

# 360° Company Dashboard

## Information Systems

Final Report



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# 1. Project Overview

This project consisted in the development of a web application with the intent of providing relevant data, and through analysis of such data, retrieve key performance indicators regarding company status. This information is delivered in an intuitive way, as to simplify user's understanding of such amount of data and consequently offer a better insight into the business progress.

The dashboard contains information concerning the financial status of the company, its sales to dealers, its purchases from suppliers, its inventory and its accounts payable, etc.

The WebApp we have developed communicates with the *Jasmin's* WebAPI in order to obtain needed data, which in turn, is parsed and analysed by our own backend service. A parser for the SAFT-T file was also created in order to allow the application to acquire data about the company such as the profit and loss statement and the balance sheet.

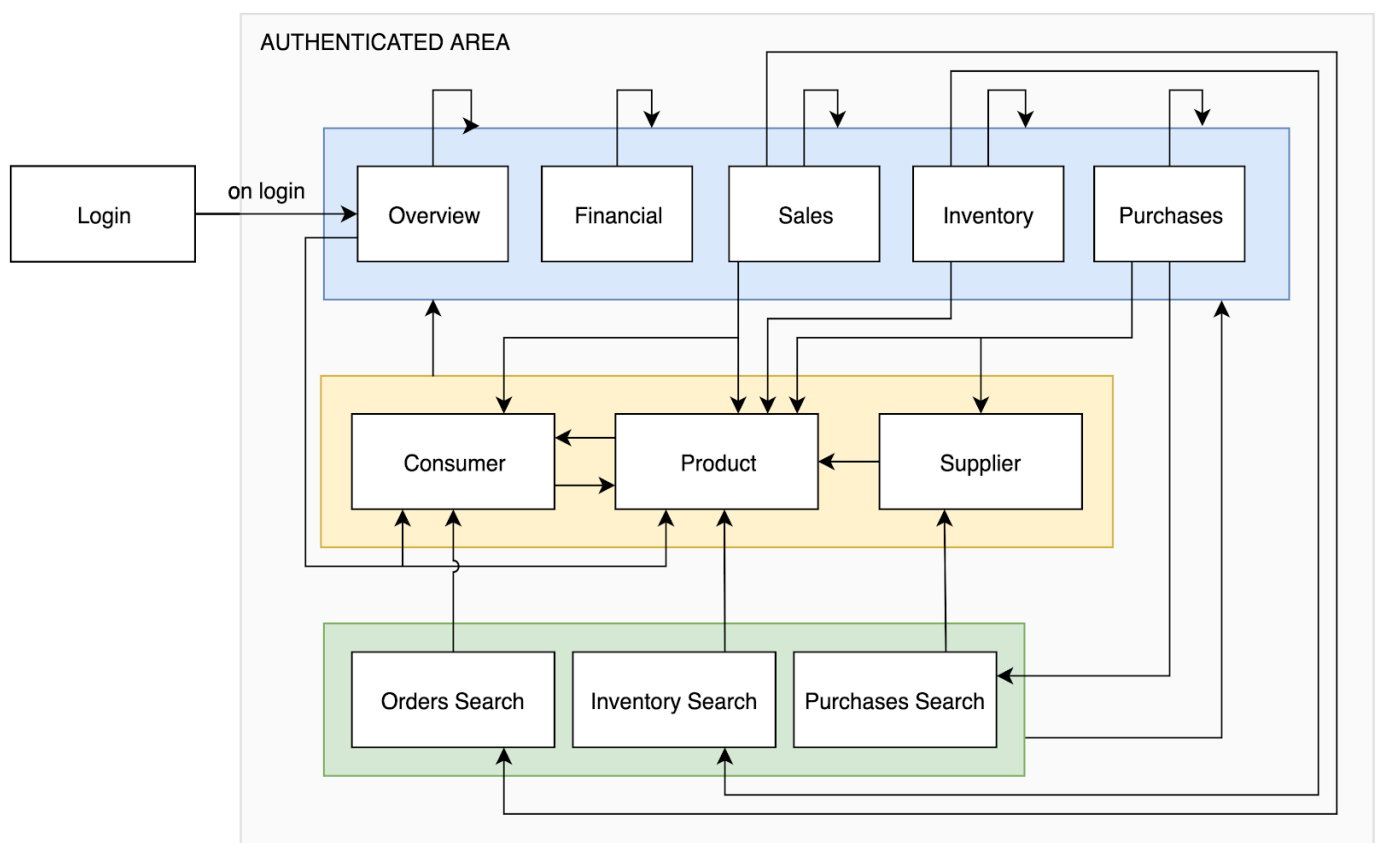


Figure 1: Site map of the web application

## 2. Functionalities

### 2.1. Overall functionalities

Apart from all the information provided in the core views, our web application provides the following functionalities.

Functionality	Description
Authentication	Access to the company's dashboard is restricted
Parse of SAF-T files	The balance sheet is built by parsing a SAF-T file using its taxonomies. The parsing of the file is efficient and can be used in any valid SAF-T file.
View of company information	Company information such as its' tax identifier and address can be found in the company's page.
View balance sheet	Visualize the company's balance sheet.
View trial balance sheet	Visualize the company's trial balance sheet.
View profit and loss statement	Visualize the company's profit and loss statement.
Filter of data through quarters	The data shown can be regarding the whole year or filtered by quarters. When the second, third or fourth quarter is selected an increase or decrease percentage of the data is shown regarding each key performance indicators that compares its value in the selected quarter with the previous one.
Search sales orders	All sales orders can be searched, filtered and sorted. Meaningful information about each sale is available such as the consumer, its' tax id, payable and taxable amount, gross value of the sale, document and due date. For each product sold, it's shown the name, description, unit price, quantity, payable and taxable amount, gross value and delivery date.
Search purchases	All purchases can be searched, filtered and sorted. Meaningful information about each purchase is available such as the supplier, its' tax id, payable and taxable amount, gross value of the sale, document and due date. For each product bought, it's shown the name, description, unit cost, quantity, payable and taxable amount, gross value and delivery date.

Search inventory	All inventory can be searched, filtered and sorted. Meaningful information about each product is available such as the product key, it's description, brand, price and number of units in stock.
View of inventory drill down	Meaningful information regarding the product is shown such as its' name, assortment, brand, product key, description, current stock, purchase and sale price, number of units bought and sold per quarter, top consumers.
View of a consumer drill down	Meaningful information regarding the consumer is shown such as its' name, tax id, currency, address, contact information, total amount of purchases made, top bought products.
View of a supplier drill down	Meaningful information regarding the consumer is shown such as its' name, tax id, currency, address, contact information, total amount of sales made, top sold products.

## 2.2. Key Performance Indicators (KPIs)

Within our core views and drill-down pages we can find the subsequent KPIs, which display useful information in an intuitive manner.

Functionality	Description	Value	Associated Core View
Net Sales	Grand total of all sale transactions minus returns, sales allowances and discounts.	Know the amount of money the company has earned from sales of its products.	CORE_OVERVIEW CORE_SALES
Cost of Goods Sold	The cost of the materials and labor that were used to create the products.	Assess the amount of money that goes into producing the products the company sells.	CORE_OVERVIEW CORE_SALES
Inventory Value	The cost of unsold inventory.	Know how much money the company has on the current inventory.	CORE_OVERVIEW CORE_INVENTORY
Inventory Turnover	The number of times that the company has sold and replaced its inventory.	Help understand the inventory changes. A low turnover implies weak sales and possibly excess inventory. A high ratio implies either strong sales or insufficient inventory	CORE_OVERVIEW CORE_INVENTORY
Total Assets	Total assets owned by the company.	Know the total value of the assets owned by the company.	CORE_OVERVIEW
Financial Autonomy	The ratio between the company's equity and the assets detained by the company.	Understand the percentage of the assets that are being funded by capitals owned by the company itself.	CORE_OVERVIEW CORE_FINANCIAL

Top Selling Products	Table with the 5 most sold products of the company.	Understand which products are in great demand.	CORE_OVERVIEW CORE_SALES CORE_INVENTORY
Top Consumers	Table with the 5 consumers who have spent the most on products of our company.	Understand which clients the company should try to please and keep in good relations.	CORE_OVERVIEW CORE_SALES
Net Sales & Cost of Goods Sold Chart	Chart of current and historical Net Sales plotted against the Cost of Goods Sold.	Compare the revenue the company is generating from sales vs the cost it is incurring in producing the goods.	CORE_OVERVIEW
EBIT	Earnings before interest and taxes of the company.	A metric used to evaluate the profitability of a company's core operations.	CORE_FINANCIAL
EBITDA	Earnings before interest, taxes, depreciation and amortization of the company.	A metric used to evaluate the profitability of a company's core operations.	CORE_FINANCIAL
Net Profit	The earnings of the company after all costs and expenses are subtracted.	Understand if the company is making money or operating at a loss.	CORE_FINANCIAL
Gross Profit Margin	The amount of money left over from sales after deducting the cost of goods sold.	Assess the efficiency of the company at selling products profitably taking in account the cost it incurred in producing the goods.	CORE_FINANCIAL CORE_SALES

Accounts Payable	Credit the company's suppliers gave it.	Know how much money the company owes to its suppliers.	CORE_FINANCIAL
Accounts Receivable	Credit the company gave to its clients.	Know how much money the clients owe the company.	CORE_FINANCIAL
Working Capital	It refers to the difference between operating current assets and operating current liabilities	Measures a company's liquidity, operational efficiency and its short-term financial health.	CORE_FINANCIAL
Current Ratio	The ratio between current assets and current liabilities.	Assess the company's capacity to pay all financial obligations due in less than one year.	CORE_FINANCIAL
Earning Power	The ratio between EBIT and Total Assets.	Shows the company's ability to generate profits over the long haul. It may determine if it is viable for the company to apply for a bank loan.	CORE_FINANCIAL
Profit and Loss Statement	Financial statement that summarizes the revenues, costs and expenses of the company during a specified period.	Understand the company's ability to generate sales, manage expenses and create profits.	CORE_FINANCIAL
Net Profit Chart	Chart of current and historical values of the Net Profit.	Understand if the company has been achieving profits or has been operating at a loss.	CORE_FINANCIAL



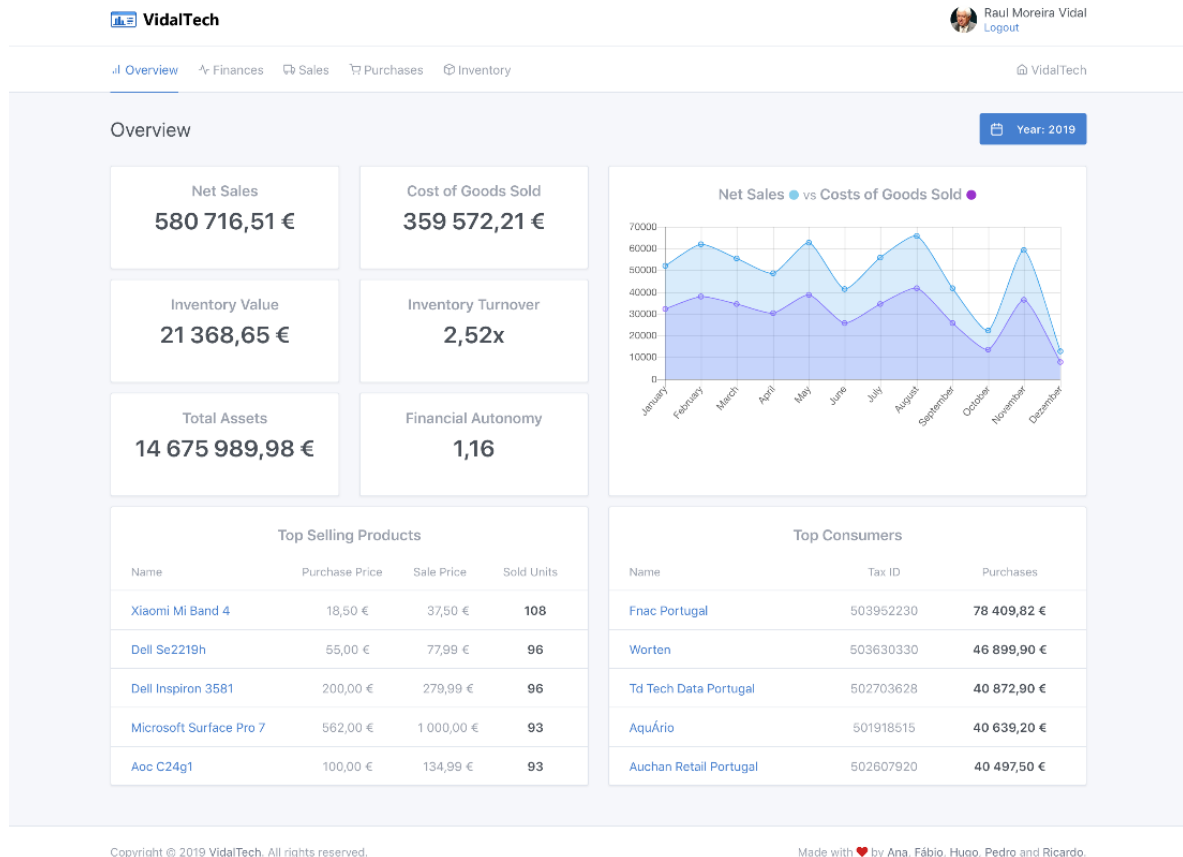
Return on Assets	Chart of the ratio between Net Income and Total Assets.	Return on assets is an indicator of how profitable a company is relative to its total assets.	CORE_FINANCIAL
Sales Order Backlog	List of orders that weren't sent yet.	Become aware of future orders.	CORE_SALES
Sales per product group	A pie chart that illustrates how the sales are divided into product groups.	Understand what product group is selling better.	CORE_SALES
Sales per month	Chart of sales value per month.	Show company's sales fluctuation and deduce possible sales' seasonal peaks.	CORE_SALES
Total Purchases	Grand total of all the purchases made by the company.	Indicates the amount the company spent on product purchases.	CORE_PURCHASES
Top suppliers	List of the suppliers from which the most products where bought.	Allows the company to know which supplier they are more reliant on.	CORE_PURCHASES
Purchases per product group	Amount the company spent on purchases per product group.	Provide information on which product groups the company spent the most on.	CORE_PURCHASES

Purchases per month	Total of all the purchases made by the company plotted in a chart.	Shows the amount the company spent on purchases month by month.	CORE_PURCHASES
Avg. Inventory Period	The average number of days that the goods are held in inventory before they are sold.	It shows how much time the company takes to turn its inventory into cash. It may indicate slow sales if value too high.	CORE_INVENTORY
Inventory by Category	A pie chart with a ratio of each category in the inventory.	It allows to grasp what kind of products are in inventory and help balance inventory ratios.	CORE_INVENTORY
Most Profitable Products	List of the 5 most profitable products.	Allows to understand in which products the company should invest on.	CORE_INVENTORY

## 3. Information Architecture

### 3.1. Core Views

- OVERVIEW



#### User and Business Goals

- Quickly assess how well the company and its departments are doing.
- Principal view to be used as a tool for upper management to make decisions.

#### Inwards Paths/ Trigger Words

- Login.
- Top menu navigation.

#### Elements of the Core

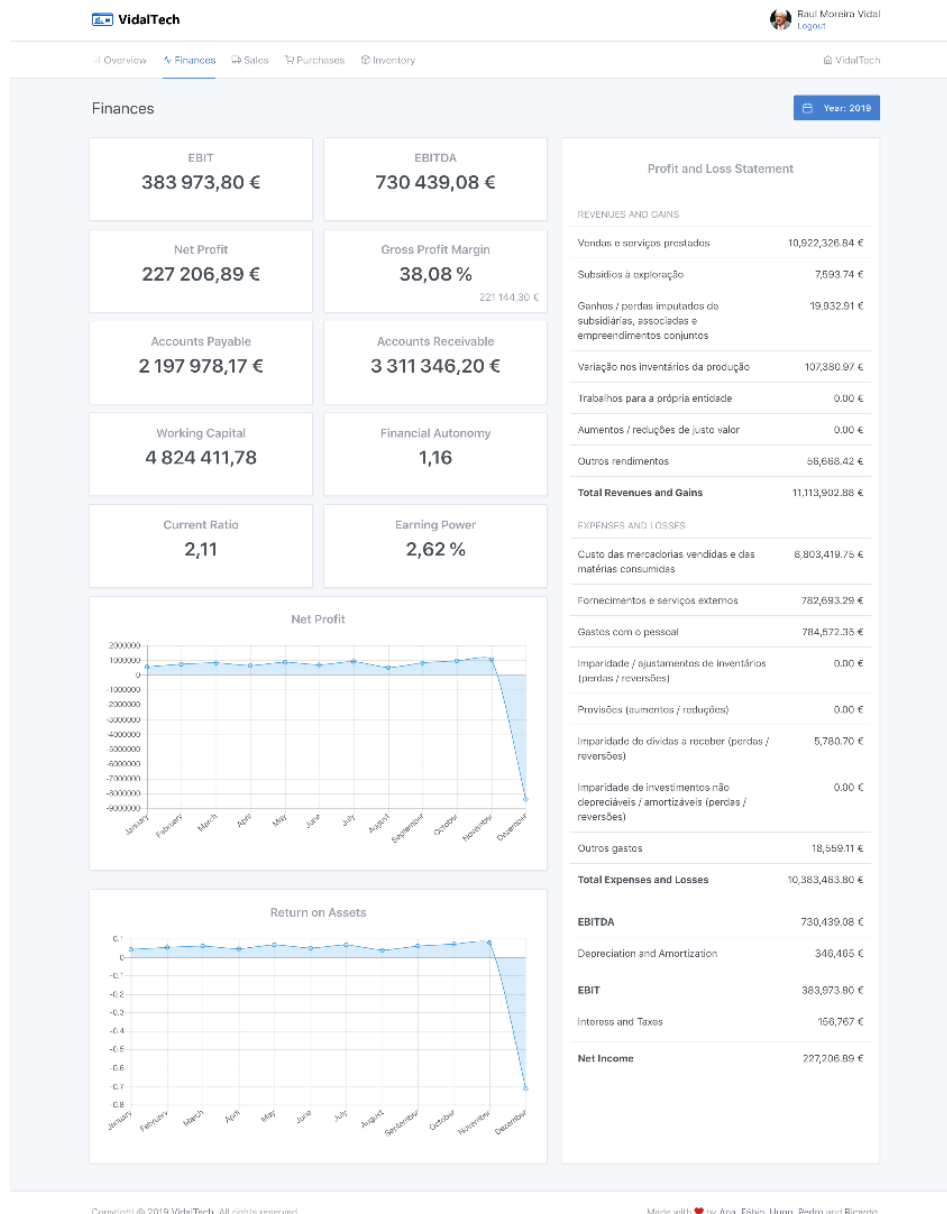
KPI_01 (KPI) – Net Sales	KPI_02 (KPI) – Cost of Goods Sold
KPI_03 (KPI) – Inventory Value	KPI_04 (KPI) – Inventory Turnover
KPI_05 (KPI) – Total Assets	KPI_06 (KPI) – Financial Autonomy

LINE_01 (Line Chart) – Net Sales vs Cost of Goods Sold	TABLE_01 (Table) – Top Selling Products
TABLE_02 (Table) – Top Consumers	

**Outwards Paths/ Calls to Action**

- Drill down to the pages of the company's departments (finances, sales, purchases and inventory) in order to see more information.
- Drill down to one of the top selling products, with more specific information about a product.
- Drill down to one of the most valuable customers, with more specific information about a consumer.

- FINANCES



### User and Business Goals

- Assess how well the company is doing from a financial standpoint.
- Principal view to be used by the financial department.

### Inwards Paths/ Trigger Words

- Top menu navigation.

**Elements of the Core**

KPI_01 (KPI) – EBIT	KPI_02 (KPI) – EBITDA
KPI_03 (KPI) – Net Profit	KPI_04 (KPI) – Gross Profit Margin
KPI_05 (KPI) – Accounts Payable	KPI_06 (KPI) – Accounts Receivable
KPI_07 (KPI) – Working Capital	KPI_08 (KPI) – Financial Autonomy Ratio
KPI_09 (KPI) – Current Ratio	KPI_10 (KPI) – Earning Power
LINE_01 (Line Chart) – Net Profit	LINE_02 (Line Chart) – Return on Assets
TABLE_01 (Table) – Profit and Loss Statement	

**Outwards Paths/ Calls to Action**

- Switch to the pages of the company's departments (overview, sales, purchases and inventory) in order to see more information.

- SALES



## User and Business Goals

- Assess company's inventory sales.
- Principal view to see, in detail, the company's sales state.

## Inwards Paths/ Trigger Words

- Top menu navigation.

**Elements of the Core**

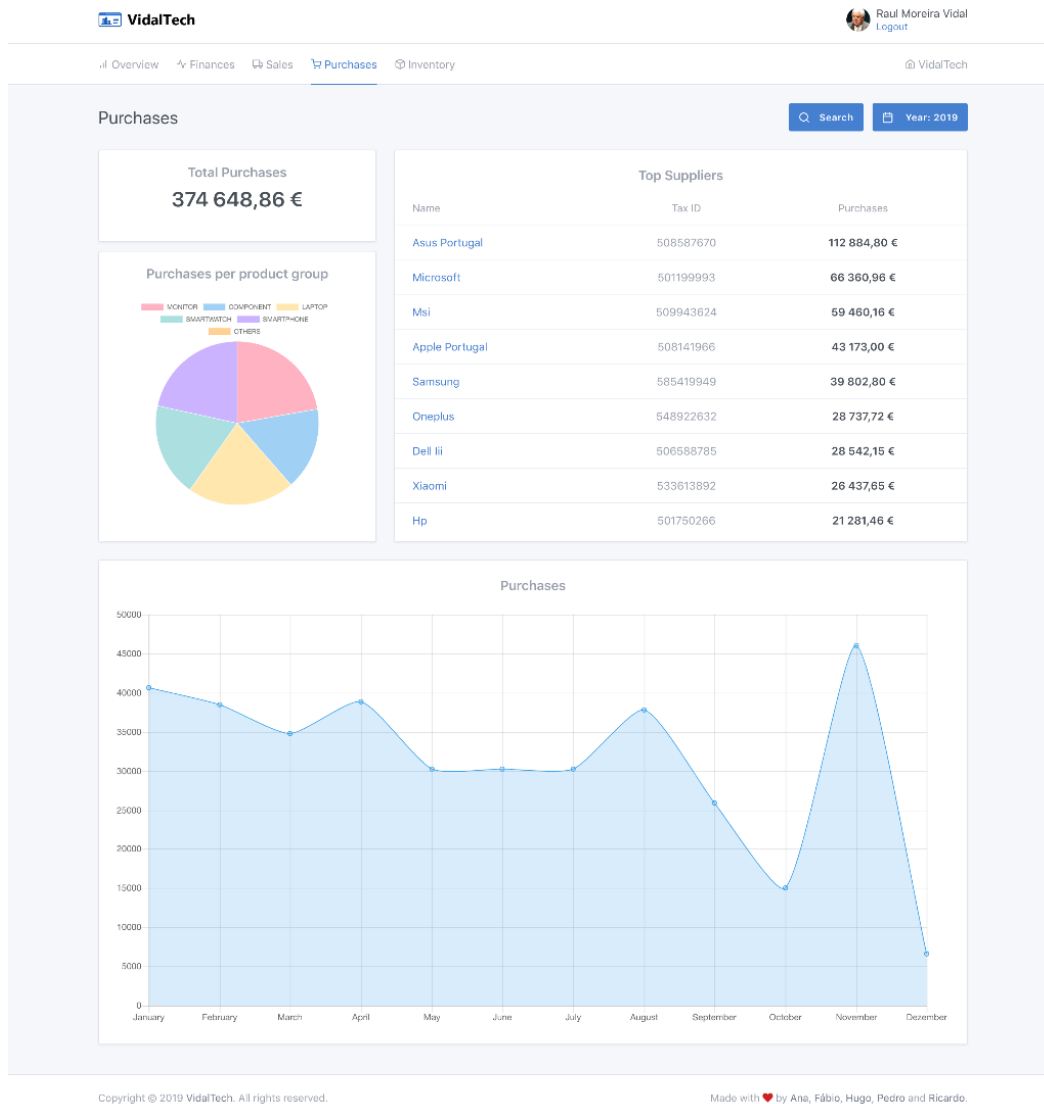
KPI_01 (KPI) – Net sales	KPI_02 (KPI) – Cost of Sold Goods
KPI_03 (KPI) – Gross Profit Margin	TABLE_01 (Table) – Top selling products
PIE_01 (Pie Chart) – Sales per product group	TABLE_02 (Table) – Top consumers
LINE_01 (Line Chart) - Sales per month	TABLE_03 (Table) – Sales Order Backlog

**Outwards Paths/ Calls to Action**

- Switch to the pages of the company's departments (overview, finances, purchases and inventory) in order to see more information.
- Drill down to any of the top selling products' page, with more specific information about the product.
- Drill down to any of the most valuable consumers' page, with more specific information about the consumer.
- Drill down to any of the consumers' page whose order is in the sales order backlog, with more specific information about the consumer.
- Switch to the search orders page, with complete information about all sales orders that can easily be searched, filtered and ordered.



- PURCHASES



### User and Business Goals

- Assess the purchases done by the company.
- Principal view to see, in detail the information regarding buys from suppliers.

### Inwards Paths/ Trigger Words

- Top menu navigation.

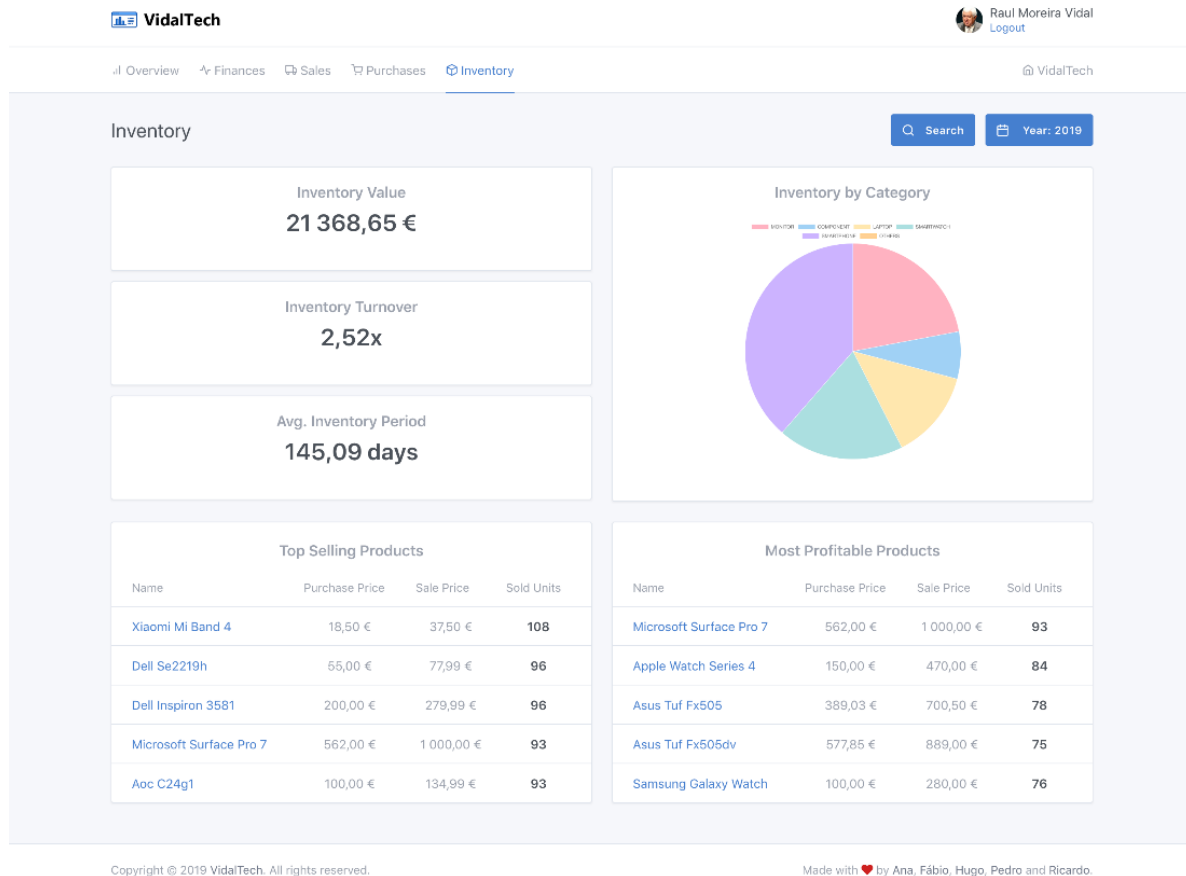
### Elements of the Core

KPI_01 (KPI) – Total Purchases	PIE_01 (Pie Chart) – Purchases per product group
LINE_01 (Line Chart) - Purchases per month	TABLE_01 (Table) – Top suppliers

**Outwards Paths/ Calls to Action**

- Switch to the pages of the company's departments (overview, finances, sales and inventory) in order to see more information.
- Drill down to any of the top suppliers' page, with more specific information about a supplier.
- Switch to the search purchases page, with complete information about all purchases, that can easily be searched, filtered and ordered.

- INVENTORY



### User and Business Goals

- Assess company's inventory status.
- Principal view to be used when wanting to evaluate specific products statistics, through drill down views.

### Inwards Paths/ Trigger Words

- Top menu navigation.

### Elements of the Core

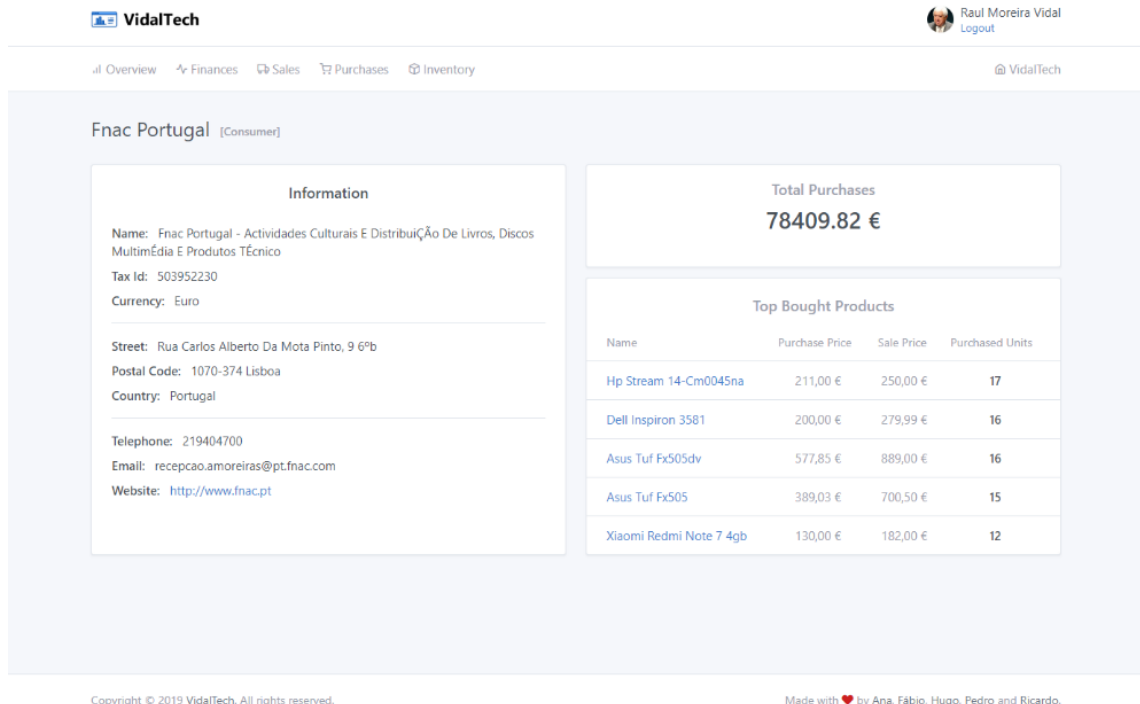
KPI_01 (KPI) – Inventory Value	KPI_02 (KPI) – Avg. Inventory Period
KPI_03 (KPI) – Inventory Turnover	PIE_01 (Pie Chart) – Inventory by Category
TABLE_01 (Table) – Top Selling Products	TABLE_02 (Table) – Most Profitable Products

**Outwards Paths/ Calls to Action**

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the top selling products' page, with more specific information about the product.
- Drill down to any of the most profitable products' page, with more specific information about the product.
- Switch to the search purchases page, with complete information about all the inventory, that can easily be searched, filtered and ordered.

### 3.2. Drill Downs

- CONSUMER



The screenshot shows the VidalTech dashboard for a consumer named Fnac Portugal. The dashboard includes a navigation bar with links to Overview, Finances, Sales, Purchases, and Inventory. The main content area is divided into two sections: Information and Total Purchases. The Information section displays details about Fnac Portugal, including its name, tax ID, currency, street address, postal code, country, telephone, email, and website. The Total Purchases section shows a total of 78409.82 € and a table of top bought products.

**Information**

Name: Fnac Portugal - Actividades Culturais E Distribuição De Livros, Discos Multimédia E Produtos Técnico  
 Tax Id: 503952230  
 Currency: Euro

Street: Rua Carlos Alberto Da Mota Pinto, 9 6ºb  
 Postal Code: 1070-374 Lisboa  
 Country: Portugal

Telephone: 219404700  
 Email: recepcao.amoreiras@pt.fnac.com  
 Website: <http://www.fnac.pt>

**Total Purchases**

78409.82 €

**Top Bought Products**

Name	Purchase Price	Sale Price	Purchased Units
<a href="#">Hp Stream 14-Cm0045na</a>	211,00 €	250,00 €	17
<a href="#">Dell Inspiron 3581</a>	200,00 €	279,99 €	16
<a href="#">Asus Tuf Fx505dv</a>	577,85 €	889,00 €	16
<a href="#">Asus Tuf Fx505</a>	389,03 €	700,50 €	15
<a href="#">Xiaomi Redmi Note 7 4gb</a>	130,00 €	182,00 €	12

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### User and Business Goals

- View a consumer information.

### Inwards Paths/ Trigger Words

- Product page
- Sales page
- Overview page
- Order Search page

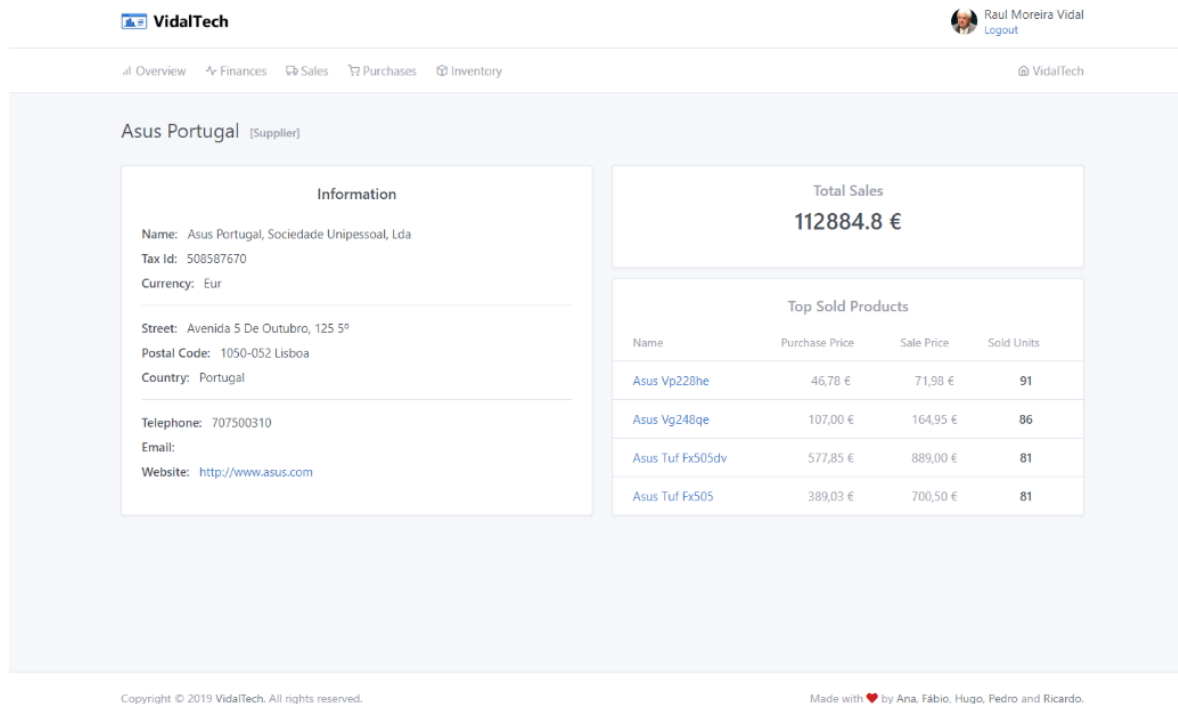
### Elements of the View

KPI_01 (KPI) – Total Purchases	TABLE_01 (Table) – Top Bought Products
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### Outwards Paths/ Calls to Action

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the top bought products' page, with more specific information about the product.
- Consumer's website.

- SUPPLIER



The screenshot shows the VidalTech dashboard for a user named Raul Moreira Vidal. The main section displays information for the supplier 'Asus Portugal'. It includes a sidebar with navigation links (Overview, Finances, Sales, Purchases, Inventory) and a top bar with the user's name and a logout button. The supplier information is presented in a card layout with two main sections: 'Information' and 'Total Sales'.

**Information**

Name: Asus Portugal, Sociedade Unipessoal, Lda  
 Tax Id: 508587670  
 Currency: Eur

Street: Avenida 5 De Outubro, 125 5º  
 Postal Code: 1050-052 Lisboa  
 Country: Portugal

Telephone: 707500310  
 Email:  
 Website: <http://www.asus.com>

**Total Sales**

112884.8 €

**Top Sold Products**

Name	Purchase Price	Sale Price	Sold Units
Asus Vp228he	46,70 €	71,98 €	91
Asus Vg248qe	107,00 €	164,95 €	86
Asus Tuf Fx505dv	577,85 €	889,00 €	81
Asus Tuf Fx505	389,03 €	700,50 €	81

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## User and Business Goals

- View a supplier information.

## Inwards Paths/ Trigger Words

- Purchases page
- Purchases Search page

## Elements of the View

KPI_01 (KPI) – Total Sales	TABLE_01 (Table) – Top Sold Products
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## Outwards Paths/ Calls to Action

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the top sold products' page, with more specific information about the product.
- Supplier's website.


- PRODUCT

**VidalTech** Raul Moreira Vidal  
Logout

Overview Finances Sales Purchases **Inventory** VidalTech

---

ASUS TUF FX505 [LAPTOP]



Brand: ASUS

Product Key: LAPTOP005

Description: ASUS TUF FX505 15.6 inch Full HD 120 Hz Gaming Laptop (Black) (AMD Ryzen R5-3550H, Nvidia GeForce GTX 1650 4 GB, 256 GB PCI-e SSD, 8 GB RAM, Windows 10)

Current Stock: 3 Units

Purchase Price: 389.03€

Sale Price: 700.5€

Information per Quarter

Quarter	Bought Units	Sold Units
1st	22	21
2nd	23	22
3rd	21	22
4th	15	13

Top Product Consumers

Name	Tax ID	Bought Units	Total Product Purchases
FNAC PORTUGAL	503952230	15	11 070,00€
TD TECH DATA PORTUGAL	502703628	13	9 594,00€
WORTEN	503630330	12	8 856,00€
KONTROLSATELITE	509043267	8	5 904,00€
SWITCH	513274154	8	5 904,00€

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### User and Business Goals

- View a product information.

### Inwards Paths/ Trigger Words

- Overview page
- Purchases page
- Inventory Search page
- Supplier page
- Sales page
- Inventory page
- Purchases page

### Elements of the View

TABLE_01 (Table) – Information per Quarter	TABLE_02 (Table) – Top Product Consumers
--	--

### Outwards Paths/ Calls to Action

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the top Consumers' page, with more specific information about the Consumer.

- INVENTORY SEARCH

**VidaTech** Raul Moreira Vidal Logout

Overview Finances Sales Purchases **Inventory** VidaTech

### Inventory Search

Show  entries Search:

Product	Description	Brand	Price	Stock
A001	ASUS VG248QE	ASUS	€ 107.00	8 Units
COMPONENT001	AMD Ryzen 5 3600	AMD	€ 100.00	5 Units
COMPONENT002	MSI B450 TOMAHAWK	MSI	€ 87.40	0 Units
COMPONENT003	Corsair CMK16GX4M2B3200C16	CORSAIR	€ 34.00	3 Units
COMPONENT004	MSI NVIDIA GEFORCE RTX 2070	MSI	€ 500.00	1 Unit
LAPTOP001	ASUS TUF FX505DV	ASUS	€ 577.85	6 Units
LAPTOP002	Dell Inspiron 3581	DELL	€ 200.00	3 Units
LAPTOP003	Microsoft Surface Pro 7	MICROSOFT	€ 562.00	3 Units
LAPTOP004	HP Stream 14-cm0045na	HP	€ 211.00	2 Units
LAPTOP005	ASUS TUF FX505	ASUS	€ 389.03	3 Units

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## User and Business Goals

- View, search and sort all inventory products.

## Inwards Paths/ Trigger Words

- Inventory page

## Elements of the View

TABLE_01 (Table) – All products	
---------------------------------	--

## Outwards Paths/ Calls to Action

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the products' page, with more specific information about the product.



## ORDERS SEARCH

**VidalTech** Raul Moreira Vidal Logout

Overview Finances **Sales** Purchases Inventory

### Orders Search

Show  entries Search:

Buyer	Tax ID	Payable Amount	Gross Value	Tax Amount	Document Date	Due Date	
ONDISC	513828036	€ 3431.70	€ 2790.00	€ 641.70	06/12/2019	06/12/2019	
<b>Product</b>	<b>Description</b>	<b>Unit Price</b>	<b>Quantity</b>	<b>Payable Amt</b>	<b>Gross Val</b>	<b>Tax Amt</b>	<b>Delivery Date</b>
COMPONENT001	AMD Ryzen 5 3600	€ 180.00	3 Units	€ 664.20	€ 540.00	€ 124.20	06/12/2019
MONITOR002	Dell SE2219H	€ 110.00	2 Units	€ 270.60	€ 220.00	€ 50.60	06/12/2019
LAPTOP005	ASUS TUF FX505	€ 600.00	3 Units	€ 2214.00	€ 1800.00	€ 414.00	06/12/2019
MONITOR004	AOC C24G1	€ 115.00	2 Units	€ 282.90	€ 230.00	€ 52.90	06/12/2019
KONTR0LSATELITE	509043267	€ 6158.61	€ 5007.00	€ 1151.61	04/12/2019	04/12/2019	
<b>Product</b>	<b>Description</b>	<b>Unit Price</b>	<b>Quantity</b>	<b>Payable Amt</b>	<b>Gross Val</b>	<b>Tax Amt</b>	<b>Delivery Date</b>
MONITOR003	ASUS VP228HE	€ 69.00	3 Units	€ 254.61	€ 207.00	€ 47.61	04/12/2019
LAPTOP001	ASUS TUF FX505DV	€ 800.00	6 Units	€ 5904.00	€ 4800.00	€ 1104.00	04/12/2019
BITCARE	507659210	€ 4575.60	€ 3720.00	€ 855.60	03/12/2019	03/12/2019	
UNIVERSIDADE DO PORTO	501413197	€ 4022.10	€ 3270.00	€ 752.10	28/11/2019	28/11/2019	
SUPREMEPIXEL	513731083	€ 3843.75	€ 3125.00	€ 718.75	26/11/2019	26/11/2019	
JURINFOR	502117486	€ 2237.37	€ 1819.00	€ 418.37	25/11/2019	25/11/2019	
AUCHAN RETAIL PORTUGAL	502607920	€ 4108.20	€ 3340.00	€ 768.20	21/11/2019	21/11/2019	
KONTR0LSATELITE	509043267	€ 3739.20	€ 3040.00	€ 699.20	19/11/2019	19/11/2019	
BEYOND FRESH	509788971	€ 4832.67	€ 3929.00	€ 903.67	18/11/2019	18/11/2019	
BAJOAL	502180919	€ 6937.20	€ 5640.00	€ 1297.20	15/11/2019	15/11/2019	

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### User and Business Goals

- View, search and sort all orders.
- See detailed information regarding an order's products.

### Inwards Paths/ Trigger Words

- Sales page

### Elements of the View

TABLE\_01 (Table) – All products

### Outwards Paths/ Calls to Action

- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the products' page, with more specific information about the product.
- Drill down to any of the Consumers' page, with more specific information about the Consumer.

- PURCHASES SEARCH

**VidalTech** Raul Moreira Vidal  
Logout

Overview Finances Sales **Purchases** Inventory

### Purchases Search

Show  entries Search:

Supplier	Tax ID	Payable Amount	Gross Value	Tax Amount	Document Date	Due date	
> OnePlus	548922632	€ 4934.76	€ 4012.00	€ 922.76	16/12/2019	15/01/2020	
> OnePlus	548922632	€ 290.28	€ 236.00	€ 54.28	08/12/2019	07/01/2020	
> AMD	551563990	€ 295.20	€ 240.00	€ 55.20	06/12/2019	05/01/2020	
> Samsung	585419949	€ 885.60	€ 720.00	€ 165.60	04/12/2019	03/01/2020	
> HUAWEI TECH	506909034	€ 984.00	€ 800.00	€ 184.00	03/12/2019	02/01/2020	
▼ Xiaomi	533613892	€ 559.65	€ 455.00	€ 104.65	02/12/2019	01/01/2020	
<b>Product</b>	<b>Description</b>	<b>Unit Cost</b>	<b>Quantity</b>	<b>Payable Amt</b>	<b>Gross Val</b>	<b>Tax Amt</b>	<b>Delivery Date</b>
SMARTWATCHES002	Xiaomi AMAZFIT GTS	€ 90.00	3 Units	€ 332.10	€ 270.00	€ 62.10	02/12/2019
SMARTWATCHES003	Xiaomi Mi Band 4	€ 18.50	10 Units	€ 227.55	€ 185.00	€ 42.55	02/12/2019
> AMD	537040145	€ 1230.00	€ 1000.00	€ 230.00	18/11/2019	18/12/2019	
▼ ASUS PORTUGAL	508587670	€ 13784.12	€ 11206.60	€ 2577.52	18/11/2019	18/12/2019	
<b>Product</b>	<b>Description</b>	<b>Unit Cost</b>	<b>Quantity</b>	<b>Payable Amt</b>	<b>Gross Val</b>	<b>Tax Amt</b>	<b>Delivery Date</b>
A001	ASUS VG248QE	€ 107.00	10 Units	€ 1316.10	€ 1070.00	€ 246.10	18/11/2019
LAPTOP001	ASUS TUF FX505DV	€ 577.85	10 Units	€ 7107.56	€ 5778.50	€ 1329.06	18/11/2019
LAPTOP005	ASUS TUF FX505	€ 389.03	10 Units	€ 4785.07	€ 3890.30	€ 894.77	18/11/2019
MONITOR003	ASUS VP228HE	€ 46.78	10 Units	€ 575.39	€ 467.80	€ 107.59	18/11/2019
> DELL III	506588785	€ 2798.25	€ 2275.00	€ 523.25	18/11/2019	18/12/2019	
> AOC	537040145	€ 1230.00	€ 1000.00	€ 230.00	18/11/2019	18/12/2019	

Showing 1 to 10 of 148 entries

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### User and Business Goals

- View, search and sort all purchases.
- See detailed information regarding a purchase's products.

### Inwards Paths/ Trigger Words

- Purchases page

### Elements of the View

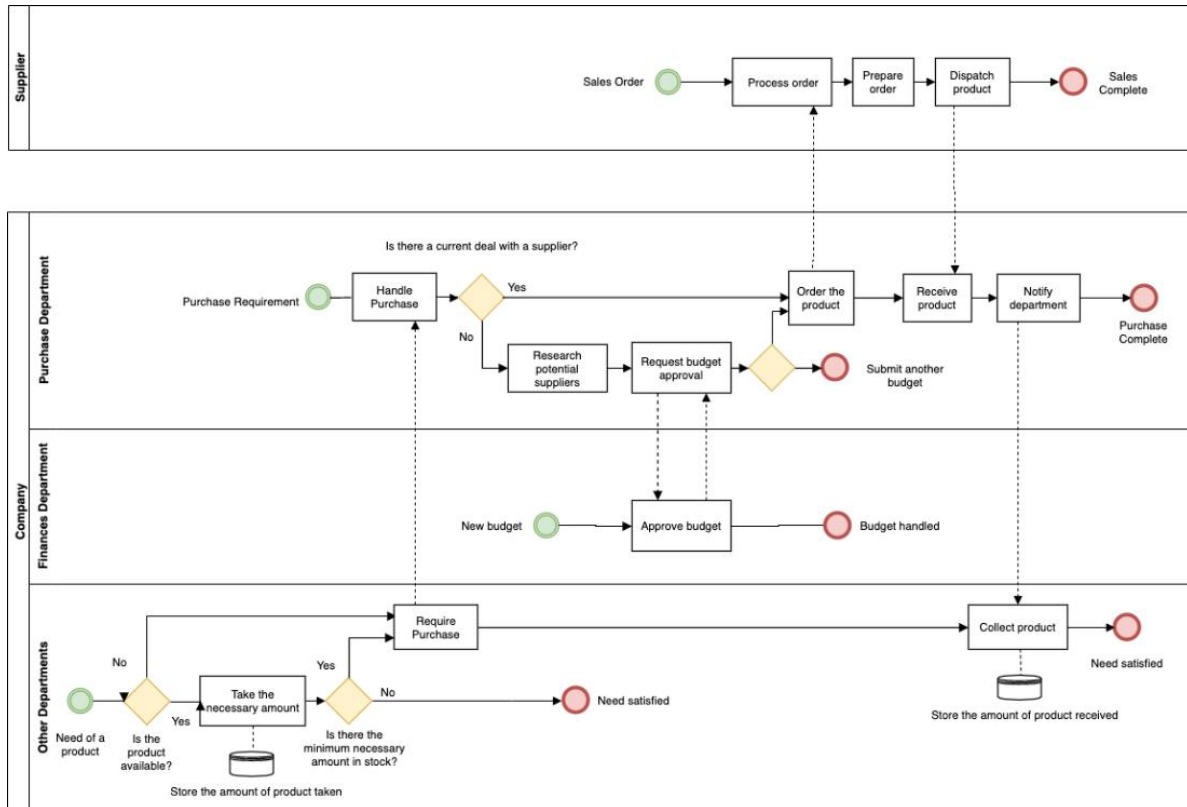
TABLE_01 (Table) – All purchases	
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### Outwards Paths/ Calls to Action

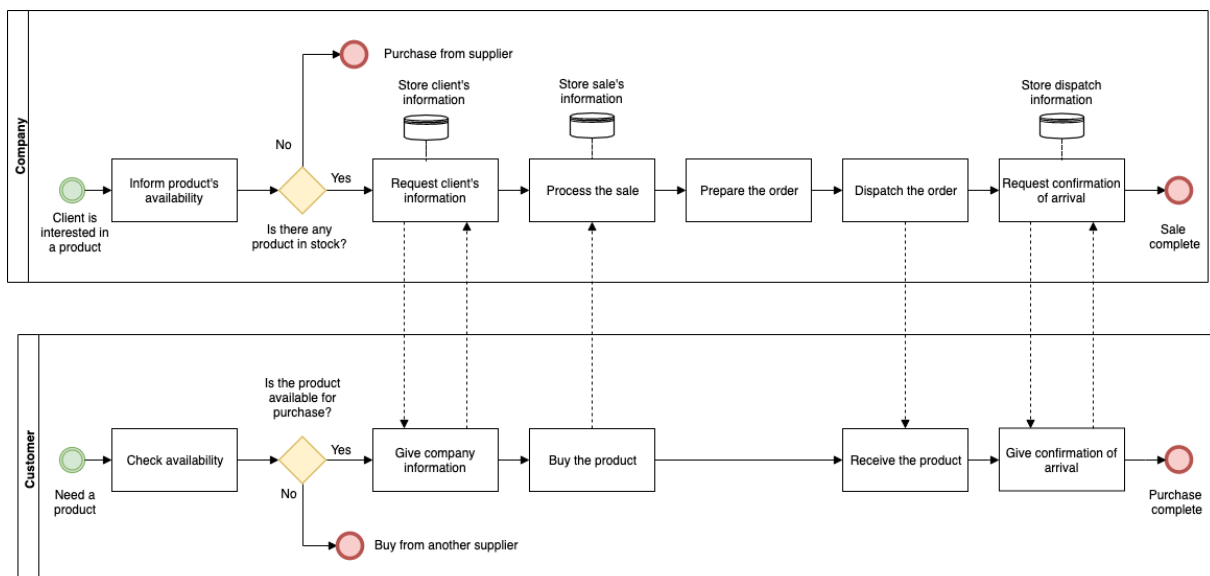
- Switch to the pages of the company's departments (overview, finances, sales and purchases) in order to see more information.
- Drill down to any of the products' page, with more specific information about the product.
- Drill down to any of the supplier's page, with more specific information about the supplier.

## 4. Business Process Models

The following Business Process Model shows the purchase of a product from a supplier.

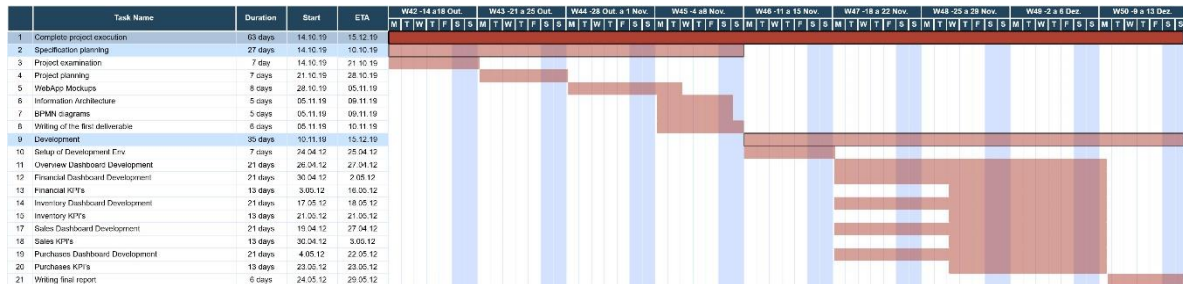


The following Business Process Model shows the sale of a product to a customer.



## 5. Planning

This project's planning was represented in a Gantt diagram. A copy of this diagram is also present as an image inside the deliverable archive.



## 6. Final Considerations

We believe the project we have developed is a great tool for company managers to quickly assess the financial health of the business in a very intuitive and simple manner. The drilldown features prove themselves to be very useful to see entities such as suppliers, clients and products in more detail whilst retaining the most valuable information. The key performance indicators and charts present in the WebApp allow the user to see the most important financial health features for a company that focusses on informatics equipment retail.

It was quite a challenge to build the dashboard as it required great expertise in areas in which we are not knowledgeable such as accounting. Along the development we troubled many people with an economics background and the help we received cannot be summarized in just so many words. We would also like to point out that the support we have received from our practical lessons' professor was essential especially during the requirements specification and early development.

Although most hindrances originated in the lack of domain expertise, some can be attributed to technical challenges. For this matter, the Jasmin API proved to be unreliable having query response times that oscillated between very fast and very slow. We solved this issue by using a cache layer position between the backend service and the HTTP calls. Another hindrance was knowing what information to extract from the *saft* file and in what way to transform it such that useful business indicators could be presented to the user. We feel that there was a lack of meaningful documentation provided to us to help us overcome such difficulties. Finding relevant information on the internet proved to be quite hard as most documents were very extensive and written in a way that assumed an accounting background.

To conclude, we believe that we finished this project successfully and achieved all the established goals, despite all adversities, leading to the delivery of a tool that would be useful in any company.