

Introduction to Artefact & Feature Team

2022

What we aim to cover today.

- 1. Artefact at a glance.
- Artefact & Azure use cases.
- 3. What is Artefact Feature Teams?
- **4.** Feature Teams Operation Model & Deliverables example.

We are a fast growing data service company that helps organizations transform data into value and business impact.



∧RTEF∧CT

We are global.

14 countries

16 offices

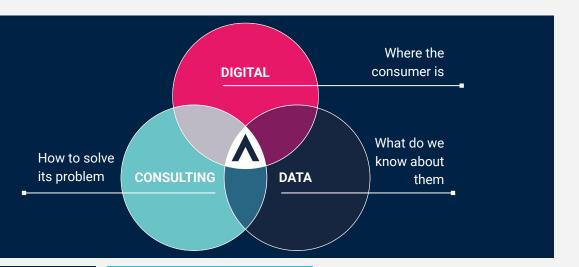
1000 employees

Europe, Asia, Americas (North & South), Middle East Africa



ARTEFACT

A data & digital services company providing an end-to-end offer.



DATA ACCELERATION PROGRAMS

- ∧ Data Strategy
- ∧ Data Governance
- Λ Data Platform Implementation
- Λ Data Factory
- A Data Consulting
- A Acculturation

DATA INDUSTRY SOLUTIONS

- Λ Al for Call Center
- ∧ Demand Sensing
- Λ Consumer & Market Insights
- Λ Data for PEs
- Λ Data for Category Management

DATA DRIVEN MARKETING

- Λ Data Marketing Strategy
- ∧ MROI
- ∧ Lead Data Agency
- Λ Consumer Data Platform
- Λ Data Partnerships
- Λ Advanced Analytics
- ∧ Personalization
- ∧ Data for B2B Sales

DIGITAL MARKETING

- Λ Digital Marketing Strategy
- ∧ Media Channels
- ∧ Ecommerce Services
- Λ CRM
- Λ Digital Content
- Λ Digital Technology
- Λ In-housing Framework
- Λ People Acculturation

Our team comprises cross-functional expertise

Data Engineer



Experts in cloud technology, they are specialized in building/reviewing data infrastructure suited from the business need. They also help with data flow automation as well as the ability to build specific tools in order to activation, if necessary.

Data Scientist



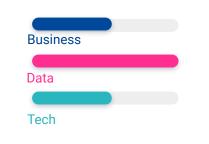
Experts in data modeling, from traditional Artificial Intelligent models until Deep Learning algorithms, they are always guided by the business problem resolution. They are specialized in building use cases prototypes, tracking and tagging and web analytics infra.

Data Consultants



Consultants specialized with experience in the market, they are always ready to understand the clients business challenges, prioritizing and translating them to the technical team. They help with project management and developing data governance.







We take pride in the loyalty of global leaders in many industries.

Banking **CPG** Insurance **★** Heineken

DANONE

Pernod Ricard

Reckitt

Unilever

HIVEA

Benckiser























AIRFRANCE /

Uisnes









































Cosmetic Luxury

















Health Wellness High Tech















Telecom Energy Services

















ARTEFACT

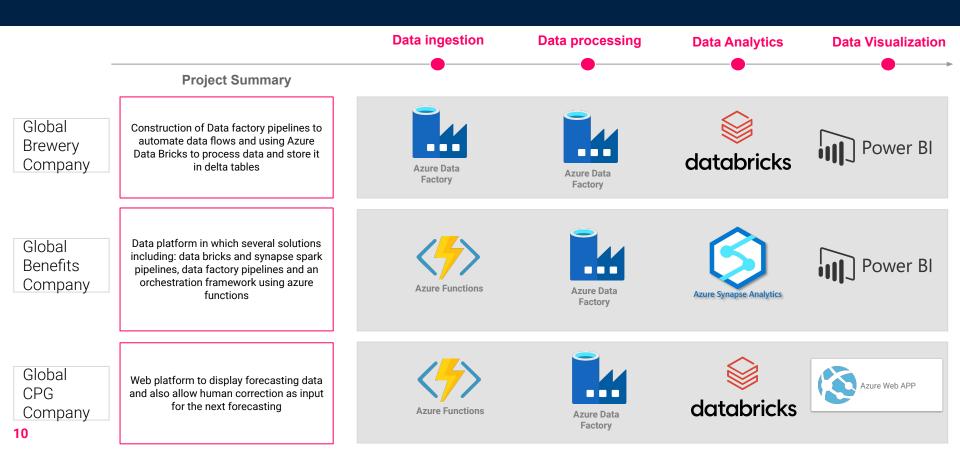
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In Brazil, we have 9 big clients helped in implementing and deploying Microsoft Azure stack in many of our clients.



We are familiar with most of the Azure stack with solid references of how to apply at scale on large corporations



Global Brewery Company

Marketing ROI

Global Brewery

Context:



Today, external MMM study is not fully utilized across the brands because it is not scalable to all brands, has low refresh rate, and low granularity of insights.



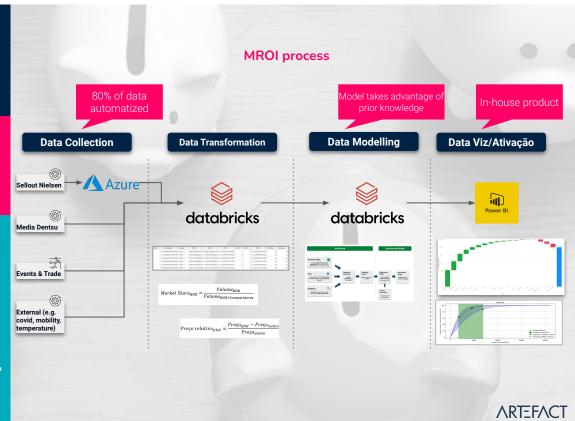
Business Question:

How to optimize marketing resources more efficiently through an in-house solution?

Business Value:

With our proposed MROI tool:

- Save around **BRL 1.3M/year spent on foreign market studies** for our 4 main brands (around BRL 350,000/brand).
- **Bring speed to decision making** of Marketing initiatives
- Solve pain points such as availability of insights, data granularity and investment planning time, optimizing marketing actions





Global Benefit Company

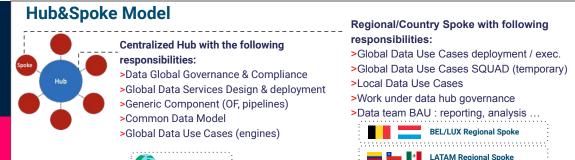
Hub&Spoke Model Deployment and Data Infrastructure



Services - Leader in food services and facilities management

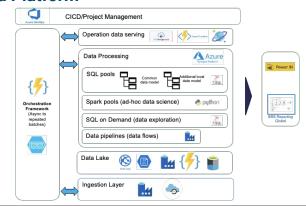
How to take the most from data cloud resources to be able to share data capabilities globally and reduce processing and storage costs?

- Operating Model: Deployment of a Hub&Spoke Global Operating Model Organization for the company.
- Data Platform: Prepare a common Azure data platform so each region can use generic pipelines and codes to facilitate ingestion and processing automation, as well as share of data use cases



Azure Global Data Platform

Global Hub



UK Country Spoke

India Country Spoke

ARTEFACT

Global Healthcare Company

One central data platform fueling the business needs of diverse team (ecommerce, marketing, sales, BI, ...)

Global Healthcare Company

Context

Company has an ambitious plan to reach the e-commerce edge by 2025... To achieve this objective we started building the big data foundation that supports the accelerated e-commerce growth and enables Al use cases

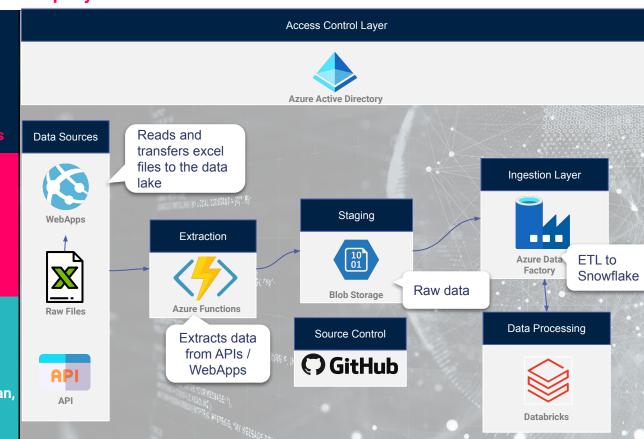


Objective

Centralized strategic data sources for e-commerce in a single source of truth enabling access to and cross-referencing of multiple databases in real time

Enablers

- □ DC: Understand business needs, design business cases, and connect business decisions with data
- DE: follow devops best practices, using lean, link data sources and make the data infrastructure globally scalable



Global CPG Company

Demand Forecast and Deployment tool

Food & Beverages company











Construction of a short-term demand forecasting tool and process management from start to finish supplying CDs with collaboration from 6 areas.



- A A complete tool to manage the process of demand and deployment
- A Process integrated with Deployment, Sales operations, PRGM, GRs and Customer Services with 4 different views.
- A global data framework that generates hundreds of machine learning models for each SKU X **Customer combination**



- ∧ **5.5 pp gain in prediction accuracy** with a lower bias (approx. R\$350k gain in revenue)
- ↑ Up to **40% of time saved** every week
- A 8 new structured data sources
- ↑ +700k new data points per month



Understanding of technical and business processes, validation of MVP scope (data, tools, models, output)

Incremental building of MVM in 4 sprints, initial integration of the views, understanding of business needs to be targeted

Test and industrialization of the final product. Delivery of the MVP's final version

40+ Interviews

50k+ Models Trainings

8 Views

DEMAND

Goal: Automate the process of building the naive demand prediction with a model capable of forecasting the demand for Salvador DC with a higher FA (2p.p.)



COLLABORATION

Goal: Allow other teams to collaborate in real time in order to increase FA and analytical power

DEPLOYMEN

Goal: Automate the deployment process in the integrated tool and test some intelligence

What we aim to cover today.

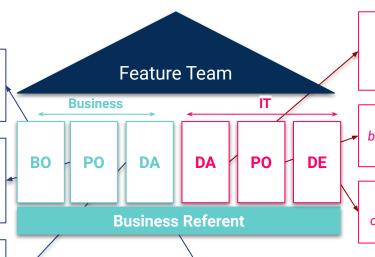
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What is the Feature Team: Multidisciplinary team that can connect business to technology

<u>The Business Owner</u> defines the business problem, models the output, sets KPIs for the project, challenges decisions, and signs off on each step of the way

Product Owner (Business) provides
expertise on addressed topics and
supports the lab on operational and
technical decisions,
on demand from the B.O.

The Data Analyst (Business) conducts projects to support the transformation of business operations through the effective collection, processing, and visualisation of relevant data



<u>The Data Analyst (IT)</u> can **update and write queries** and handle **dashboard maintenance** on its own. He is the technical owner of the dashboard

<u>Product Owner (IT)</u> **translates** the business brief into technical specifications and **drives agile** project execution

<u>The Data Engineer</u> manages the dashboards backend (with ownership, optimization, and through pipelines health checks)

The Business Referent_facilitates
communication between the project and
strategic decision-making groups. His role
is to prioritize data subjects within the BU to
be in line. Can also act as troubleshooter
when needed

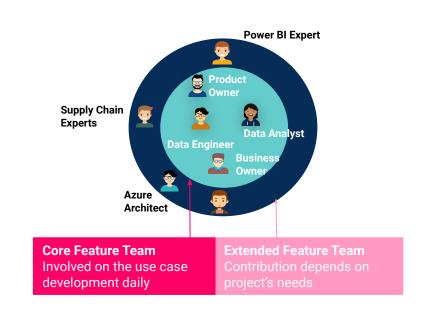
This model makes flexible to allocate person with specific skills

Responsibilities

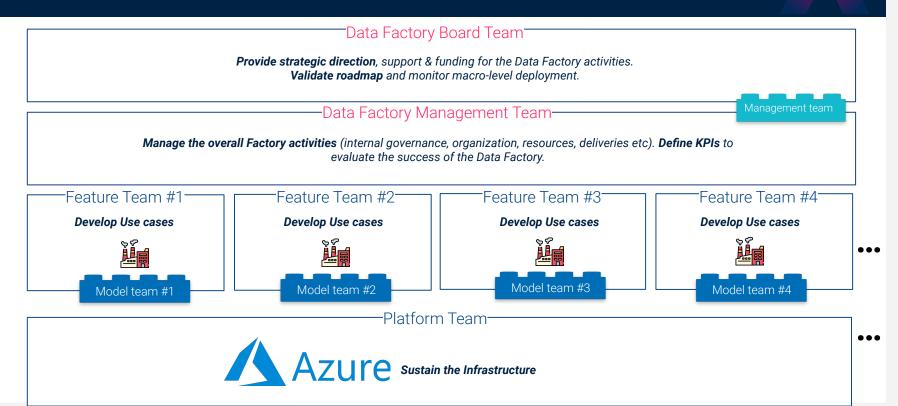
- **Deliver at each phase** of the BI use case life-cycle (e.g. Qualification, Production, Maintenance) in close collaboration with business and tech teams
- Collaborate as a team with daily alignment ensuring information flow and transparency
- Contribute to the BI Factory community and communicate achievements to Partners (e.g. write articles, present demos, share learnings, etc)
- Implicate the Business Referent on a monthly basis

Objectives and Key Results

- Business impact: impact of use case on top line, bottom line and / or other business KPIs
- Al use case adoption / Customer satisfaction: Qualitative feedback survey results



The Data Factory will be organized around data models types with a focus on "customer" satisfaction:



Global Brewery Company Example: multidisciplinary hybrid team





Factory Sponsor



Factory Director



Product Manager



Business Leads

Feature Teams

FT* B2B Digital

- **1** PO Sr.
- 2 Data Scientist
- 3 Data Scientist
- 4 Scrum Master
- 5 Business Owner

FT Finance

- PO Sr.
- **2** PO
- Data Scientist
- 4 Scrum Master
- 5 Business Owner

FT Marketing

- 1 PO Sr.
- 2 Data Scientist
- 3 Data Scientist
- 4 Scrum Master
- 5 Business Owner

FT Supply

- 1 PO Sr.
- **2** PO
- Data Scientist
- 4 Scrum Master
- 5 Business Owner

FT People

- 1 PO Sr.
- **2** PO
- Data Scientist
- 4 Scrum Master
- 5 Business Owner

FT Production

- **1** PO
- 2 Data Scientist
- Data Scientist
- 4 Scrum Master
- Business Owner

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Platform Team

Tech Lead **2** Product Owner

3 Data Engineer

Data Engineer

Platform Owner

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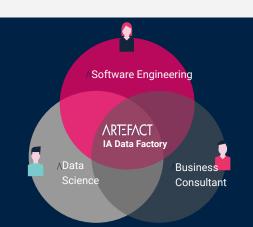
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Data use case lifecycle is structured around 3 steps



New Demand **MAINTENANCE QUALIFICATION PRODUCTION** Demand Delivery Objective Continuously monitor dashboard Understand business challenges and quality, collect evolutive and technical complexity to qualify the Build the UC corrective insights and provide support UC & design solution architecture to end users Deliverable Dashboard & Integration, or digital Qualification report Monitoring the tool assets Key steps Use case impact monitoring Qualification form filling Data architecture building Qualification meeting Front-end building Teams onboarding In-house deep dive **End** users iterations Ticketing process

Al Data Factory methodology is able to delivery fully customizable Data products in 8~16 weeks:



New Demand

QUALIFICATION

PRODUCTION

MAINTENANCE

Demand Delivered



Business Discovery

MVM

4~8 weeks

MVP 2~4 weeks

Product Industrialization
4~8 weeks

- > Understand the business needs and map all the enablers, data and technology barriers to build each use case;
- > Prioritize and qualify the use cases to be built in terms of business impact and technical feasibility.
- > Ingest, prepare and harmonize all the necessary data defined in the previous phase
- > **Design and structure the technical environment** for the use case.
- > Build the models and algorithms that best respond to business decisions (MVM - Most Valuable Model)

- > **Define the key performance identifiers** to evaluate the model:
- > Structure and automate the data process (ETL) to capture, iterate and accelerate the execution of models;
- > Run tests in the "real world" to evaluate the effectiveness of the model.

- > Scale the scope of the created product;
- > Design and create digital products for large-scale activation:
- > Scale the product to business areas to accelerate day-to-day decisions.

ARTEFACT

What is a use case? Is something that can bring tangible business value

What is a use case?



A use case **is a digital product** in which we identify a problem, propose a solution and execute the corresponding action, **all the use case must have:**







Answer a
Business Problem



2-5%

2

Can be build incrementally



3

Can be measured

Real Case Example

Automated Digital Marketing efficiency using ML

efficiency using ML
Leverage consumer data to develop
personalized marketing approaches &
media content at an individual level

Demand Forecast IA Models

Optimize product flows (for cost, service levels) across sourcing, plant, transport and warehouse network

10%

7%

Improve Digital UX for POS
Enhance outlet selection,
assortment and merchandising
optimization at POS level



-4%



Sales lift (x^c



Artefact is an expert in the 4 key challenges of this project, therefore we believe we are the ideal partner you are looking for.

Explore the right data/analysis from the business needs to accelerate decision making...

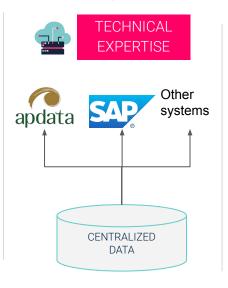
...characterize and correlate the data to amplify and speed up the indicators...

... building dashboards from UX best practices for easy end-user adoption...

... and AI analysis for the detection of opportunities and trends

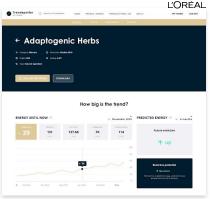














Artefact is the right partner because we have a specific methodology based on the user story to build dashboards that are not only about KPI visibility but about the actual business.

Start from the business question

Identify the user story to be answered

Identify the KPIs and correlated data

Select the analysis that fits the user story

ANALYTICS

ILLUSTRATIVE



I want to...

"...See target vs sales by brand and customer."

Then..

"...I can evaluate if I should look for alternative actions for the rest of the period."



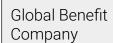


Solutions must be generated from the business needs, aligned with the business strategy, and fully validated by the user.



We are technology agnostic: We adapt to the data environment and the business challenges of our customers.





Global CPG Company

SAP R3/ERP (legacy systems) + AWS







→ Our goal was to migrate the data coming from SAP R3/ERP among other systems to the AWS environment (S3 and Redshift) by using custom and native integrations, such as AppFlow.

 Creating personalized WebApps and Dashboards using data and processes with complex operation inside Snowflake. In addition, we also master most of the technology stacks in the market, having certifications from Google, Amazon and Microsoft



Artefact has developed Dashboards for companies around the world and applied the best practices for visualizations.



DATA EXPERTISE
VIZ / FRONT-FND

Global Healthcare Company

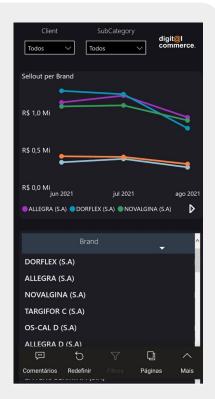
Ecomm Data Foundation





∧ A 3+ year partnership featuring several data projects, the latest one focused on E-commerce, which included more than 30 analyses in the final Dashboards

Dashboard Examples: sell-out, market share, traffic evolution



Global Tech Company



CDM Dashboard

∧ A fully automated Dashboard shared globally with 30+ countries for the company to monitor media performance in real time



We develop many Artificial Intelligence projects, from trends detection to voice shopping



IA EXPERTISE

Global Healthcare Company

Pricing optimization

- ∧ Preliminary evaluation
- ∧ Use case modeling
- ∧ Implementation strategy definition

BUSINESS VALUE

Prioritization for price increases for products with a lower chance of losing volume







Global CPG Company

Demand and supply forecasting

- ∧ Short-term demand forecasting
- ∧ Start-to-finish process management for supplying the DCs
- More than 50k trained models for demand forecasting
- ∧ 8 screens in a customized portal, one for each area involved in the project

DEMAND

More than 5% gain in model accuracy



COLLABORATION

Engagement of 6 areas that previously did not contribute to the generation of the demand forecast

DEPLOYMENT

Automation of the supplying process, integrating forecasting results and testing of intelligent features

We have a track record of success in end-to-end data management projects with other customers

Global Healthcare Company **BI Acceleration Program A Building the Foundations:** Understand data needs, data vision and qualify use cases for Advanced Analytics A Consolidate and Launch: New BI Portal, report redesign according to business needs ∧ Aculturate: Data governance (building catalog and defining owners) and Workshops for change management

Global Healthcare Company Centralization of strategic data sources for e-commerce ∧ +10 prioritized data sources

- A Data lake with automatic data ingestion flow
- A Data warehouse for data consumption
- 9-page dashboards with 30+ views



Global CPG Company

Leverage intelligence to impact sell-out in order to maximize profitability

- Store prioritization
- Price simulator to help in the negotiation process
- Supply analysis tool with sell-in suggestion
- ∧ Alert system for the execution team in the stores



Global CPG Company

Optimizing and building a lean cloud architecture for sales intelligence

- Mapping and documentation of the entire legacy system (with local server)
- Optimization of +250 sales. invoices and product tables into 4 main tables for easier use and maintenance
- Playbook with data flow mapping and future mapping including business context







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Thank YOU!