
ERP TECH

SUMMIT 2024

Modern Electronic Data Interchange for Fourth Shift

EDI Visualizer

Overview and Demo

Keith Vincent, Evangelist, MFGStream

Ed Paty, ICG EDI Senior Consultant

Roger Weidel, ICG Director of Sales



infor



Innovative Consulting Group

www.ICGTechnology.com

Agenda



Introduction



ICG's Approach & Value We Deliver



EDI Visualizer

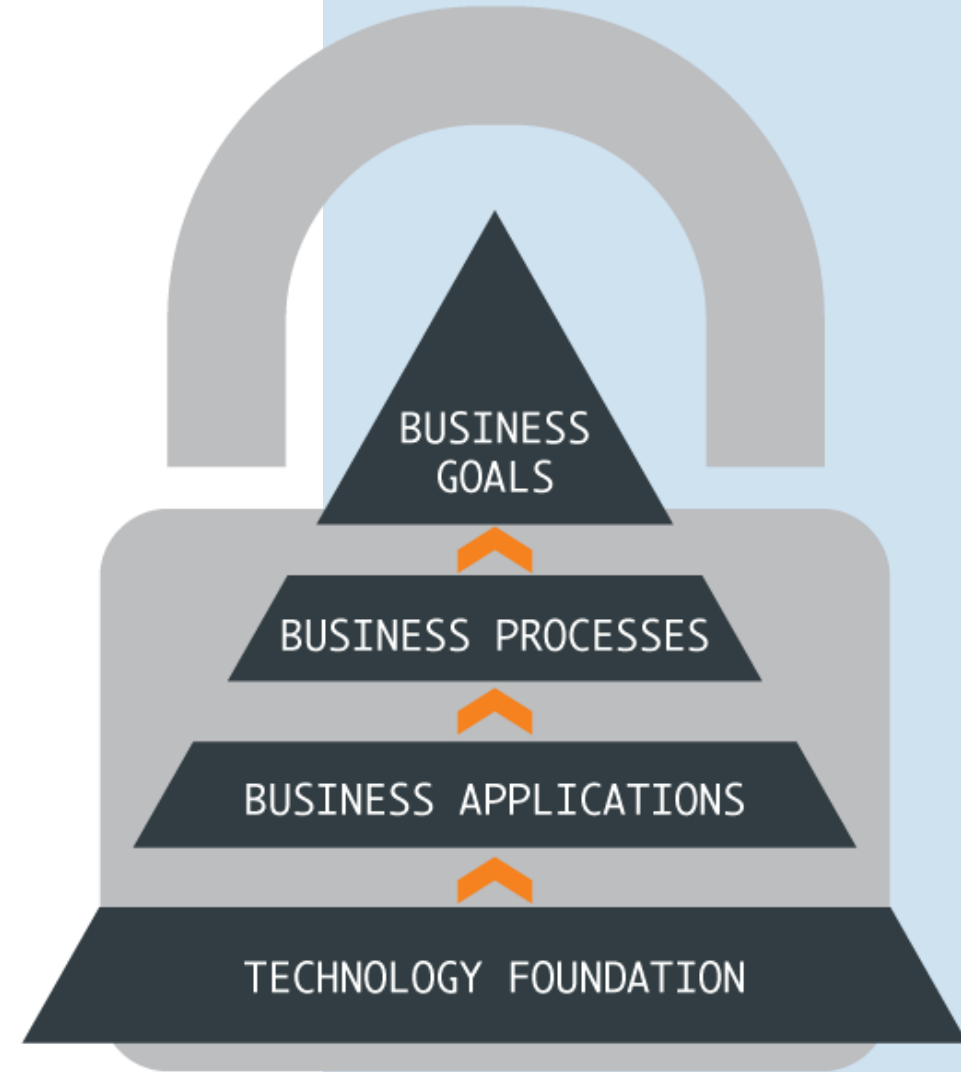


Discussion & Next Steps

The ICG Approach

A solid **technology foundation** delivers your **business applications** when and where you need them. These two combined implement your unique **business processes**, allowing you to reach your **goals**.

ICG is a process-driven business technology company that ensures your IT platform securely delivers your applications and processes whenever and wherever you need them.



O U R M I S S I O N :



Deliver innovative and reliable business and technology solutions that exceed our client's expectations, resulting in reduced cost, improved efficiency, and a guaranteed ROI.



O U R V I S I O N :



Enable enterprises of all sizes to leverage technology for business growth and success.



Value We Deliver

ERP SOLUTIONS

One-Stop Shop for Fourth Shift, VISUAL, Acumatica

- Sell ERP
- Cloud Hosting
- Implementation
- Optimization
- ERP Upgrades
- Training
- Develop/Customization
- And More!

ICG is uniquely qualified with both IT and ERP under one roof!



IT SERVICES

We Architect & Implement Strategic IT Solutions:

- Managed Services
- Technical Support
- Cybersecurity
- Cloud Infrastructure
- Data Center Infrastructure
- Virtual Desktop Infrastructure
- TSR and Health Checks
- And More!



How Companies Communicate

ARE YOU STILL RELYING ON
OLD TECHNOLOGY?

How to communicate?

- Phone
- Fax
- Email
- Mail
- Spreadsheets
- EDI

HAVE YOU EMBRACED
MODERN SOLUTIONS?

What is communicated?

- Forecasts
- Orders
- Invoices
- Inventory Positions
- Notifications

Why use EDI?



Volume of Transactions
Being Exchanged



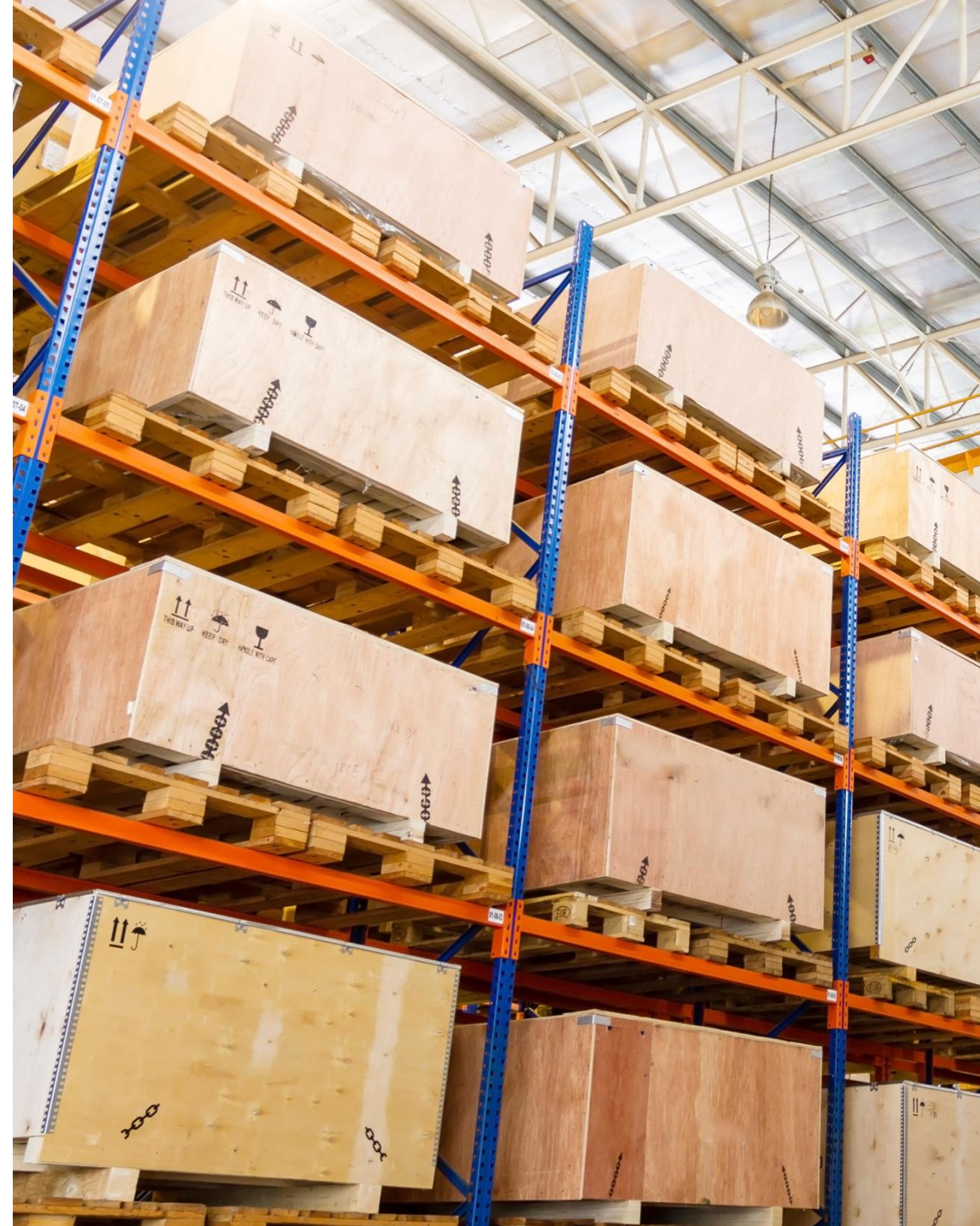
Timing Requirements



Trading Partner Coercion



MFGStream
EDI-Visualizer



EDI Transactions

- Commonly use ANSI X-12 in US, but can be EDIFACT
- Assuming you are the supplier, and your partner is the customer



Inbound Automotive

830 / DELFOR – Planning Schedule

862 / DELJIT – Shipment Schedule

861 / RECADV – Shipment Received Confirmation



Inbound Retail

850 / ORDERS – Purchase Order

860 / ORDCHG – Purchase Order Change

EDI Transactions

- Commonly use ANSI X-12 in US, but can be EDIFACT



Outbound

856 / DESADV – Advance Shipment Notice

810 / INVOIC – Invoice

855 / ORDSP – (Retail) PO Ack / Confirmation



Inbound and Outbound

846 / INVRPT – Report Inventory

997 / CONTRL – Functional
Acknowledgement

EDI Promise vs Reality

Real World Example

- **Partner: The 810 (invoice) you sent is bad**
- Me: Looking through the logs and the data
- Me: It is rejecting because it says the Invoice Number is bad
- **Partner: Yes, we don't use the Invoice number in the Invoice Number field. It should contain the Shipment Number.**
- Me: OK... make change
- **Partner: The 810 you sent is bad**
- Me: Looking ... It says the Invoice Number is bad
- **Partner: When you ship to plant XYZ you should have the Invoice Number in the Invoice Number field**
- And it goes on and on...

Promise

EDI provides a standard for Trading Partner communications

Reality

Each Trading Partner you have will have their own variation to the standard

EDI Promise vs Reality

Every Trading Partner your company works with will have their own variations to the standard EDI transaction definition. It can and will vary by customer and even vary between customer sites.

The preceding conversation would be funny if it wasn't true. And this Trading Partner did \$280 Billion in revenue last year – so they are not an insignificant customer.



EDI Promise vs Reality

- Your partner will dictate the standards
- They will require your compliance
- You will be penalized if you don't comply or if you make errors in a transaction

-
- Some companies with high order volumes may be able to see some cost reduction
 - Some companies with high volume may have to use EDI just to keep up
 - However – the bottom line for most companies is we do EDI because our Trading Partners have asked/required us to

Promise

Promise: EDI is peer-to-peer Trading Partner collaboration

Reality

It is absolutely dictatorial!



EDI Promise vs. Reality

It is a dictatorship!



...Companies who use EDI can typically spend up to 2% of their top-line revenue to pay for supplier chargebacks, penalties, and other fees.

<https://www.coenterprise.com/blog/how-to-avoid-edi-related-fines-fees-and-chargebacks/>

EDI Promise vs. Reality

Promise: EDI is real-time integrated with your ERP system

Reality: Almost every site we have visited was manually integrated

- Inbound demand transactions are so variable or non-standard they are manually reviewed before entry into Fourth Shift
- Most companies told us over half the transactions they received had errors: Part Number, Delivery Dates, Pricing, Ship To...

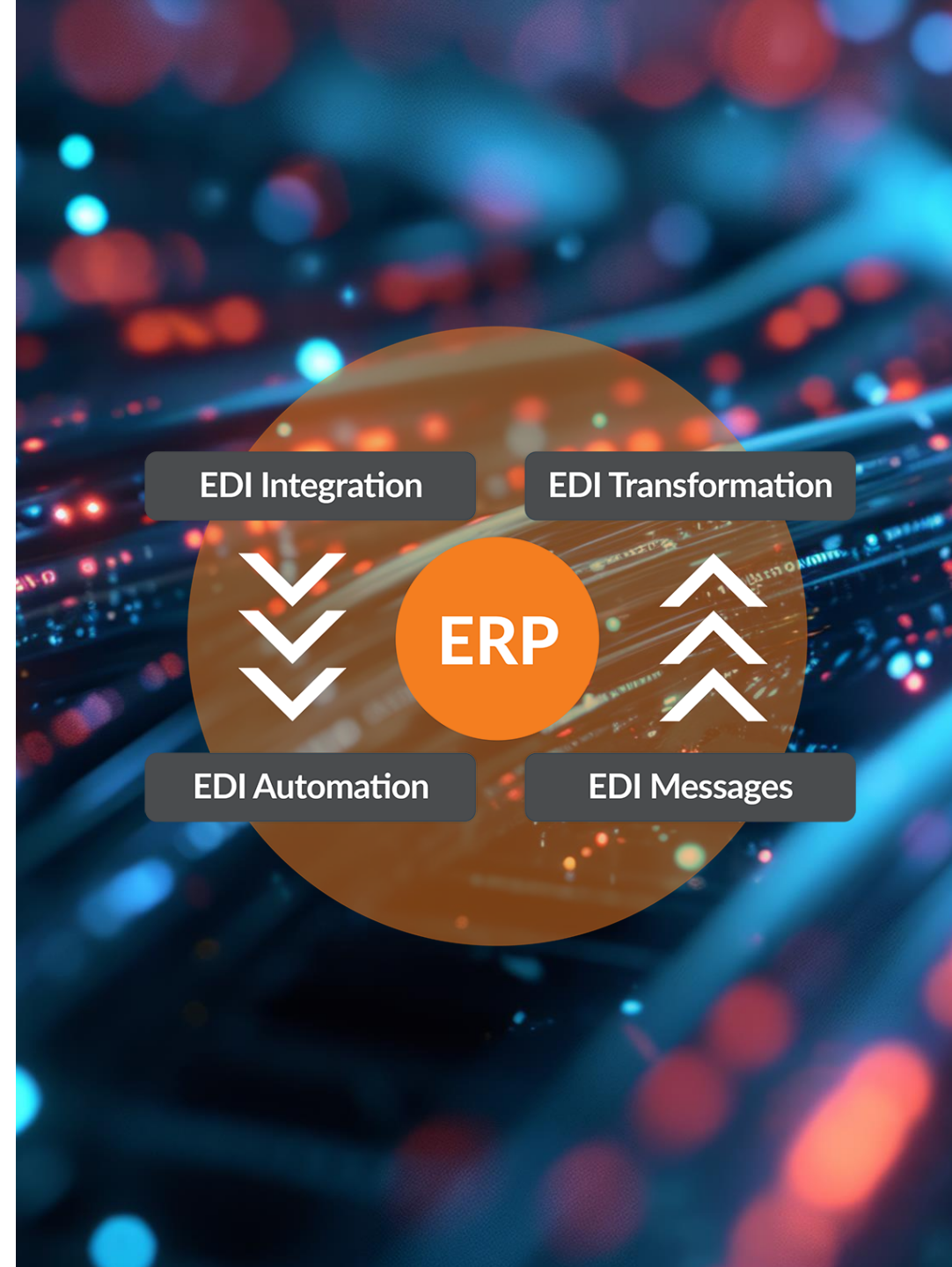
Reality: EDI was/is a batch process

- Most companies relied on Rip-n-Read – they printed incoming orders and manually keyed them into Fourth Shift
- Everything had to be batched because they had to check and correct almost every order first
- They really didn't have integration with Fourth Shift, and nothing happened automatically



MFGStream
EDI-Visualizer

- ✓ Handle Transaction Volume and ERP Integration While Available Anywhere
- ✓ Rules-based EDI Transaction Data Manipulation
- ✓ Catch and Handle Issues on the Way In
- ✓ Exception-Based EDI



EDI-Visualizer

- **Your Trading Partners**

These are your customers. Orders, shipments, invoices, and more are transacted via EDI.

- **EDI-Visualizer (EDI-V)**

EDI-V facilitates all inbound and outbound ERP communication.

- **Your Personnel**

Fully integrated EDI-V allows your personnel to deal with exceptions and correct any issues with the transaction.



- **TrueCommerce / SPS Commerce**

VANs (Value-Added Network) are private networks that act as an intermediary between business partners to exchange electronic data and network services. VANs have audit capabilities so that the data being exchanged is formatted correctly and validated before it is transferred to the next party.

- **Your ERP System**



MFGStream
EDI-Visualizer

Handle EDI Volume and ERP Integration

- Transaction review and configuration tools are all web-based so they are available anywhere
- The EDI execution tools are all run on premise or hosted with Fourth Shift in CloudFour
- EDI-V can look at configurations and ERP data to make decisions and quickly process them into Fourth Shift
- EDI-V handles extremely large and high-volume systems
- Uses MFGStream BPA
- Most data is only on-site

Rules-Based Data Manipulation

- Each partner will typically comply with about 80% of the standard EDI transaction definitions
- Build rules and logic to handle the other 20%
- Built-in tools for most common scenarios like Unit of Measure changes, swapping fields, etc.
- MFGStream Business Process Automation (BPA) is used underneath. All the rules needing further customization beyond the EDI-V Configurator are in a modern procedural language

Catch and Handle Issues On the way In

- Data validation on inbound EDI transactions
- Rules can be designed to stop bad/incomplete data from coming into ERP
- By stopping and correcting them, when it comes time for outbound ASN or Invoice transactions they are already validated
- Outbound transactions are where chargebacks occur, so correcting data means the chances for them are greatly reduced

Exception-Based EDI

- You cannot stop your Trading Partners from sending bad data!
- Rules can be configured so EDI transactions which pass them are automatically brought into Fourth Shift
- EDI transactions that flag a rule or fails a rule are highlighted for customer service to review
- This allows most EDI transactions to flow into the ERP in real-time while alerting to those requiring human intervention



EDI-V Document Types

Standard EDI documents available in EDI-V

→ Inbound

- 830 – Planning Schedule
- 850 – Purchase Order
- 860 – Purchase Order Change
- 861 – Shipment Received Conf.
- 862 – Shipment Schedule

→ Outbound

- 810 – Invoice
- 855 – PO Ack / Confirmation
- 856 – Advance Ship Notice

*Additional documents can be added as required



EDI-Visualizer

Advanced Features: Can do more than EDI transaction processing

- Web Portals
- API
- XML
- Vendor Managed Inventory
- Supplier Inventory Control

Looking Forward

- AI/Chat GPT Integration
- AI decisions about bad inbound data
- AI responses and email to trading partners



Success Stories



MFGStream
EDI-Visualizer

Plastilite



Plastilite:

Established in 1958, Plastilite is a leading provider of insulated packaging and bait containers, with over 65 years in the industry. The company has expanded its product offerings to include gel packs, thermal insulation bags, and more.

ERP and Technology Integration:

- **2012:** Plastilite adopted Fourth Shift as its ERP system. Since then, the company has been continuously refining processes to fully utilize Fourth Shift capabilities.
- **2024:** Recent additions of MFGStream and EDI-V have enhanced the efficiency of processing EDI transactions within Fourth Shift. This integration has significantly reduced manual input labor and minimized potential errors.

Plastilite is continuing to look at opportunities to build on successes and ways to optimize operations.

Plastilite



Retail EDI

- Inbound EDI Transactions
 - 850 – Purchase Order
 - 860 – Purchase Order Change
- Outbound EDI Transactions
 - 810 – Invoice
 - 855 – Purchase Order Ack.
 - 856 – Advance Ship Notice

Number of Trading Partners:

- 10

VAN used:

- True Commerce

(Customer Name Withheld)

Automotive EDI

- Inbound EDI Transactions
 - 830 – Planning Schedule
 - 850 – Purchase Order
 - 860 – Purchase Order Change
- Outbound EDI Transactions
 - 856 – Advance Ship Notice

Number of Trading Partners:

- 2 with 150 plant locations

VAN used:

- SPS Commerce



Live Demo



MFGStream
EDI-Visualizer



Discussion and Questions





Thank You!