eazystock

How to enhance the inventory management capabilities of **Pegasus Opera 3**

The additional benefits of inventory optimisation software

Contents

Introducing Pegasus Opera 3

Pegasus Opera 3 is a complete ERP business solution that supports small and mid-sized businesses. It can be fully integrated into an organisation to remove the need for separate systems to manage finance, payroll, CRM and service operations.

With the option to host on-premise or in the cloud, Opera 3 offers a simple and cost-effective way to modernise businesses and streamline processes.

Whilst Opera 3 has a breadth of built-in functionality, it also has a development area where approved Pegasus developers can make customisations to meet individual business requirements. This also allows seamless integration of software add-ons to increase system capabilities and meet bespoke needs.

In this eGuide, we will look at Opera 3's functionality in terms of inventory management.

We will also evaluate its features and describe the additional inventory optimisation capabilities EazyStock offers.

Opera 3 and inventory management
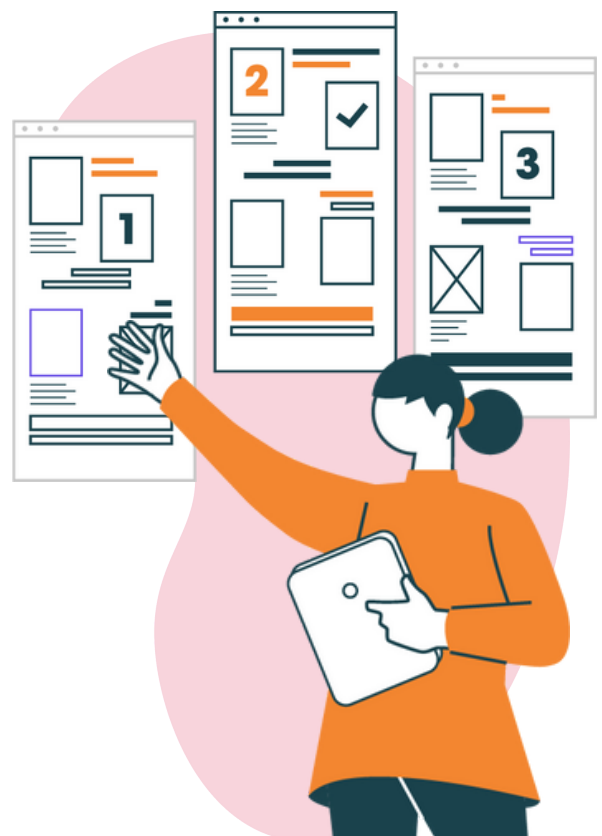
Opera 3 and inventory management

Opera 3's supply chain management functionality allows users to store a wealth of data about every product they carry. This makes it easy to track these goods across their supply chain and update stock levels based on outgoing sales (or works orders) and incoming purchases.

For some organisations, these features may provide an adequate level of stock control. For others, additional inventory optimisation functionality could be essential.

Key core inventory management functionality in Opera 3

Storing a wide breadth of data on every inventory item, including unit costs, sales prices and batch numbers.

Storing supplier data, including lead times and item unit costs, to rank them accordingly.

Assigning warehouses and tracking items from one location to another.

Linking items to create a bill of materials for production.

Posting item transactions, such as sales and purchases, against each item to automatically adjust stock counts.

Linking replacement articles to offer alternatives to sold-out or superseded products.

Creating back-to-back purchase or work orders for items with insufficient stock to cover the sales order.

Tell-tale signs that you need further inventory optimisation capabilities include:

01 | Inaccurate demand forecasts

02 | An inability to increase inventory turnover rates

03 | Difficulty improving service levels (stock availability/order fulfilment), leading to lost sales

04 | Consistently having too much working capital tied-up in excess stock

05 | Issues with obsolete stock

06 | Spending too much time manually updating reorder levels and quantities

07 | Regular stockouts or incomplete orders that lead to unhappy customers

08 | An inability to deal with irregular supplier lead times

These challenges occur because Opera 3, like most ERPs, is great at managing stock – from goods in to dispatch – but cannot optimise stock levels. This makes it difficult to hit order fulfilment targets while keeping inventory investment to a minimum.

Here's how inventory optimisation software can fill this void.

What is inventory optimisation?

Inventory optimisation is the concept of balancing high service levels with the lowest possible inventory investment. It allows businesses to achieve stock availability while reducing inventory costs and minimising the risk of excess stock.

This is done using software that provides statistical demand forecasting, dynamic inventory classification and stock level optimisation, automated inventory ordering and smart supplier management features.

Inventory optimisation software is growing in popularity. Large, enterprise-level businesses have been investing in inventory optimisation software for many years to improve their service delivery and bottom line. Now, with EazyStock, businesses of all sizes can use the same technology.

EazyStock is an ERP add-on designed to provide stock-holding organisations with inventory optimisation capabilities.

As a cloud-based system, it's easy to implement and offers a fast ROI.

EazyStock users sign up on a 'software-as-a-service' (SaaS) subscription model, meaning it's a low-risk financial option with little upfront capital investment.

Read on to see how EazyStock can support Opera 3's inventory management functionality.

Switching from manual to statistical demand forecasting

The challenges of manual forecasting with Opera 3

Opera 3 has no built-in demand forecasting functionality. Instead, it relies on users to manually create forecasts outside the system, often in Excel. These can then be used to manually query and override order quantities before a purchase order is raised.

Anyone who manually produces demand forecasts knows it's a resource-intensive task, particularly when there's an extensive portfolio of products to consider. These manual calculations need regular updates to ensure forecasting accuracy; even the best forecasting spreadsheet can be prone to human error.

Manual forecasts usually predict future demand based on previous sales history. While this method is suitable for inventory items with stable demand (where the previous demand data is a good indicator of the future forecast period), few items follow such simplistic logic in reality. This is because as they move through their product life cycle, most experience a range of demand patterns. They are also subject to market trends, variances in forecast sensitivity and seasonality.

For these reasons, basic, manual forecasting often fails to deliver accurate results.

EazyStock's additional demand forecasting capabilities

By connecting Opera 3 to EazyStock, demand forecasting becomes an automated process.

To produce a base forecast, EazyStock takes a data feed from Opera 3. It starts by analysing historical demand and classifying items into one of seven different demand types based on their position in their product life cycle.
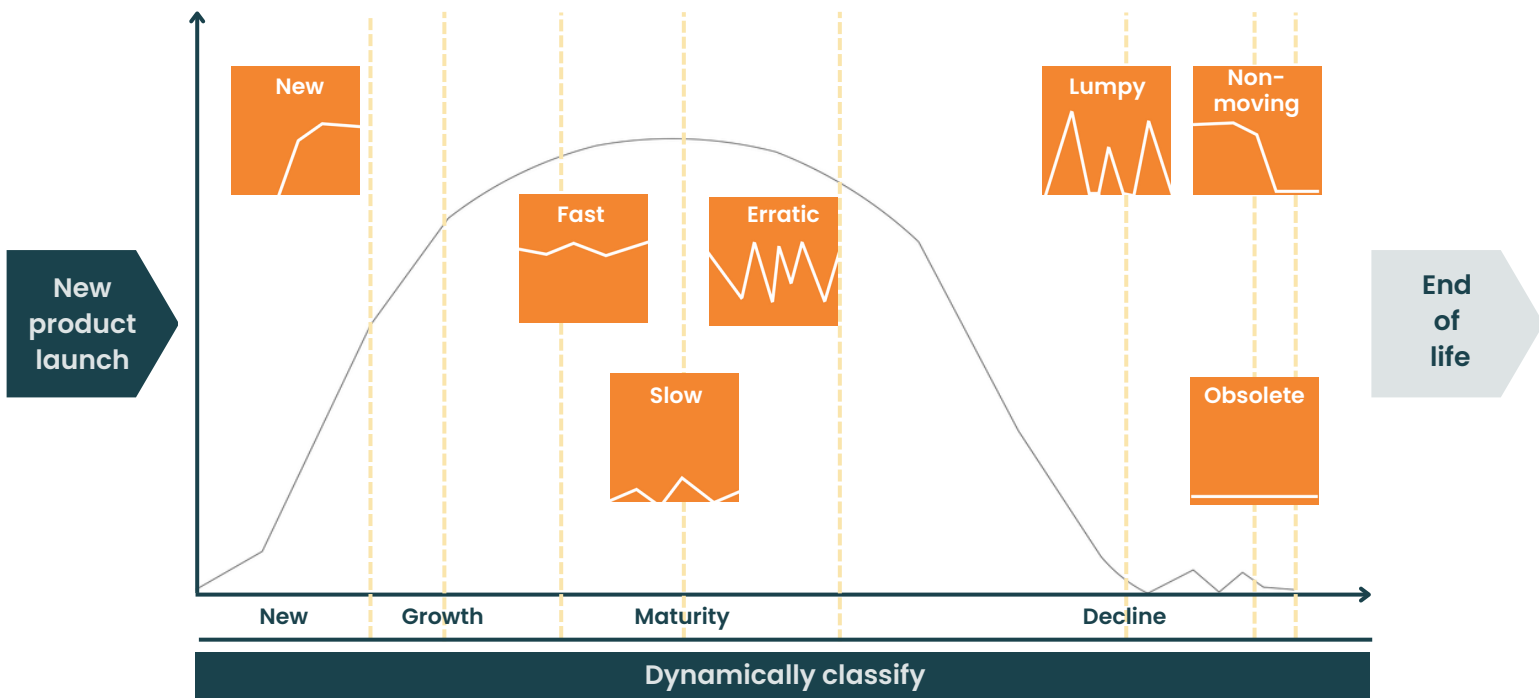
Diagram: Product lifecycle and demand types, as classified by EazyStock

For example, a product in its growth phase will likely follow a positive demand trend as sales increase until it hits maturity, where demand usually stabilises before becoming increasingly erratic and lumpy as it faces decline.

Demand types are important as they dictate the type of statistical algorithm that EazyStock uses to calculate forecasts. As products move along their life cycle, demand types and subsequent algorithms get updated to keep forecasting as accurate as possible.
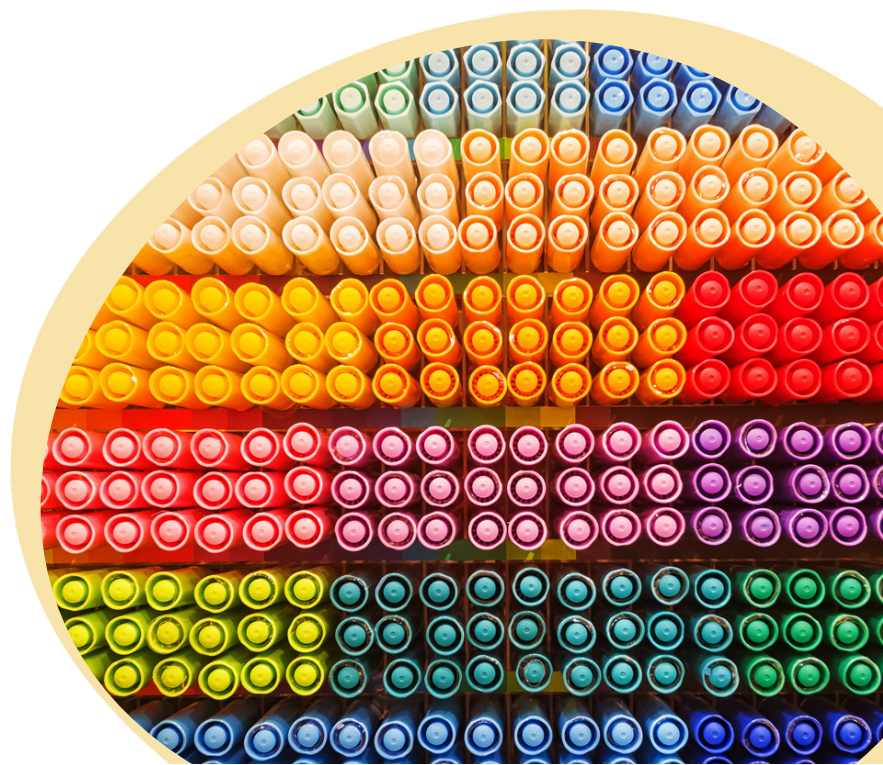
With the base demand calculated, EazyStock then considers:

Seasonality

Adding seasonal demand profiles helps prevent shortages during peak seasons and expensive surpluses as demand tails off.

Trends

Trends due to changes in consumer behaviour or tastes can be identified quickly, and forecasts adjusted accordingly for optimum reactivity.

Promotions

Special offers, discounts and long-term price drops can easily be manually added to the forecast.

Forecast sensitivity

EazyStock can be configured to weight forecasts on more recent demand data for fast-moving industries, or to consider longer historical demand periods for industries where trends are slower to change.

With data flowing daily between Opera 3 and EazyStock, items are re-analysed and forecasts updated to ensure they are constantly reacting to market dynamics and consumer behaviour.

EazyStock also tracks actual demand throughout the forecast period and provides alerts when there's a significant deviation from the projection. This allows the user to act on the intel and prevent potential stockouts or excess inventory building-up.

At the end of a forecast period, it will also highlight extreme forecasting variances, e.g. demand outliers, so the cause can be investigated and future forecasts adjusted accordingly.

Put simply, EazyStock removes the need for creating manual forecasts.

Instead, it automatically generates projections using advanced statistical algorithms – ready to push back into Opera 3 to raise purchase or works orders.

EazyStock highlights demand variances

Classifying inventory and optimising stock levels

ABC inventory classification

While Opera 3 will tell you what stock you have in your warehouse, it has no functionality to help you understand what your optimal stock levels should be, e.g. to ensure high levels of fulfilment without over-stocking. Users, therefore, have to manually calculate the minimum order quantity they want to carry for each stock item.

It's common for inventory managers to use a simple form of inventory classification, such as ABC analysis, to do this. This involves manually grouping inventory items based on their value and volume relative to total stock. So 'A' items, which have a high value and are stocked in low volumes, are treated differently to 'C' items, which conversely are carried in high volumes and have a low comparative value.

Different stocking policies can then be used to manage these groups; for example, you may choose to set higher order quantities for cheaper C items that you know will move quickly through the warehouse. This process of analysing and classifying every inventory item is, however, time-consuming for any stock manager.

Unfortunately, as soon as the information is calculated, it will begin to fall out of date, which could lead to ordering unsuitable inventory levels and consequential stockouts or excess stock situations.

Dynamic inventory classification

To replace this manual process, EazyStock has dynamic inventory classification functionality. It aims to prioritise which products you stock, based on a wider range of variables, to optimise and increase inventory levels.

To do this, EazyStock takes a daily feed of demand profiles, stock levels and items on order and in transit from Opera 3 and calculates stocking rules for every SKU based on several key criteria:

- Demand types – as discussed above.
- The value of annual usage (VAU) of each SKU – this takes into account sales volume as well as the product's unit cost.
- How often each SKU gets picked – this distinguishes high-volume products with many requests (1000 requests for 1 unit) from high-volume products with low requests (2 requests for 500 units).
- The demand volatility of each SKU – segmenting items based on their demand volatility and, therefore, how easy their demand is to forecast.

Whilst ABC classification simply groups items based on their value, EazyStock uses multi-dimensional variables and goes much more granular, categorising SKUs into inventory matrixes. These can either be kept very simple or have over 200 segments, like in the matrix on the next page.

EazyStock then automatically applies the stocking rules to ensure reordering parameters are set and target service levels are achieved accordingly (read more about this on page 24).

EazyStock dynamically moves items between categories daily and automatically updates stocking rules as required. The result is automatically optimised inventory levels, allowing capital investment in the right stock and achieving healthy turnover rates.

Picks class	DG		A1	A2	A3	A4	B1	B2	B3	C1	C2
P0	0	N	94.00%	95.00%	96.00%	96.50%	97.00%	97.50%	98.00%	98.50%	99.00%
		L	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
		S	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%
P1	1	N	94.00%	95.00%	96.00%		97.00%	97.50%	97.10%	80.00%	99.45%
		L	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	98.40%
		S	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	99.25%	99.80%
P2	3	N	94.00%	95.00%	96.00%	96.50%	97.00%	97.30%	97.00%	97.40%	99.40%
		L	70.00%	70.00%	60.00%	60.00%	60.00%	70.00%	93.00%	95.00%	99.00%
		S	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	97.50%	99.25%	99.95%
P3	5	N	94.00%								9.65%
		L	70.00%								9.60%
		S	90.00%								9.95%
P4	7	N	94.00%								9.96%
		L	60.00%								9.80%
		S	90.00%								9.97%
P5	10	N	92.50%								9.97%
		L	70.00%								0.00%
		S	90.00%								9.98%
P6	15	N	95.00%								9.98%
		L	70.00%								0.00%
		S	90.00%								0.00%
P7	24	N	97.80%								9.99%
		L	70.00%								0.00%
		S	99.90%								0.00%
P8	47	N	99.90%	99.90%	99.96%	99.95%	99.96%	99.97%	99.98%	99.00%	99.99%
		L	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
		S	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%

Diagram: Example of an EazyStock inventory matrix with target service levels

As a general rule, this means items with consistent demand, high pick frequency, and a low cost-to-sell will have higher stock levels, while those that are expensive to stock, have a low pick frequency and more volatile demand will be stocked in lower volumes.

Service levels and stock availability

Many businesses use service-level KPIs to measure stock availability or order fulfilment. Service levels are directly linked to customer satisfaction, e.g., customers are more likely to be pleased with their service experience if orders can be fulfilled entirely.

Unfortunately, most ERPs, including Opera 3, lack the functionality to measure service levels and track this important KPI. With EazyStock, however, users can set and measure target service levels at product group or even SKU level. This allows businesses to keep a closer eye on stock availability and its impact on customer satisfaction.

In EazyStock, service levels are usually configured during system implementation and assigned to segments of the inventory matrix. So, if high service levels are required, EazyStock will automatically adjust stocking rules accordingly to carry more of the items – and vice versa.

To summarise, EazyStock helps businesses make more informed inventory management decisions. Whether they're looking to increase turnover and free-up capital or reduce stockouts and improve service levels, EazyStock allows users to test, implement and fine-tune their optimisation strategies.
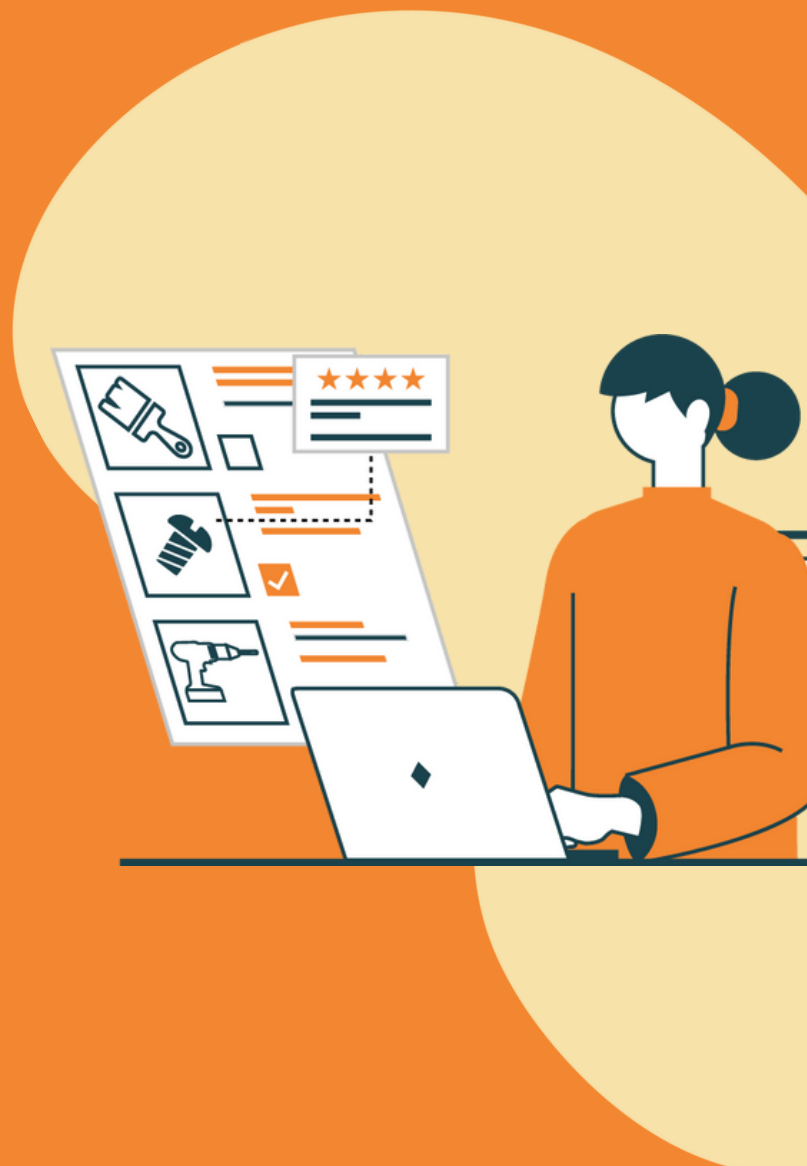
Automating reordering

Opera 3's reordering functionality

When it comes to inventory reordering functionality, Opera 3's capabilities, like many ERPS, is fairly basic.

Opera 3 works on the assumption that inventory should be reordered when there are insufficient stock levels to cover upcoming sales requests. When sales orders are raised, it will check if there is enough stock to fulfil the order, and if not, it will give users the ability to raise a back-to-back purchase or works order to cover the shortfall.

Users can manually set:
- A minimum quantity for every stock item, e.g. the target number of items to have in stock after all sales orders have been fulfilled.
- A reorder level, e.g. the level of stock at which a request for a purchase order is triggered.

Opera 3 will then generate purchase or works orders when these trigger points are met.

The order requests include a reorder quantity (the amount to be reordered every time a purchase order is placed) and an economic order quantity (the optimal order multiple to get the best price from each supplier), both of which the user can manually set and adjust as necessary.

This functionality, however, has several crucial drawbacks:

- It's time-consuming to set up, e.g. the user has to calculate and input every reordering parameter, e.g. the minimum quantity, reorder level and reorder quantity, for each item.
- It relies on the user having a detailed understanding of the ordering requirements of each stock item.
- No demand forecasts are included in the reordering calculations (unless the user manually calculates these in Excel).
- Every reordering parameter is static and has to be manually adjusted.
- It relies on lead times remaining static.
- The reordering parameters are limited; for example, there's no way to add safety stock levels, minimum and maximum order quantities, etc.

The lack of automation around allocating the reordering policies and planning parameters makes replenishment a very time-consuming and manual process for the user.

Plus, most markets experience fluctuating demand and supply variables. This means these policies and parameters need to be regularly revised to prevent reordering resulting in episodes of excess (even obsolete) inventory or stockouts.

Automated reordering and replenishment

A key benefit of using EazyStock is that it removes all the manual work and deliberation over choosing the right replenishment strategies and rules.

EazyStock calculates all reordering policies and automatically adjusts them to changes in demand forecasts, stocking rules, target service levels and supplier lead times (more below).

This means reordering becomes market-led and reacts to customer behaviour (or production requirements) and supplier performance.

Let's look at some examples of EazyStock's replenishment functionality:

Safety stock

Most inventory planners manually calculate safety stock quantities by taking the cycle stock quantity over a specified period and adding a little more, just in case.

In comparison, EazyStock uses statistical algorithms to consider important factors, such as service level, forecast accuracy and lead time variability.

Since each inventory item has a unique demand pattern, it will adjust safety stock levels accordingly.

Reorder alerts

In Opera 3, reorder points are either a fixed amount or based on a static forecast – both manual calculations.

In contrast, EazyStock automatically factors in dynamic demand forecasts (to mirror customer demand), safety stock levels (to avoid stockouts), and supplier lead times (to cover supplier holidays or busy periods).

If ordering or delivery acceptance can only take place on specific days of the week or month, the user can add these operational constraints to EazyStock's order calendar feature. The system then recalculates reorder quantities and safety stock levels to prevent any impact on stock availability.

Reorder quantities

In Opera 3, reorder quantities are again a specified fixed amount based on estimated fulfilment requirements and/or a supplier's best price. Both options can potentially result in stockouts or holding surplus stock).

Instead, EazyStock automatically generates daily order proposals calculating the order quantity based on current stock levels, reserved stock, goods-in-transit and back-orders, dynamic demand forecasts and stocking rules, as well as planning parameters, e.g. safety stock, min/max order quantities etc., so it always suggests the optimal reorder quantity.

Lead times

EazyStock's dynamic lead time feature helps mitigate the impact of supply delays on fulfilment. It does this by tracking actual lead times and sending alerts when they begin to deviate from the norm. Users can then either manually adjust planning parameters for the affected items or let the system update them automatically.

Smart and efficient reordering

EazyStock will continuously analyse stock to ensure each SKU falls into the correct demand type and the appropriate area of the inventory matrix. This makes it subject to the correct stocking rules and planning parameters.

With these advanced algorithms working in the background, EazyStock provides a daily list of items and their optimal reorder quantities. Users can then decide whether to review the orders (which they may do for high-priority, slow-moving items) or simply automate the ordering process (which often happens with faster-moving, low-value items where the risk of excess stock is low). The orders can then be imported back into Opera 3 for processing.

A daily review of EazyStock's user-friendly dashboard allows users to sense-check their replenishment recommendations.

The system promotes managing by exception, providing inventory alert reports so attention can be given to product categories or SKUs that need revision or fine-tuning from a human perspective.

The result is that day-to-day replenishment tasks become more efficient, reordering accounts for demand and supply variability, and prevents over-stocking.

Summary
Intelligent inventory planning

Supply chain management teams need time to manage customer expectations and find solutions to supply challenges. Every hour saved by using automation to do forecasting and replenishment calculations is time available for more strategic tasks.

With EazyStock, teams see their focus shift from manually producing forecasts and updating reordering policies to reviewing those automatically generated by the software. Users are no longer wasting hours on calculations in spreadsheets. Instead, they can manage by exception, interrogate the data in EazyStock and make smart adjustments using the simple dashboards, reports and item screens.

EazyStock is an invaluable add-on to Opera 3 that will empower businesses with the information they need to perform much more efficiently. They will also be able to lower stock levels, free-up capital and reduce excess stock proactively.

Ultimately, they'll experience higher profits, happier customers and a more resilient supply chain.

eazystock

Find out more about inventory optimisation

Book a demo