

A man in a dark suit and light blue shirt stands in a factory, holding a tablet. The background is a blurred industrial setting with large windows and machinery. The image is overlaid with a blue geometric pattern of hexagons and triangles.

What an Automotive Supplier Should Look for in an Order Management System

WHITE PAPER

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Intro

Automotive EDI solutions receive and send electronic data seamlessly between automotive suppliers and customers, keeping orders moving in the supply chain. They deliver accuracy, time and money savings and faster order and transaction processing.

Order management starts with a solid EDI foundation and incorporates trading partner – OEM and sub-tier – business requirements into the order management logic framework so suppliers can create a smooth demand production schedule. Above all else, it must offer EDI transactions for the numerous trading partners including FCA, Ford, GM, Honda, Toyota and hundreds of Tier I and Tier II automotive suppliers.

What are some of the must-have features a world-class solution should offer to streamline order management? We describe some of them here.





Order Management System

Order Management System

A world-class order management system consists of several parts, from the customer requirements themselves, to proper labeling, tracking what has shipped, and tracking available inventory to meet the orders, down to ensuring adequate raw material to produce the needed parts.

In the automotive world, customers communicate orders via traditional EDI in multiple formats or EDI standards: X.12, UN/EDIFACT, Odette, VDA, and flat file. A best-in-class solution supports multiple standards and allows customers to change their EDI standards (e.g., from X.12 to UN/EDIFACT) which can affect the processing of the inbound and outbound data exchange.

It's critical to find a solution that manages all EDI and labeling changes mandated by the customer and provides updates as needed to ensure clients are compliant with their customer's EDI requirements.

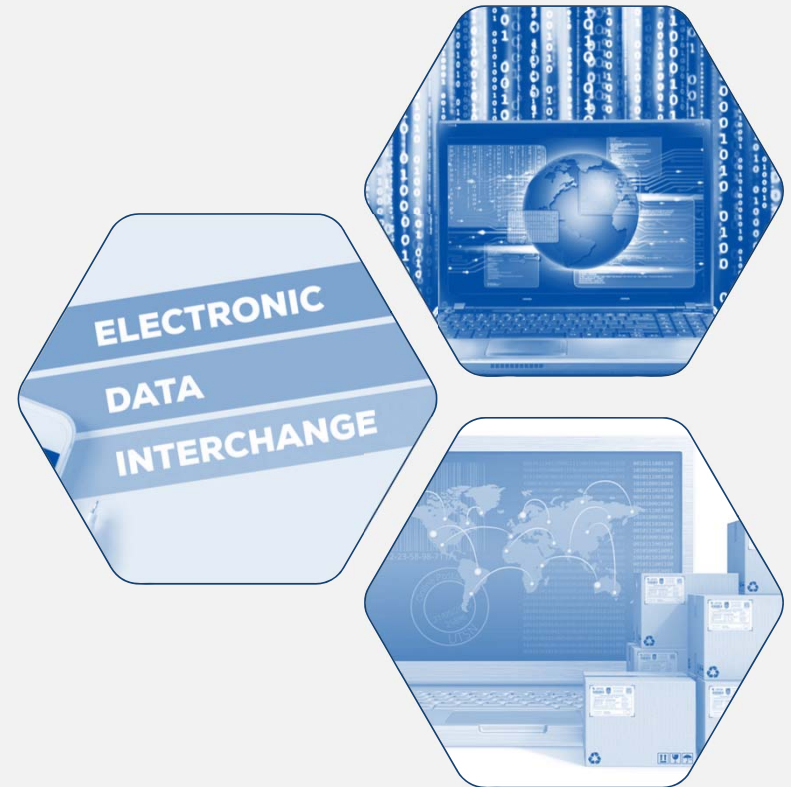


Types of Transactions and Orders

EDI has various types of transactions that communicate customer release schedules and orders:

- 830 Material Release (UN/EDIFACT: DELFOR, Odette: DELINS)
- 862 Shipping Schedule (UN/EDIFACT: DELJIT, Odette: CALDEL)
- 850 Purchase Order/860 Purchase Order Change (UN/EDIFACT: ORDERS/ORDCHG, Odette: ORDERR)
- 866 Production Sequence

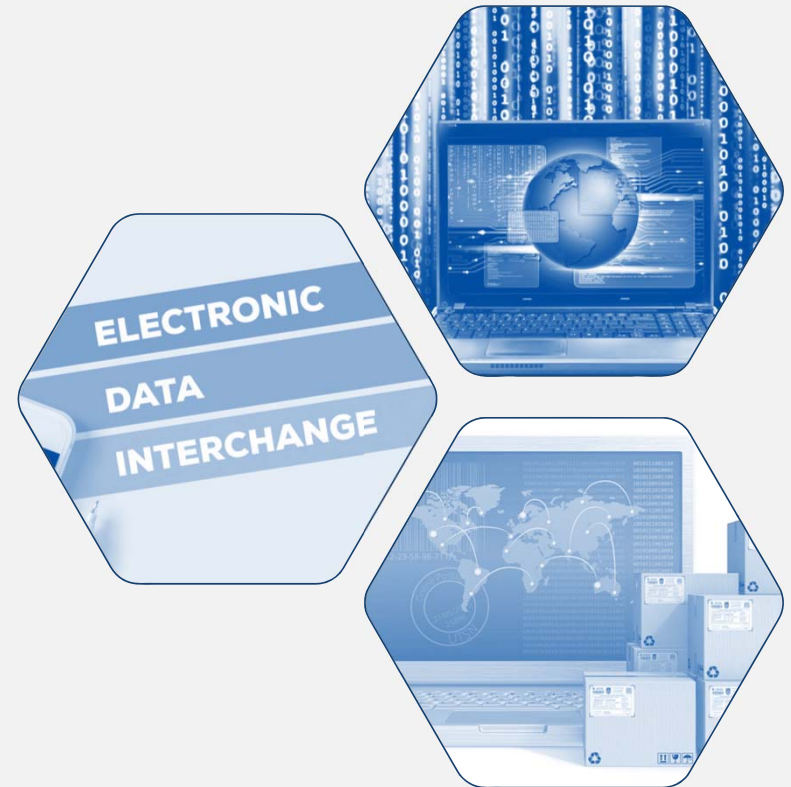
The best solutions handle multiple types of orders and smooth demand between them. They manage orders in a centralized order system and process EDI seamlessly with no need for end users to map the data sent from their customers to the order system.



Types of Transactions and Orders

Moreover, in the more efficient solutions, EDI is fully integrated into the ERP order system with no need for manual rekeying of any requirements. They automate Blanket Order building created by inbound EDI as inbound EDI is received. The best solutions continually update the demand into the order and scheduling processes. In this case, “continually updated” refers to the process where automotive customers send daily 862 Shipping Schedules and the solution incorporates these requirements into the daily shipping lineup.

The best ERP solutions take the Electronic Data Information and consolidate it into an EDI database to provide numerous types of reporting used to see what the customer demand/requirements are for daily shipments as well as forecasting.



Handling Non-EDI Orders

An ERP EDI solution must be configured to receive non-EDI orders, such as spreadsheets, PDFs, faxes or emailed reports. When a supplier receives non-EDI orders, the system should automatically extract the orders and process them into the order system with the right format. It should remove the manual steps of creating the order and entering the requirement quantities, dates, and additional order information. Non-EDI orders should be automated so that they can be processed as if it they had been electronically received.




Tracking Customer Requirements

Keeping track of all customer requirements can be time consuming, so having a system to automate input and consolidate information is essential and adds accuracy by avoiding manual input.

Some customer requirements include special reference information that is included with the order to be used later for labeling, shipping paperwork, and advanced notification of shipments (ASN). This might include kanbans, Release Authorization Numbers (RAN), manifest numbers, ship order numbers, line feeds, dock codes, handling codes, and pack information. When sent electronically, the special reference information should be automatically included with the order information to be used as needed (labels, shipping paperwork, ASN). Best solutions track specific details on an order-by-order basis that come in on the inbound EDI to be included on the outbound EDI.

While customers may send in dates with specific requirements, the actual quantities shipped may differ due to standard pack sizes. Actual ship dates may need to take into consideration transit days, or special ship day logic, and containerization. World-class solutions maintain such requirements with a blanket order or spot buy to take the customer demand and provide accurate shipping information.





Managing Cumulative (CUM) Accounting

Managing CUM Accounting

Cumulative or CUM accounting doesn't occur in many manufacturing environments, but it is essential in the automotive industry. OEMs often quote figures in cumulative quantities. CUMs are the basis for calculating the cumulative scheduled quantity for the model year. From the customer's CUM, the supplier can accurately determine where they are in shipping compared to the scheduled CUM.

In some cases, the customer may not send a CUM quantity in the planning and shipping schedules – the more efficient solutions are able to manage the orders in this case as well. Further, they easily manage CUM roll backs with reset CUM options and allow for manual CUM adjustments as needed. They manage three types of CUMs:

- Prior CUM required – cumulative amount required prior to the new release schedules
- Supplier CUM shipped – total cumulative amount shipped for a given period
- Customer CUM received – total cumulative amount received for a given period



Managing CUM Accounting



Customer's CUM

If the customer's CUM is included in the inbound electronic planning schedule (830) or shipping schedule (862), best solutions compare the customer's CUM to the supplier's CUM based on the last shipment recognized. CUMs may disagree for various reasons – mislabeling, shipping the wrong part, too many parts, shorted parts, plant loss, quality issues, etc. If a CUM discrepancy is identified, the solution should allow for a CUM adjustment.

Supplier's CUM



If the supplier's CUM is included in the outbound ASN, the customer compares it to their CUM received. If there is a discrepancy, the customer may generate an electronic Receiving Advice (861 / RECADV) to notify the supplier.

Net Requirements Due

Reporting on shipping requirements and part requirements should calculate the net requirements due based on CUM required plus net requirements less supplier CUM shipped. In this way, suppliers can easily identify past dues and over shipments.



Net Requirement Due = (CUM required + Net Requirements) – Supplier CUM Shipped

EDI solutions must include reporting and inquiries to review customer and supplier CUMs.

Automated Alerts

EDI users need ways to notify all identified parties when requirements or other critical information changes and set parameters that will trigger these alerts. Such alerts should be triggered, for example, for EDI release net changes, EDI-to-orders update exceptions, selling price changes and changes in requirements affecting current shippers.

Selling Price Management

In the automotive industry, selling prices can be affected by price negotiations or surcharges that require the price to be managed based on a certain date or on a periodic basis. Future selling prices for each purchase order can be established prior to the effective date to be proactive in setting up the change. Best ERP/EDI solutions include reports and utilities to review and manage price changes.





Scheduling Shipments

Best-in-class EDI solutions are built on a logical framework that guides shipping for suppliers by taking into consideration transit days, days to cover, shipment-based rather than transit day-based requirements, valid shipping days for material to be shipped, and late pick-up times from carriers. An easy-to-use interface is essential for coordinating all shipment requirements and timing.

Ship vs. Delivery Date Logic

Solutions need ways to differentiate between ship dates and delivery dates. Reporting options should include release accounting and shipping reports that give the user multiple ways to calculate the actual ship day based on destination transit days or other special shipping logic set up to attain optimal on time delivery ratings.

Pre-Production Part Approval Process

Pre-Production Part Approval Process (PPAP) is a critical process used in the automotive supply chain system in conjunction with the quality process to ensure parts are not shipped until they have met quality requirements. Managing the PPAP process, requirements, and status is integral to compliance with OEM requirements. Identifying by item number whether PPAP is required or waived gives suppliers a way to track this essential requirement. Tracking the status of the item in the PPAP certification process is mandatory to identify whether further processing may occur and the reasons why or why not full or interim approval is granted and in which quantities.





Additional Shipping Considerations

The best EDI/ERP solutions also deliver these additional shipping considerations.

Standard Packing

Quality solutions apply a standard pack logic when standard pack options are used. The standard pack quantity is the amount of parts that must be in each standard container or package. The standard pack quantity is used to calculate the number of containers needed for shipping which facilitates tare weight calculations and palletizing configurations.

Bar Code Control

The best solutions include destination-level and order-level control of bar code label format definitions and flexible number of copies. Trading partner label changes should be easy to acquire and update to the orders to ensure customer label compliance. Setups should accommodate OEM and other supplier-specific information with automatic EDI updates.



Freight Management

EDI solutions need to handle freight consolidation where multiple shipments are hauled to a destination point, broken down and shipped to their final destination. This may require the use of pool/consolidation point codes required on the ASN or Master Bill of Lading paperwork in addition to the Packing Slip and Straight BOL.

Best solutions offer multiple ways to identify carriers, using either internally assigned codes or the standard carrier assigned code (SCAC). The SCAC code represents the carrier as defined by the National Motor Freight Association and is included in the shipper information and the ASN report.





Consignment Warehouse

In addition to shipping from your facility or off-site warehouse, solutions should allow for shipment to and from a consignment locale and provide the ability to coordinate and manage shipments and inventory control when dealing with consignment warehouses.

Returnable Container Tracking

Proper management of the flow of returnable containers, inbound and outbound, requires efficient processes that help you manage that flow. A quality order management system should include the ability to track returnable dunnage and its components to eliminate shortages and additional costs associated with expendable packaging.

International Shipping and Multi-Currency

Suppliers need ways to operate in a global marketplace. This requires the need to handle customer paperwork requirements for the carrier relating to international commercial terms, or incoterms and FOB rules, which include export paperwork and commercial invoices. In addition, the system must be able to handle multiple currencies in order to track the sales for each order properly and identify which currency the invoice should reflect.



Conclusion

When looking for a world-class EDI solution that delivers efficiency and time and cost savings, look for customizable features and options, ample reporting choices, and logical frameworks for order management and EDI communications. Review multiple solutions to find the appropriate fit.



A man in a dark suit and light blue shirt stands in a factory or industrial setting, holding a tablet. The background is blurred, showing industrial equipment. The image is overlaid with several white hexagonal shapes of varying sizes and opacities, creating a modern, tech-oriented aesthetic. A dark grey text box is positioned on the right side of the image.

About AIM Computer Solutions

AIM Computer Solutions, Inc., provides business software solutions for automotive manufacturers to meet specific ERP needs. Known for its world-class EDI features, the AIM Vision® solution meets the needs of small to mid-size repetitive automotive suppliers and delivers customizable support from the shop floor to the front office. AIM Vision and its AIM Mobility Apps are designed to support an enterprise-wide automotive supply chain. For the latest news and updates, connect with AIM on [LinkedIn](#), [Facebook](#) and follow [@aimcomERPnews](#) on Twitter. For more information go to www.aimcom.com.