

EXPERIENCE AND SKILLSETS

A decorative graphic consisting of multiple thin, grey, wavy lines that flow from the left side of the page towards the right, creating a sense of movement and depth. These lines are positioned behind the text 'MATHIEU PRICHONNET'.

MATHIEU PRICHONNET

DATA INSIGHT (ANALYTICS)

TECHNO / FUNCTIONAL AREAS OF EXPERIENCE

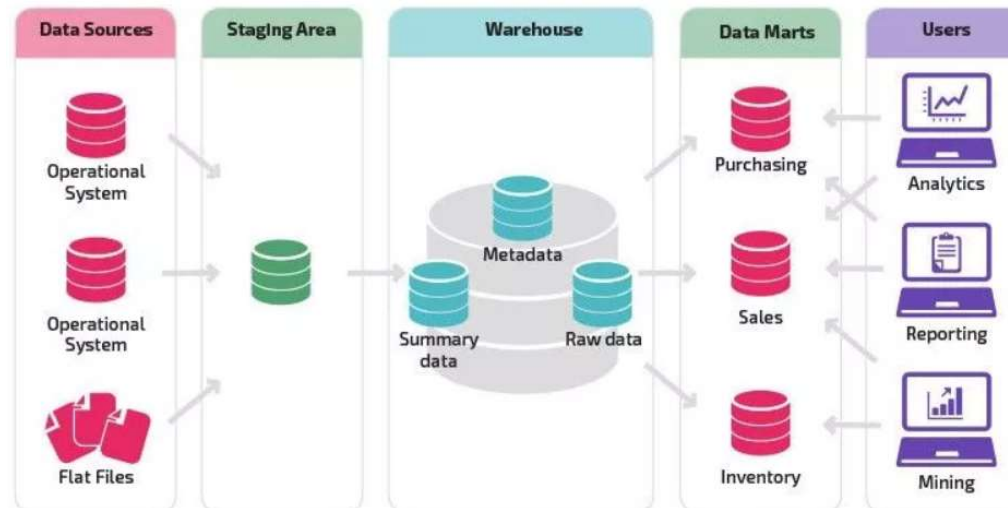
Data warehouse

The database type where wither MS SQL, Oracle and Azure SQL

- **Determine the business objectives** → we need to understand overall the relationship of the data between various business units (cross functionally) and be able to quantify / qualify the KPIs that we needed
- **Collected and analyzed the data** → the data cam from Finance (SAP – finance, PM, PS), CRM system, Time reporting system, Project and Cost management system (Oracle Primavera and EcoSys) as well as Maximo (WO). Did basic analytics reporting and understand how the data was gathered and what was the data flow (Enterprise Architect was used to map)

Possible Issues:

- *Data integrity (due to failed rollback / duplication / omissions / conflicts in data)*
- *Technology knowledge and compatibility with existing enterprise systems*



Possible Issues:

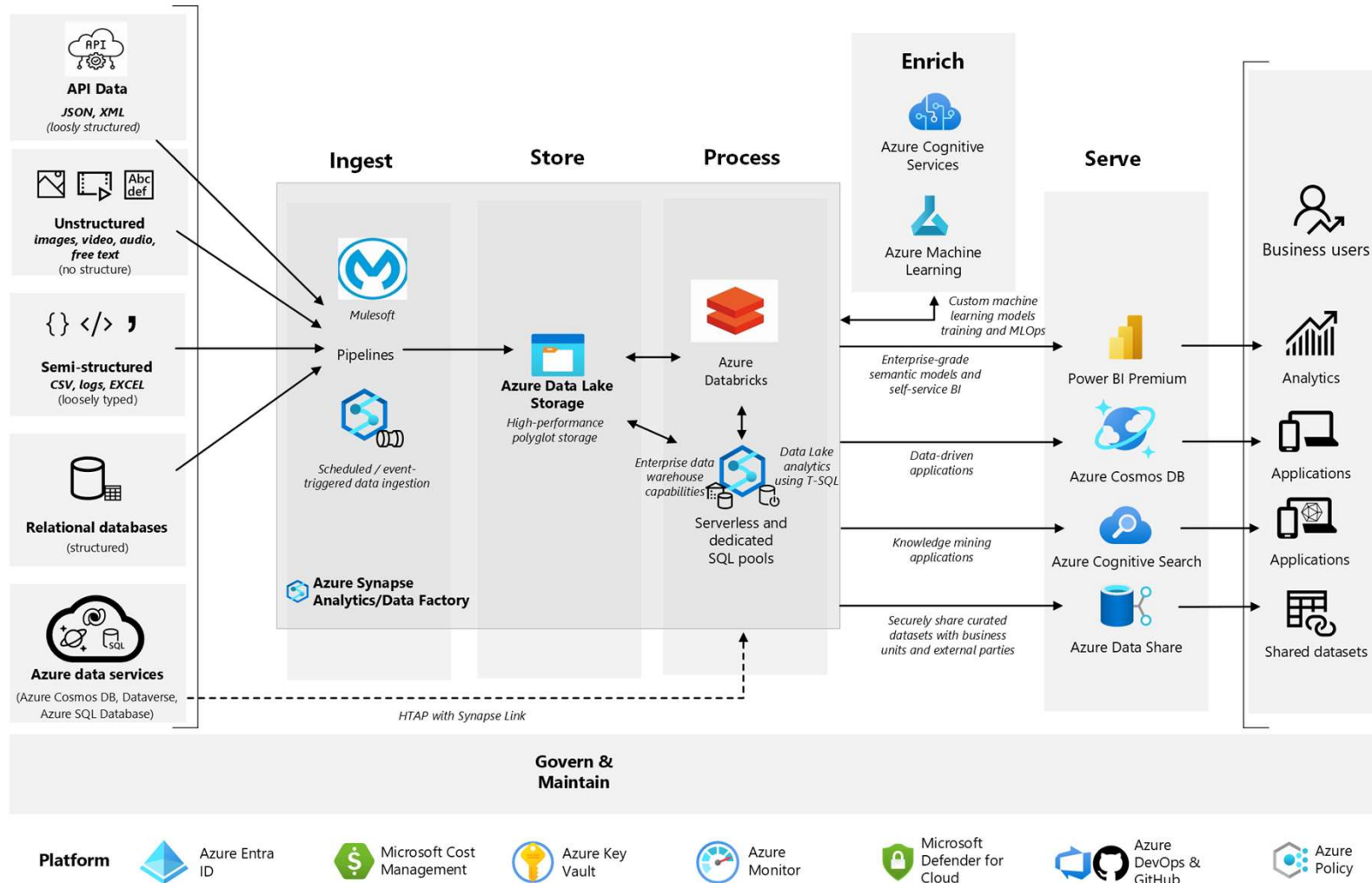
- *Didn't analyze the data correctly*
- *Wrong requirements*

TECHNO / FUNCTIONAL AREAS OF EXPERIENCE

Data warehouse (cont'd)

- **Build the Data Model & Extract-Transform-Load (ETL)**
 - Built the staging area → Extraction (retrieval of the source data from original data sources), transformation (conversion of the original data structures into the target one) and loading (deposition of the information into a data storage system). Used both traditional ETL (did preliminary analysis on the data we needed to transform and include before loading into the DW). Also used the modern ELT process type, which enabled us to have the freedom to experiment with the pool of unfiltered data (finance, production, engineering, sales, etc.).
 - Build the storage (repository) area → Did the data models (how data is structured) and the system architecture. I used both in the past normalized and dimensional methods to data model (Normalized where relational tables grouped together by subject areas // Dimensional where data is partitioned into facts (generally, numeric transaction data) and context to the facts).
 - Scrubbing the data was an important factor → used manual and automated data conversion (some developers were used to build those)
- **Test (Archiving / Performance / Rollback procedures / Mock deployment)** → Build the protocol for data conservatorship and retention. Tested lag times and performance testing (loads, peaks, etc.) as well as how to roll-back. Laid out plan for both step by step and timed data conversion and transfer.
- **Data visualization** → Pentaho (also the back reporting engine for Hexagon EcoSys, MS PowerBI, Tableau)

EXAMPLE OF AZURE DATA LAKE IMPLEMENTED



TECHNO / FUNCTIONAL AREAS OF EXPERIENCE

Data Migrations (Extract-Transform-Load (ETL))

Did several data migrations and sunset projects

Key factors I considered where as follows

1. **Scoping** → Stakeholders and their required deliverables / Business domain knowledge / system expertise and migration expertise / Communication plans and reporting requirements / Budget and deadlines.
2. **Resource evaluation** → understanding the talents of the team / outsourcing to SI or Offshore as need be.
3. **Migration design** → How the data is extracted, held and verified / Mapping rules / How data is loaded into the new system / Recovery plans for each stage of the migration / Plan.
4. **Knowing the data** → Source data needs audit.
5. **Cleanup** → Scrubbing
6. **Maintenance and protection** → Make sure we accounted for the degradation after a period of time, making it unreliable. Data Quality checks and balances
7. **Governance** → Tracking and reporting on data quality / data integrity.

**CONCEPTS OF WHERE WE ARE
AND WHERE WE WANT TO GO**

TECHNO / FUNCTIONAL AREAS OF EXPERIENCE



Manual Data Drudgery

Manual reports

Spreadsheets & PowerPoints communicate status

Disagreements on how data was processed



Death by Dashboards

Shadow data teams

Only privileged employees can create reports

Big spend on reporting, dashboarding or BI systems

Employees flooded with irrelevant data

Multiple, inconsistent sources of truth



Data Tells A Story

Glance-able answers start to simplify employee processes

Multi-source data merging

Consistent view of info up & down the organization

IT & business leadership coordinate work

Measurable results emerge



Emerging Intelligence

Consistent measurable results

Proactive information supports employees

Experience tuned for each customer and employee

Smart systems know what to look for

Data crosses silos



Transformed Organization

AI/ML is real

New ways of working

Employees focused on high value work, all low value work automated

Recommendations are right for the employee

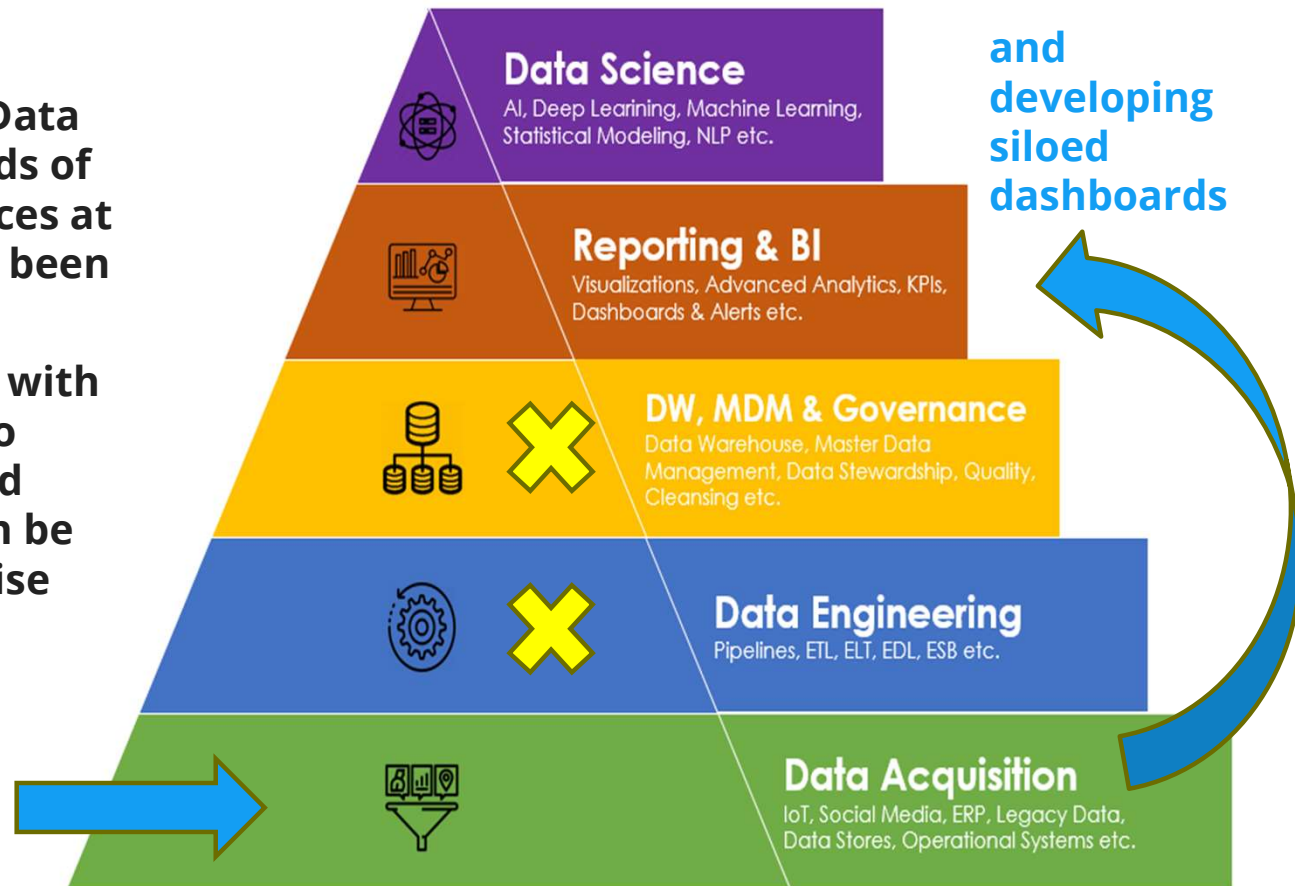
New business models emerge

TECHNO / FUNCTIONAL AREAS OF EXPERIENCE

Data hierarchy

- You can't leverage fully your Data (top pyramid) and meet the needs of the business until scalable services at the bottom of the pyramid have been implemented
- But this needs to be balanced with current needs, our goal will be to stabilize existing dashboards and reports while ensuring these can be transitioned to a future enterprise analytics platform by defining a governance model.

You are here / Gathering data



X Capability does not currently exist

ANALYTICS - JOURNEY

