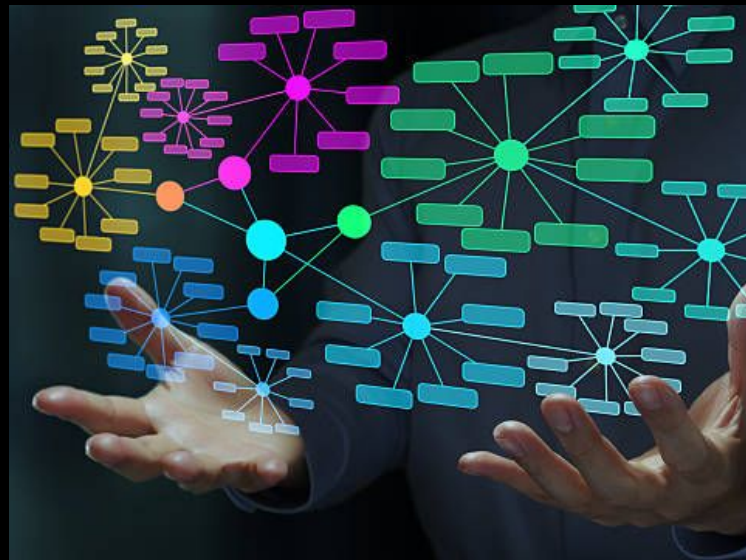


Scalable Architecture



- IT provided tech-stack to enable Data Teams
- Break Silos in a central Data Platform
- **KNIME** to enable Data Teams

Business Insights and Concepts



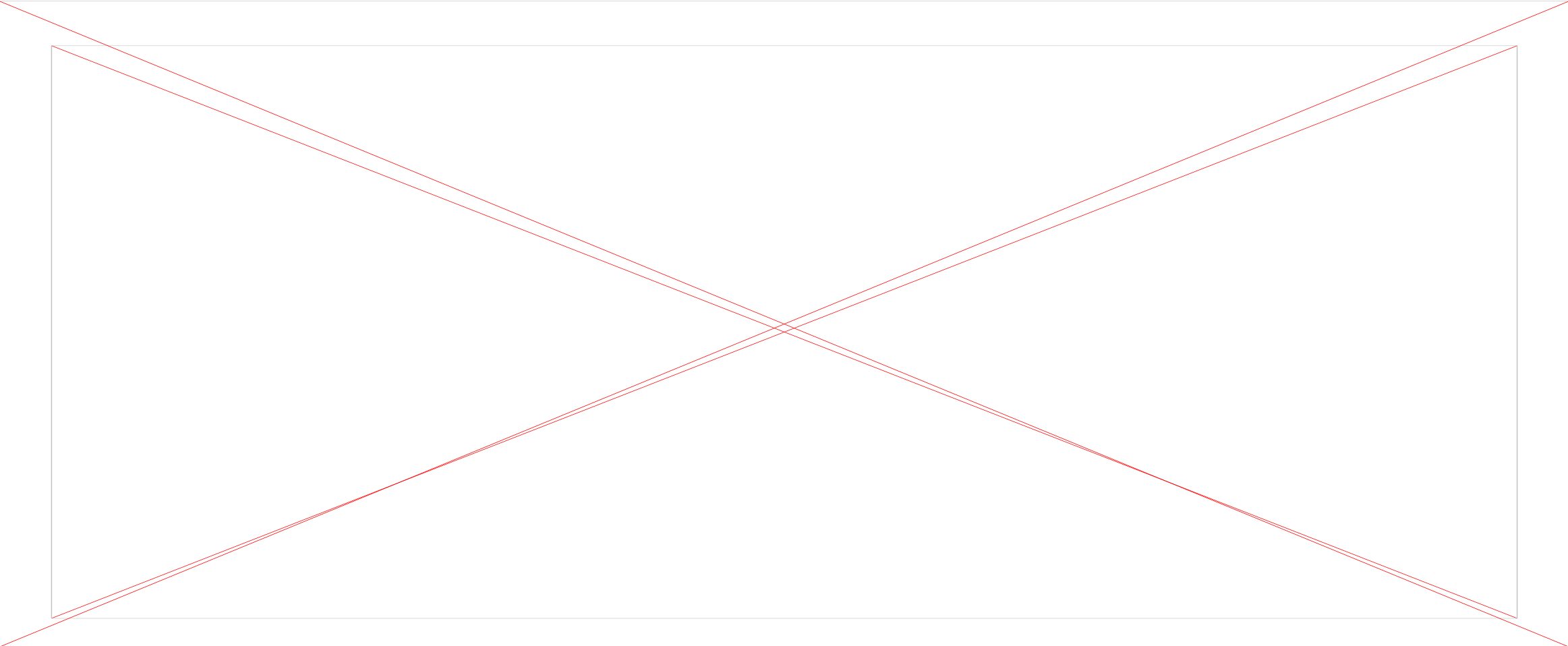
- Enrich Data with Semantics
- Integrate Domain Knowledge
- Model Relationships and Concepts
- **KNIME** to support streamlined modelling

Accelerate AI Projects



- Use the enriched Platform to accelerate Data-driven AI Project
- **KNIME** to enable business to drive context rich AI Projects

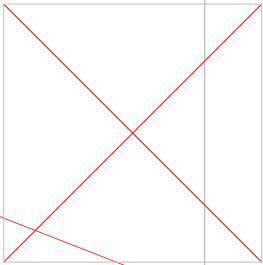
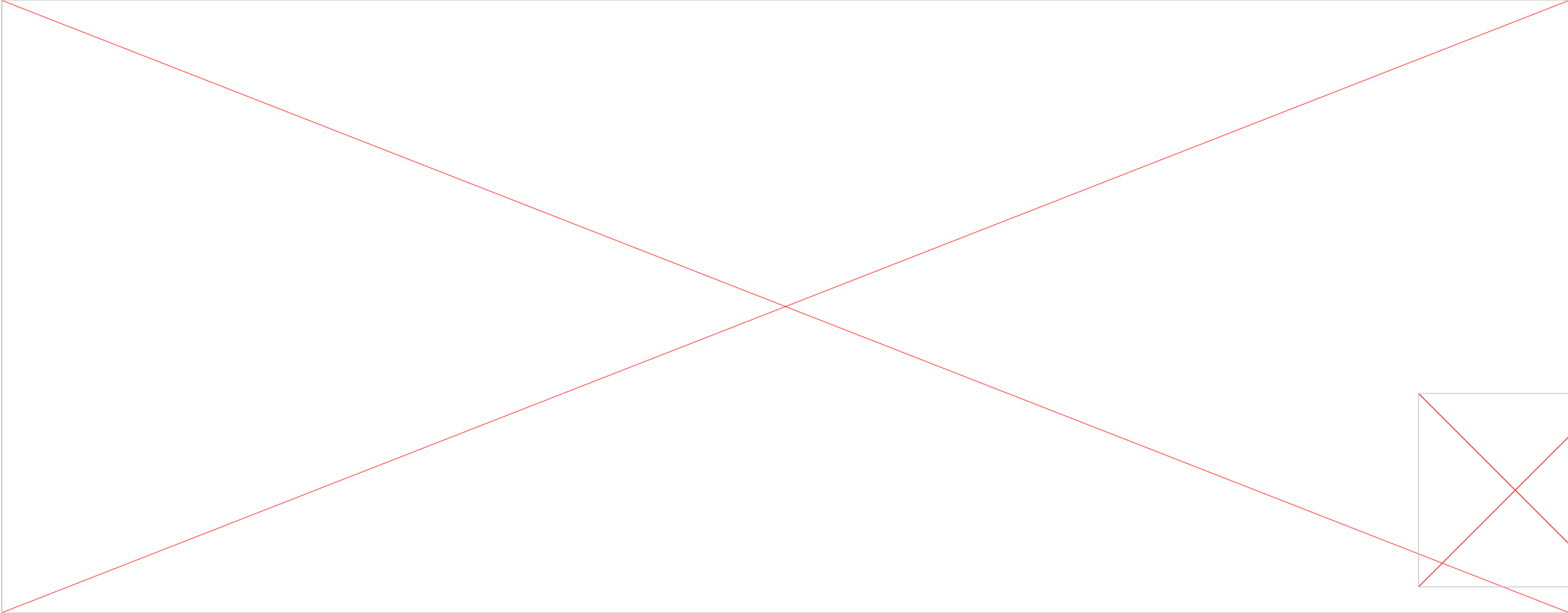
Think of CRM Data Cloud as a supermarket ...



Next time you find exactly the milk you are looking for, and you even know, how you can use it



... and Robots (AI) will have it easier to support your decision





Thank you!