

A photograph showing a yellow intermodal container being lifted by a forklift. The container is suspended in the air, and the forklift's large tires and mast are visible at the bottom. The background shows an outdoor industrial or construction site with other containers and a cloudy sky. A large blue curved graphic element is on the left side of the image.

Supply Chain Automation: Need and benefits

Supply Chain Management

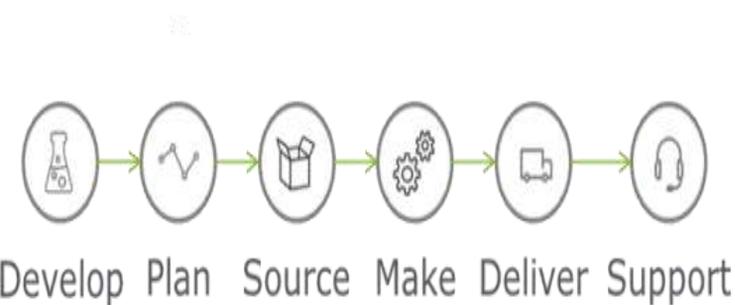
Is a most important strategic coordination of business functions within a corporation with the aim of achieving the foremost efficient and optimised movement and storage of products from point of origin to point of consumption.

As technology develops it becomes increasingly paramount for businesses to start to enhance processes, and more importantly technologies; nearly as good practice to stay before the inevitable developments and innovative enhancements within the Logistics industry.

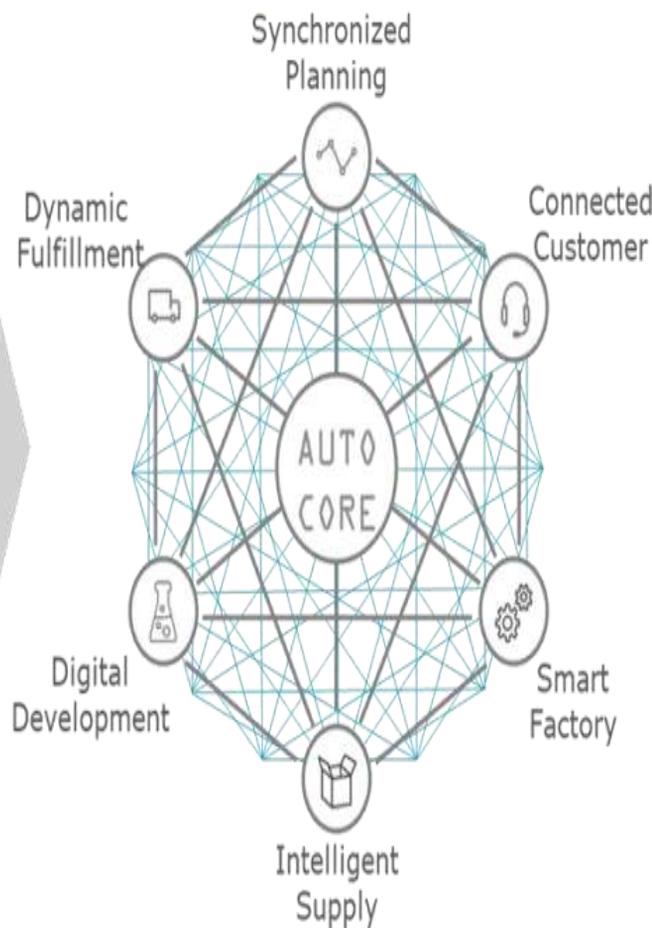
An important start line to improving efficiency, and optimising supply chains, requires automation and adequate investment in relevant technologies, which incorporates the utilization of computerised software and machines for a various assortment of Supply Chain processes, encompassing: internal control , RFID software, WMS and ERP databases, and additionally, technology to enable warehouse automation and data collection, to holistically monitor facility performance.

Supply chain technology is benefitting the Logistics Industry in some ways, and is very wanted by manufacturers and logisticians alike, to enable further improvements within their supply chains, and successively, the extent of customer service they will offer. On the entire, integrating automation into a supply chain, benefits the accuracy of labor completed, whilst simultaneously ensuring businesses adhere to relevant and mandatory compliance procedure.

TRADITIONAL SUPPLY CHAIN



AUTOMATED SUPPLY CHAIN



Some of the key Insights:

- [Optimized supply chains](#) generally have 15% overall costs, less than 50% inventory holdings, and a faster cash-to-cash cycle by nearly three times compared to under-optimized supply chains.
- A [recent report](#) shows that by 2020, 65% of e-commerce operations will leverage automated robots within their fulfillment practices.
- Automated storage and retrieval systems can [increase accuracy](#) in orders by up to 99%. Manually traveling to and picking an order can account for [more than 50%](#) of picking time.
- Automation increases the efficiency and accuracy of mundane tasks, but human employees are still very necessary for higher-level planning and relationship formation.



Automating the supply chain process could primarily drive value through indirect and direct operating expense reduction and through increasing revenue potential. Additionally, there are major benefits that companies can reap by choosing to automate their supply chain processes such as:

1. Decreasing operating costs:

- Supply chain automation helps in the reduction of labor costs, inventory, warehousing, and overhead costs related to inventory storage, including rent, labor and energy costs.

2. Increasing productivity

- By optimizing current resources, enabling round the clock work, companies can gain up to twenty percent more productivity in areas that are automated.

3. Increasing Volume

- For manufacturers, automation allows for the rise of the quantity of products which will be produced. The technology will leave the incorporation of the talents of trained workers with the accuracy of automated equipment, hence, increasing productivity.

4. Improving accuracy

- Automation can reduce errors related to manual processes, which successively, helps plan cost control through providing accurate, real-time information on inventory levels.

5. Time savings:

- Through streamlining business processes, supply chain automation boosts time savings by reducing the time related to implementing labor intensive tasks like accounting, saving manufacturers immense amount of your time and money.

Integrating with large suppliers

- The ability to integrate systems thereupon of huge suppliers is one among the main advantages of automating a supply chain, because it enables a robust foundation of which allows more visibility between partners.

6. Improving compliance:

- Automation can assist organizations with complying with industry standards through standardizing pricing, products and vendors.

While automating tasks may be a far more convenient and efficient thanks to manage a supply chain and does provide immense benefits, managers and leaders within a corporation may like better to be ready to track specific actions and outputs. For that reason, many automation solutions provide a comprehensive & customizable dashboards that give leaders visibility into all the required data and processes, which is why Enterprise Resource Planning (ERP) is vital to an automation project.

Some widely used automation systems:

1. **Supply Management – Machine Learning**
2. **Supply Logistics – Robotic Solutions**
3. **Supply Shipping – Driverless Vehicles**

ERP software's leave the automation and integration of core business processes. a number of these processes include scheduling operation, inventory records, customer orders and financial data. That said, ERP software's can drive huge improvements in terms of the efficiency and productivity of any organization, which incorporates distribution, manufacturing, finance, reporting and analysis. Automation was a luxury, but now it's a necessity for companies to survive during this competitive environments.

