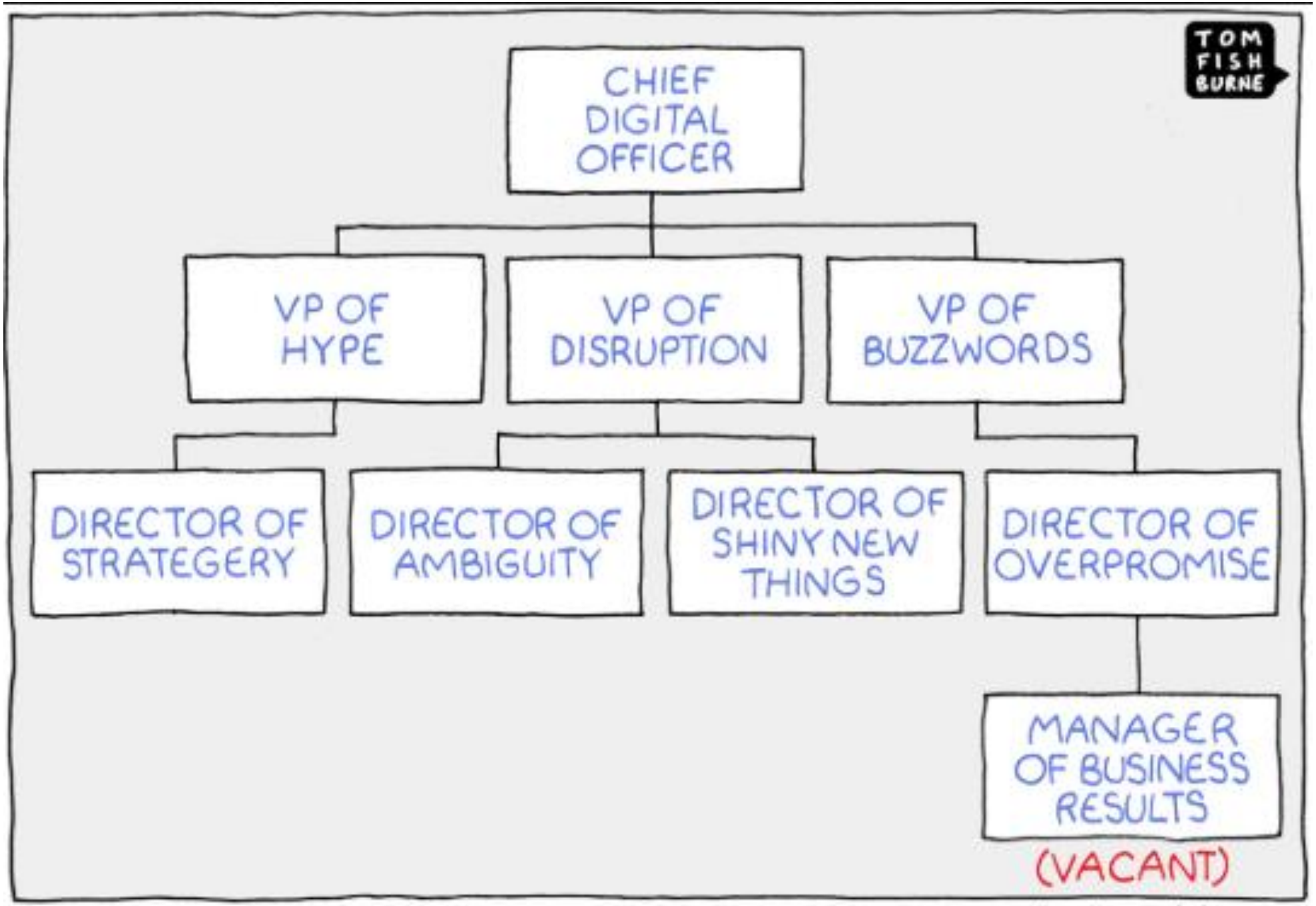
Elemica

Cutting Through the Acronym Noise

to Understand Digital Transformation

Go Digital. Transform.

March 8, 2019


TOM FISH BURNE
CHIEF DIGITAL OFFICER
VP OF HYPE
VP OF DISRUPTION
VP OF BUZZWORDS
DIRECTOR OF STRATEGERY
DIRECTOR OF AMBIGUITY
DIRECTOR OF SHINY NEW THINGS
DIRECTOR OF OVERPROMISE
MANAGER OF BUSINESS RESULTS
(VACANT)
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Elemica Delivers Business Results via Digital Transformation

Elemica

$500+ Billion
Commerce per Year

12,000+
Direct Material Partners

The Digital Supply Network

CLIENTS

- App Users
- ERP
- API

The Digital Supply Network

Elemica **See**

Buy **Sell** **Move**

Elemica **Platform**

PARTNERS

- IoT
- Data Providers
- Transaction Networks
- Customers
- Suppliers
- Logistics Service Providers

Elemica Digital Transformation Solutions

Elemica

Buy

Onboard your raw material suppliers to optimize your procure-to-pay process, reducing inventory levels and increasing productivity

Products:

- Purchase Order Management
- Quicklink Email P2P
- Vendor Managed Inventory
- Delivery Forecast
- Invoice Compliance

Elemica

Quality

gsqa

Improve quality and simplify compliance. Create information from COAs to drive decisions and improve processes.

Products:

- e-COA® Management
- Finished Goods Traceability
- Test Results and Graphics
- Pre-ship authorization
- Regulatory Reporting

Elemica

Sell

Automate your complete order-to-cash process to reduce operating expenses, optimize working capital, and improve sales performance

Products:

- ENRICH
- Sales Order Management
- Customer Portal Assistant
- Quicklink Email SELL
  - OCR Module
- VMI & Delivery Schedule
- Invoice Compliance

Elemica

Move

Collaborate with all of your logistics service providers to reduce freight costs, improve productivity and maintain shipper-of-choice status.

Products:

- Transport Execution
- Quicklink Email Move
- Freight Cost Management
- Terminal & Warehouse Visibility
- Timeslot Management

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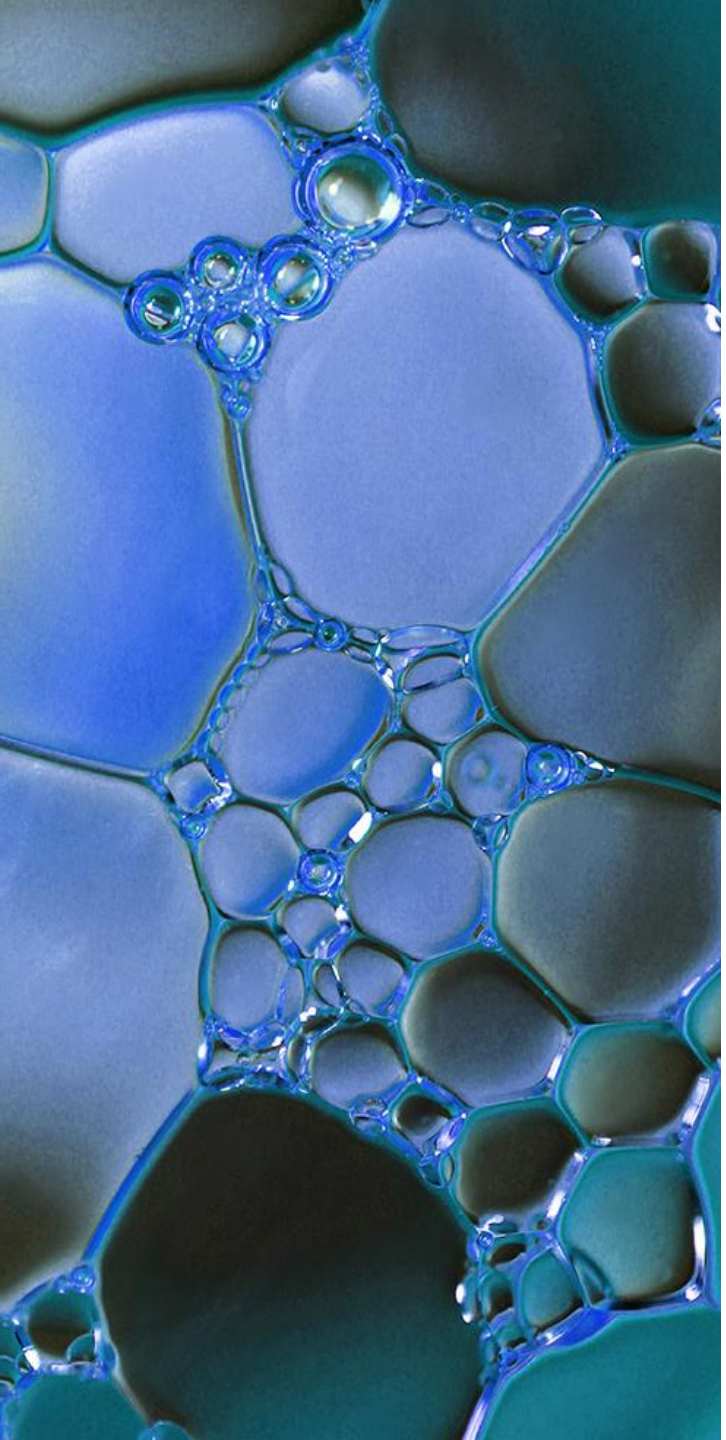
See

Unleash the power of a digital supply chain with visibility and exception management of your order-to-cash and procure-to-pay processes.

Products:

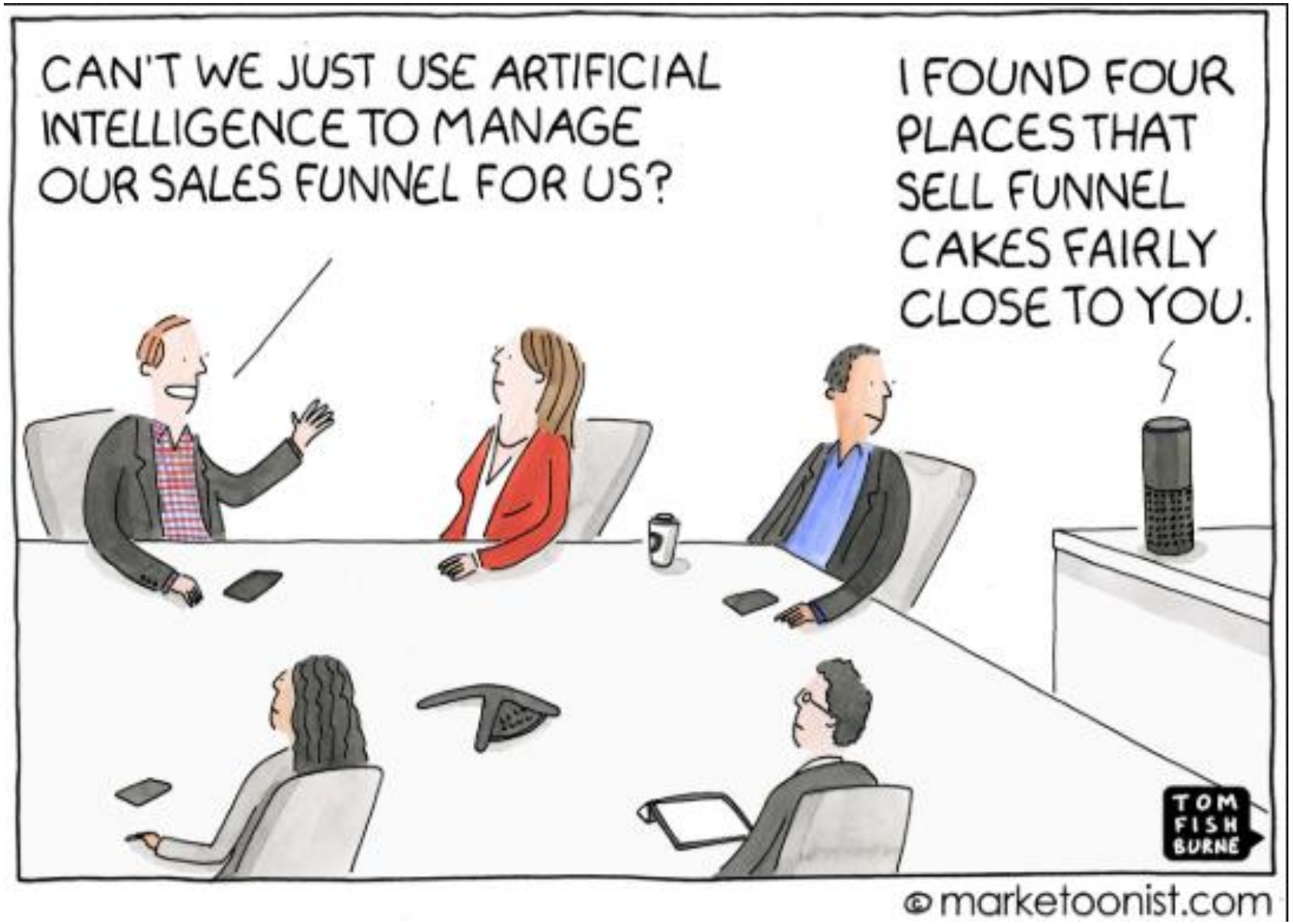
- Pulse
- Trace
- Risk



Agenda

- Hype? Reality?
- Acronyms and Buzzwords
- Results Driven Digital Transformation
- Q&A

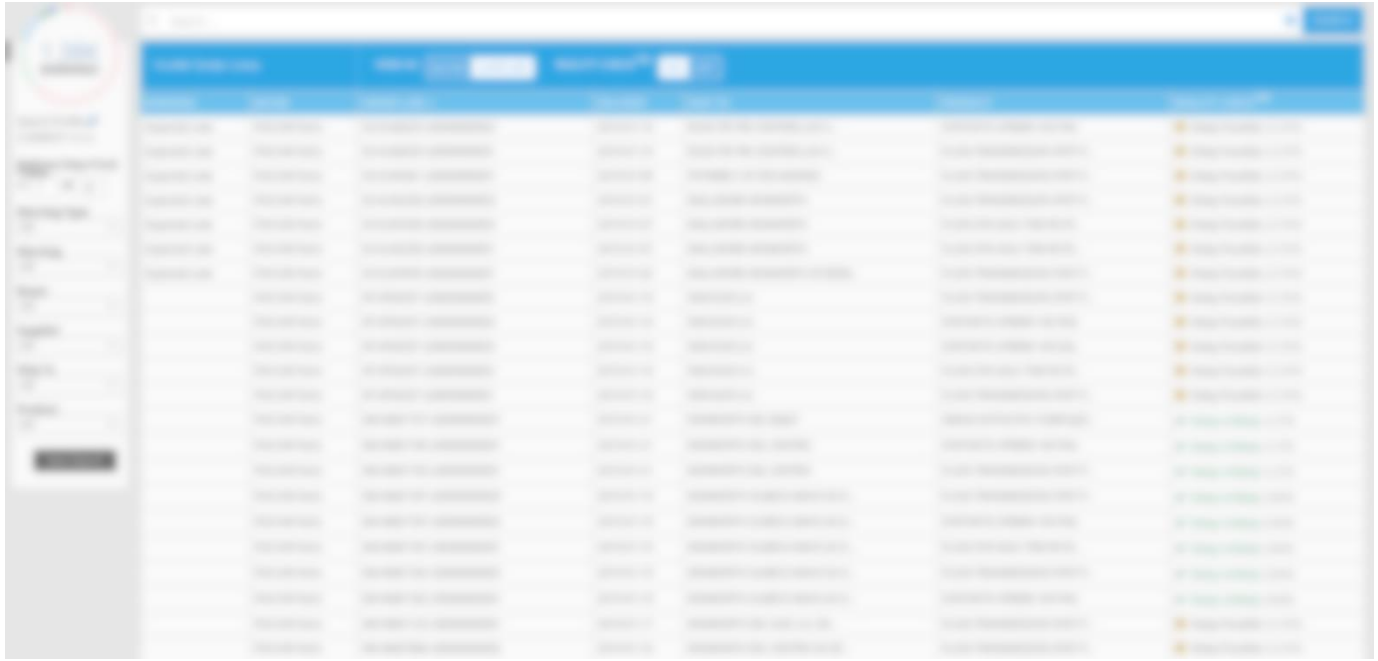
Artificial Intelligence (AI)



OTIF Predictions using Machine Learning

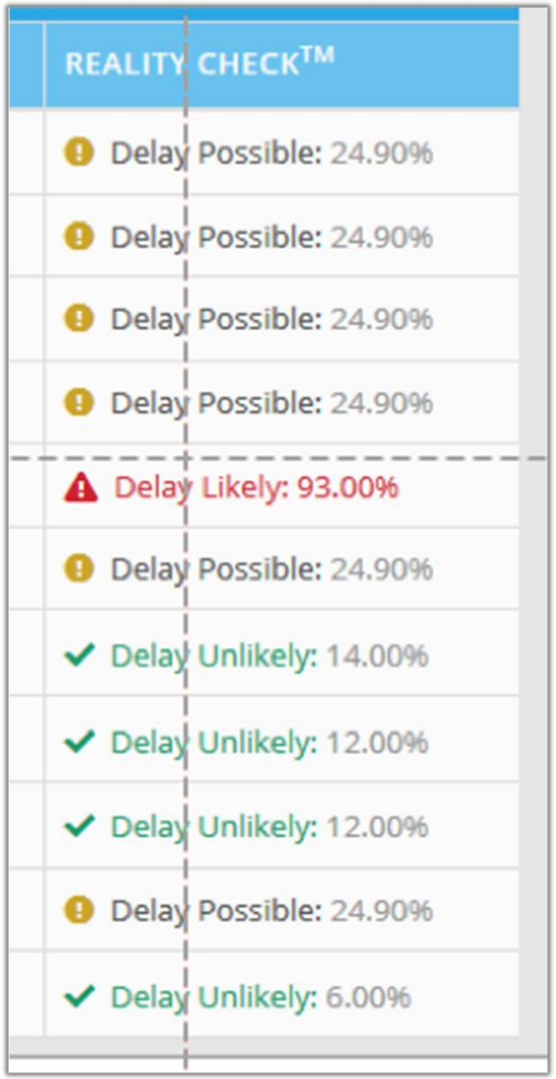
AI for Business Results

Elemica Sell



Independent historical shipment variables tied to known outcomes

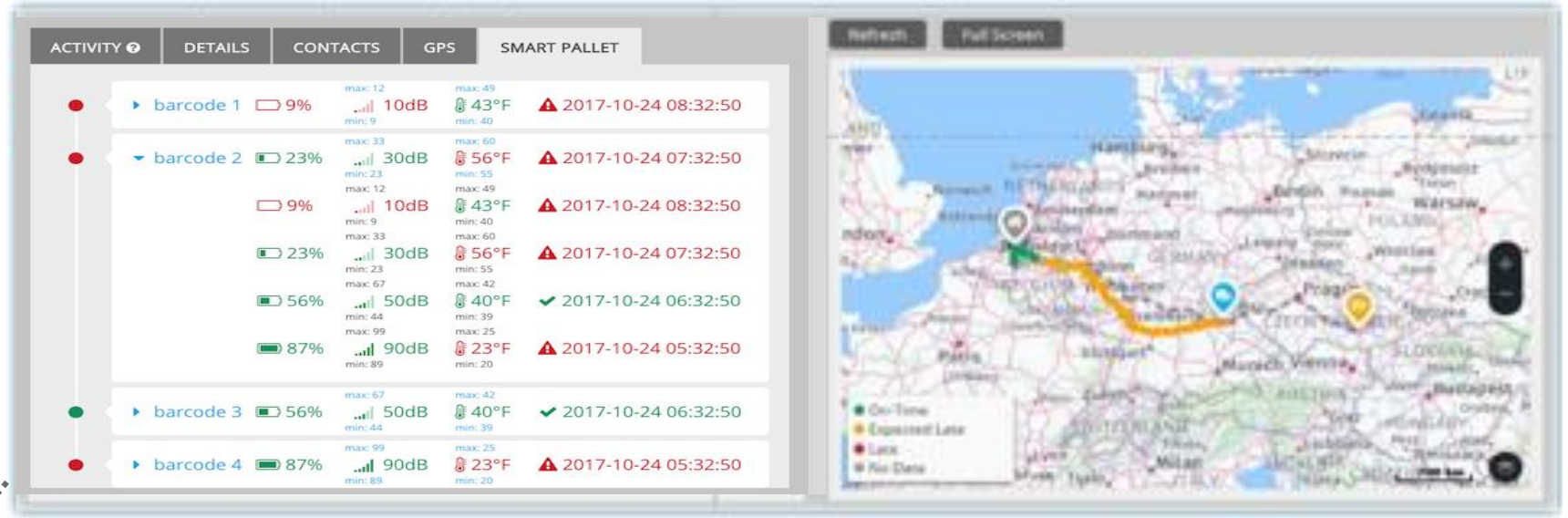
- PRODUCT CODE
- SHIP FROM CODE
- SHIP TO CODE
- CARRIER SCAC
- EQUIP TYPE
- WEEK # OF ARRIVAL
- DAY OF WEEK
- PICK UP VARIANCE

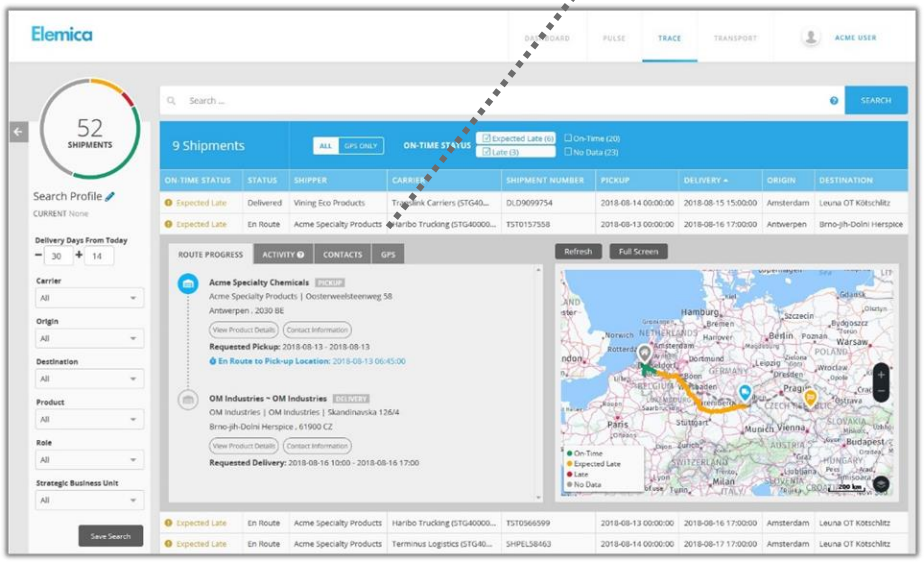


FREQUENCY TABLES → **WEIGHTED PROBABILITY** → **REGRESSION MODEL**

Real Time Order Visibility

Elemica See

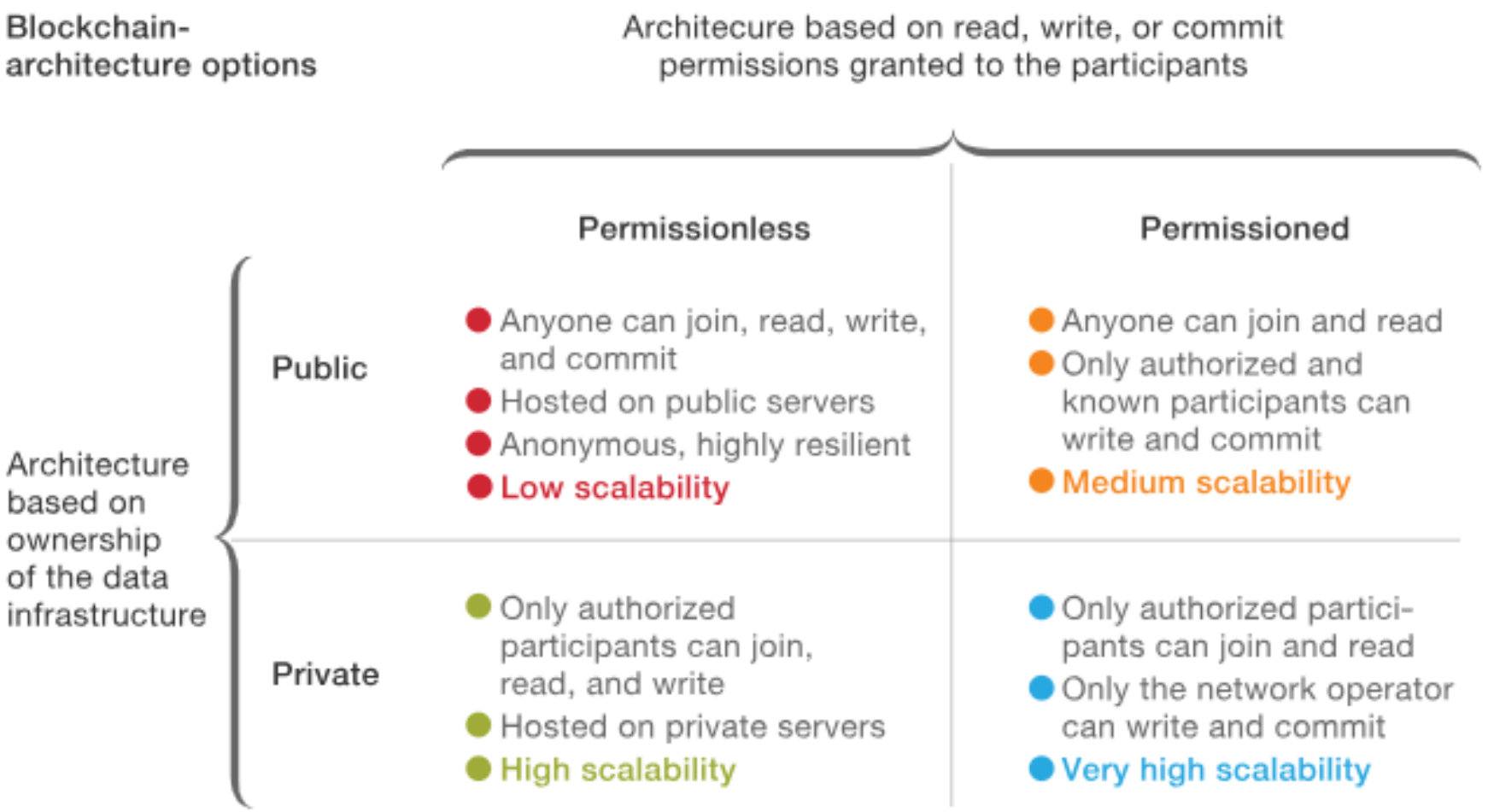




Features

- ✓ Smart pallet tracking
- ✓ Predictive ETAs
- ✓ GPS (IoT) Tracking
- ✓ Batch traceability

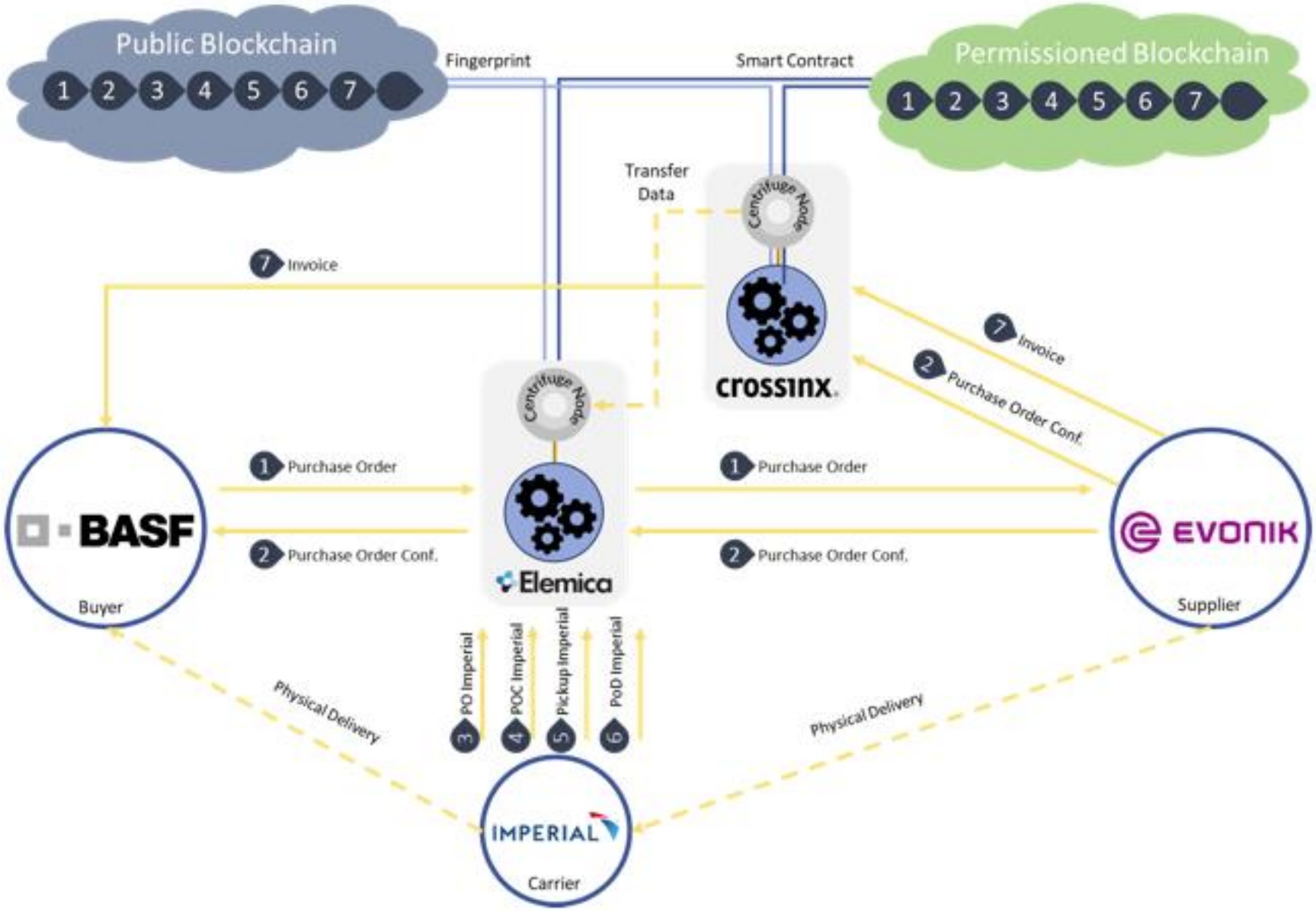
Blockchain



McKinsey&Company

Elemica Blockchain Pilot

Elemica



Blockchain Pilot Objectives

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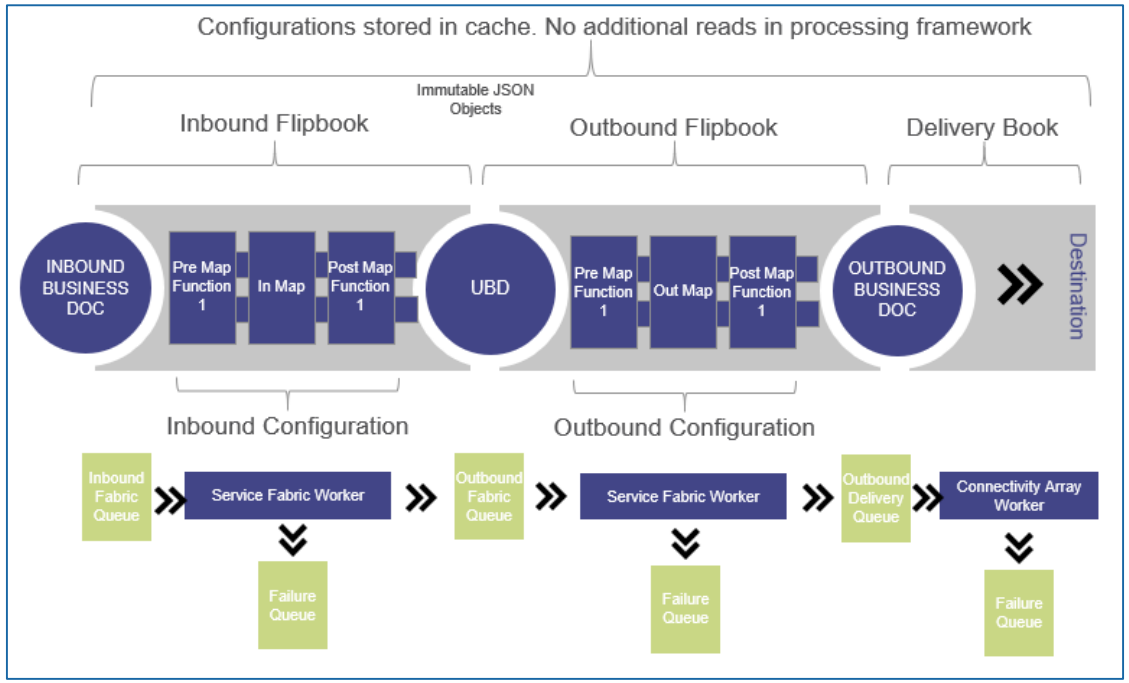
- Feasibility of employing a trustless, intermediary-free, decentralized standard to exchange information between different stakeholders
- Simplify existing business processes and make them smarter
  - Auto-matching of invoices
  - Auto-payments
  - Auto-ordering based on IoT information
  - Automated PO confirmations
  - Auto-invoice creation based on Pickup or PoD
- Extend to other complementary decentralized networks
  - Integrate information from IoT devices

Elemica is Like a Permissioned Private Blockchain

With OTC Business Functionality



Blockchain Security

- ✓ Secure and auditable
- ✓ Permissioned data read / write
- ✓ Managed access

Supply Chain Features

- ✓ Order to cash
  - ✓ Adapts to your customer ordering process
  - ✓ Full traceability and visibility
- ✓ Business process flexibility:
  - ✓ Discrete and process manufacturing
  - ✓ Quality and batch control
  - ✓ ECEMA and FDA requirements

Currently faster than using tradition blockchain technology. Much cheaper.

Has customer service and supply chain functions.

Acronyms and Buzz Words

Business Acronyms

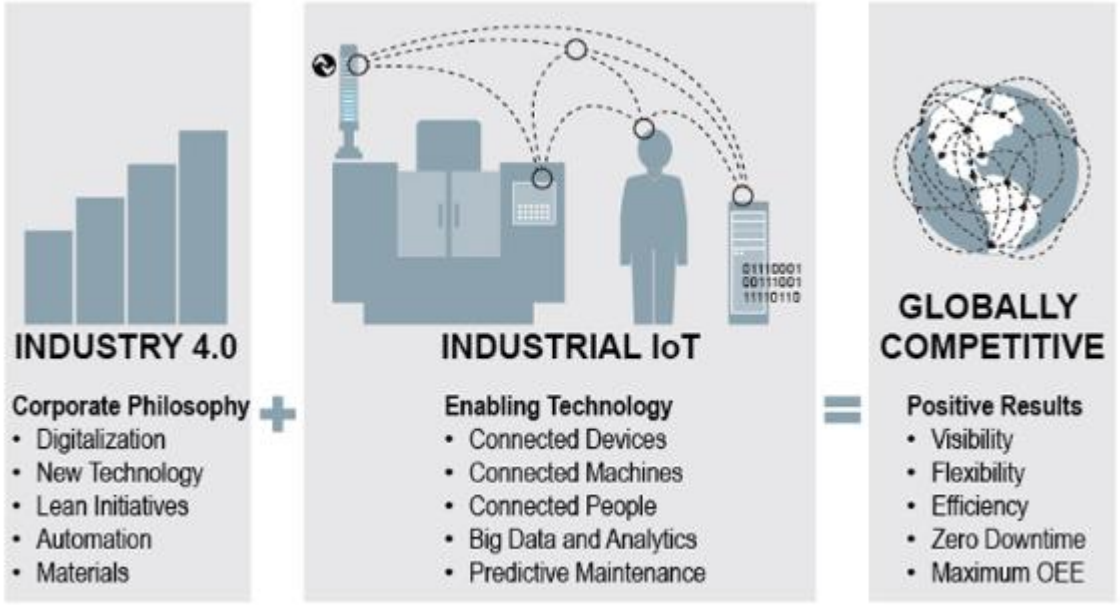
- *S&OP – sales and operations planning*

- *ROI, IRR, NPV, EBITDA – ways to express profit*
  - ***Return on investment.*** *Savings from a project divided by the cost of the project.*
  - ***Internal rate of return.*** *Another way to express ROI.*
  - ***Net present value.*** *Another way to express ROI.*
  - ***Earnings before interest, tax, depreciation, & amortization.***

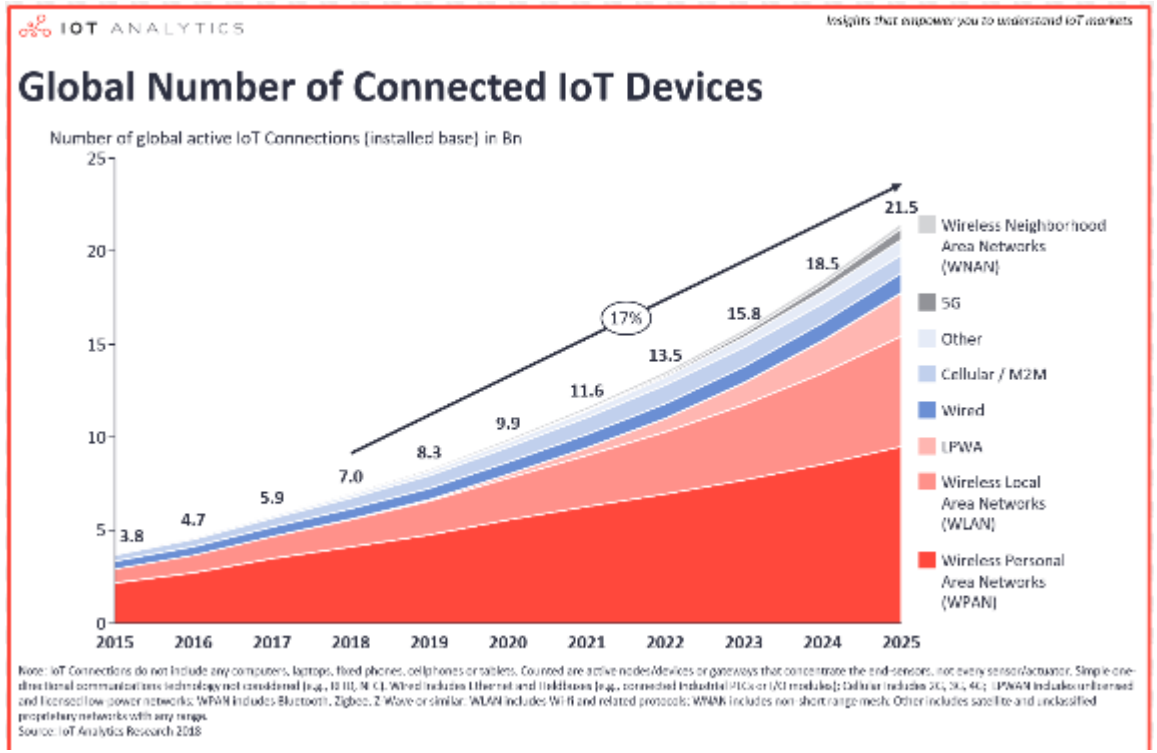
Internet of Things (IoT)

Component of Digital Transformation

Elemica Platform



Automation Insights



System connectivity

Different types of speaker wire

- *API – application programming interface*
- *AS2 – Applicability standard 2*
- *AS4 - Applicability standard 4*
- *Digital certificate –secures transmissions and identifies partners*
  - *These tend to be issued by 'Certifying Authorities" like Versign*
  - *Block chain is a digital certificate on steroids without a Certifying Authority*
- *FTP – file transfer protocol*
- *FTPs & sFTP - FTPsecure & secureFTP*
- *HTTP – Hyper Text Transfer Protocol*
- *HTTPS – Hyper Text Transfer Protocol Secure*
- *SSL – secure sockets layer. Technology to secure transmissions*
- *TLS – transport layer security*
- *Web service*

Ways to get data from one place to another reliably and securely.

EDI, IDOCs, XML

- *EDI – electronic data interchange. Some examples:*
  - *X12 North American ANSI EDI standard*
    - *X12 3060 850 = purchase order (version 3060)*
    - *X12 4010 856 = ship notice (version 4010)*
  - *EDIFACT – EU EDI standard*
    - *UN/EDIFACT D96A ORDERS = purchase order (version 96a)*
    - *UN/EDIFACT D96A DESADV = ship notice (version 96b)*
  - *Others: EANCOM, HIPAA, ODETTE, SWIFT, Tradacoms, VDA, VICS, etc.*
- *Flat File*
- *IDOC – format SAP uses to transmit data*
  - *ORDER – a purchase order*
  - *SHPMNT – ship notices*
- *XML – a more modern form of EDI*
  - *Examples on next page…*

Data formats, or languages, programmers and systems can read.

XML Examples

- *AgGateway SPADE*
- *CIDX (Chemical Industry Data Exchange)*
- *GUSI (Global Upstream Supplier Initiative)*
- *IDOC (SAP IDOC without tags)*
- *IDOC XML (SAP IDOC with tags)*
- *ISOXML (International Organization for Standardization)*
- *PIDX (Petroleum Industry Data Exchange)*
- *PEPPOL (Pan European Public Procurement On-line)*
- *… many, many more*

Adding a new language will not increase standardization.

Results Driven Digital Transformation to Improve Customer Service

Sound Familiar?

Elemica Sell

Order processing is more difficult
than ever due to data formats and data values.

Marketplaces

EDI, IDOCs, & XML

Customer Portals

Email & Auto-fax

Manual
Update

Customers
Lacking Systems

ERP

Elemica's Multi-Channel Approach For Customers

Elemica Sell

EDI, IDOCs, & XML

Email & Auto-fax

Marketplaces

Customer Portals

Customers Lacking Systems

Elemica Platform

Standardize Format

ENRICH Data

Transmit Sales Order

ERP

Elemica Digital Transformation Solutions

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Products:

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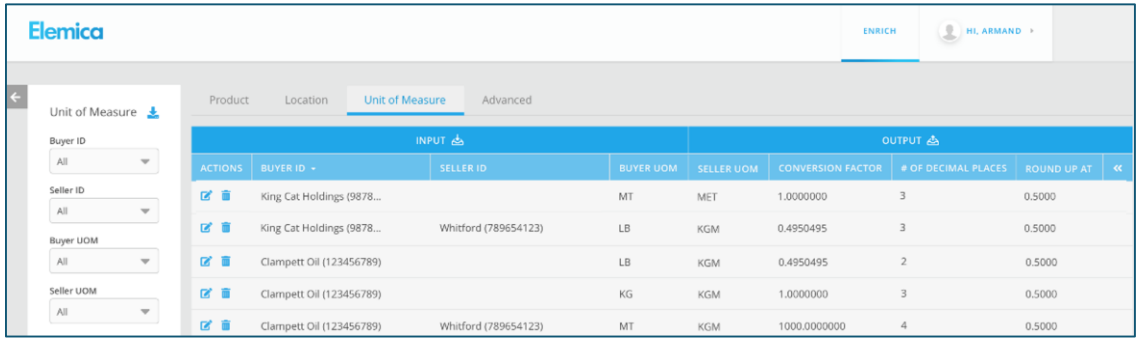
- Trace
- Risk

ENRICH



EXAMPLE Conversion Supported

A customer orders in KGM using a single product ID. They want you to supply in either Drum or Bulk depending on the quantity.

- <10000 KGM is sold in 55 Gallon Drums (Supplier Product ID =A)
- >10000 KGM is sold in Bulk (Supplier Product ID = B)

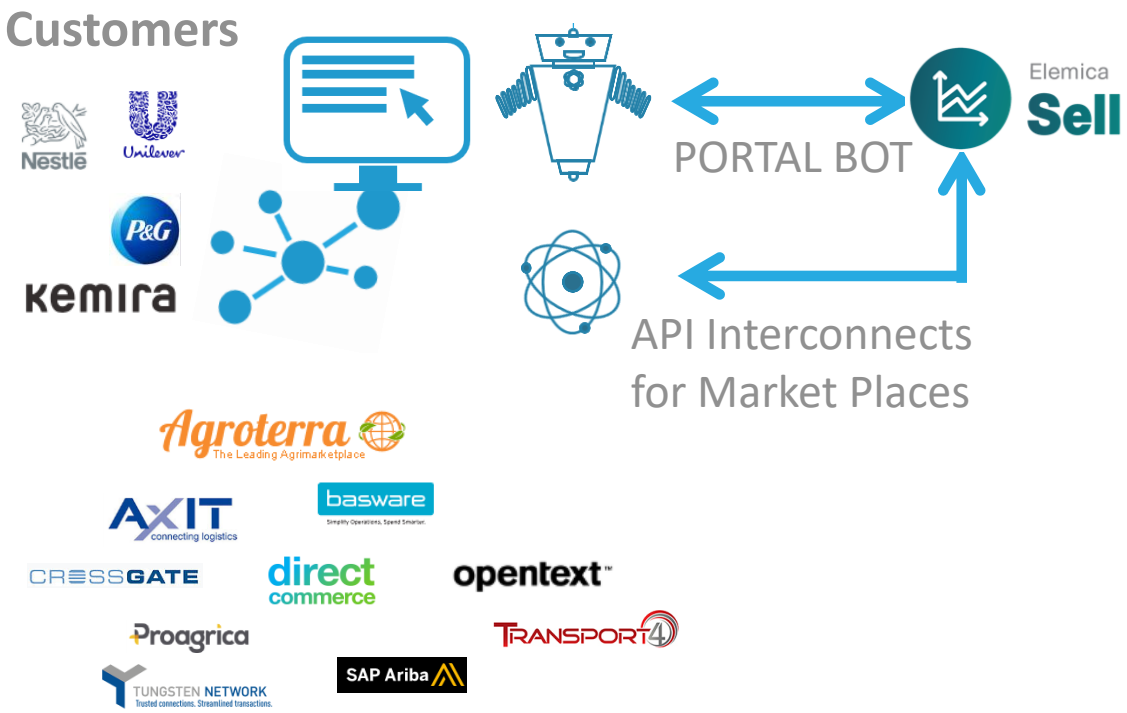
A 3200 KGM order resolves to 12 Drums of Product A*
A 11000 KGM order resolves to 24,251 LBR of Product B

Features

- ✓ Data pre-processing:
  - ✓ Location, product and UoM
  - ✓ Bulk to packaged
  - ✓ Packaging size increments
  - ✓ Volume based product cross-reference
- ✓ Business routing:
  - ✓ Sold to, sales org, and source plant determination
  - ✓ Route orders to the correct people
- ✓ Governance
  - ✓ Alerts and notifications
  - ✓ Audit control
  - ✓ Governance model
- ✓ Self-service management

Manage external customer data variability efficiently. Simplify internal PIM and PLM.

Customer Portal Assistant



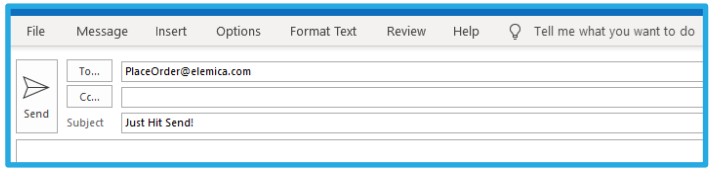
Features

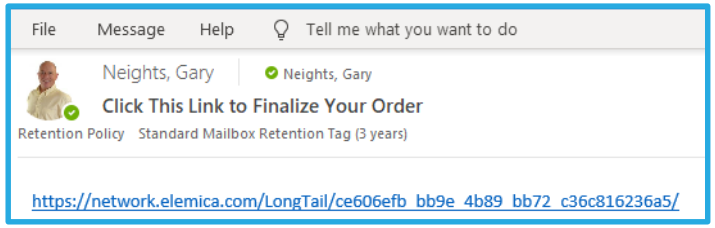
- ✓ No need to go websites for orders
  - ✓ Reduce errors, accelerate payments
  - ✓ Increase CSR job satisfaction
  - ✓ Suppliers realize a 25% reduction in AR costs and 8.9% lower DSO*
- ✓ Less IT cost and pain.
  - ✓ No need for client to create, maintain, and staff a cXML infrastructure
  - ✓ Less IT focused on non-differentiating work
  - ✓ Lower on-going support costs

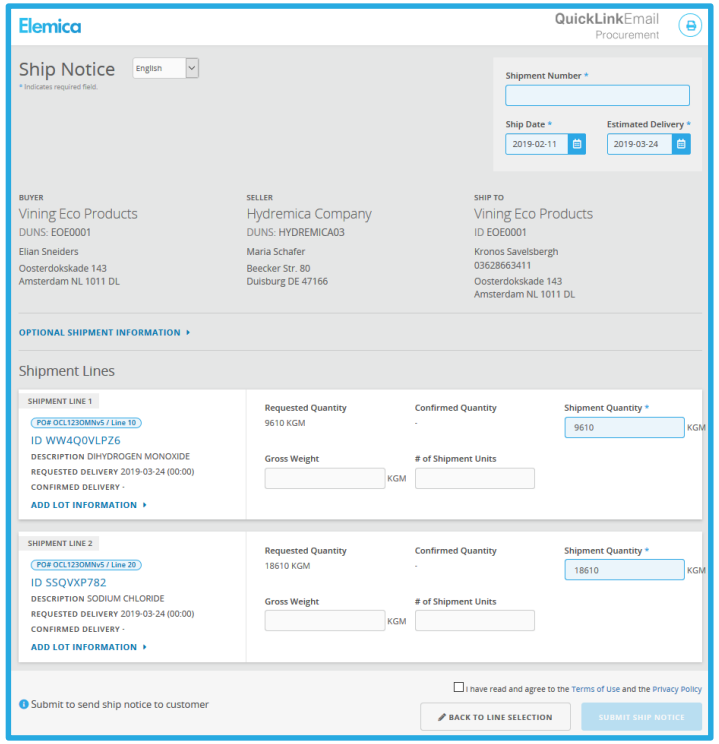
*2017 SAP Benchmarking

Customer Order Form - Email

1. Send Email
2. Click Link
3. Finalize Order





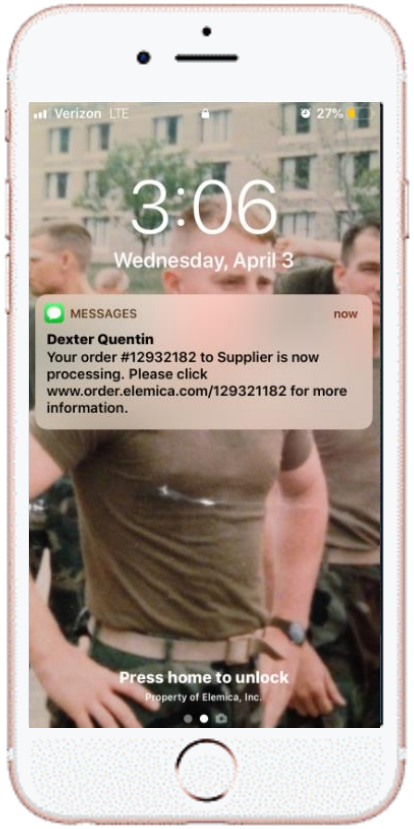


Features

- ✓ Customer and sales agent ordering app
  - ✓ Works on desktop, laptop, or mobile
    - ✓ Android, Apple, or Samsung
  - ✓ Multiple security layers
- ✓ Fast easy ordering
  - ✓ ***Easier than Amazon!***
  - ✓ No usernames, passwords, or registration
  - ✓ No screens to navigate
- ✓ Self-service administration
  - ✓ Setup delivery locations and products
  - ✓ Send the buyer the ordering email address
- ✓ Benefits
  - ✓ Cost effective, pervasive automation
  - ✓ Added level of customer service
  - ✓ More responsive field service support

Customer Order Form - Text

1. Send Text
2. Finalize Order
3. Get confirmation



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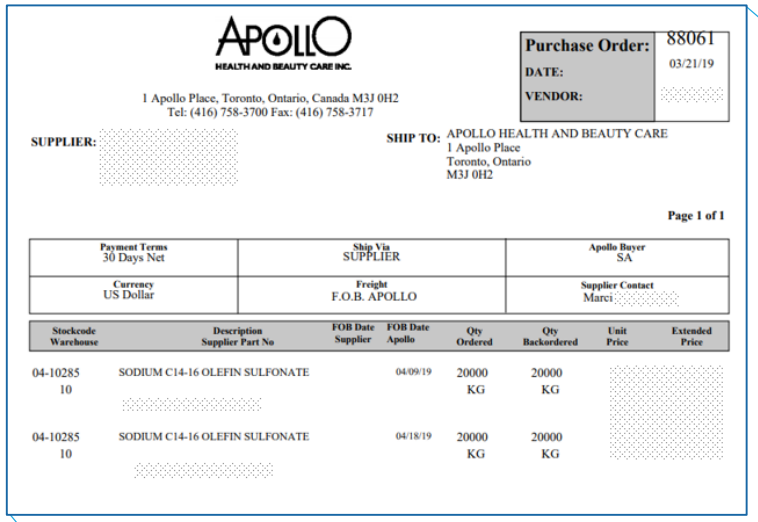
QL Email Sell:
for Inbound Customer Orders

Email & Auto-fax



APOLLO
HEALTH AND BEAUTY CARE INC.

1 Apollo Place, Toronto, Ontario, Canada M3J 0H2
Tel: (416) 758-3700 Fax: (416) 758-3717

Purchase Order: 88061
DATE: 03/21/19
VENDOR:

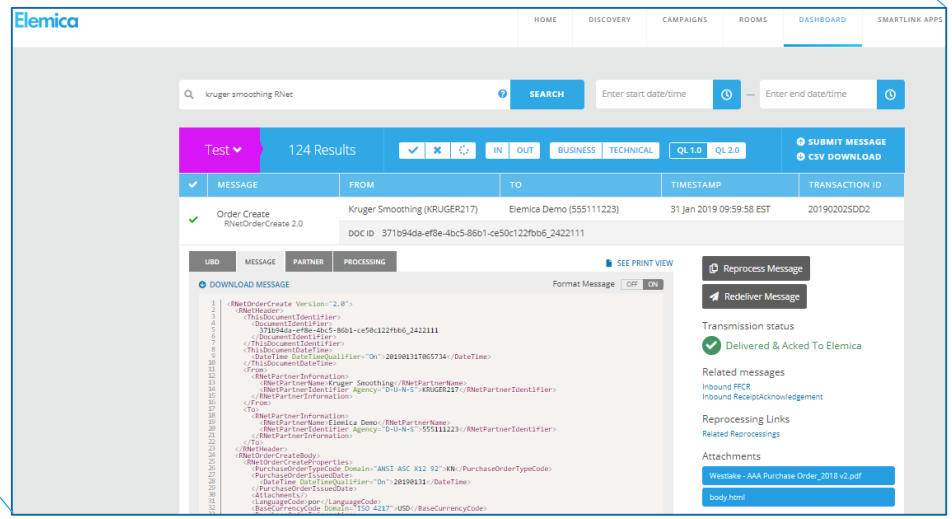
SUPPLIER:

SHIP TO: APOLLO HEALTH AND BEAUTY CARE
1 Apollo Place
Toronto, Ontario
M3J 0H2

Page 1 of 1

Payment Terms	Ship Via	Apollo Buyer
30 Days Net	SUPPLIER	SA
Currency	**Freight**	**Supplier Contact**
US Dollar	F.O.B. APOLLO	Marci

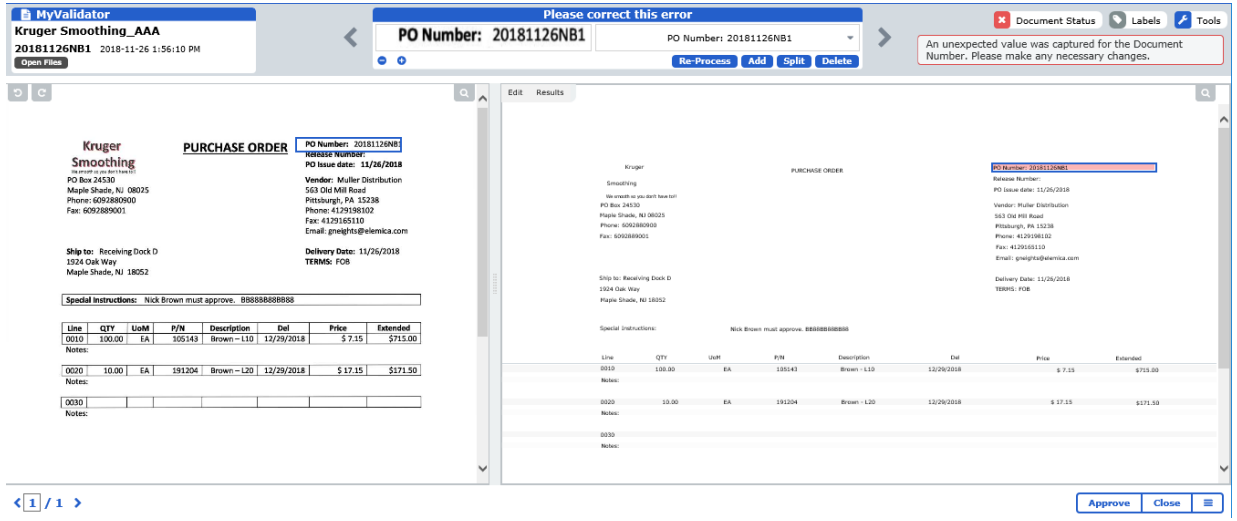
Stockcode / Warehouse	Description / Supplier Part No	FOB Date Supplier	FOB Date Apollo	Qty Ordered	Qty Backordered	Unit Price	Extended Price
04-10285 / 10	SODIUM C14-16 OLEFIN SULFONATE		04/09/19	20000 KG	20000 KG		
04-10285 / 10	SODIUM C14-16 OLEFIN SULFONATE		04/18/19	20000 KG	20000 KG		



Features

- ✓ Email processing
  - ✓ Receive email
  - ✓ Verify authorized buyer
- ✓ Order processing
  - ✓ Map attached order (PDF, XLS, etc.)
  - ✓ Convert street addresses to codes
  - ✓ Verify order data
- ✓ Alerting and workflow
  - ✓ Unrecognized document type
  - ✓ Cannot determine customer
  - ✓ Unknown buyer
  - ✓ Unknown ship to address

OCR Module for QLE Sell

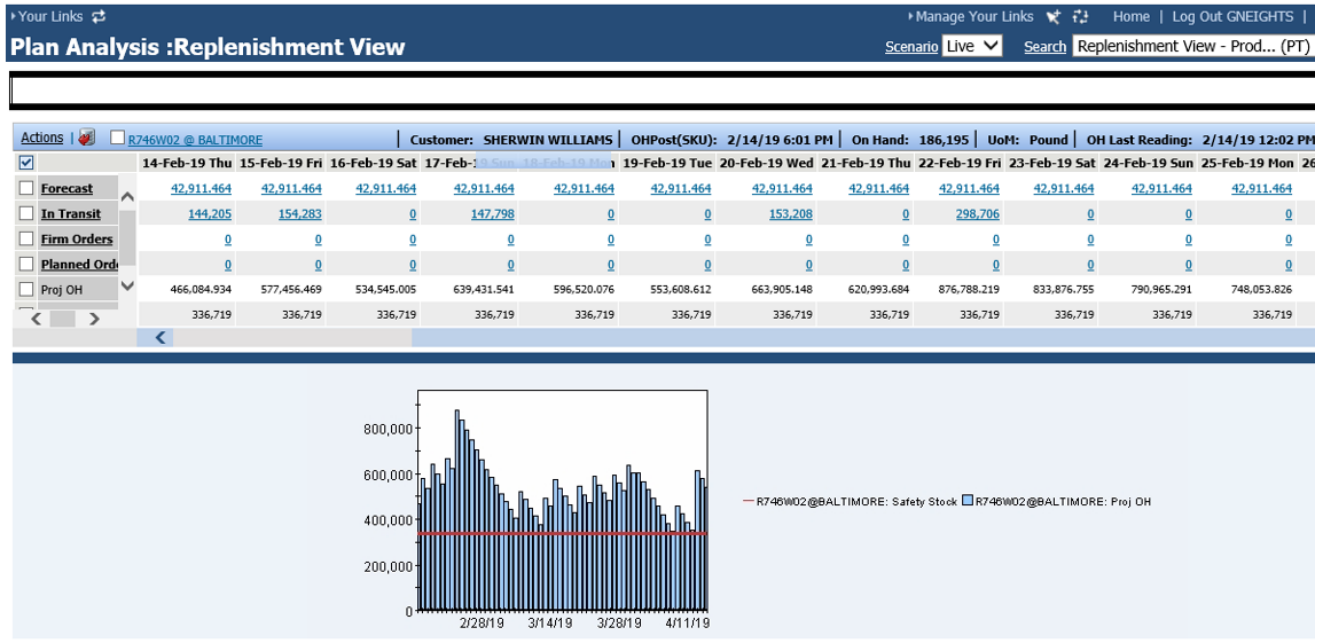


Features

- ✓ Optical character recognition
  - ✓ Convert images to text
- ✓ Error correction
  - ✓ Resolve 8/B, 0/O, I/l/1/!, etc. inaccuracies
  - ✓ Check sums
- ✓ Easy to use workflow
  - ✓ Potential issues are highlighted for resolution
  - ✓ Typically less than 2 minutes per order

Email & Auto-fax

VMI: Vendor Managed Inventory



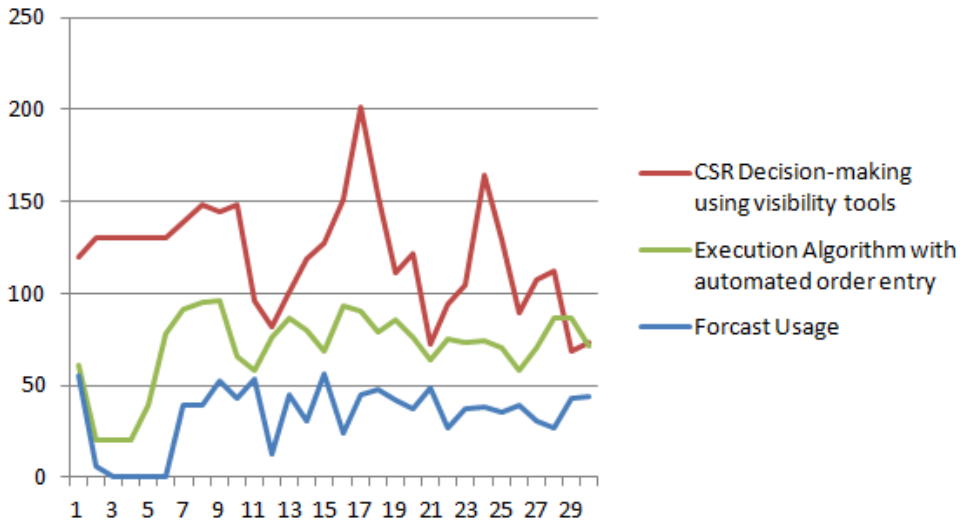
Features

- ✓ Multi-party data processing
  - ✓ Customer demand
  - ✓ Automated Inventory Status connectivity
    - ✓ w WMS, telemetry, IoT, etc.
  - ✓ Supplier order processing status
  - ✓ Carrier shipment status
  - ✓ Proof of delivery
- ✓ Advanced algorithms
  - ✓ Lead times, shipment sizes, and calendars
  - ✓ Static or floating safety stock
  - ✓ Multi-echelon (intermediate stocking points)
- ✓ Order generation
  - ✓ Hands-free (tends to have best performance)
  - ✓ Monitored (may have human induced swings)

VMI Value

VMI on high volume customer tanks predicts a savings of nearly **6% in total mileage** driven and **12% fewer total delivery trips**. This savings is achieved through superior truck utilization on routes services by VMI, where the **total mileage required is estimated to be 10% lower** than under the current system.

Vendor Managed Inventory vs. Order Based Fulfillment in a Specialty Chemical Company
Dimitrios Andritsos and Anthony Craig
MIT

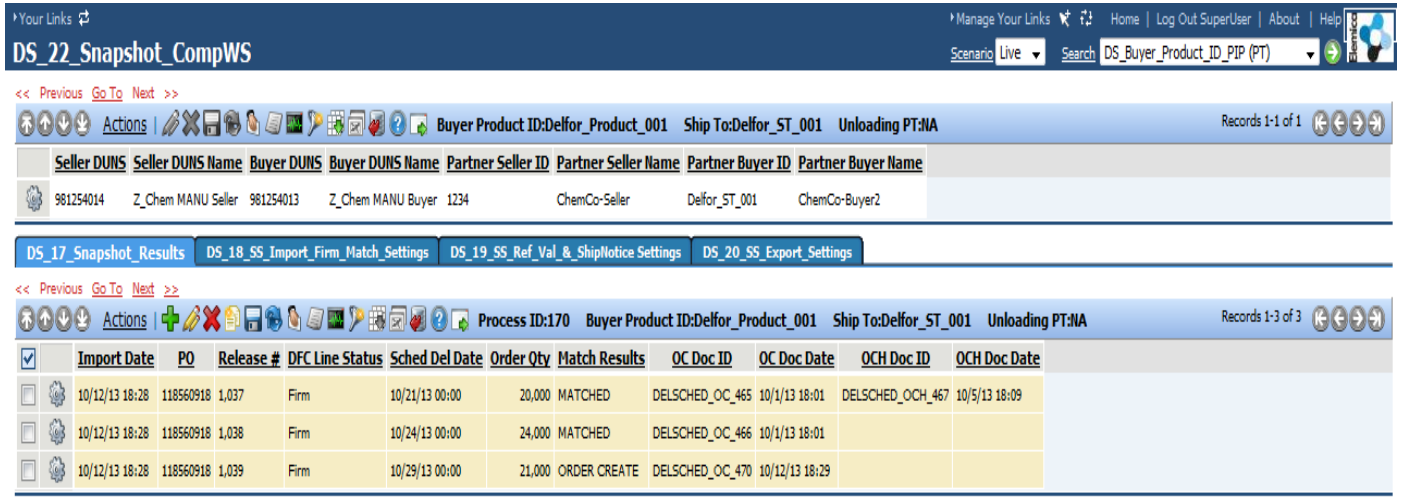


Source: Supply Chain Council Presentation on Elemica VMI April 9th, 2013

VMI Value

- Working Capital:
  - Inventory reduced by 41%
  - EUR 24,000 per year:
    - 8% cost of capital
    - 33,200 KGM / Day
    - 7 EUR / KGM
- Visibility to stock levels

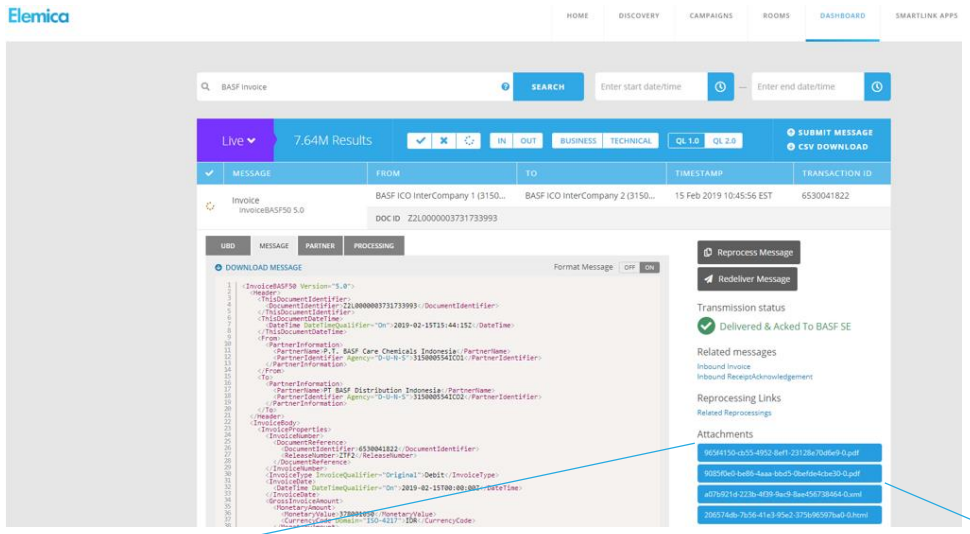
Delivery Schedule



Features

- ✓ Schedule Line Processing
  - ✓ Convert difficult to process schedule lines into orders or changes
  - ✓ Upon shipment, orders frozen
- ✓ Flexible Configurations
  - ✓ At the product-location level
  - ✓ Firm flags and/or frozen zones
  - ✓ Order create lead times
  - ✓ Order change lead times
  - ✓ Auto-setup defaults at the location level
- ✓ Business Friendly Alerting
  - ✓ Notify customers or CSRs if inside freeze zones
  - ✓ Alert upon auto-setup

Invoice Compliance



Human Readable
Compliant Invoice

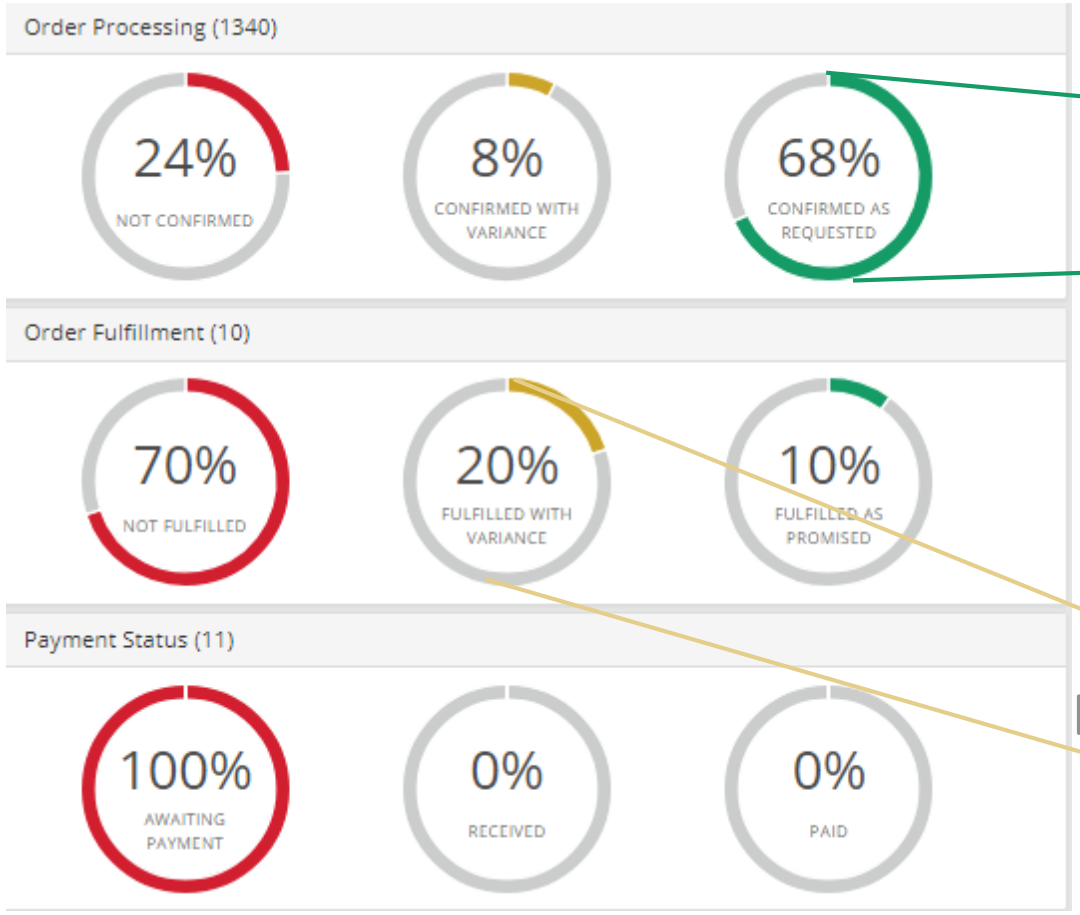
Electronic Signature
for Business Control

Features

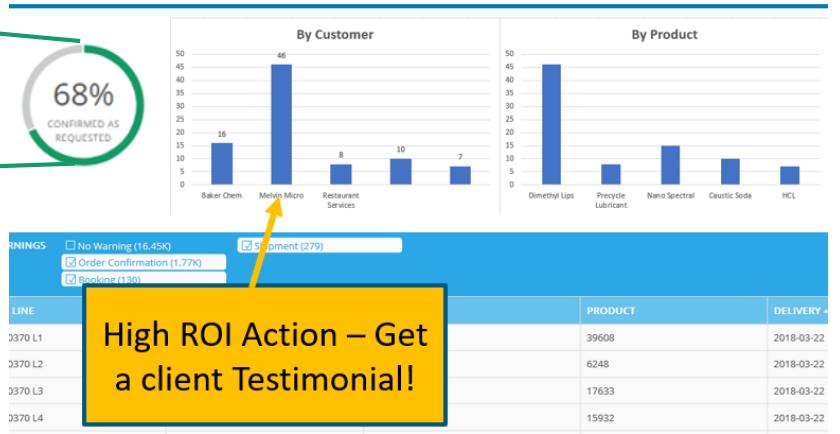
- ✓ Invoice Signatures and Archive
  - ✓ EU-compliant signatures by Sovos TrustWeaver
  - ✓ EU-hosted compliant archive
- ✓ Business Controls
  - ✓ Auditable, compliant system
- ✓ Invoice Clearance Support
  - ✓ Custom integration of shipping documents and invoices to meet country specific requirements for prior invoice approval

Customer Service Dashboard

Elemica Sell

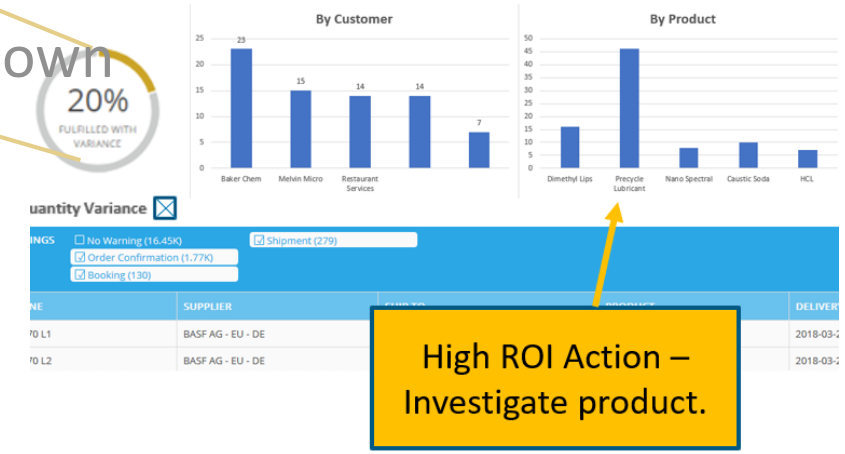


Drill Down



High ROI Action – Get a client Testimonial!

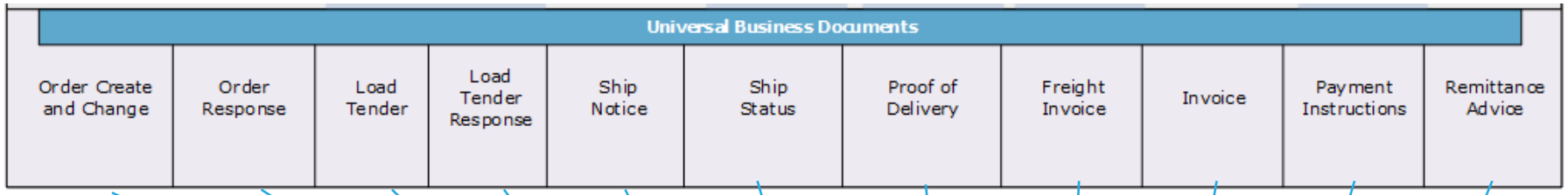
Drill Down



High ROI Action – Investigate product.

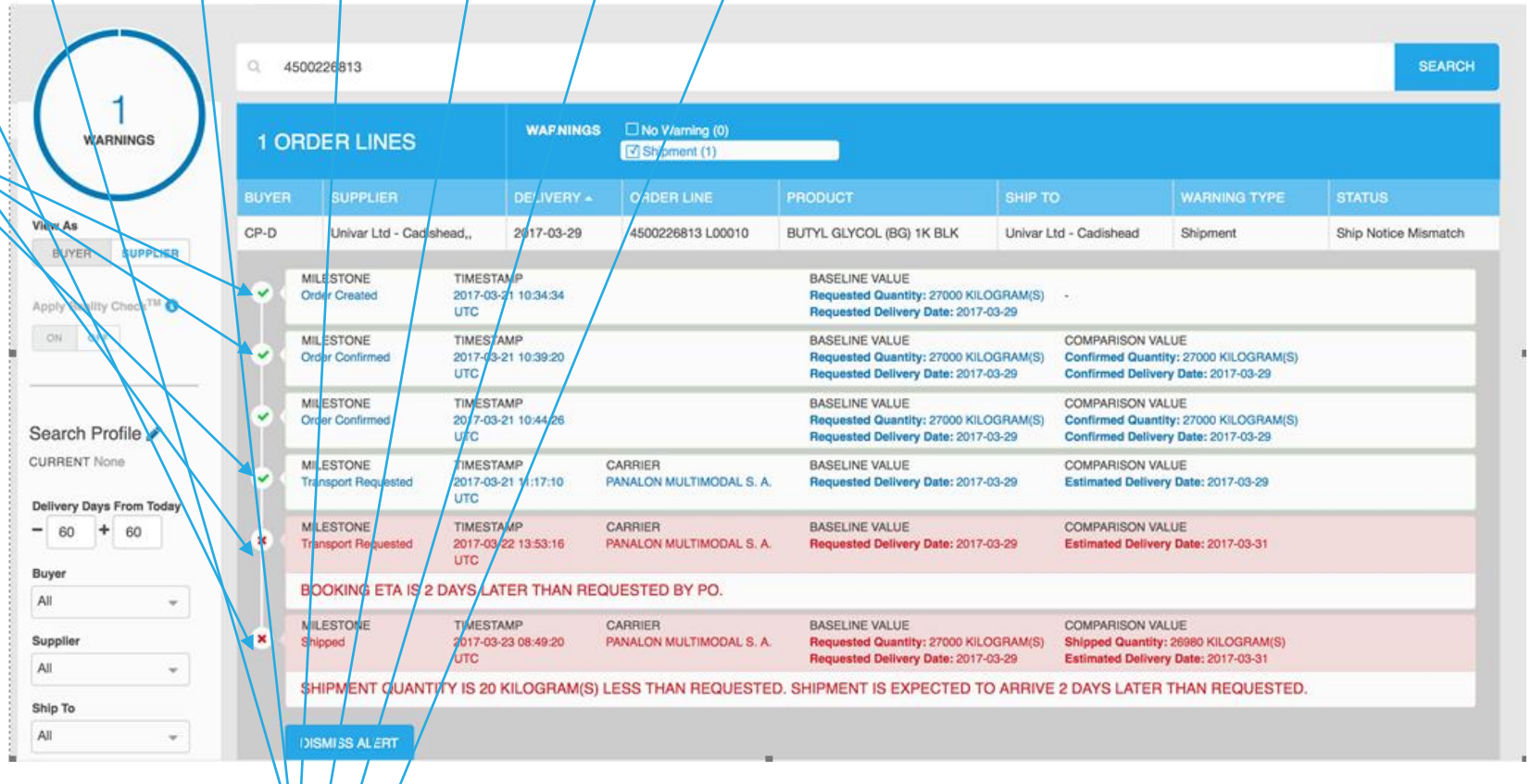
Business Visibility and Alerting

Elemica See

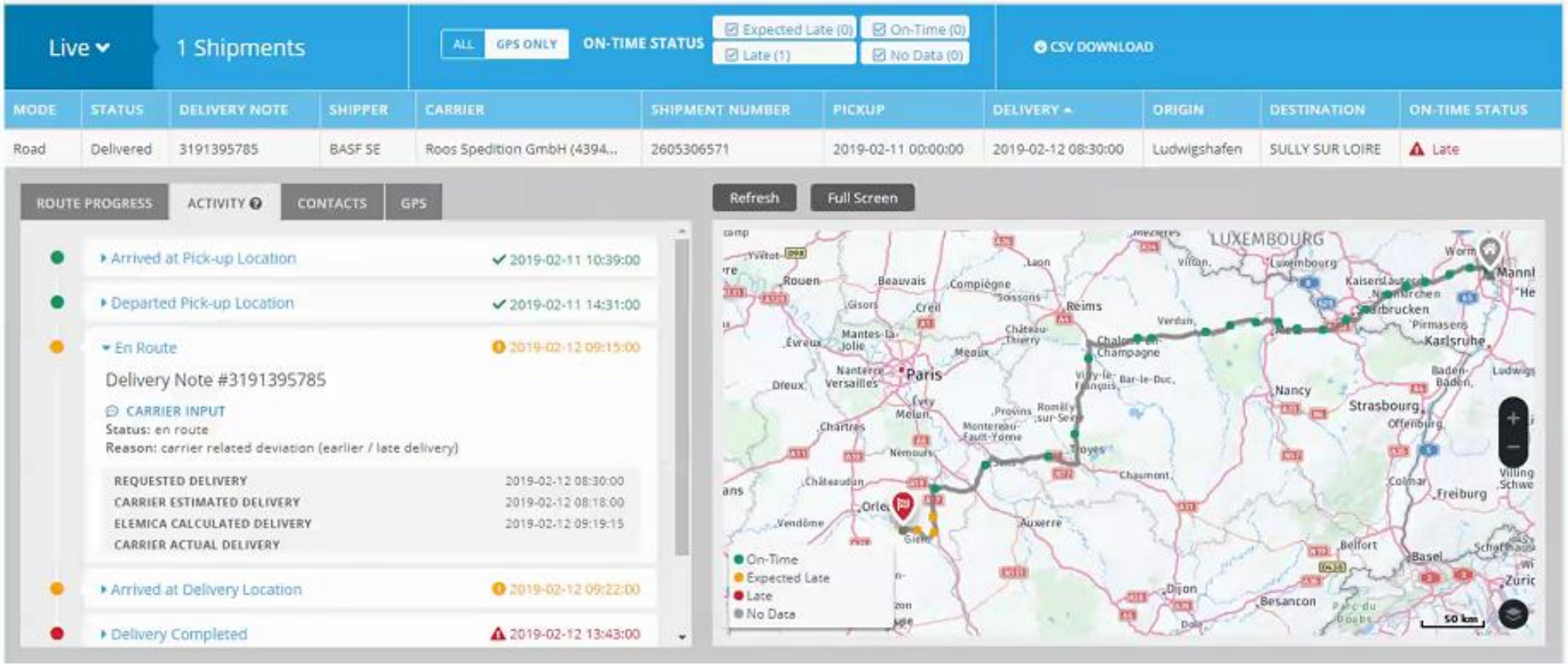


Search by:

- PO#
- Product ID
- Sales Order #
- Shipment ID
- Carrier
- Invoice Number



Trace: Real Time Shipment Tracking w “GPS” Signal Capture providing Predictive ETA Calculations



Q&A