

The logo for xpan d i t, where the 'x' is a stylized white symbol consisting of two overlapping shapes, and the remaining letters are in a clean, white, sans-serif font.

# xpan d i t

Corporate Presentation

Version 1.0 - 2021

The logo for xpandit features a teal chevron pointing right, followed by the word "xpandit" in a bold, black, sans-serif font. The letters "i" and "t" are rendered in a teal color. The logo is centered on a white background with a faint, light blue circular graphic composed of concentric arcs and segments, resembling a stylized gear or a data visualization, positioned behind the text.

**xpandit**

xpandit

**Best 2020  
Portuguese SME**



**1000 PME**  
2020  
**Exame**

# Locations



# Numbers

---

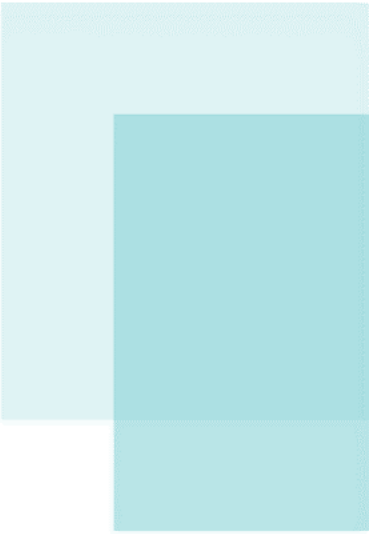
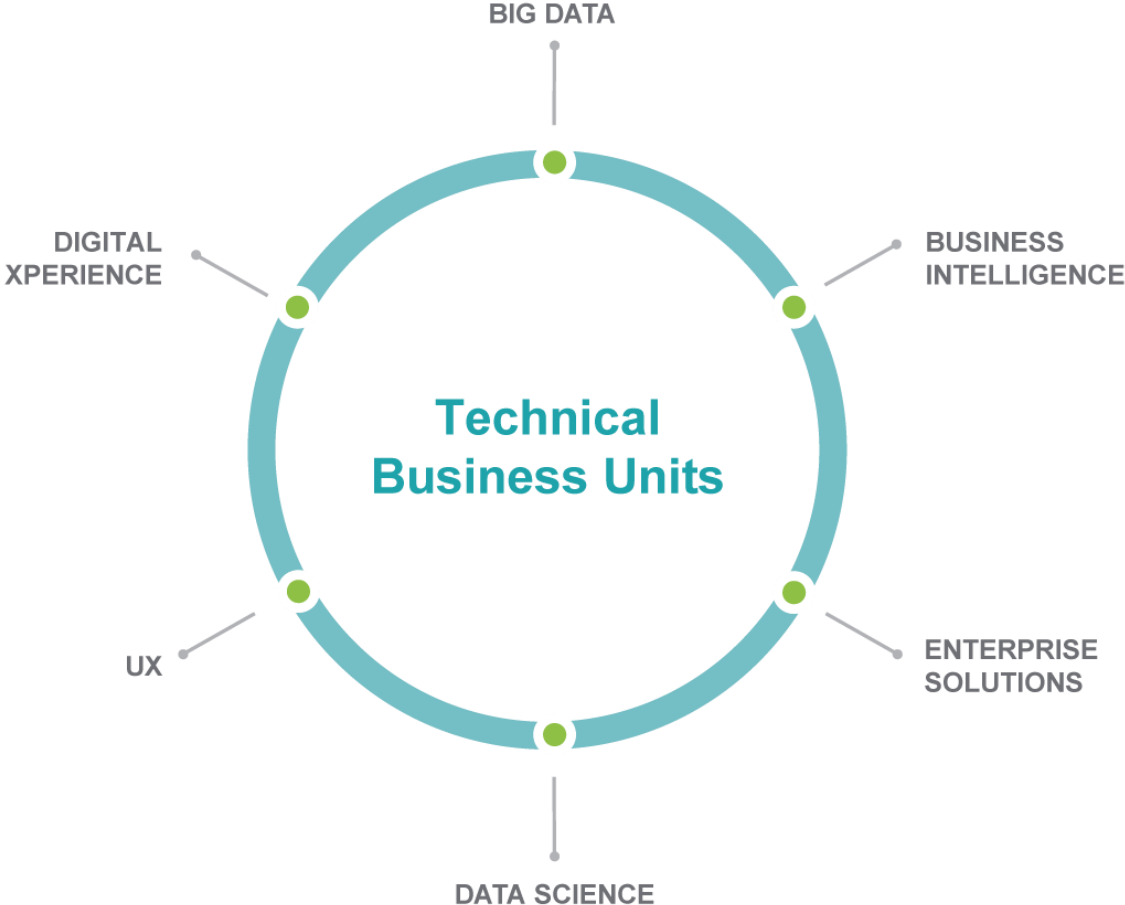


**+290** Technology Experts

FT1000: Europe's Fastest Growing Companies



# Expertise



# Expertise in Data

---

## Complete Data Lifecycle

### Big Data

- Infrastructure
- Data Lake
- Data Ingestion
- Realtime Processing

### Business Intelligence

- Datawarehousing
- Datamodelling & ETL
- OLAP
- Analytics

### Data Science

- Data Wrangling & EDA
- Machine / Deep Learning
- Advanced Analytics
- Optimization & Produtization

# Experience

Partnerships & Expertise





# Big Data Team

---



## Partnerships & Certifications

---

**CLOUDEXERA**



CONFLUENT

 databricks®

 Azure



mongoDB

 StreamSets

unravel



**Red Hat**

# Expertise with flexibility

---

We improve agility and performance through technology & skills

## Big Data Consulting



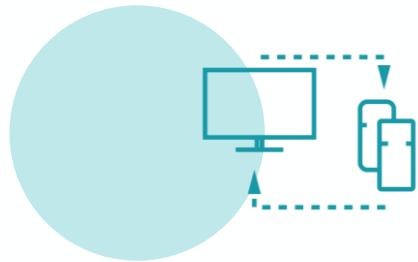
You know your business. We know DATA and we strive to work with you to envision all possible ways to extract value from it, in order to define and develop a Big Data execution plan.

# Expertise with flexibility

---

We improve agility and performance through technology & skills

## Big Data Development



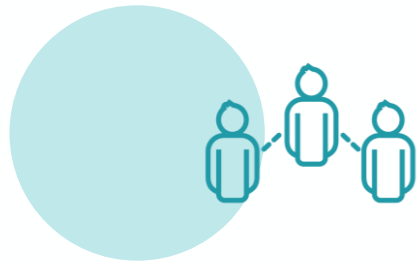
Our Big Data experts with mastery in **Cloudera, Databricks, Confluent, NoSQL** Databases and Azure Big Data stack, can help you develop NRT (near real-time) and batch data pipelines for all types of data.

# Expertise with flexibility

---

We improve agility and performance through technology & skills

## Big Data Operations



We help customers define, install, configure, manage and tune a distributed data environment. We can help you install and adopt Big Data software based on **Cloudera**, **Databricks**, **Confluent** or **Azure**.

# Certifications in Data

---

Gold  
Microsoft  
Partner



- **Azure Administrator / Security**
- **Implementing and Designing an Azure Data Solution**
- **Designing and Implementing a Data Science Solution on Azure**
- **Analyzing Data with Microsoft Power BI**



- **Confluent Certified Developer for Apache Kafka**
- **Confluent Certified Administrator for Apache Kafka**

# Certifications in Data

---



- Cloudera Certified Administrator for Apache Hadoop
- Cloudera Spark and Hadoop Developer



**databricks**

- Databricks Certified Developer

What we really are

---

**EXPERTS**

Spark | Kafka | Analytics | Streaming | Governance | Security | Data Movement



# Big Data



# Use Case – Ingestion

## CHANGE DATA CAPTURE



## DATA BROKERAGE



## DATA CONSOLIDATION



## DATA STORAGE



# Use Case – Data Backend

## EVENT GENERATION

In App Purchase

In App Event

In App Failure

## DATA BROKERAGE



## DATA PROCESSING



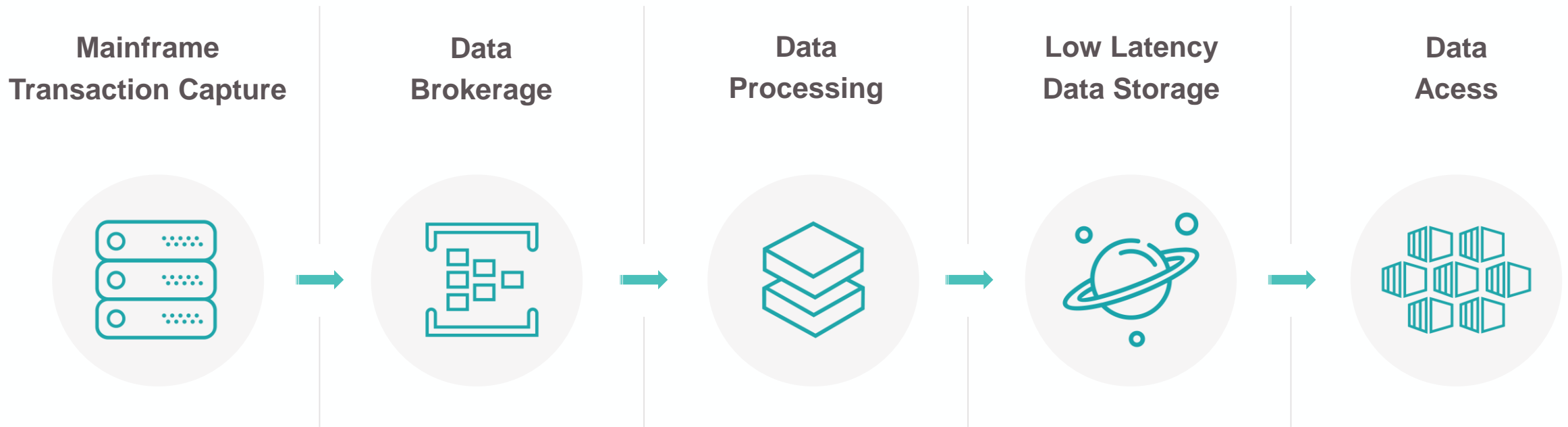
## DATA DELIVERY

Invoicing

Recommendation

Error Log

# Use Cases – Mainframe Offloading



# References in Data

---



# European Agency

## European Entity

The challenge was to develop a software solution supported on **Confluent Kafka platform**, based on several micro-services acting as interfaces between low-level/raw formats and higher-level formats, including business logic implementation on **streaming data**. Also, Confluent was used not only as central hub, but also to implement buffering from producers and consumers, built as a **mash of Kafka clusters**. The solution allowed for speed of processing, with low latency end-to-end, resilience and easy scalability (either horizontal or vertical).

### Highlight Technologies:



# Insurance

## Insurance Leader

The customer wants to implement a platform that can aggregate all relevant and needed information about its customers for search and access of other Applications (mobile apps, website and others), building a Customer Data Hub. Xpand IT was responsible to setup, implement and produtize the platform, based on Confluent, and the ingestion processes that feeds the final data sources.



### Highlight Technologies:



# Retail

## Major Retail

The challenge was built a full near-real time solution, leveraging the Kafka component. To enable generic applications to produce data a generic ingestion message driven API, was developed and worked a major frontend for data ingestion. To process (filter, enrich, streamline) and deliver (to several different targets, implementing different delivery semantics) the incoming messages a set of Spark streaming application were developed. The solution was developed in a way that new flows could be added by configuring them (without the need of any coding). The customer was then able to achieve the goal of having a robust, high-scale and low-latency solution.



### Highlight Technologies:

**CLouDERA**

APACHE  
**Spark**



**xpandit**

Proprietary & Confidential

SABER MAIS



# Utilities

## Major Utilities

The customer wants to build a Data Lake with an ingestion strategy that allowed for CDC based data to be integrated in fast cycles in the consolidated data. This would allow the customer to build a set of solutions, both traditional and advanced analytics. The challenge was very much tied with the size of some tables (several billions) and the number of changes some tables suffered on a daily basis (one table with 160.000.000 changes per day), which due to their size and RDBMS support couldn't cope with any analytics type of scenarios.

The solution used CDC data from Golden Gate delivered onto a Kafka cluster to consolidate target table data in fast cycles. The overall solution was able to import historical data (batch) and then merge onto a CDC mode, incorporating DML changes in cycles that could be as short as a few minutes. The Data Lake become a major enable of new use cases and value creation.

### Highlight Technologies:

**CLOUDERA**



# European Agency

## European Entity

The challenge was to develop a **classification solution of events in NRT (near real-time)** and propose an architecture for the deployment and monitoring.

Due to the large volume of messages received every day (~20 million messages from terrestrial and satellite sources), the modelling solution was built using python.

The implemented solution included a **viability analysis** about rich datasets, **determination of feasible models, modelling and productization** of a classification solution and **technical and technological support**.



### Highlight Technologies:



# xpandit

## Obrigado

---

Luís Vicente | Marta Gomes | Nuno Barreto

[www.xpand-it.com](http://www.xpand-it.com)