



Firakotra Business Game

by **ForgeFlow**

Data Visualization

Data visualization mode

You can choose how you want to visualize the data by selecting your preferred data visualization mode.

Not all records can be visualized in all the different ways, but we invite you to play with the options and choose the one that you find appropriate.

Record searching

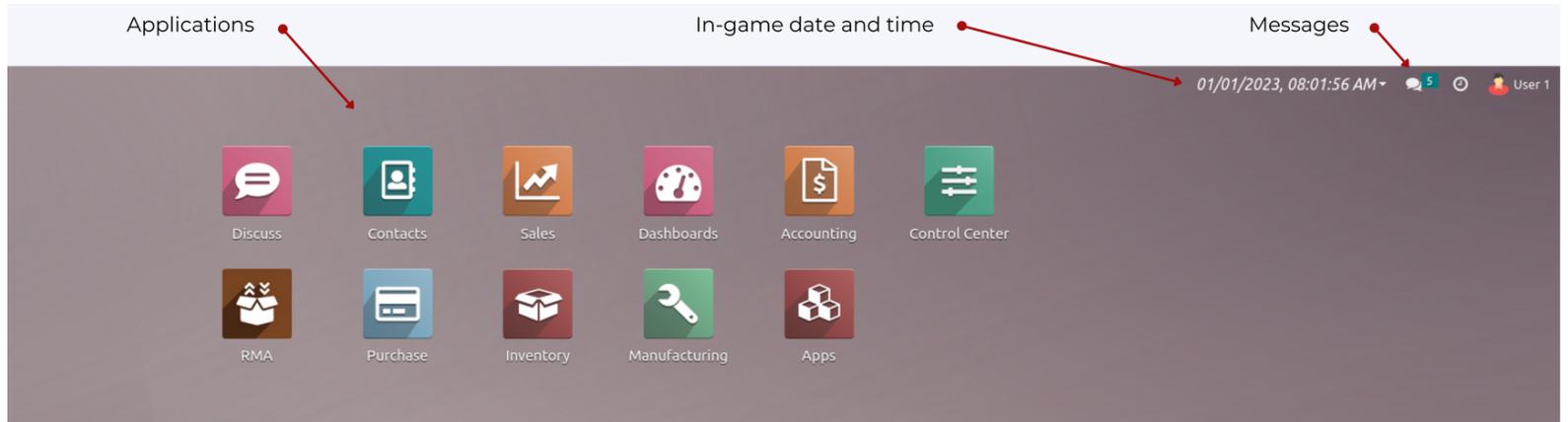
Use the search bar to find specific records, or use filters to search records based on some specific criteria.

If you find yourself constantly using the same filters, you can choose to save the current search, which will allow you to use the same filters later on.

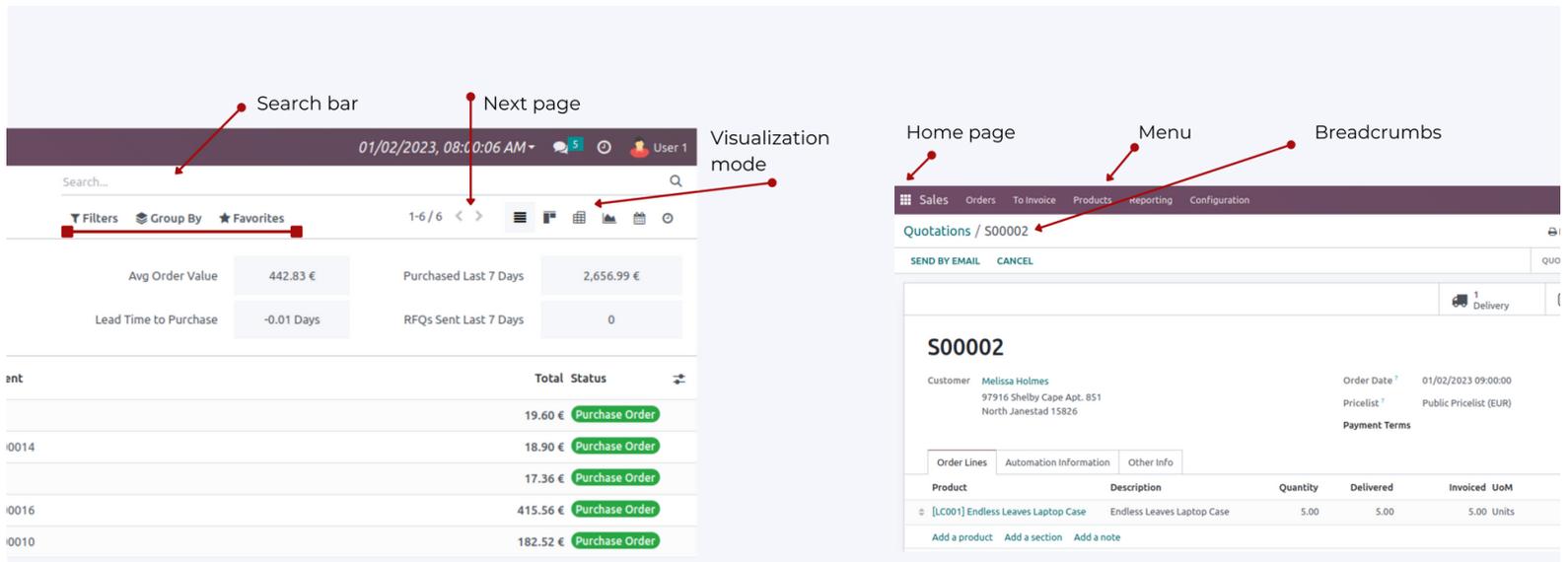
You can also create your own filters, or use the «Group by» button to group the records by a specific field.

The first page you see after accessing the simulation is the home page, which comprises a group of different applications you will have to use to manage the business.

The top bar is present in all of the views, and it shows the in-game time and date and **received messages**. By clicking on the time and date, you can open a **time controller**, which allows you to pause the game and advance to the next day after completing all tasks in a given day.



Each application has its own menu that allows you to navigate through the different views of the application. **Breadcrumbs** also will enable you to move back to the previous view quickly. To go to the home page, use the square icon. Once you are on the home page, pressing this icon again will take you back to the previously opened view.



Vendor Selection

How to choose the right vendor?

When choosing the right vendor, you will need to consider three main factors:

- **Vendor quality** – has a direct impact on the quality of the finished products delivered to the customer.
- **Price**
- **Delivery lead time** – impacts the stock availability of the materials needed for producing the final product. Choosing vendors with a higher delivery time will make the system recommend larger stock buffers for that given product, increasing the occupied warehouse space.

If you click on the icon next to «**Delivery Lead Time**», a list with more vendor information you can display will appear. Selecting «**Vendor Quality Variability**» will show you how much the quality of each given vendor is expected to change from product to product.

The quality variability can also help you choose the most appropriate vendor for each product.

At the beginning of the game, Firakotra sells two products, the Endless Blossom laptop case, and the Endless Leaves tote bag. As the game progresses, more products will be launched.

Each of the products has a suggested baseline price, which you can choose to modify if you find it fitting. Try to apply various **pricing strategies**. You can experiment to see whether having a smaller margin and more significant sales volumes or a more considerable margin with smaller sales volumes is better.

You can view all the products by clicking on the «**Sales**» application > «**Products**» > «**Products**». To change a product's price, click on it and write the desired value in the «**Sales Price**» field.

The screenshot shows the product details for 'Endless Blossom ToteBag'. The product name is 'Endless Blossom ToteBag' with a star icon. There are two checkboxes: 'Can be Sold' (checked) and 'Can be Purchased' (unchecked). Below are tabs for 'General Information', 'Attributes & Variants', 'Sales', 'Inventory', and 'Accounting'. The 'Sales' tab is active, showing 'Product Type' as 'Storable Product' and 'Sales Price' as '€24.99' (with a note '(= 30.24 € Incl. Taxes)'). The 'Invoicing Policy' is 'Ordered quantities'.

The **purchase department** is responsible for sourcing and acquiring the raw materials to produce the final products. The department is also responsible for finding suppliers and negotiating favorable price, quality, and lead time conditions.

Once the purchasing department has concluded the negotiations with a new supplier, the new vendor will be added to the system, and you will receive a message informing you of the latest available vendors. As the CEO, you will be responsible for deciding the primary vendors for each product.

In order to do this, head to the «**Purchase**» application, and click on the «**Purchase**» tab > «**Products**». Then, you can click on each of the products and see the available vendors under the «**Purchase**» tab. To change vendors, simply rearrange them by dragging them to the top of the list. The vendor placed at the top of the list will be the primary vendor in the future procurements.

The screenshot shows the vendor selection interface for the product 'Bag'. On the left, there is a list of vendors with columns for 'Price' and 'Delivery Lead Time'. A red arrow points to the 'Delivery Lead Time' column header with the text 'Click to display additional vendor information'. Below this, a list of checkboxes is shown, with 'Vendor Quality Variability' checked. A red arrow points to this checkbox with the text 'Drag to choose your preferred vendor'. On the right, the product details for 'Bag' are shown, including the 'Purchase' tab and a table of vendors.

Vendor	Vendor Quality	Price	Delivery Lead Time
Tejas Corona	★★★★☆	0.35	1
Sacs France	★☆☆☆☆	0.15	1

Investment

You can invest in marketing, quality control, and warehouse capacity.

- **Marketing** – investing in marketing activities increases the demand for the products but also incurs a daily cost for the company. You can see the impact of your marketing investment by checking the historical demand under the «**Dashboards**» application.
- **Quality control** – investing in quality control will increase the quality of the products delivered to the customers, decreasing the probability of getting product returns. Customer returns increase the workload of several departments and lower profits, so it is best to try to minimize them. In the «**Dashboards**» application, under the «**Logistics**» tab, you will find various Quality KPI indicators, which you can use to make an informed decision.
- **Warehouse capacity** – Firakotra uses an external warehouse and pays a daily bill for the rented capacity. You can see the overall used capacity as a KPI by clicking on «**Dashboards**» > «**Logistics**». Choosing a suitable warehouse capacity is vital to ensure materials are available when needed and that the company isn't incurring unnecessary costs by keeping an empty warehouse.

To modify the amount you invest in the different categories, click on the «**Control Center**» application and change the desired field.

What is the right investment amount?

Explore the «**Dashboards**» application to gain valuable insights into how the daily actions you are taking have a direct impact on the overall profitability of your business.

With the help of this comprehensive dashboard, you'll be able to make more informed decisions and continually improve your business's financial performance.

The screenshot displays the 'Control Center' interface for 'Firakotra'. The dashboard is titled 'Investments' and includes tabs for 'Automations Settings' and 'Notification Settings'. It features three main sections for investment management:

- Marketing:** Shows a slider for 'Daily Cost dedicated for the marketing activities' (ranging from 0 to 500 €) and a 'Daily Limit of money that can be dedicated to marketing' (set at 500 €).
- Quality Control:** Shows a slider for 'Daily Cost dedicated for the quality control activities' (ranging from 0 to 500 €) and a 'Daily Limit of money that can be dedicated to quality controls' (set at 500 €).
- Warehouse:** Shows a slider for 'Contracted warehouse capacity' (set at 30.00).

The interface includes a top navigation bar with the date '01/02/2023, 08:00:06 AM' and a user profile 'User 1'. A 'New' button is visible in the top right corner.

Material Requirements Planning

Forgeflow's solution implements the **Material Requirements Planning (MRP)** methodology by using the demand of the incoming orders to provide accurate recommendations on when, how many, and which kits to produce. Daily, you will have to review and confirm the procurement recommendations of the MRP.

To do this, enter the «**Manufacturing**» application; on the top panel, click on the «**Planning**» menu and select «**MRP inventory**». The page will show you the list of recommendations made by the MRP tool. To see the recommendations that need to be confirmed on a given day, apply the filter «**To Procure**», select all of them, and click on «**Actions**» > «**Procure**» > «**Execute**».

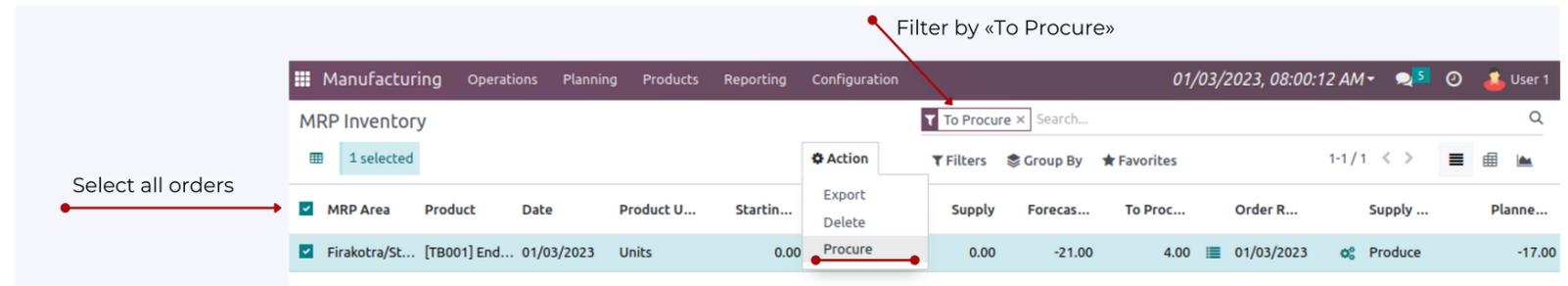
This process automatically generates orders for the manufacturing team to assemble the required products. You can see these newly developed orders on the manufacturing application's main page and click on each to visualize the order details.

What is MRP?

MRP is a systematic approach that ensures an organization has the suitable materials in the right quantities at the right time, minimizing excess inventory and production delays.

It consists of three key components:

- **Demand forecasting** - It analyzes the expected demand for the products by looking at historical sales data, market trends, and other relevant factors.
- **Bill of Materials (BOM)** - It also uses the BOM, breaking each final product into all the materials and sub-assemblies required to manufacture it.
- **Inventory Management** - Lastly, MRP also considers the current inventory levels of raw materials and components.



What is DDMRP?

DDMRP, or **Demand-Driven Material Requirements Planning**, is a modern supply chain approach that minimizes overstocking and understocking by using strategically placed inventory buffers based on demand variability and lead times. It offers more agile and responsive supply chain management, enhancing efficiency and customer service while lowering operational costs.

By comparing the demand forecast with the BOM and current inventory, the system can determine what needs to be ordered and when.

Purchase department

Forgeflow's solution also implements the **Demand-Driven Material Requirements Planning (DDMRP)** methodology, allowing sock buffers to size the raw materials inventory correctly. The system considers the current stock levels and the expected demand for each buffered product to suggest when and how much quantity to procure.

Each day, you will have to review the status of the stock buffers to trigger the procurement of the ones the system recommends. To do this, enter the «**Inventory**» application and navigate to the «**Products**» menu at the top panel; then, select «**Stock Buffers**». This will show you the list of buffers configured in the system. To see only the buffers that need procurement, select the filter «**Procurement recommended**». Then, select all the buffers by clicking on the checkbox at the top left and click on «**Action**» > «**Request Procurement**» > «**Execute**» to trigger the process that will automatically generate the request for quotations (RFQs) for the procurement of the products. These will be handled later on by the purchasing department.

Confirming the purchase orders

When the inventory triggers the procurement of raw materials recommended to keep the correct stock buffers, the system generates requests for quotations for the required products and their corresponding vendors.

You must review and confirm these RFQs as purchase orders to the suppliers.

To do so, go to the «**Purchase**» application to see the list of purchase orders. Apply the filter «**RFQs**» and confirm the orders. You can choose between opening each order and confirming it manually by clicking on the «**Confirm order**» button or selecting all orders at once and approving them by clicking on «**Action**» > «**Confirm orders**».

The RFQs will now appear as purchase orders.

Filter by «Procurement recommended»

Select all orders

Product	Wareho...	Locati...	Net flo...	On-Hand	Procure...
[WD001] W...	Firakotra W...	WH/Stock	0.00	0.00	54.00 Units

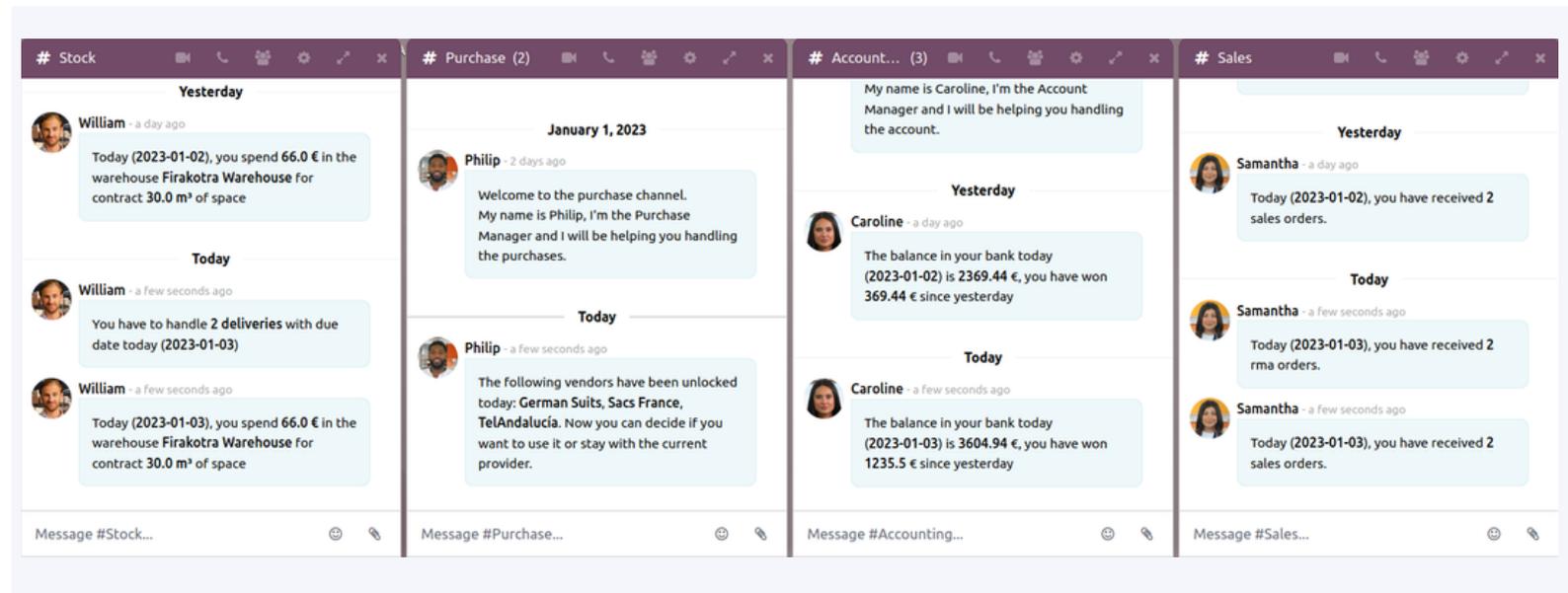
Filter by «RFQs»

Select all orders

Reference	Vendor	Buyer	Order Deadline	Source Document	Total	Status
P00008	Lilkhata		01/03/2023	SB/00015	2.80 €	RFQ

The **accounting team** will receive the bills from the vendors and save them in Forgeflow's system, matching them with the corresponding purchase orders. The accounting team uses the aged partner balance report to follow up on due payments and then issues bank transfers as needed.

It is time to start playing. When you enter the interface for the first time, you will see the messages you received from all departments. You should read these messages daily and act according to the information you receive.



As a summary, here are a few actions you should be performing every single day:

- Review and confirm the procurement recommendations of the MRP to start the process of producing the kits that are needed.
- Review the status of the stock buffers to trigger the procurement of the raw materials that the system recommends. Doing this after the MRP ensures the system considers the materials needed to produce the newly procured kits when sizing the correct stock buffers.
- Review and confirm the RFQs created when procuring the raw materials for the stock buffers.

Additionally, you should check the dashboard application to see how the company is performing and take any necessary actions. Pay close attention to the warehouse capacity KPI, and invest more into warehouse space when needed. Also, remember to choose the most suitable vendor when you receive a message that new vendors are available.

When you have completed all tasks in a given day use the time controller to advance to the following day.

[Explore all the available applications to maximize your playing experience and learn the most about the interface.](#)