P3 - Interoperability

U.PORTO
FEUP **FACULDADE DE ENGENHARIA**
UNIVERSIDADE DO PORTO

Mestrado Integrado em Engenharia Informática e Computação

Sistemas de Informação

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December 2, 2018

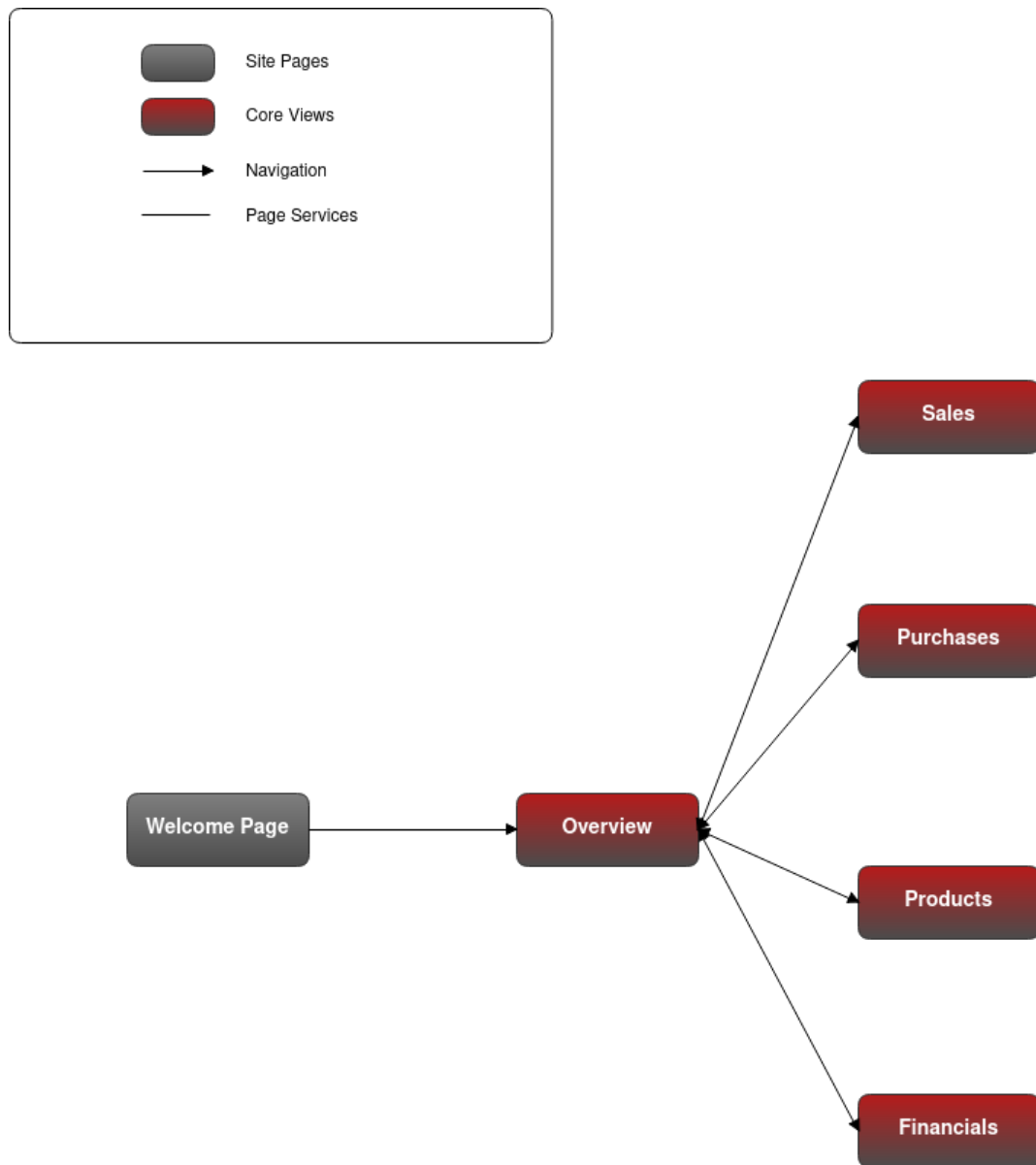# 1 Information Architecture (Core Views)

1.1 Site-Map

Figure 1: Site-Map
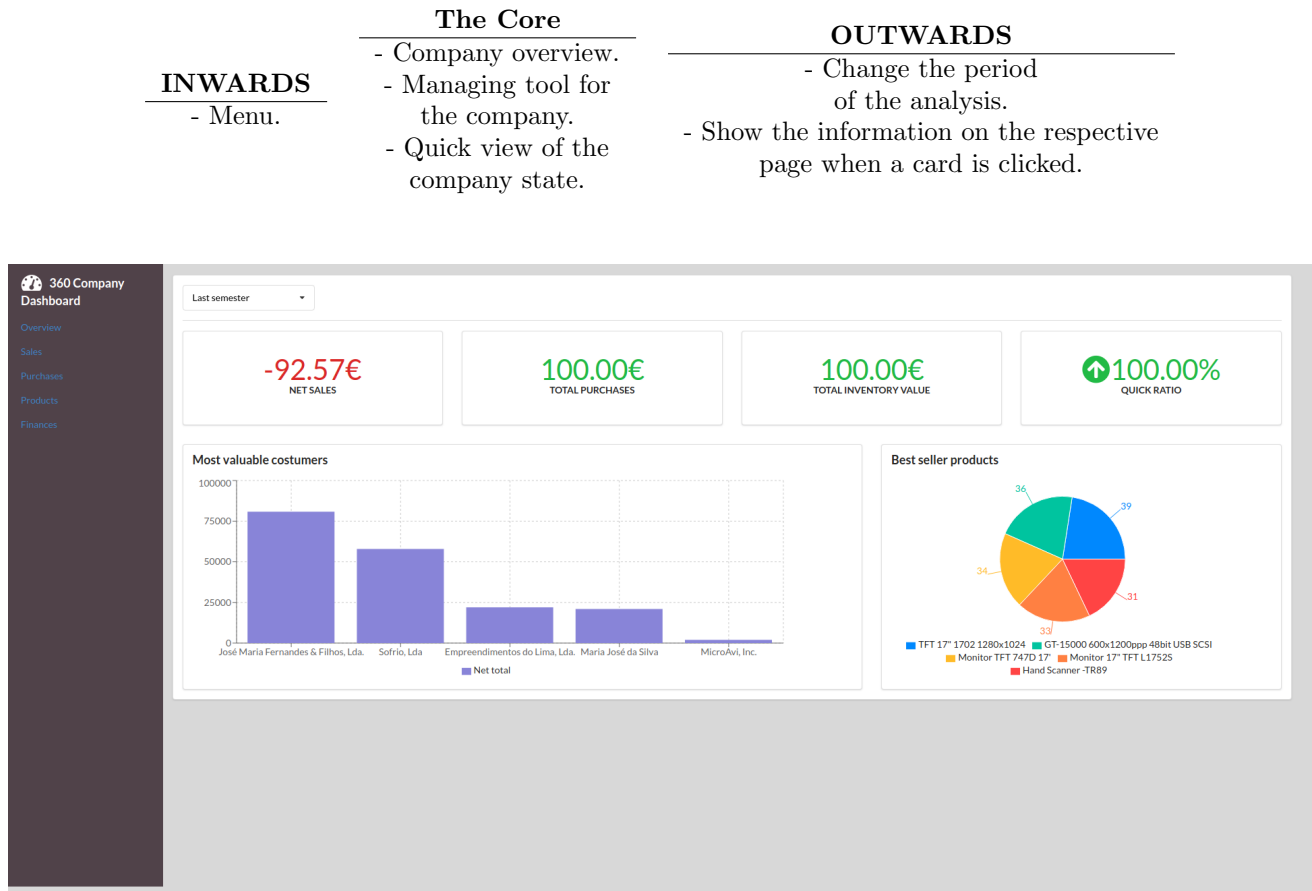
1.2 Core-Views

1.2.1 Overview Dashboard

INWARDS	**The Core**	**OUTWARDS**
- Menu.	- Company overview.	- Change the period
	- Managing tool for	of the analysis.
	the company.	- Show the information on the respective
	- Quick view of the	page when a card is clicked.
	company state.	

Figure 2: Overview Dashboard

Elements of the core

- KPI_01 |Net Sales	- KPI_02 |Total Purchases	- KPI_03 |Total Inventory Value
- KPI_04 |Quick Ratio	- BAR_01 |Most Valuable Costumers	- PIE_01 |Best Seller Products

Item	Description
KPI_01	Net Sales (all *Invoice.Line*)
KPI_02	Total Purchases (SQL - *LinhasCompras*)
KPI_03	Total Inventory Value (SQL - *V_INV_ArtigoArmazem* with *ArtigoMoeda*)
KPI_04	Percentage of Quick Ratio ((Cash and Equivalents + Marketable Securities + Accounts Receivable) / Current Liabilities)
BAR_01	Pick all costumer's gross total (*Invoice.CustomerID* →*MasterFiles.CustomerID*) and sort.
PIE_01	Pick all products sold (*SourceDocuments.SalesInvoices.Invoice.Line* →*MasterFiles.Product*) and sort.

Table 1: Overview Items

1.2.2 Sales

The Core

- Quick view of the company's sales orders
status evolution during specified period.
- View of the top costumers
during specified period.
- View top sold items.
- View graphs about sales, clients and orders over time.

INWARDS
- Menu.

OUTWARDS
- Change the period
of the analysis.
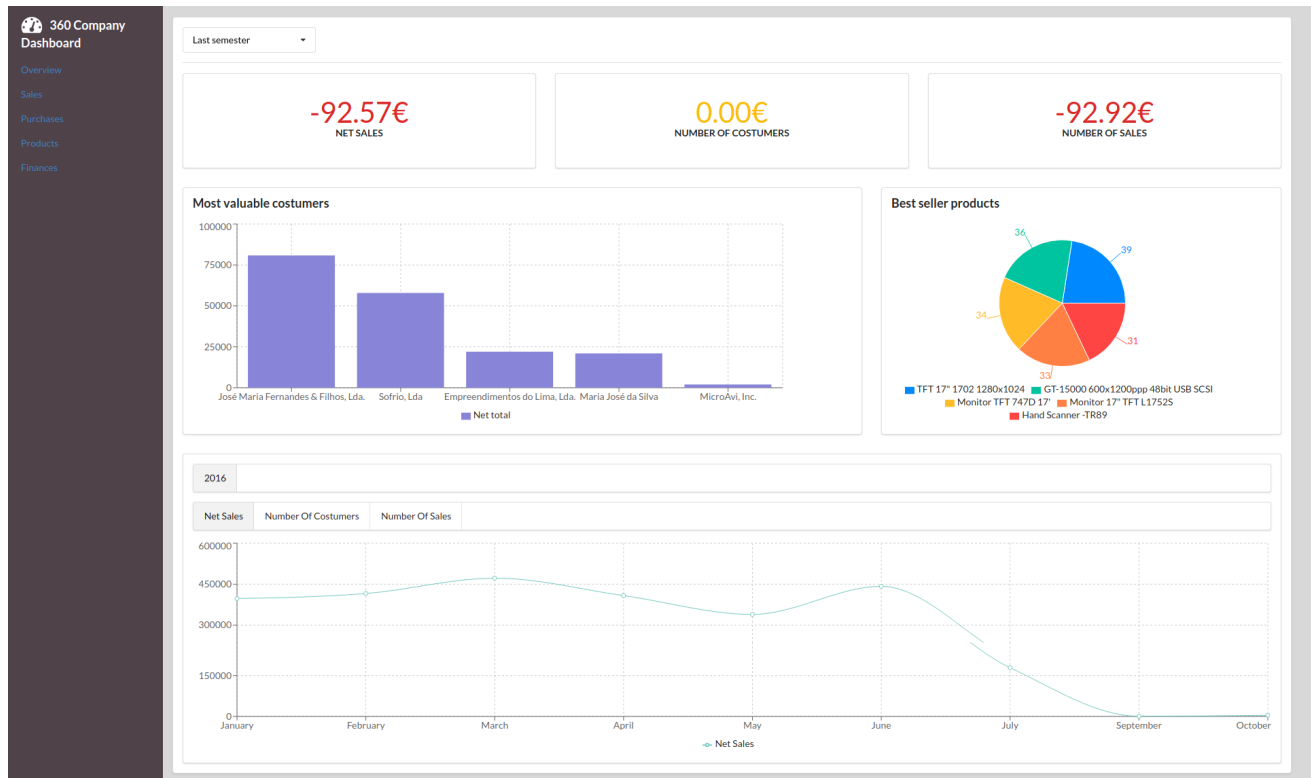
Figure 3: Sales Dashboard

Elements of the core

- KPI_05 |Net Sales	- KPI_06 |Number of Costumers	- KPI_07 |Number of Sales
- BAR_02 |Most Valuable Costumers	- PIE_02 |Best Seller Products	- LINE_02 |Net Sales
- LINE_03 |Number of Costumers	- LINE_04 |Number of Sales	

Item	Description
KPI_05	Net Sales (all *DocumentTotals.NetTotal*)
KPI_06	Number of Customers (all *Invoice.CustomerID*)
KPI_07	Number of Sales (all *Invoice.Line*)
BAR_02	Pick all costumer's gross total and sort. (*Invoice.CustomerID* →*MasterFiles.CustomerID*)
PIE_02	Pick all products sold and sort. (*SourceDocuments.SalesInvoices.Invoice.Line* →*MasterFiles.Product*)
LINE_02	Show Net Sales by Month.
LINE_03	Show Number of Customers by Month.
LINE_04	Show Number of Sales by Month.

Table 2: Sales Items

1.2.3 Purchases

The Core

- Quick view of the company's purchases
status evolution during the specified period
- View of the top suppliers
during specified period.
- View most bought items.
- View graph about purchases and
suppliers over time.
- View which items the company is
spending most of the money.

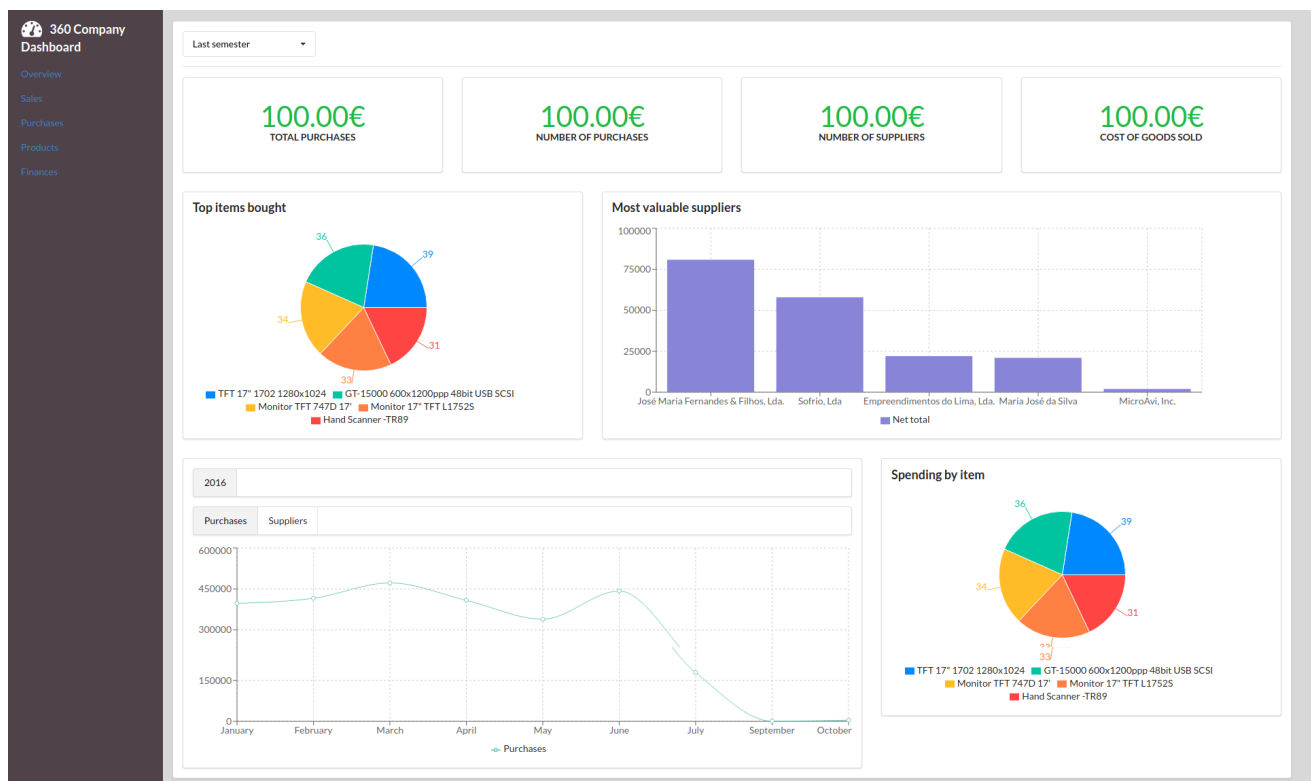**INWARDS**

- Menu.

OUTWARDS

- Change the period
of the analysis.

Figure 4: Purchases Dashboard

Elements of the core

- KPI_08 |Total Purchases	- KPI_09 |Number of Purchases	- KPI_10 |Number of Suppliers
- KPI_11 |Cost of Goods Sold	- PIE_03 |Top Items Bought	- BAR_02 |Most Valuable Suppliers
- LINE_05 |Purchases Cost	- LINE_06 |Number of Suppliers	- PIE_04 |Spending by Item

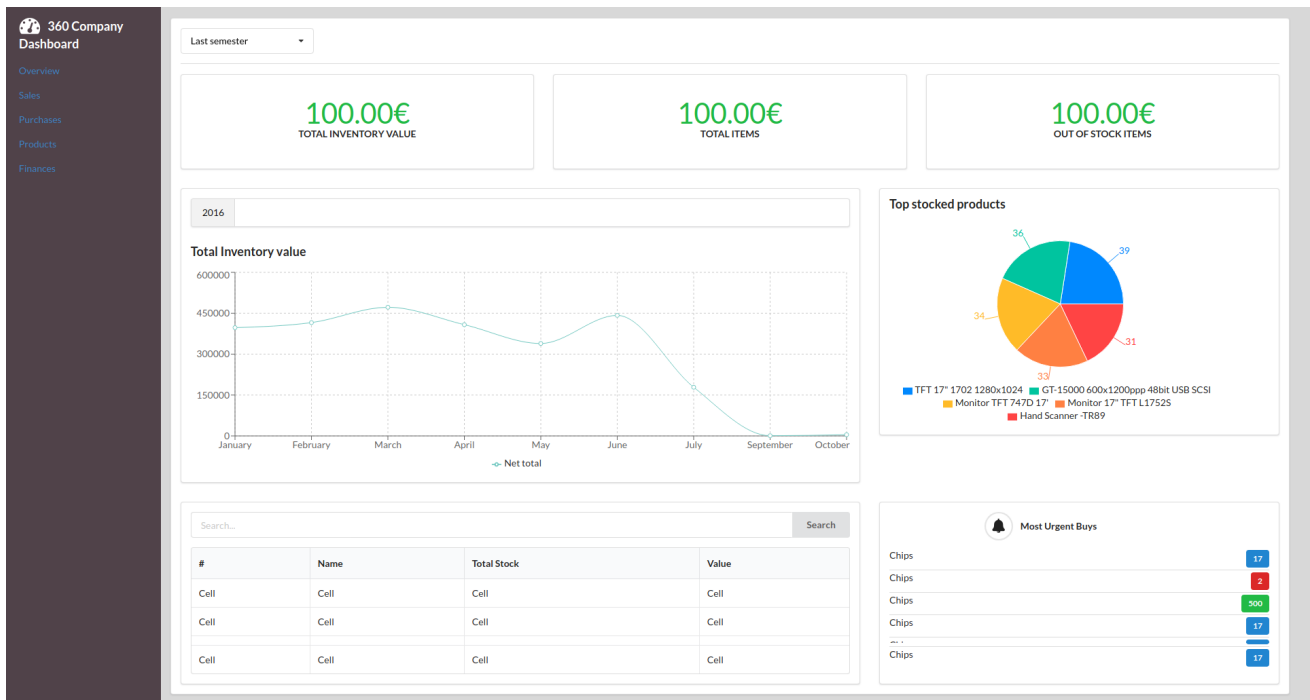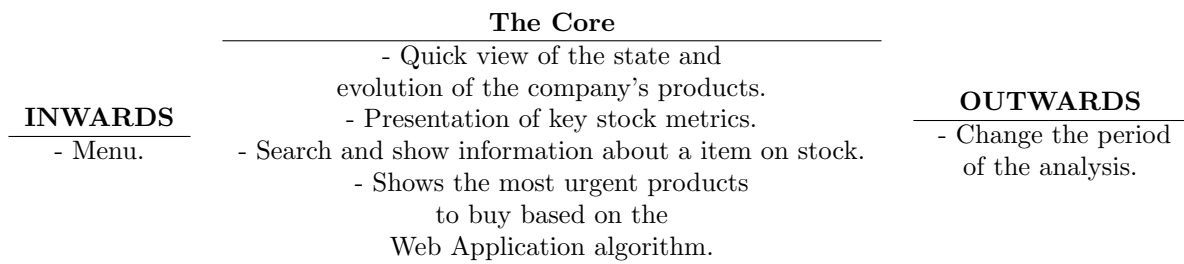| Item	Description
KPI_08	Total Purchases (SQL - *LinhasCompras*)
KPI_09	Number of Purchases (SQL - *LinhasCompras*)
KPI_10	Number of Suppliers (*MasterFiles.Suppliers*)
KPI_11	Cost of Goods Sold (SQL - *LinhasCompras* with *SalesInvoices.Invoice*)
PIE_03	All items bought by number.
BAR_02	All Suppliers's gross total and sort.
LINE_05	For a specific year, show Purchases Cost by Month. (SQL - *LinhasCompras*)
LINE_06	For a specific year, show Number of Suppliers by Month. (*MasterFiles.Suppliers*)
PIE_04	All items bought by cost. (SQL - *LinhasCompras*)

Table 3: Purchases Items

1.2.4 Products

The Core

- Quick view of the state and
evolution of the company's products.
- Presentation of key stock metrics.
- Search and show information about a item on stock.
- Shows the most urgent products
to buy based on the
Web Application algorithm.

INWARDS

- Menu.

OUTWARDS

- Change the period
of the analysis.

Figure 5: Products Dashboard

Elements of the core

- KPI_12 |Total Inventory Value	- KPI_13 |Total Items	- KPI_14 |Out of Stock Items
- LINE_07 |Inventory Value	- PIE_05 |Top Stocked Items	- LIST_01 |Stock Items
- LIST_02 |Most Urgent Buys		

Item	Description
KPI_12	Total Inventory Value (SQL - *V_INV_ArtigoArmazem* with *ArtigoMoeda*)
KPI_13	Total Items (SQL - *V_INV_ArtigoArmazem*)
KPI_14	Out of Stock Items (SQL - *V_INV_ArtigoArmazem*)
LINE_07	For a specific year, show Inventory Value by Month.
PIE_05	Top most stocked items and sort.
LIST_01	Search and Show all Stock Items (SQL - *V_INV_ArtigoArmazem*)
LIST_02	Show most urgent buys with current stock (SQL - *NecessidadesCompras*)

Table 4: Products Items

1.2.5 Finances

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The Core

INWARDS
- Menu.

- Quick view of financial evolution
compared to previous period.
- View graphs
about the company finance status
over time.

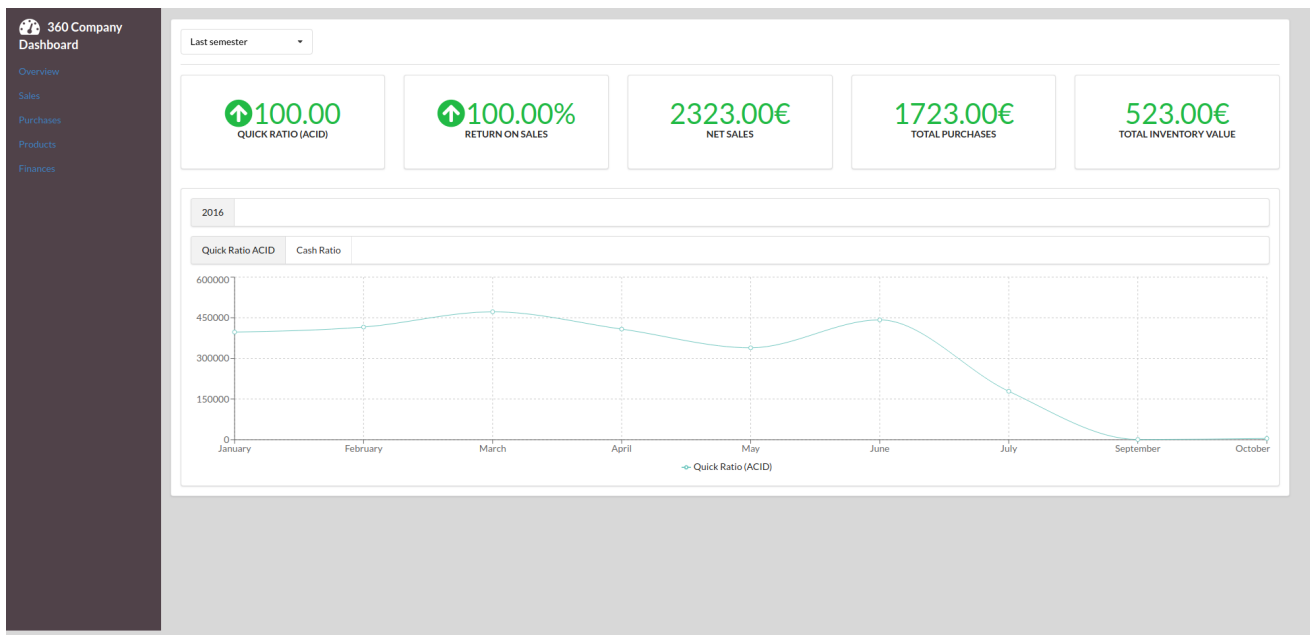**OUTWARDS**
- Change the period
of the analysis.

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Figure 6: Finances Dashboard

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Elements of the core

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- KPI_15 |Quick Ratio (ACID)	- KPI_16 |Return on Sales	- KPI_17 |Net Sales
- KPI_18 |Total Purchases	- KPI_19 |Total Inventory Value	- LINE_08 |Quick Ratio (ACID)
- LINE_09 |Cash Ratio		

Item	Description
KPI_15	Percentage of Quick Ratio ((Cash and Equivalents + Marketable Securities + Accounts Receivable) / Current Liabilities)
KPI_16	Percentage of Return on Sales (Net Income / Net Sales)
KPI_17	Net Sales (all *DocumentTotals.NetTotal*)
KPI_18	Total Purchases (SQL - *LinhasCompras*)
KPI_19	Total Inventory Value (SQL - *V_INV_ArtigoArmazem* with *ArtigoMoeda*)
LINE_08	For a specific year, show Quick Ratio (ACID) by Month.
LINE_09	For a specific year, show Cash Ratio by Month. ((Cash and Cash Equivalents) / Current Liabilities)

Table 5: Finance Items