

# MINIMUM VIABLE SCALE

TRANSFORMATIVE AI & DATA SOLUTION





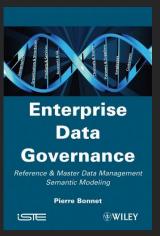
# PIERRE BONNET

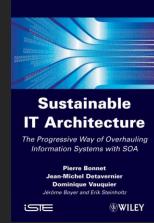


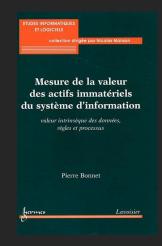
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## A VETERAN IN IT ARCHITECTURE

## BRINGS OVER 30 YEARS OF EXPERIENCE AND AUTHOR





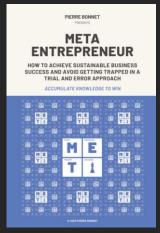


## **E**NTREPRENEUR

IN 2000, I CREATED A START-UP IN SOFTWARE FOR DATA MANAGEMENT WITH TWO CO-FOUNDERS AND BECAME AN ENTREPRENEUR. WE SOLD THE COMPANY EIGHTEEN YEARS LATER (ORCHESTRA NETWORKS) TO AN INTERNATIONAL GROUP

EXIT END 2018 – TRANSITION TO END 2022

TIBCO® Platform–Data Management





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Home | Author & services | The META framework | Advices > | Resources | Book

## **ENGAGE-META** COMMUNITY

Accumulating knowledge for sustainable win

Q Contact me



## **Objectives of the Engage-Meta community**

Engage-Meta is a think tank for the distribution of open-source content in these three areas:

- TRAIDA FRAMEWORK for the deployment of Al and largescale data solutions in businesses. TRAIDA stands for: Transformative AI and Data solutions.
- META FRAMEWORK for aiding knowledge accumulation in a world where access to information is increasingly fragmented. META stands for Motion, Engagement, Treasury and
- META-ENTREPRENEUR for increasing the chances of success in entrepreneurship as well as being an employee with an entrepreneurial mindset (intrapreneurship). This area relies on No-Code + Al and knowledge accumulation to accelerate decision-making.



with the community of entrepreneurs and intrapreneurs (January 2024)

Engage-Meta was created by Pierre Bonnet. If you need my advice, see the CONSULTING OFFER. If you want to partner with us, download the PARTNERSHIP LETTER.

## THINK-TANK **ENGAGE-META**

#### FRAMEWORK FOR AI AT SCALE

FOR THE DEPLOYMENT OF AI AND LARGE-SCALE DATA SOLUTIONS IN BUSINESSES. TRAIDA STANDS FOR Transformative AI and Data solutions

#### FRAMEWORK FOR KNOWLEDGE MGT.

FOR AIDING KNOWLEDGE ACCUMULATION IN A WORLD WHERE ACCESS TO INFORMATION IS INCREASINGLY FRAGMENTED. META STANDS FOR MOTION, **ENGAGEMENT, TREASURY AND ASSURANCE** 

### FRAMEWORK FOR ENTREPRENEURSHIP

FOR INCREASING THE CHANCES OF SUCCESS IN ENTREPRENEURSHIP AS WELL AS BEING AN EMPLOYEE WITH AN ENTREPRENEURIAL MINDSET (INTRAPRENEURSHIP)



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# CONTEXT



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## Maintain control of IT + AI

#### **INNOVATION**

ARTIFICIAL INTELLIGENCE NEEDS MORE QUALITY DATA FOR LEARNING ALGORITHMS AND DECISION-MAKING PROCESSES TO FUNCTION CORRECTLY



MDM, ODS. EKG, MDM GRAPH, RDF-STAR, OWL, SPARQL, GRAPHQL, JASON, SHACL, NO-SCHEMA, FREE-SCHEMA, DOCUMENT-SCHEMA, NoSQL, LLM, **SEMANTIC** ONTOLOGY, MODELING, META-DATA, Master data, REFERENCE DATA, OPERATIONAL DATA, DATA FABRIC, DATA MESH, VECTOR RAG, T-RAG, DATABASE, R2RML, PROMPTING, HALLUCINATION CHECK, DATA LAKE WAREHOUSE, OLTP, AI-POWERED GOVERNANCE, ETC.





## Maintain control of IT + AI

#### SEMANTIC & KNOWLEDGE GRAPH DB +AI

#### **INNOVATION**

ARTIFICIAL INTELLIGENCE NEEDS MORE QUALITY DATA FOR LEARNING ALGORITHMS AND DECISION-MAKING PROCESSES TO FUNCTION CORRECTLY



MDM, ODS, EKG, MDM
GRAPH, RDF, RDF-STAR,
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FREE-SCHEMA, DOCUMENTSCHEMA, NOSQL, LLM,
ONTOLOGY, SEMANTIC
MODELING, META-DATA,
MASTER DATA, REFERENCE
DATA, OPERATIONAL DATA, DATA
FABRIC, DATA MESH, VECTOR
DATABASE, RAG, T-RAG,
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LAKE WAREHOUSE, OLTP, AIPOWERED GOVERNANCE, ETC.



## **ABILITY TO ACT**

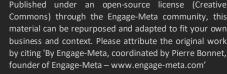
THE SKILLS REQUIRED TO GRASP THE ENTIRE IT DOMAIN HAVE BECOME TOO VAST FOR A SINGLE EXPERT



## TO SERVE MODERN WORLD

IN A FAST-EVOLVING WORLD, THE EA BUSINESS AND TECHNICAL TARGETS ARE OFTEN MISTAKEN

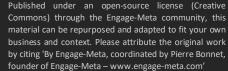






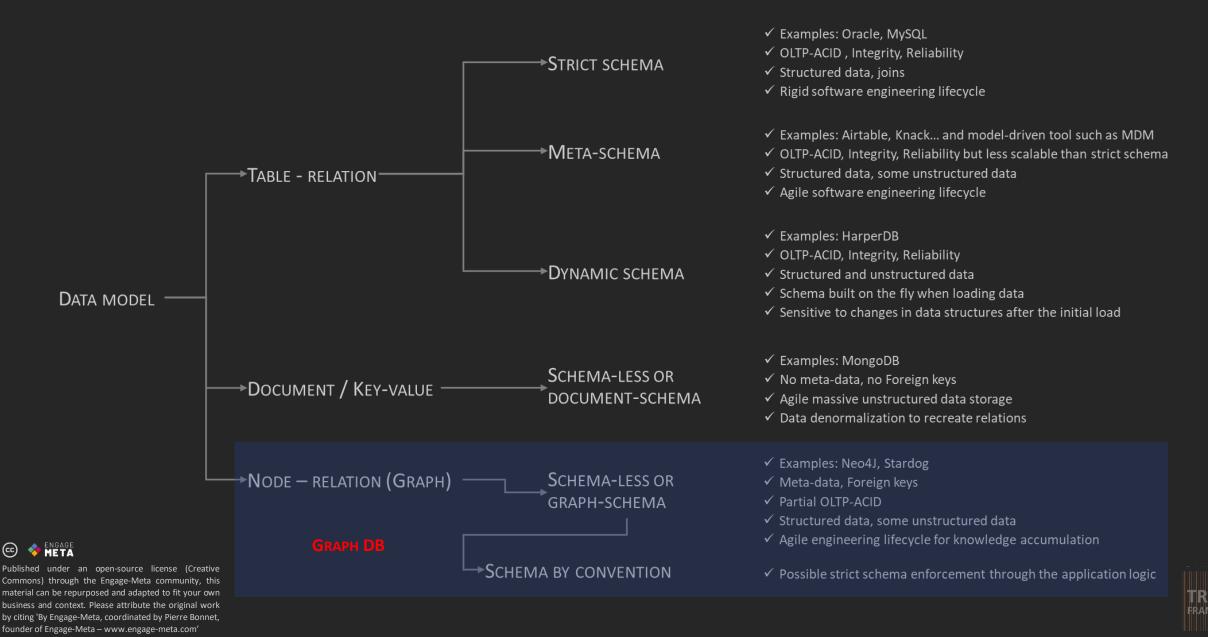
# THE SOFTWARE VENDORS' VOICE







## Understanding the basics of knowledge graph-oriented databases

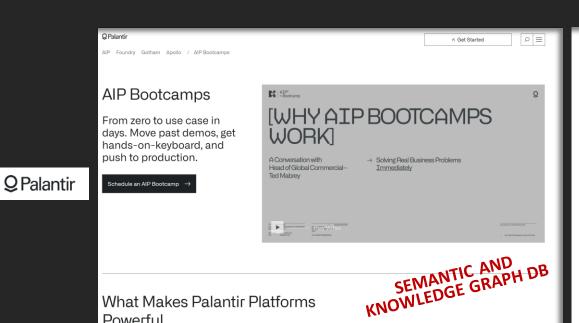


## Understanding enterprise data architecture

#### **OPERATIONAL SYSTEMS AND DATA** Structured data Plug Online Transaction processing Back-end systems ERP, SCM, CRM... Data as a product (data mesh) **OLTP** OLTP OLTP SEMANTIC GOVERNANCE (based on unified data models => ONTOLOGY) Master Data Management Enterprise Knowledge Graph Operational Data Store Structured data Structured data Online Transaction processing Structured data Al design Unstructured data Master and ref data Online Transaction processing Semantic Online Transaction processing Big repository of operational data Meta-data MDM - OLTP ODS - OLTP EKG - SOLTP Big repository of knowledge Analytic Governance features Generative Governance DATA ANALYTICS (based on a Data fabric) Data Lake Warehouse Data Warehouse Data Lake Structured data Structured data Structured data Unstructured data Online Analytical Processing Unstructured data Atomic Online Analytical Processing Online Analytical Processing **DLW-AOLTP** DW - OLAP DL - OLAP Metadata for governance







Why don't we force you to model data up-front like everyone else? Think heads. Think walls. Think slamming.



#### Zero upfront modelling

CluedIn lets you import and development your data instantly. No more waiting six months and only building data models when the business is ready. With CluedIn, you can dive right into harnessing the power of your data from the get-go.



MarkLogic

#### Build Golden Records...

support for your operations teams.

Through Augmented Data Modeling, you can dynamically adjust Golden Records as often as you need - adding new data sources like transactions, social media, and demographics as they emerge. The result? More accurate segmentation, decision-making, and better



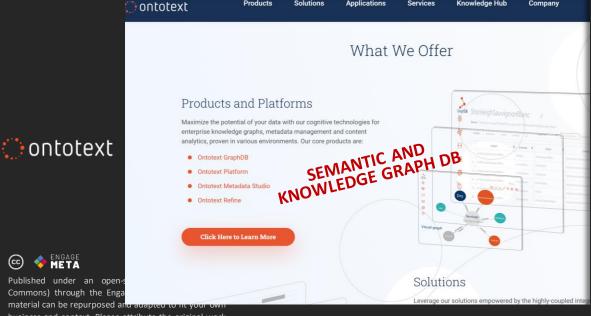


...with any system data

OVERVIEW SOFTWARE \* SOLUTIONS \* RESOURCES \* DOWNLOADS

Build Golden Records with data pulled from 200+ native two-way integrations including OneLake, SAP, SalesForce, Oracle and many, many







SEMANTIC AND
SEMANTIC AND
KNOWLEDGE GRAPH DB lets you respond quickly to business change while providing rigorous data governance and transformational data security.



#### Connect and Manage Complex Data

Unify data and metadata while ensuring data quality and security. Deploy anywhere with trusted, enterprise capabilities.

- → Multi-model data integration



#### Create Metadata to Interpret Data and Its Meaning

Put information in context with our nocode metadata engine that uses machine learning and knowledge models.

- → Knowledge graph modelling
- → Fact extraction



#### Consume Knowledge Across the Enterprise

Use industry-standard APIs and programming languages to deliver data in context for multiple users and multiple use cases

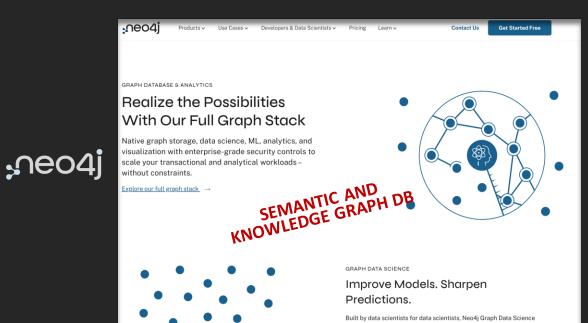
- Informed search
- Contextual application

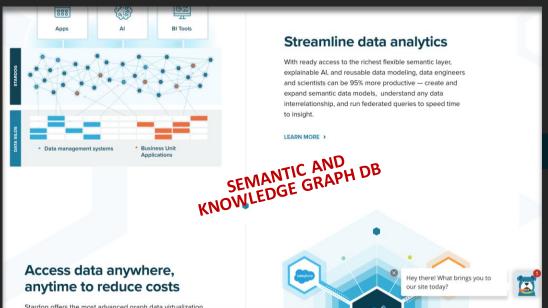




business and context. Please attribute the original work by citing 'By Engage-Meta, coordinated by Pierre Bonnet, founder of Engage-Meta - www.engage-meta.com'

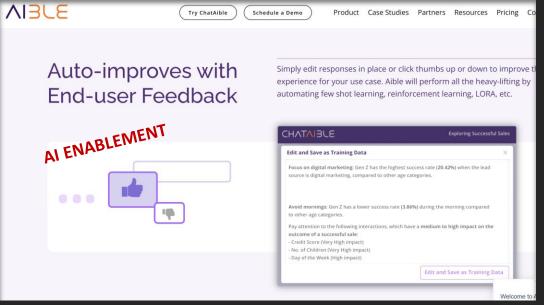
Powerful







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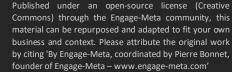






## WHO IS READY TO DEPLOY AI AT SCALE?







## THE USUAL APPROACH DOES NOT SEEM TO BE SUITABLE



USING IT FRAMEWORKS THAT HAVE BECOME MARKET STANDARDS SUCH AS TOGAF AND ZACHMAN...



... USING THE "AGILE APPROACH" TO COMPENSATE FOR THE RIGIDITY OF THESE IT FRAMEWORKS. A VARIANT OF IT ARCHITECTURE IS THEN DEVELOPED FOR EACH PROJECT



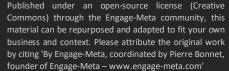






# SOLUTION







## A NEW APPROACH

#### **POSTULATE**

MASTERY OF AI AND DATA MANAGEMENT SOLUTIONS CONSTITUTES THE LAUNCHING PAD OR THE MINIMAL STARTING POINT FOR AN EVOLVING IT ARCHITECTURE



# MINIMUM VIABLE SCALE ARCHITECTURE (MVS)

## TRAIDA

THE ESSENTIAL TOPICS FOR LARGE-SCALE DEPLOYMENT OF AI AND ASSOCIATED DATA SOLUTIONS ARE GATHERED IN A FRAMEWORK NAMED TRAIDA FOR "TRANSFORMATIVE AI AND DATA SOLUTIONS"



## THE FRAMEWORK FOR BUILDING

RATHER THAN FORCING THE DEFINITION OF IT AND BUSINESS EA TARGETS, THE COMPANY FIRST COMPARES ITSELF TO A SET OF ESSENTIAL TOPICS FOR LARGE-SCALE DEPLOYMENT OF AI AND ASSOCIATED DATA SOLUTIONS





# TRAIDA FRAMEWORK

# 6 IT CARDS

## DATA CORE SYSTEM EXISTING SILOED DB DATA CORE SYSTEM BUSINESS DOMAIN DB WITH DATA MESH THE CORE SYSTEM DEPENDS ON DATABASES THAT ARE EITHER

ISOLATED IN SILOS OR ORGANIZED

INTO CLEARER BUSINESS DOMAINS

MASTER DATA MANAGEMENT

MASTER DATA MANAGEMENT

FOR THE MOST SHARED DATA

(MDM) SERVES AS A REPOSITORY

WITHIN THE INFORMATION SYSTEM

## **OPERATIONAL DATA STORE** WRITE-MODE WITH DATA FABRIC

ODS

360-DEGREE VIEW: THE OPERATIONAL DATA STORE IS A UNIFIED REPOSITORY THAT COLLECTS ALL DATA FROM ALL DATABASES

# **DATA LAKE WAREHOUSE**

DATA LAKE WAREHOUSES ARE UTILIZED FOR DATA REPOSITORIES CONTAINING RAW, STRUCTURED, AND UNSTRUCTURED DATA FOR **BUSINESS INTELLIGENCE** 

ANALYTICS

DATA LAKE

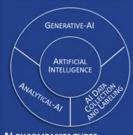
**DATA WAREHOUSE** 

#### **ENTERPRISE KNOWLEDGE** GRAPH



**EKG** UTILIZES KNOWLEDGE GRAPH DATABASE TECHNOLOGIES TO MANAGE KNOWLEDGE AND **ONTOLOGIES** 

#### **ARTIFICIAL INTELLIGENCE**



AI ENCOMPASSES THREE **SOLUTIONS: GENERATIVE AI; AUTOMATED DECISION-MAKING** AI; AND AI DATA COLLECTION AND LABELING

## **3** GOVERNANCE CARDS **10** TOPICS



IMPLEMENTED AT FOUR LEVELS: DATA. Al. SUPERVISION OF THE **BUSINESS SYSTEM AND** REGULATIONS COMPLIANCE

## ENTERPRISE ARCHITECTURE



THE BUSINESS SYSTEM

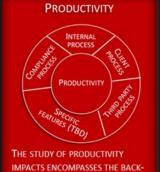
## **HUMAN RESOURCES**



SKILL SETS ARE REQUIRED TO

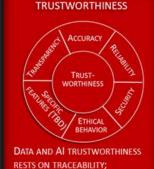
OF AI AND DATA SOLUTIONS

ENHANCE THE POSITIVE IMPACTS



OFFICE, FRONT-OFFICE, AND

INTER-COMPANY PROCESSES



RELIABILITY CHECKS; AND SECURITY

**TREASURY** 

IN DATA ACCESS



AND IT, INVESTMENT IN R&D,

AND THE INNOVATION PROCESSES





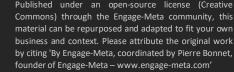
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13 CARDS AND 49 TOPICS



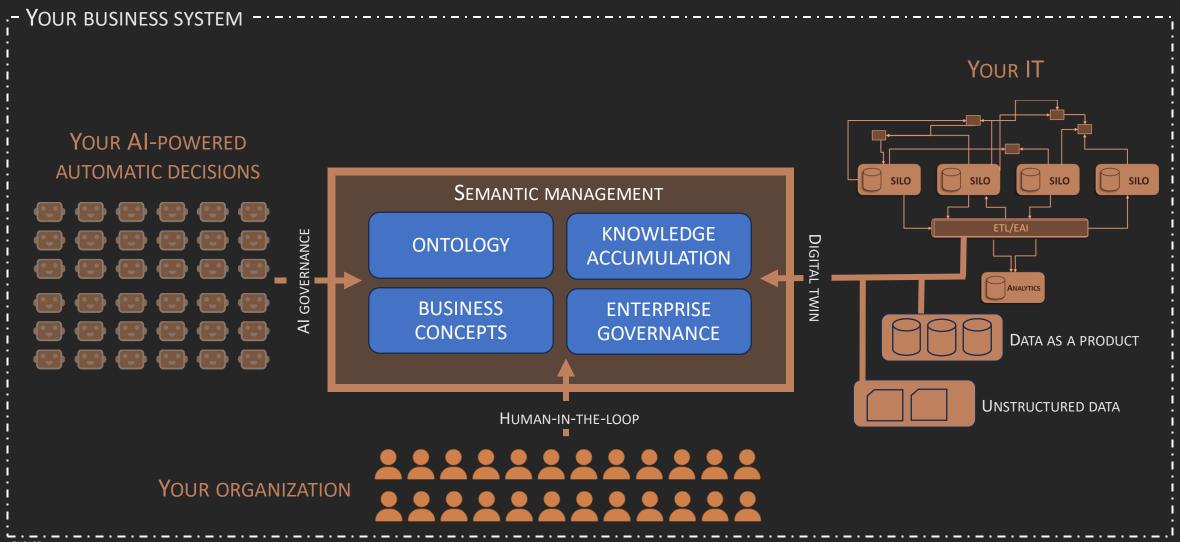
# TRAIDA IS BASED ON A MINIMUM VIABLE SCALE ARCHITECTURE VISION







## MINIMUM VIABLE SCALE ARCHITECTURE

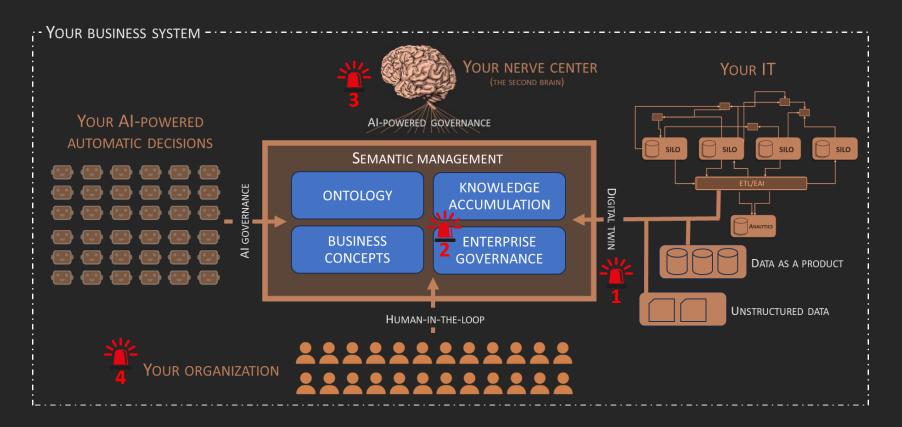








## MINIMUM VIABLE SCALE ARCHITECTURE





CHALLENGE OF SYNCHRONIZING THE DATA FLOWS AND PROGRESSIVELY REDUCING THE SILOS



CHALLENGE OF GOVERNANCE OF ONTOLOGIES AND THEIR SYNCHRONIZATION WITH OPERATIONAL DATABASES



CHALLENGE OF SUPERVISING
THE BEHAVIOR OF THE ENTIRE
INTELLIGENT SYSTEM — TRUSTED AI



AI OVERTURNS THE VERY IDEA OF CLASSICAL MANAGEMENT, PARTICULARLY THE TRADITIONAL FRENCH STYLE BASED ON ADMINISTRATION





## THE TRAIDA FRAMEWORK

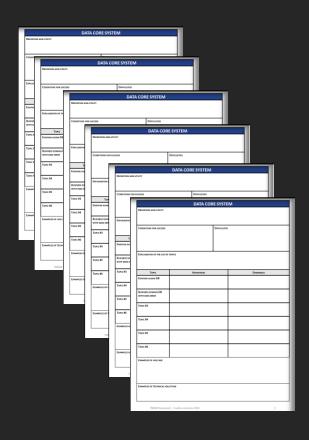


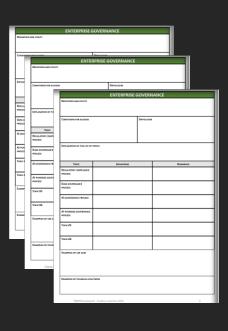


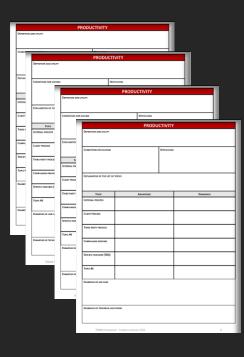


## EACH CARD IS DESCRIBED IN THE FORM OF AN INFORMATION SHEET

THE WORK OF DRAFTING THESE SHEETS IS UNDERWAY TO ACCUMULATE ESSENTIAL INFORMATION ON EACH CARD AND TRAIDA TOPIC. YOU CAN HELP THE COMMUNITY WITH WRITING AND PROOFREADING











## **EXAMPLE OF ALIGNMENT**

CUSTOMER DATA INTEGRATION FOR THE PRODUCTIVITY BUSINESS CARD

## #1. Implementation

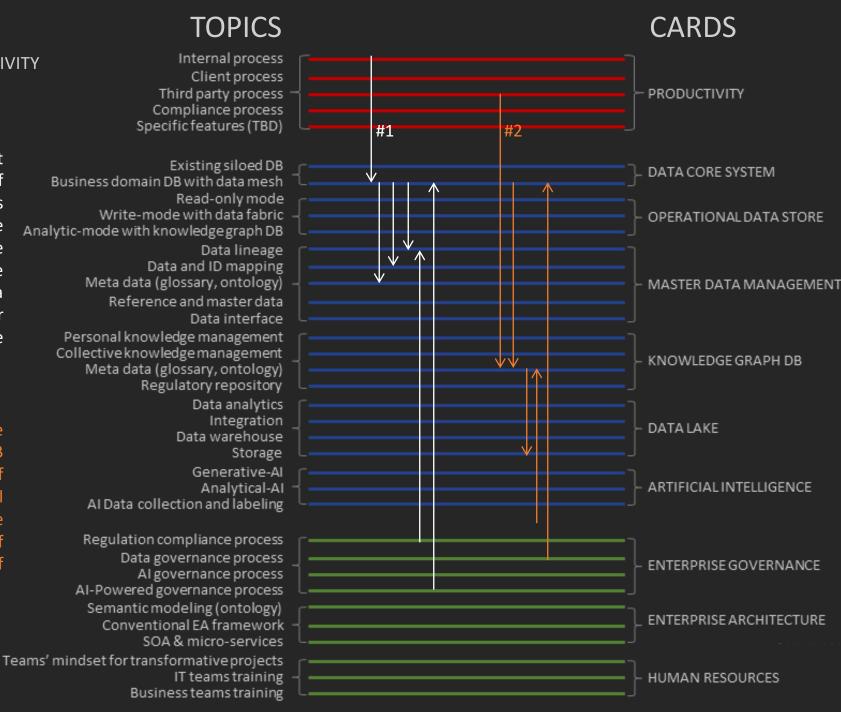
Increased productivity of the internal client management process through the implementation of a read-only Operational Data Store (ODS) that relies on Master Data Management (MDM) for the management of reference and master data, and the deduplication of identifiers. Data governance supports the deduplication rules and the data lifecycle. Implementation of semantic modeling for the creation of a unified model of the 360-degree representation of clients.

## #2. Regulatory compliance

Copying of the ODS into a regulatory compliance analysis repository through knowledge graph DB technology. Generative AI supports the analysis of knowledge graphs on customers to detect atypical cases, fraud, and commercial opportunities. The whole is based on corporate governance in terms of regulatory compliance as well as the governance of the existing AI

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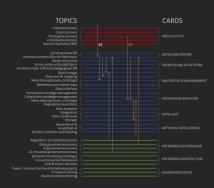
## PROCEDURE FOR USING THE TRAIDA FRAMEWORK



#2. HIGHLIGHT THE FUNDAMENTAL CHOICES OF THE BUSINESS NEEDS



#3. ENGAGE YOUR TRANSFORMATIVE PROJECTS





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# SUPPLEMENTAL MATERIALS ON <u>WWW.ENGAGE-META.COM</u>

## WHITE PAPER



#### **EXECUTIVE SUMMARY**









## **OUR MISSION**

- I. HELP YOUR TECHNICAL EXPERTS MAINTAIN A GLOBAL VISION OF THE ARCHITECTURE AND CHALLENGE YOUR TECHNICAL SOLUTIONS TO IMPROVE THEM
- II. FINALIZE THE DRAFTING OF THE TRAIDA THEMATIC SHEETS AND CUSTOMIZE THEM TO YOUR CONTEXT
- III. PROVIDE THE MARKET WITH THE TRAIDA FRAMEWORK AS OPEN SOURCE SO THAT IT BECOMES ESTABLISHED AS A STANDARD FOR ASSISTING IN THE CREATION OF THE MVS ARCHITECTURE





## THANK YOU

## FOLLOW ME ON LINKEDIN





