



grupo  
primavera

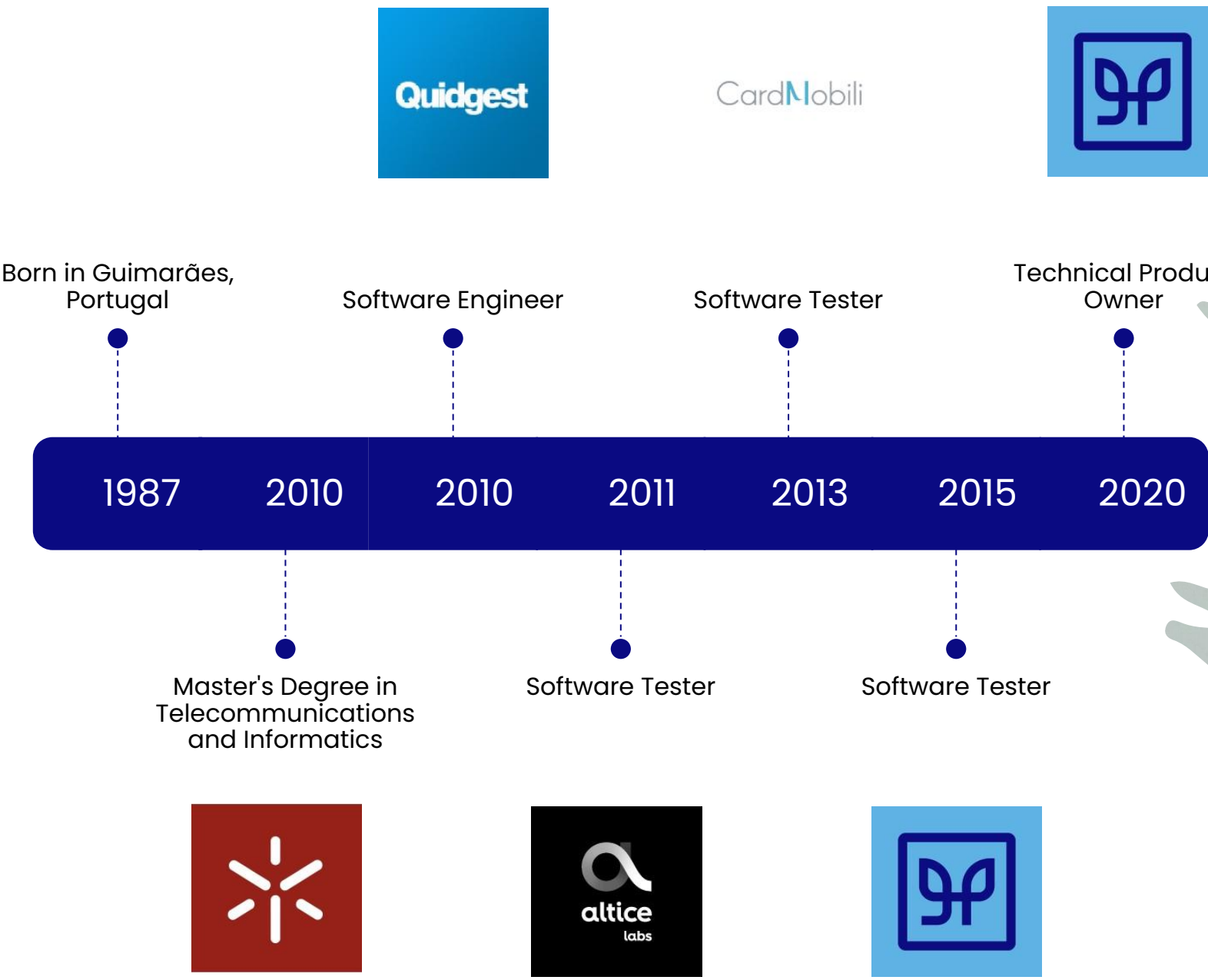
**AI,**

**the enabler of I-ERP Systems**

Leandro Duarte, Technical Product Owner

10.2022

# About me



# Primavera's Group in 2022



Revenue

**78M€**

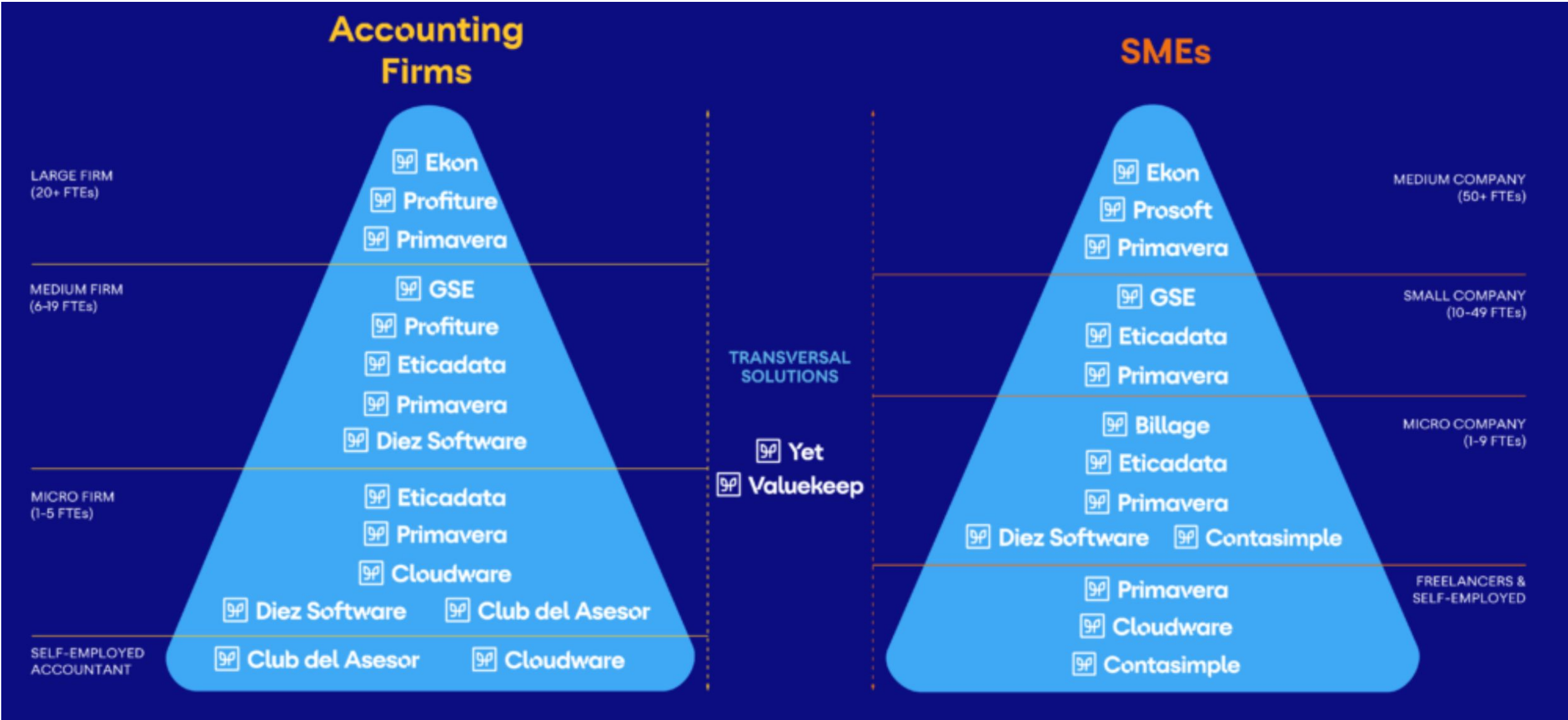
Clients

**+165,000**

Accountants

**+24,000**

# Context



# Goals

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1

- Help the business manager to
  - Increase productivity
  - Take better decisions

- Help the group to
  - Take data-driven decisions
  - Know the behavior of our customers

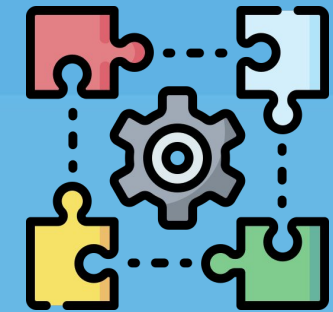
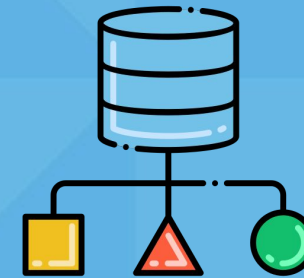
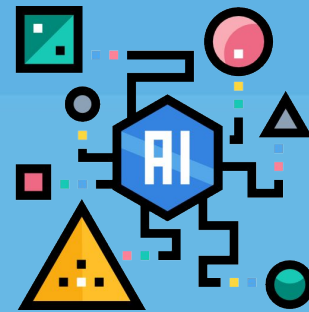
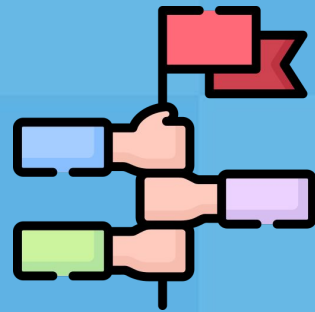
2

# Challenges

- Multiple configurations in ERP
- Many companies
- Numerous data sources
- Multiple data models
  - Accounting
  - Human Resources
  - ...



# What is Carbon?



# What is Carbon

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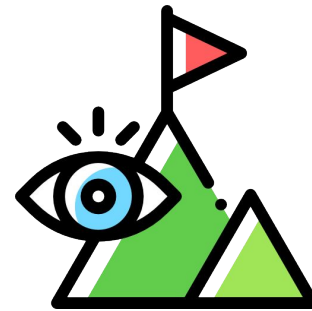
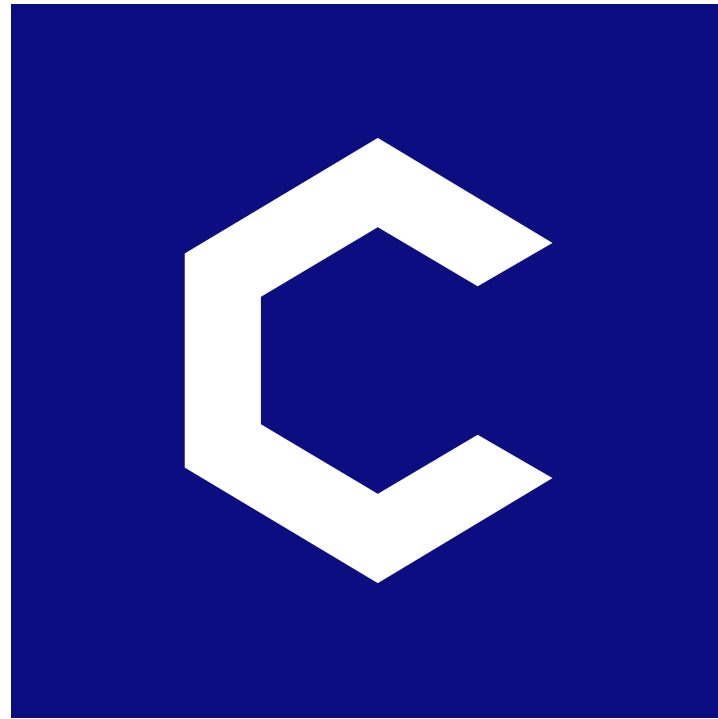
**Carbon is mainly an enterprise data strategy for a business community of products and companies.**

That's why we can't buy it from a vendor.

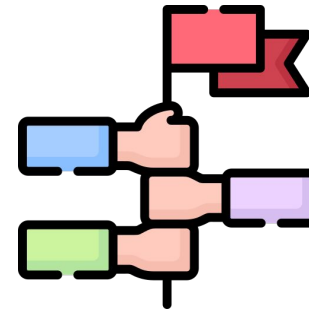
It mostly depends on the level of adoption of the organization and then on the technology platform.



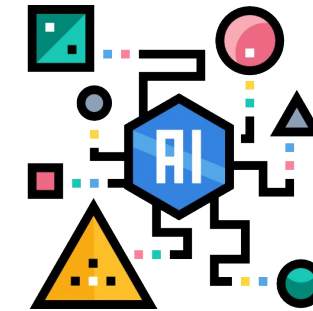
# What is Carbon



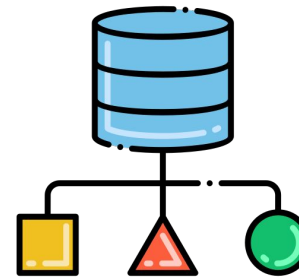
**Vision**



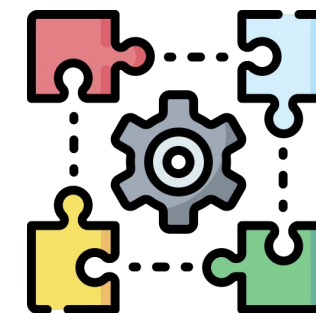
**Team**



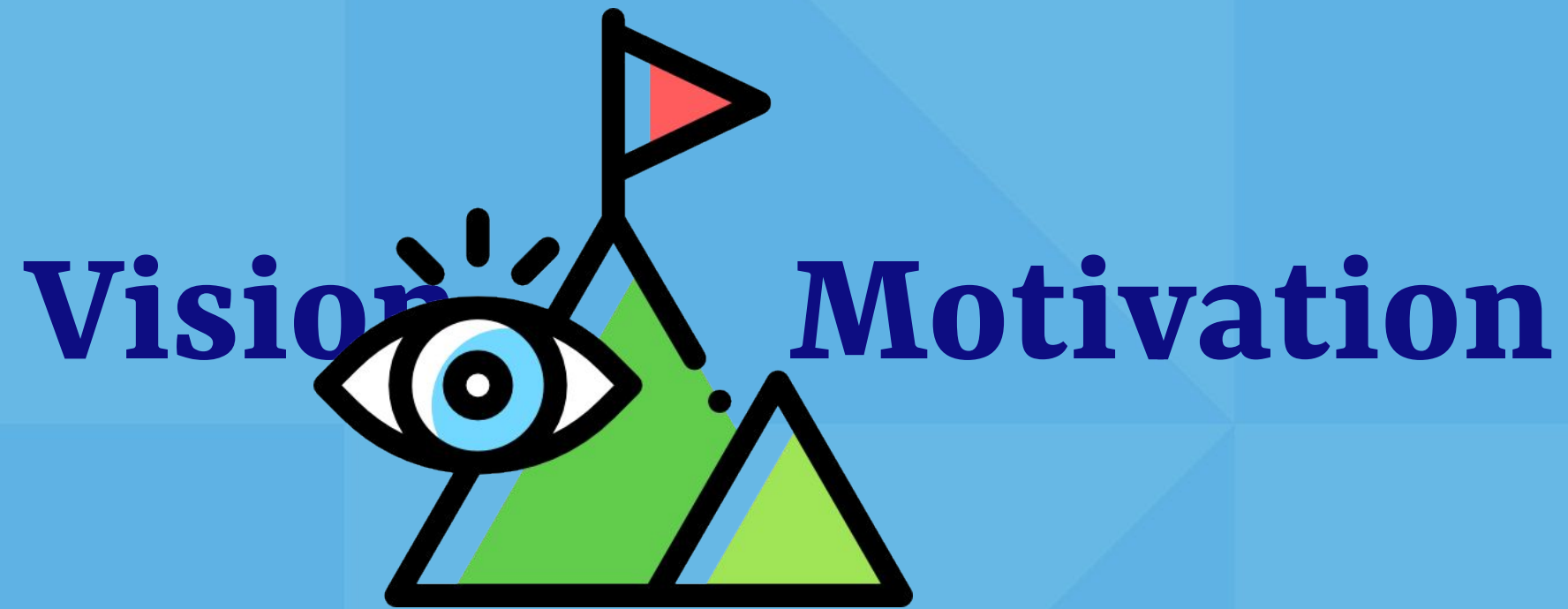
**Data  
Factory**



**Ref.  
Data  
Model**



**Ref.  
Arch.**

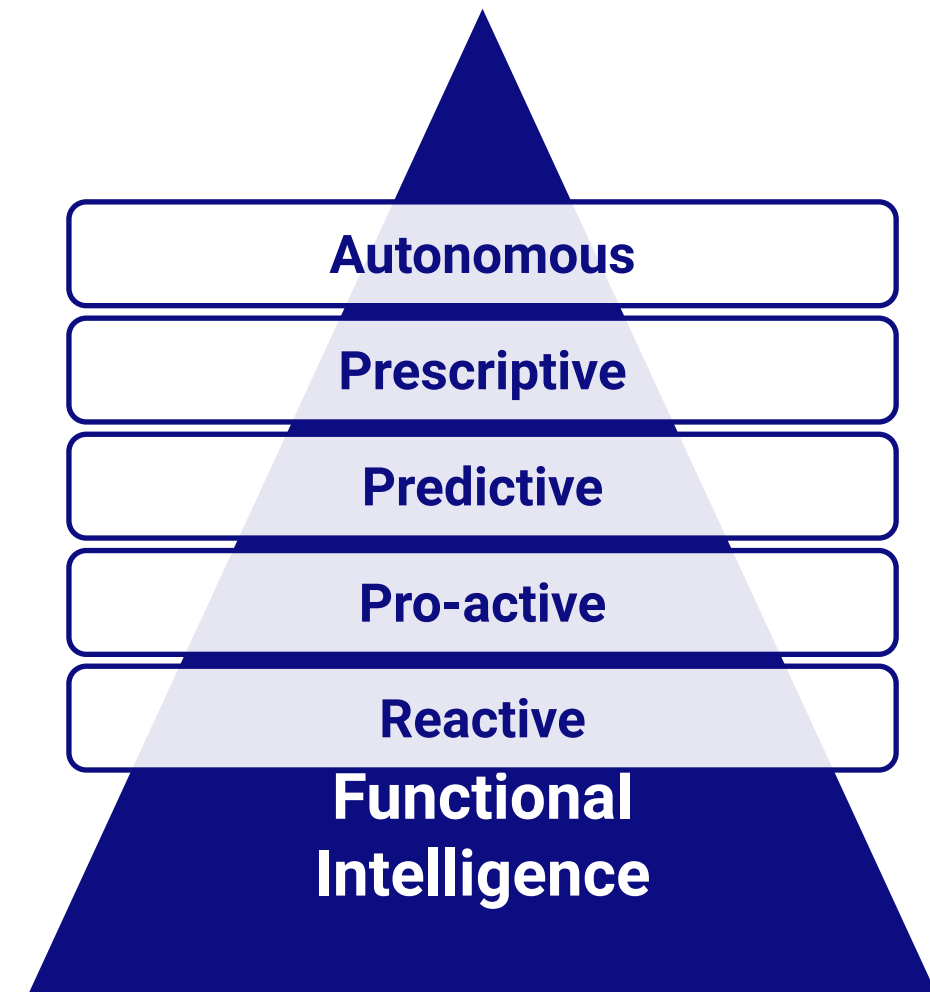


# Carbon Vision

## How to build intelligent software ... far beyond the basics?

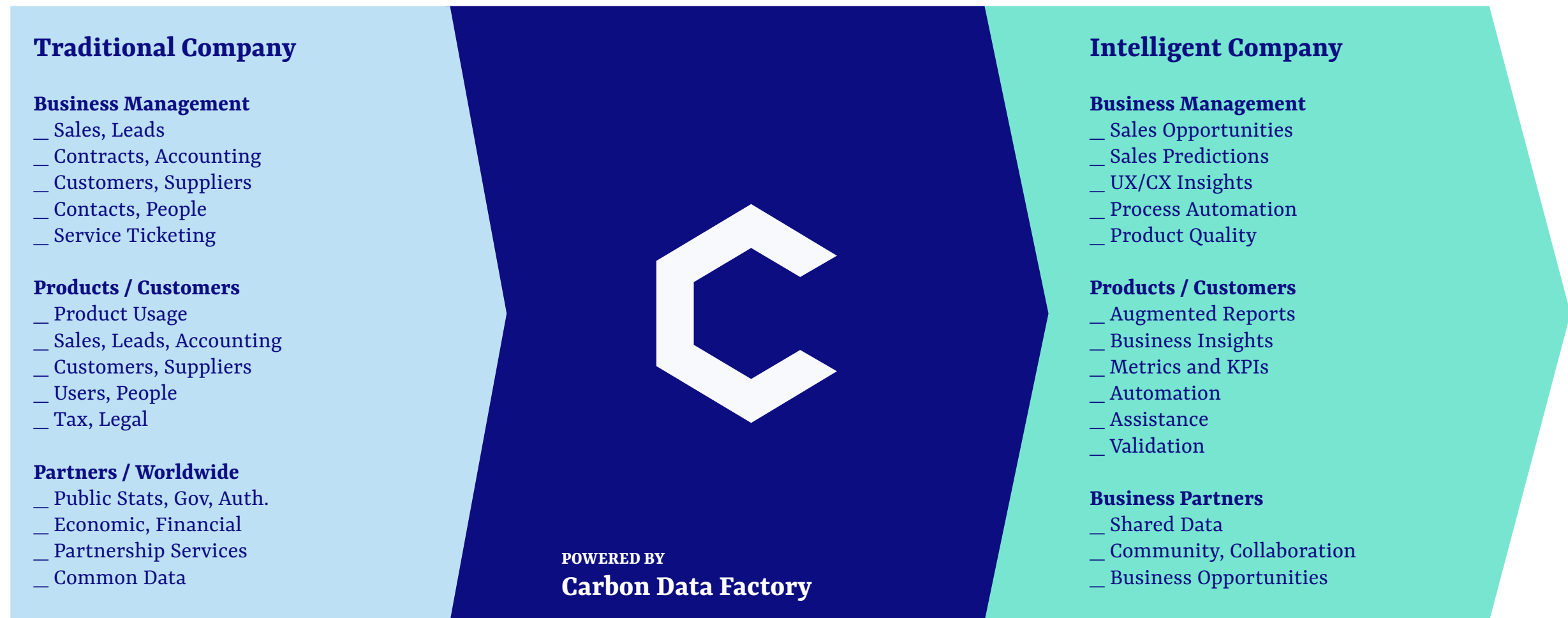
*"Our vision is to provide a solution where the manager comfortably supervises the autonomous system that runs his business"*

**Data is the fuel** of that solution; it provides the power that is required **to build intelligent features.**

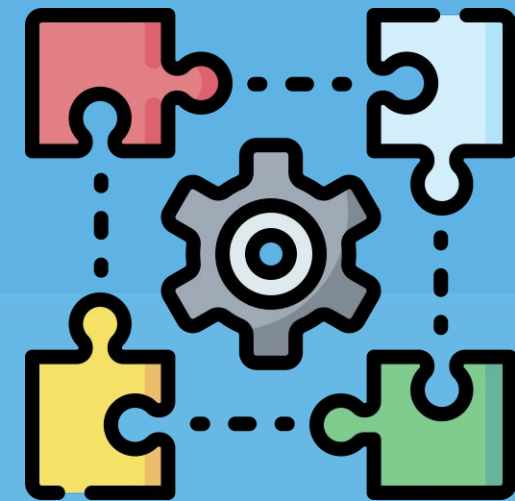
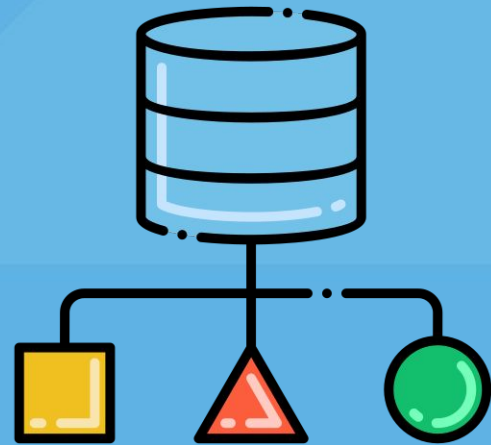


# Carbon Vision

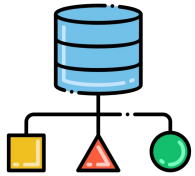
## We need an Enterprise Data Strategy



# Carbon References

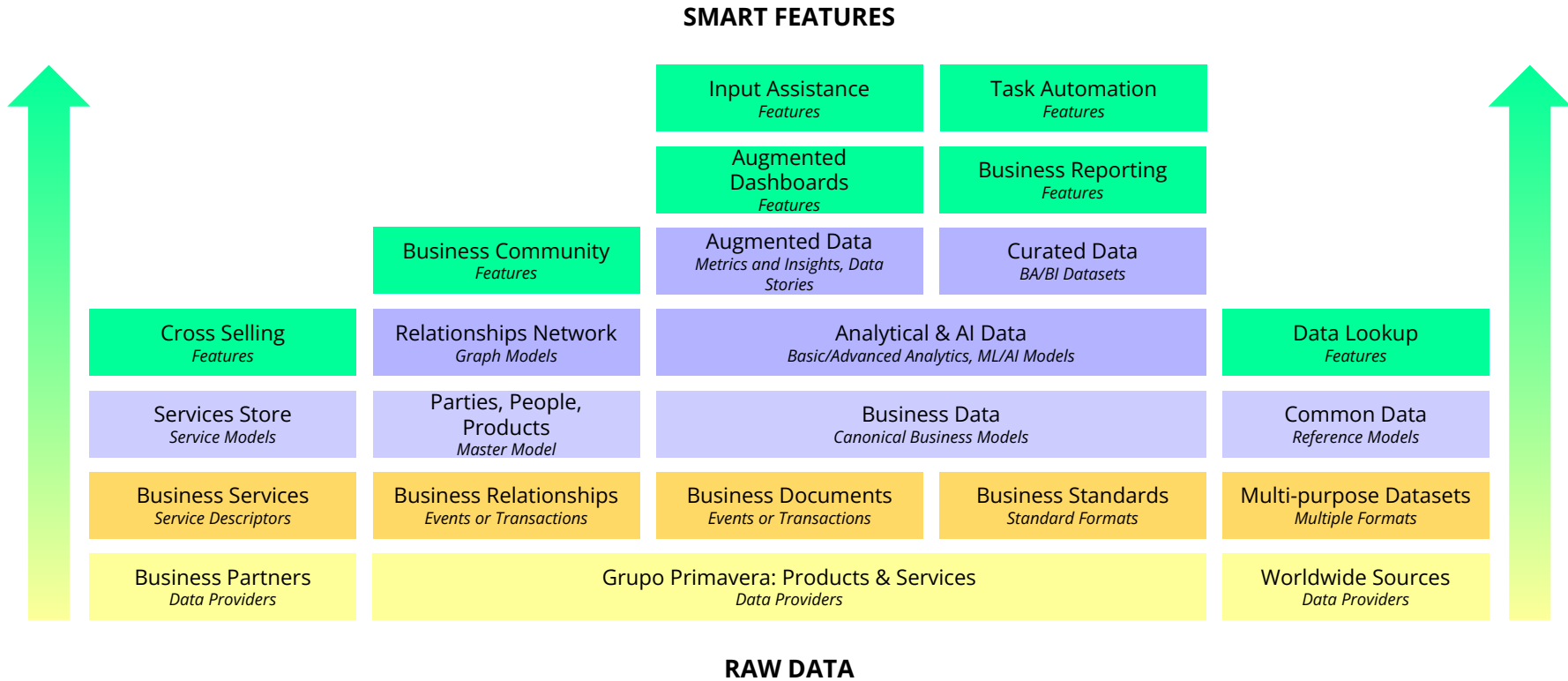


# Carbon Data Model

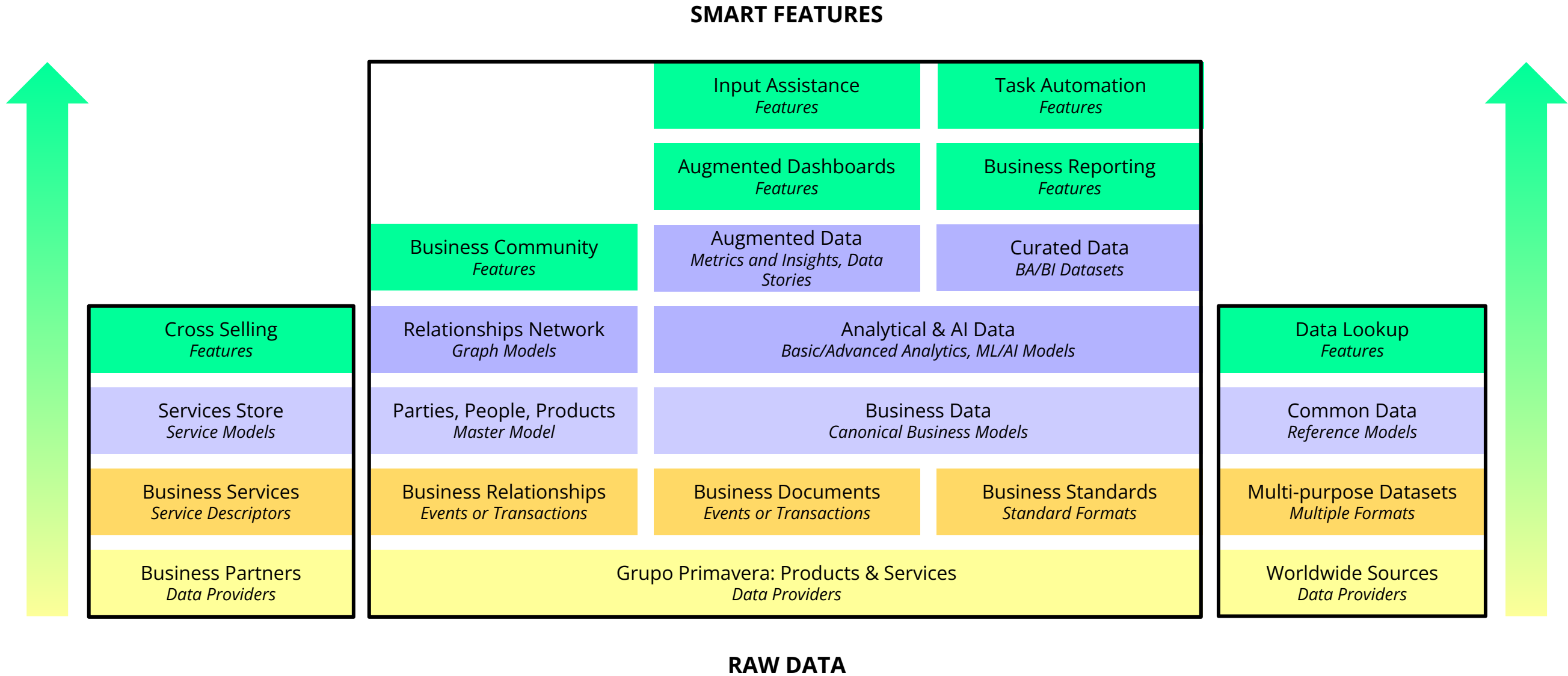
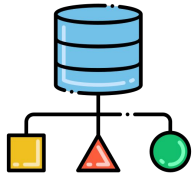


It follows this **Reference Data model**

This diagram shows the data stack we can build from various data sources, increasing its value from level to level, returning valuable data as a product itself, or using it to leverage smart features of our community of products.



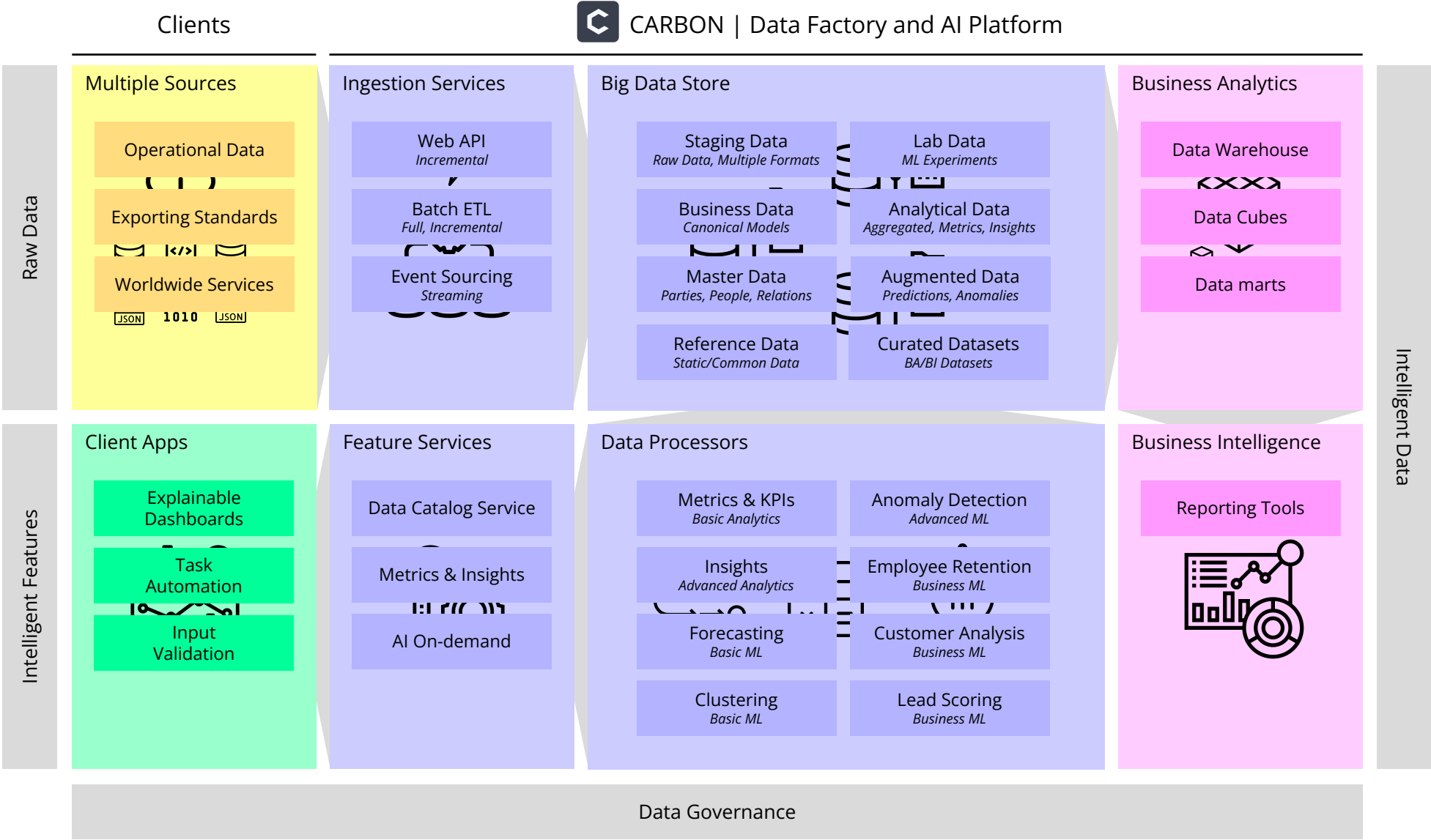
# Carbon Data Model



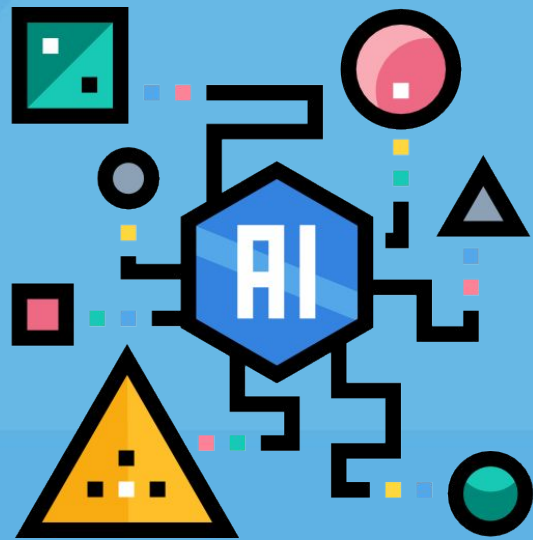
# Carbon Architecture



It follows this **Reference Architecture**







# Features and Capabilities

# Augmented Dashboards

**“70% of enterprises view advanced analytics as a critical strategic priority, but only 10% actually believe they’re achieving anywhere near the full potential value of those analytics.” – Chris Brahm**

# Augmented Dashboards

## Metrics Benchmarking



Compare metrics by company, location or economic activity.

## Variations Detection



Detect unexpected variations, explain causes or composition.

Anomaly detection algorithm applied to time series data.



## Context Insights

Summary of the situation presented in the graph.

## Predictive Analysis

Data projection and forecasting algorithms.

# Business Report

# Business cases

## Accounting Report, ROSE AS



The screenshot shows an email interface. At the top left is the logo for ROSE ACCOUNTING SERVICES. On the right is a blue donut chart with five segments. Below the logo is a circular icon with 'xyz' and the text 'Contabilidade XYZ'. The main body of the email contains a greeting and a message about a management report for 'Manuela Oliveira, Lda.' for the period of 01/04 to 30/04. At the bottom, there is a reply bubble from 'Henrique Bastos' with a message about analyzing a new program of incentives for SMEs starting in June.

ROSE ACCOUNTING SERVICES

xyz Contabilidade XYZ

**Olá Manuela Oliveira,**

Conheça o relatório de gestão da empresa **Manuela Oliveira, Lda.** relativo ao período de **01/04 a 30/04.**

Boa tarde Dr.ª Manuela,  
Espero que se encontre bem. Aproveito para lhe dizer que estamos a analisar o novo programa de incentivos para PMEs que vai abrir em junho. Qualquer dúvida, estou ao dispor.  
- Henrique Bastos





Contabilidade XYZ

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- Henrique Bastos

**1**

### Obrigações



Tipo de Obrigação	Valor a Pagar	Pagar até
IVA	4 606,00 €	20/05/2021
Segurança Social	4 150,75 €	20/05/2021
Retenções	3 324,06 €	20/05/2021
Fundo de Compensação	35,00 €	20/05/2021

Bu

Bus  
ROSE



2

History Analysis



Lookup for relevant events, highlight achievements and compare values over time.

Variations Detection



Detect unexpected variations, explain causes or composition.

Anomaly detection algorithm applied to time series data.

Insights de Negócio



It reached 40% of the Expenses budget in April. It will exceed the annual budget by 8%.

COMENTAR →



In this period, the conversion rate of quotes into orders was 10%. In the previous period it was 8%.

COMENTAR →



Em Abril 15% das vendas foram feitas com clientes conquistados nos últimos 3 meses. No mesmo período de 2020 esse valor era de 50%.

COMENTAR →



Total Expenses increased by 40%: Electricity increased by 25%; Fuel increased by 50%.

COMENTAR →



Detetamos uma variação significativa nos gastos com pessoal, 7% do valor em indenizações.

COMENTAR →



Detetamos uma variação significativa nas vendas, 70% desse valor deve se à venda de mercadorias.

COMENTAR →



Predictive Analysis

Data projection and forecasting algorithms.

Bu

Bu  
Acco

3

Performance  
Analysis



Temporal: Previous, Homologous  
Community: Company, Sector, Region

## Indicadores de Desempenho



VENDAS E PRESTAÇÃO  
DE SERVIÇOS

248 742,24 €

Mês Anterior: 87,86% ▲  
Homólogo: 39,53% ▲

Sector: 20,00% ▲

GASTOS COM PESSOAL

110 825,79 €

Mês Anterior: 10,03% ▲  
Homólogo: 6,17% ▲

Sector: 8,00% ▲  
Vendas: 44,55%

FORNECIMENTO DE  
SERVIÇOS EXTERNOS

21 305,05 €

Mês Anterior: 57,78% ▲  
Homólogo: - 11,73% ▼

Sector: 5,00% ▲  
Vendas: 8,57%

CUSTOS DAS MERC.  
VENDIDAS E DAS MAT.  
CONSUMIDAS

- €

Mês Anterior: - %  
Homólogo: - %

Sector: - %  
Vendas: - %

EBITDA

116 624,02 €

Mês Anterior: 150,61% ▲  
Homólogo: 175,00% ▲

Sector: 16,00% ▲  
Margem: 46,89%

LIQUIDEZ GERAL

3,61 Min. 0,2

Capacidade que uma  
empresa tem de  
honrar com as suas  
obrigações de curto e  
longo prazo.

AUTONOMIA  
FINANCEIRA

0,74 Min. 0,2

PRAZO MÉDIO  
PAGAMENTOS

30 dias

PRAZO MÉDIO  
RECEBIMENTOS

15 dias



Related  
Metrics

Compare related metrics  
or key performance indicators



Reference  
Metrics

Benchmarks or business rules  
about good and bad performance





# Lessons Learned



You cannot buy **YOUR** data strategy from any technology vendor.



Very expensive and it's one solution for each problem.



Do it in **your way**.

**“We have no data!”**



**No historical data, or it's not accessible, or is not ready to consume.**



**Go for it – wherever it is, meanwhile use synthetic data.**

Companies take decisions based on assumptions.



Does not have reliable data or deny data output.



Create a **data-driven** company **mindset** to take better decisions.

Travel for a success **AI strategy** is complex and twisted.



Convince stakeholders, a different team mindset and a rapidly changing technology.



*“By failing to prepare you are preparing to fail.”* – Benjamin Franklin

# Questions?

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Raise your hand please!

After the session, please fill out this form to send me your feedback.

Thank you!

leandro.duarte@primaverabss.com  
lmfduarte@gmail.com



<https://forms.office.com/r/EAGJBTaRUG>



**grupo  
primavera**

**Together we grow**