Automated inventory management :

An automated inventory management system is a tool that helps businesses keep track of their stock levels automatically with minimal human intervention.

It’s a proactive system that can help businesses avoid:

• Stockouts

• Lost sales

• Frustrated customers

• Inventory management is essential for most business owners—even more so if you’re juggling multiple sales channels (and perhaps a brick-and-mortar store on top of that)!

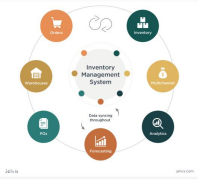
• Attempting to juggle all of these variables manually is a recipe for error. Not to mention time-consuming. But what if we told you that you and your team could be using that time for more important pursuits while still attending to your inventory?

• That’s where automated inventory management comes in. By utilizing the power of a retail operating system like Brightpearl, you’ll save months’ worth of time each year while improving the accuracy of your inventory management processes.

How does an automated inventory management system works?? :

Automated inventory management is how most modern retailers (both e commerce and otherwise) track and organize stock, supplies, and sales. An automated system allows retailers to manage inventory in real-time, and make business-critical decisions in a timely fashion.

Inventory automation should also work in conjunction with other retail management tools like your order management or point-of-sale (POS) software. If you’re going to achieve real-time accuracy in inventory management, after all, you need to be on top of all sales through all





Artificial intelligence applications in IMS :

Inventory management software has vastly improved businesses by creating data-driven manufacturing and distribution centers. AI’s capacity to understand real-time inventory control dynamics, which affect inventory stock levels, makes it revolutionary compared to traditional human methods. AI can predict scenarios, recommend solutions, and even perform them for you.

Seven Ways AI Can Enhance Inventory Management

1 . Effortless Demand Forecasting

Traditional methods of demand forecasting, such as autoregressive integrated moving averages and exponential smoothing, are becoming antiquated because businesses now generate much more data. AI-enhanced inventory management systems can spot demand patterns and use this data for accurate forecasts and optimizing warehouse replenishment plans.

2 . Improved Productivity Through AI Algorithms 

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| Computer algorithms are becoming a popular method for increasing workplace productivity. In a nutshell, an AI algorithm is an extended subset of machine reinforcement learning that allows a machine to learn to operate on its own. In turn, the AI continues to gain knowledge, thus constantly improving tasks and making them more efficient.  In terms of artificial intelligence inventory management, algorithms can have a plethora of benefits, including constant monitoring of: |
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By having AI oversee these tasks, resources are freed up, and staff no longer have to undertake mundane, repetitive jobs.

3 . Better Customer Support Using Chatbots

The rise of the chatbot is upon us with the chatbot market predicted to reach $102 billion dollars by 2026.

Artificial intelligence inventory management is no exception. AI chatbots help you stay updated on your EPR inventory system, keep track of orders, and other updates. For example, you could ask a chatbot for the lowdown regarding a specific order. This makes it easier for staff to carry out their tasks, too.

On top of this, chatbots bring top-level customer service that goes beyond instant messaging. For example, DHL now offers a service where you can ask a smart device like Amazon’s Alexa for instant updates on your parcel’s location and estimated delivery time.

This type of voice-assisted chatbot is becoming ever more

popular. statista predicts there will be 4.2 billion digital voice assistants being used by 2024.

The level of customer support afforded by AI improves the customer experience by giving instant answers and is likely to increase retention and satisfaction rates.

Some other ways chatbots can aid your inventory management include:

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| • Quickly assisting with delivery requests, processing orders, and issuing billing and receipts.  • Improving customer service by tracking items, solving customer queries, and allowing them to ask further questions.  • Allowing your business to collect feedback from customers and suppliers. |

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| 4 . Wiser Warehouse Management    AI inventory management makes warehouse management easier, more efficient, and more focused. Streamlining and optimizing warehouse management processes lessens the chance of human error while freeing up staff to be deployed elsewhere.  Some of the ways AI can improve warehouse management include: |

• : Automated AI systems can communicate

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| **Better Communication** |

accurate information quicker than human operatives. Implementing cloud-based devices allows for instant and on-the-go updates.

• : Optimizing logistics tasks such as counting pallets or

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| **Logistics** |

designating the required equipment for staff can now be done by AI, reducing processing time and human error.

• : Using AI frees up resources and budgets usually

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| **Inventory Optimization** |

spent on inventory control.

• Using AI lets you

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| **Automating Wages and Performance Updates:** |

automate wages and schedule performance updates. These could be linked to data to give better insights into employee performance.

All of these warehouse management improvements combine to give you a competitive advantage.

5 . Minimized Downtime Through the Help of Predictive Analytics

Predictive analytics has become a useful tool for decision-makers, allowing them to make data-driven decisions with greater insights.

This cost-effective solution utilizes predictive algorithms to allow you to detect anomalies and failure patterns, learn from them, and predict future failing issues. The result is lower downtime as predicted problems can be prevented before they occur.

For example, your AI might log that it takes six months until components within the conveyor belts need replacing. A decision can then be made to change the components every five months to avoid downtime. Or perhaps you’ve recently had network issues across your IT infrastructure. Predictive analytics can help you prevent future server downtime.

6. Automated Material Procurement

Procurement is an essential part of any manufacturing business that needs supplies and equipment. This process often involves managing a large number of documents, suppliers, and more. With many aspects to procurement, it’s clear to see how inefficiencies and mistakes can creep in.

AI analytics can automate such warehouse processes from the first stage of quoting right through to the supply chain. According to McKinsey, companies

that have introduced AI into their business have reported a reduction in logistics costs of 15 percent and an improvement in inventory and service levels of 35 percent and 65 percent, respectively.

Examples of automated procurement include:

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| • Procurement spend classification.  • Vendor matching.  • Collecting market and supplier data.  • Detecting anomalies. |

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| 7. More Lucrative Marketing Strategies  A considerable benefit of AI-enhanced inventory management is the way it offers better insights that can lead to more lucrative marketing strategies.  In particular, AI and machine learning can highlight the short-lived demand for products and their market. Not only this, but with smart inventory tools such as machine learning-based anomaly detection, and with AI that can spot sporadic changes in product interest, you can achieve an enriched database of likely prospects. This allows you to tailor marketing strategies and personalize them to your ideal customer.  Using AI in this way enables you to keep up with current trends as well as keep tabs on what products and services are losing popularity. With marketing strategies informed by data science, you can focus on ensuring increased revenue for your effort.  How to use AI in IMS:  Artificial intelligence can help optimize business processes at all stages. Implementing AI, for example, in inventory management practices like item level tagging can increase inventory accuracy to 95% . |

Streamlining the entire inventory management process

Inventory management isn’t just about keeping track of stored and delivered items. It’s also about forecasting, planning, and control. By leveraging AI solutions, a business can minimize the possibility of overstocking and understocking. That’s because AI technology can consider location-specific

demand, analyze and correlate demand insights, and detect and respond to consumer demand for a specific product.

Stocking management and delivery

Warehouses need to run smoothly for optimum business performance. Inventory management issues like planning errors and inadequate stock monitoring can lead to inventory shortages and delivery delays, which could have a negative impact on revenue and customer satisfaction.

Advantages of using AI in IMS:

Increased accuracy

One of the biggest benefits of an automated inventory system is that it improves accuracy.

This is because businesses no longer have to rely on manual input. Instead of manual data entry by workers, multichannel inventory factory offers real-time tracking across all sales channels and locations and automatically updates information.

Improved efficiency

An automated inventory control system is much more efficient than manual methods.

Since employees no longer has to use spreadsheets, they have more time to focus on other tasks. And with a system keeping track of inventory levels, stock takes don’t need to be done as frequently.

Improved decision-making

You can make informed decisions about when to restock with accurate inventory information.

This helps to avoid stockouts and ensures that there is enough inventory to fulfill every order. Moreover, you can also set reorder points with inventory software. So, when inventory reaches a certain level, you will be notified and can restock before you run out of products.

Reduced costs

Keeping stock levels optimal can save a lot on warehousing carrying costs. Businesses only need to hold enough stock to meet customer demand rather than overstocking, which can tie up valuable capital.

Improved customer satisfaction

Accurate inventory data helps you maintain inventory levels based on fluctuating demand.

As a result, businesses can significantly improve lead time and fulfill orders as soon as possible. This leads to happy customers who are more likely to return and shop again.

Simplified scaling

As businesses grow, their inventory requirements will change. With an automated system in place, it’s easy to make changes and ensure that the system can still cope with the demands of a growing business.

Greater visibility

Automated inventory management provides businesses with complete visibility of their stock levels. This means you can see what’s selling well and what’s not and make informed decisions about where to allocate your resources.

Automating these error-prone laborious tasks can free up your time and your employees’ time and increase accuracy and efficiency throughout the entire product lifecycle.

Getting the insights you need when you need them is the key to staying profitable in an increasingly competitive marketplace.

Conclusion:

AI has revolutionized and reshaped both inventory management and the way companies stock and store products. The AI solutions implemented to enable the businesses to make the inventory management pre-planned, automated, based on customer demands, and even carried out by robots. AI empowers companies to:

o Enhance user experience and consumer satisfaction;

o Increase sales;

o Reduce costs;

o Boost the overall productivity of the company.

AI is the future of the industry. Thus, if you want to stay competitive, you should implement the technology as soon as possible. The results can be outstanding.

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