Powerful Connections.



Elemica

Contents



Powerful Connections.

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Company Overview

Elemica's expertise is found at the intersection of supply chain management and Industry 4.0 technology. Our teams and tools help companies in dozens of industries replace manual and complex processes with efficient, automated and more reliable ones.

8 Technology Solutions

We pride ourselves in practical technology development that helps improve not only your supply chain, but also the discipline of global supply chain management itself. More than a million transactions per day are conducted across the Elemica network.

4 • Digital Transformation

We make digital transformation easy with an incremental, manageable approach and a collaborative Digital Transformation Journey $^{\text{\tiny M}}$ process that gives you a clear understanding of where to start and what comes next.

22 Solution Suites

Elemica offers five separate but interconnected solution suites that each offer tools to help digitize, connect and automate various aspects of supply chain functionality: Buy, Sell, Move, Assure and See.

28 • Appendix

Connect your supply chain to its true potential.

Advancements in technology, digital security and Industry 4.0-powered logistics mean new possibilities to redefine business efficiencies and create a more connected, collaborative global economy. We can help unlock the potential of these next-generation operating models.

Elemica replaces manual and complex processes with efficient, predictive, automated and more reliable ones. All by connecting the disparate systems of customers, suppliers, logistics providers and other trading partners. The result of this seamless supply chain information flow is a powerful transformation that lowers costs, reduces waste, accelerates growth and minimizes supply chain-related risk.



Book of **Elemica** • Company Overview

Elemica is a technology company focused on streamlining supply chain management and operations.

Our team brings something few global firms can offer: both a proven, 20-year legacy in supply chain consulting AND the advanced tech skills and tools to capitalize on opportunities for optimization.

Driven to digitize, connect and improve supply chains around the world, we're innovating at the intersection of technology and supply chain management. And we're doing it in a way that's transforming supply chain performance for organizations of any tier, type or industry.

Our supply chain technology experts work closely with clients and their trading partners across dozens of industries including chemical manufacturing, refining, power generation and other process-intensive sectors—working to understand their needs and challenges as they evolve. We're continuously pushing the capabilities of our teams and technologies to address new opportunities for supply chain connectivity and automation across the Elemica network.



Collaboration

You can't create something powerful unless you first create true understanding. We're only able to put our decades-long focus on supply chain optimization to work by sitting down with clients for a comprehensive end-to-end mapping of their supply chain environment and issues.

Imagination

How can something be made better? Beyond mere technical problem solving, this "imagining what could be" is among the most fulfilling work possible. And we're fortunate enough to be engaged in this creation of focused ideas and mission-driven vision each day.

Innovation

Of course, understanding and vision are just dreams without a practical way to get there; that's where Elemica's technical prowess comes in. We invest in people and technology that can help not only move our clients forward in their business performance and objectives, but also help advance the discipline of supply chain management itself.

Book of **Elemica** • Company Overview

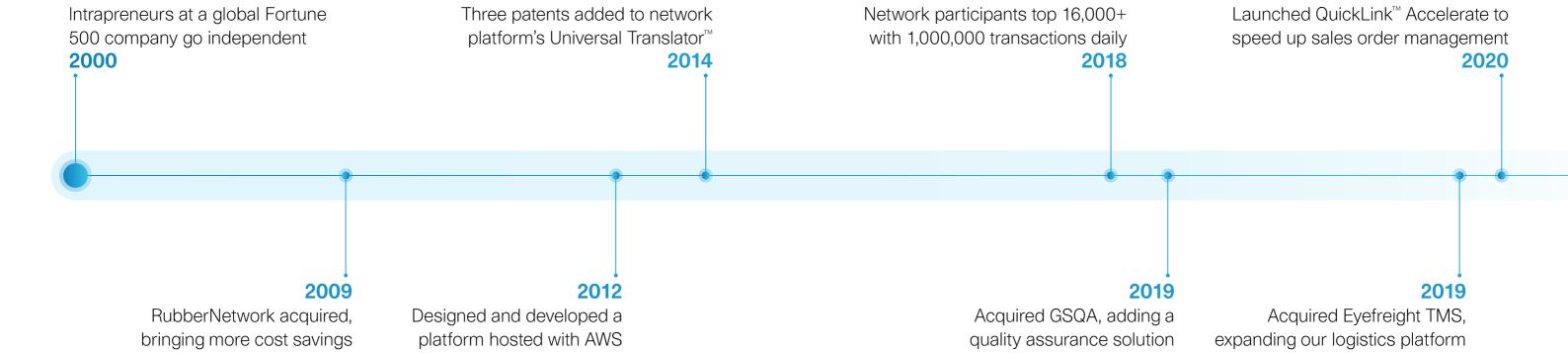
Establishing a Legacy

It all started decades ago with a group of representatives from various chemical manufacturers, frustrated by the state of supply chains in their industry.

to global manufacturers

Galvanized into action by maturing technologies, this team of intrapreneurs developed a platform to connect each others' systems for real-time information. After years of experimentation, this connectivity vastly improved their supply chain transparency and speed, netting them millions in savings during the first six months of implementation. Realizing theirs wasn't the only industry that could benefit from such integration, the leaders of this initiative struck out on their own—and Elemica was born.

Rooted in this collaborative mindset, Elemica has continued advancing and innovating on behalf of its clients for decades—building its nascent network from a few dozen chemical-related companies to an expansive powerhouse hosting 1,000,000+ transactions daily. Building on this foundation of practical problemsolving, we continually deliver new solutions that truly make an impact—rather than developing technology just for technology's sake.



Book of **Elemica** • Company Overview

Streamline every aspect of the supply chain.



Elemica's solution suites bring together multiple connectivity modules in a way that helps digitize, connect and optimize specific supply chain functions. Together they offer breadth across the entire supply chain and depth that addresses hundreds of transaction types. Those connected with the Elemica network implement individual suites or modules to address specific opportunities, or adopt several solutions incrementally over time according to their specific Digital

Transformation Journey™. And though they cover disparate parts of the supply chain, they all come from a single provider for a reliable, repeatable implementation that makes everything easy.



Buy



Move



Sell





Elemica's solution suites are made possible by the robust tech platform that serves as the hub of our digital network. This digital intermediary accepts data in any format, translates it and then transmits it to all relevant trading partners' systems in real-time

Invoices **Demand Forecasts Purchase Orders Shipping Schedules** Sales Orders

Quality Documentation

Exception Notices

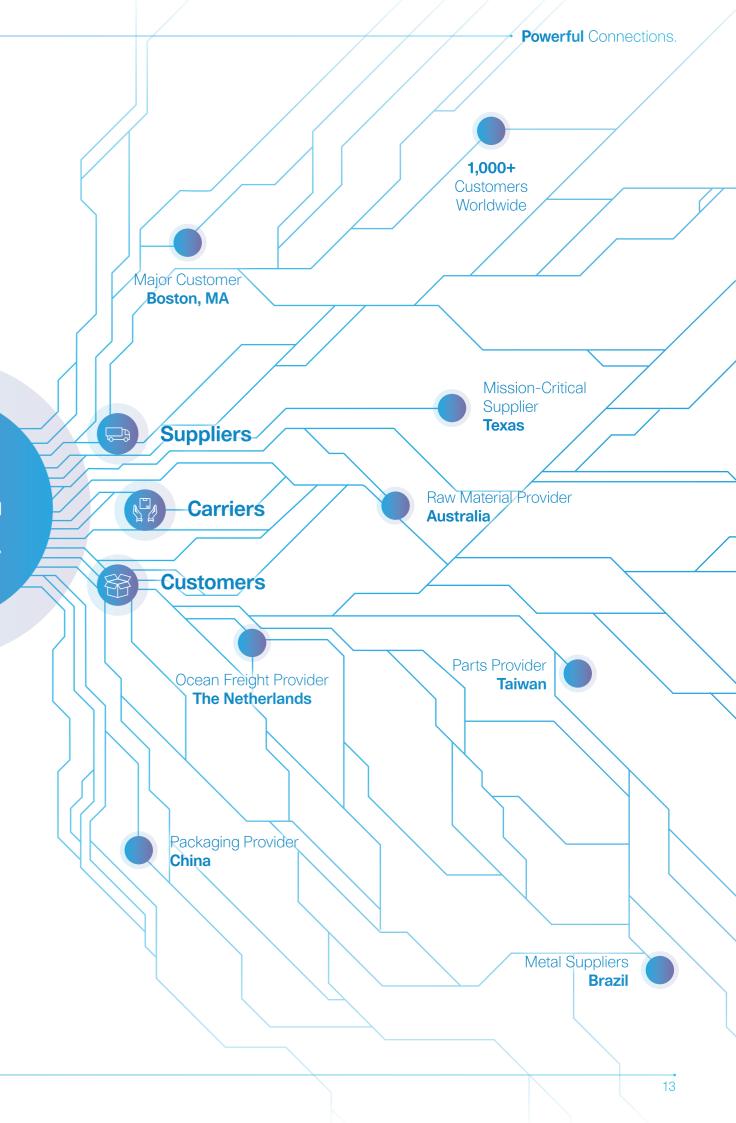
Supply chains are complex—with many parties, transactions and data sets in play simultaneously 24/7. So when it comes to digitization and the management of supply chain transactions at scale, this is a big problem. The key to making it work is flexibility. Elemica's platform was engineered to integrate data sources in a way that's 100 percent agnostic. And what makes it all possible is its patented Universal Translator™.

Elemica

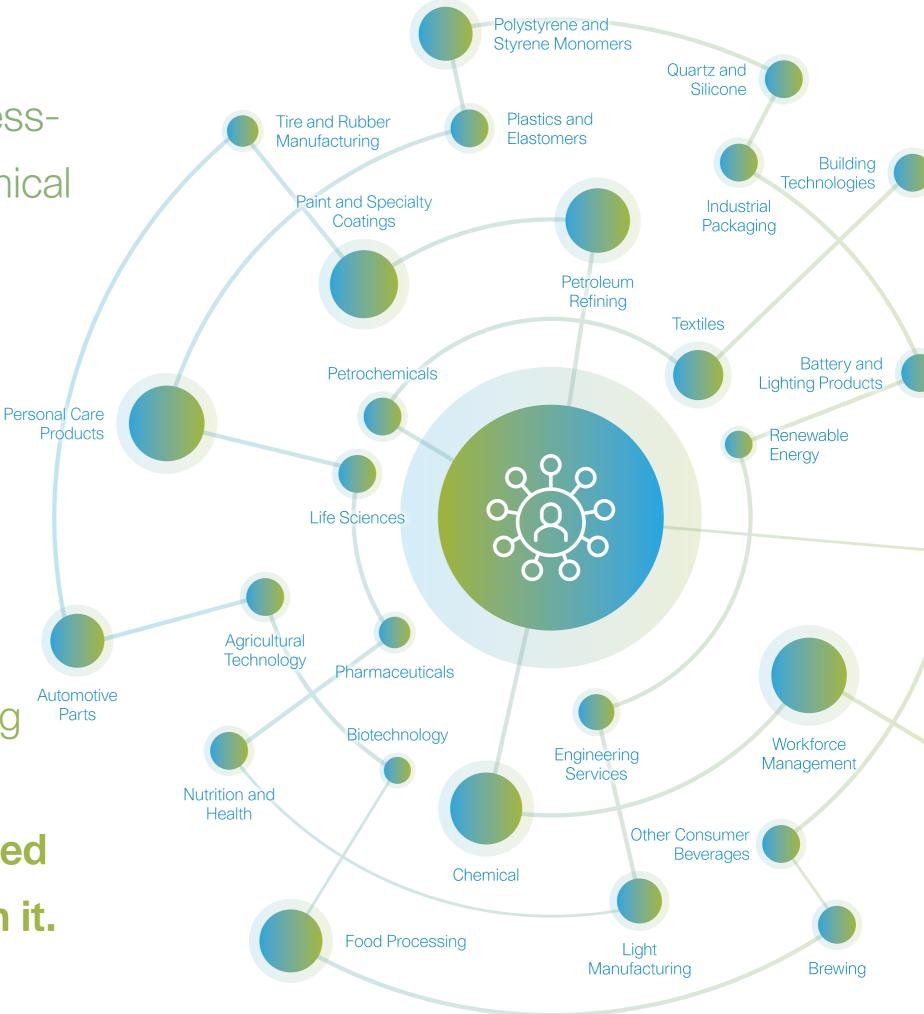
Engineered to interpret disparate data from multi-channel sources, the Universal Translator[™] accepts incoming data from any source and parses it into a specific type of Universal Business Document. From these core documents we're able to facilitate transactions efficiently while

mapping incongruencies between trading partners to resolve differences in language, time zone, units of measure, applicable tax rate or any other transaction variables.

With the platform's Universal Translator™, data sent and received can be effectively interpreted by both parties instantaneously in real time—creating a single version of the truth for everyone. Advanced ERP or no ERP, EDI, API, email, PDF or other formats. Small town supplier in Maine or global multinational in mainland China. All relevant supply chain data is captured using embedded Al and made available to help improve accuracy, enhance transparency, reduce risk and streamline transactions for all parties.



intensive industries such as chemical manufacturers has created a natural network expansion into complementary sectors such as plastics, rubber manufacturing, paint and specialty coatings, pharmaceuticals, oil and gas, power generation, automobile manufacturing and the processing of food and beverages. And as the network expands, specialized supply chain insights grow with it.



Digital **Transformation**

Elemica pairs tailor-made advice with advanced technology—and helps you get started the right way.

Connecting digitally with carriers, suppliers and customers isn't just a plug-and-play affair. Supply chain functions are oftentimes siloed within an organization. Trading partners and service providers number in the thousands. Staggering disparities in ERP environment, data format, business process and technical protocols are overlaid across hundreds of data points exchanged and tracked daily in the course of sharing Bills of Lading, Certificates of Analysis, Shipping Receipts and infinite other documents.

The stakes are high. One day's delay within a manufacturing process can mean four weeks and hundreds of thousands of dollars lost due to shipping via air rather than ocean. The prospect of this butterfly effect of supply chain inefficiency can often cause unforeseen issues down the line. It's difficult for many businesses to

for many businesses to determine where to start undertaking the kind of digital transformation that can prevent such risk.

Elemica brings together focused expertise in both supply chain management and technology to help your organization:

 Map out your existing supply chain, processes and partners

 Identify the most significant challenges, cost overages and customer service issues

 Collate all supply chain-related documents and data

Identify key value drivers within the supply chain

 Use these value drivers to set properly aligned goals and KPIs

 Identify quick wins and easy automations that can deliver value ASAP

 Create a roadmap for connecting each step and partner to meet objectives

The goal isn't to remove people from the supply chain and create touchless orders. It's more about enabling your supply chain

to better execute against your organization's goals and engage in more value-add activities—saving time,

increasing transparency and leveraging the best of Al and human intelligence to streamline workflows. Rather than no people, a digitally transformed supply chain will let people do more of what they want to do—and what only they can do.

Elemica -

How do we get started?

Determining the most logical place to get started in your digital transformation, and understanding what to do next, is highly dependent on the business and supply chain. Fortunately, we have a process that gives you a clear and profitable path forward.

Upon engagement, Elemica experts sit down with your team and map out your Digital Transformation Journey[™]— a process that will provide you with a framework that helps you start strong and get ahead at every step in the digitization and connection of your supply chain. The process has four steps that are often, but not always, performed in four different engagements.

1 Supply Chain and Data Mapping

The first step in the process is pure discovery. We'll work with your team to carefully delineate in full detail all of the current realities and intricacies of your supply chain as it exists. Who are your trading partners? What systems, technologies and platforms are in play? How is everything connected now? (Or not.) At this stage we're not worried about solving problems, only getting a clear picture of your supply chain situation as it stands.

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2 Challenge and Value Workshop

Now that we're aligned on the current status of your supply chain, we can work with you to better understand your current challenges and problems. The more input the better as we solicit various supply chain stakeholders regarding consistent areas of concern, risk, inefficiency, poor past performance, growth limitation and other issues. Then we'll explore what the ideal state of these functions would look like. No specific answers yet, just clearly identified problems and desired end states.

3 Objective and KPI Setting

Next, we'll review the current state of your supply chain, existing challenges and desired situations to assign some specific objectives and KPIs. The goal here is to set the stage for your supply chain to start small and prove out true, real-world quantifiable results—then expand efforts incrementally. It's important to get these milestones right, and to set objectives that truly matter, so your digital transformation efforts can gain and keep momentum.

4 Roadmap Creation

Nailing down a few initial big wins is one thing. But what happens next? In terms of keeping the momentum going and proving out a strong economic case along the way, staying focused and organized is essential. In this final step in planning your Digital Transformation Journey™, we'll lay out the most logical and cost-effective next steps at the 1-Year, 3-Year and 5-Year milestones so you'll have a solid long-term plan.

Book of **Elemica** • Technology Solutions

A closer look at Elemica solution suites

Each solution suite allows you to connect, automate, track and optimize transactions across the supply chain.

From sourcing to sales and beyond, each solves practical supply chain issues—eliminating everyday challenges to free up your team and resources for bigger-picture issues.

By leveraging digitization, interconnectivity and automation, these solutions help increase transparency and visibility, enhance collaboration, mitigate risk and uncover hidden potential in your supply chain to scale and expand your business.

But how, exactly, do they work?
Each solution suite is composed of individual connectivity modules engineered to optimize a specific aspect of each business function.
Rather than implement an all-ornothing approach right away, high-return modules are connected incrementally for painless, fast-track returns that address identified problem or growth areas.

How Implementation Works

Solution implementation is unique to each situation, just as data types and trading partner differences are unique within an organization (or between them). But the core of Elemica supply chain integration starts with connecting to the Elemica platform. Small-scale implementation of specific modules within a suite gives your supply chain a reliable connectivity and quantifiable savings foothold on which to build.

Order with Isolated, Manual Transaction

- Email order received from customer
- Order manually entered into ERP
- Warehouse reviews order
 - Manual pick, pack and shipping
 - Manual update of inventory
 - Shipping info sent to client
 - Issue invoice
 - Hope client is satisfied and pays
 - Wait for check, updating A/R department

VS.

Order with Digital, Interconnected Steps

- Order data automatically entered into ERPs
- Immediate fulfillment and shipping
- Real-time notification of shipping receipt
 - Automatic ACH payment and confirmation



Buy

Integrate with suppliers for more efficiency and better economics.



Move

Connect to logistics providers for stronger execution and more savings.



Sell

Link with customers digitally to accelerate and simplify sales cycles.



Assure

Streamline QA/QC management for expedited delivery and less waste.



See

Improve decision quality across the supply chain with more transparency.



Buy

Elemica Buy™ digitizes, connects and automates procureto-pay processes so you can take the risk, guesswork and waste out of procurement and supplier management.

Bringing digital transformation to your company's procure-to-pay processes lets you run more efficiently and economically. That means continuing to get the job done right—but also dedicating fewer resources, reducing overhead, staying up to speed through ASNs, mastering schedule agreements and otherwise optimizing operations. This suite includes modules for procurement and supplier management functions such as:

Purchase Order Management

Invoice Management

QuickLink Automate Buy

Vendor Managed Inventory (VMI)

Delivery Forecast

Certificate of Analysis (COA)

Strategic Sourcing

Want expert sourcing guidance that delivers superior goods and services while helping reduce cost? An Elemica Strategic Sourcing engagement helps you bring together data, models and proven approaches to help get not just a great deal now but also more value from suppliers in the long run.



Move

The Elemica Move™ suite lets you digitize, connect and automate logistics data and transactions across carriers and trading partners to help reduce risk, lower logistics-related cost and improve decision quality.

The logistics aspect of supply chain management can be one of the most challenging to streamline, especially for global multinational corporations. That's why so many companies are implementing Elemica Move™ to optimize shipping, freight, 3PL and related functions. This powerful suite automates logistics transactions for more efficiency and less risk, with modules that include:

Eyefreight TMS

QuickLink™ Product Line

Transportation Execution

Freight Cost Management

Terminal and Warehouse Visibility

Time Slot Management

ProcessWeaver

Sell

This powerful order-to-cash automation suite is designed to lower operating expenses, accelerate revenue generation, optimize working capital and improve customer experience.

Elemica Sell™ is a suite of solutions that connect supply chain data to make order processing faster, easier and more economical. Composed of modules that help digitize, connect and automate specific aspects of the sales function, this suite has been proven to empower sales personnel and their enterprises with faster growth, better retention and closer relationships with customers. Sell includes:

QuickLink Integrate

QuickLink Automate

QuickLink Accelerate

ENRICH

Vendor Managed Inventory

Delivery Schedule Management

Invoice Compliance



Strong quality is essential to serving customers the right way. But how can you streamline this mission-critical function without cutting corners? Elemica Assure™ can help.

The Assure™ solution suite provides total transparency and traceability to supply chain quality. From the basics such as management of specs to more complex issues such as keeping track of lab results, audit status and regulatory compliance— Elemica Assure™ makes mastering quality easier than ever. Help everyone maintain the same high standards with more confidence, and spend less time and money making sure it happens. Suite includes:

Supplier Quality Management

Traceability and Compliance

e-COA

Manufacturing Quality Management

Smart operational and financial decisions take accurate, timely information. That's what makes Elemica See™ such a powerful suite of modules—connecting across the supply chain for real-time visibility.

Elemica See™ lets you gain trading partner insights that could impact your supply chain chain performance, so you can take action when it counts. This includes everything from order and forecast data to Internet of Things (IoT) enabled devices and analytics-fueled alerts regarding potential raw material stock-outs or delays. This suite is a must-have for maintaining strong supply chain performance, optimizing capital and reducing risk. Modules include:

Elemica Pulse™

Elemica Trace[™]

Appendix

Digital Supply Chain Glossary

Application Programming Interface (API)

A digital interface enabling interactions between disparate software intermediaries by defining and aligning data formats and expectations for each party.

Automation

The creation and application of technology to monitor and control the production and delivery of products and services. (International Society of Automation)

Base Currency

A purchase's transaction currency or the first currency in a pair of currencies being bought or sold.

Bill of Lading

A document issued by a carrier that lists goods being shipped and specifies the terms of their transport. (Merriam-Webster)

Bill of Material

A detailed delineation of each and every component, part, assembly, quantity of raw material or other material required to make a product. Can also refer to an inventory required to enable the delivery of a service.

Break Bulk

The practice of breaking cargo shipments into separate pieces, rather than shipping 100 percent of the cargo as a single piece.

Bullwhip Effect

The phenomenon of disruptive vicissitudes in demand growing exponentially as you move up the supply chain. So if one in three consumers buy an extra package of toilet paper, distributors have stock-outs and Weyerhaeuser in Oklahoma has to build a \$100M production unit that takes two years.

Book of **Elemica** • Appendix

Control Tower

A real-time connection between a company and trading partners that allows you to monitor operations in real time and manage by exception when there's an issue.

Delivery Schedule

A purchasing Scheduling Agreement and its subsequent Delivery Schedules are used to buy or book a quantity of products at a regular interval and at agreed-upon terms based on forecasts or other procurement or supplier management data.

Demand Chain

The aspect of the supply chain that creates demand, which considers transactional, operational and economic considerations taken from a customer standpoint.

Digital Transformation

Moving business and operational processes from a manual, analog state of work to a digitally connected methodology that improves functional performance, efficiency and economics.

Digital Transformation Journey™

Elemica's process of applying its supply chain and technology expertise to help customers chart a course that digitizes and connects supply chain functions in a logical and methodical way.

Digital Transformation Roadmap™

The end product of the Digital Transformation Journey™, this is a document that outlines a step-by-step process of customer supply chain digitization, integration, connectivity and automation. Typically includes 1-Year, 3-Year and 5-Year projects and milestones.

Electronic Data Interface (EDI)

An old-school approach to digital connectivity established in the mid-20th Century, EDI is the inter-organizational exchange of business document data in a standardized digital format.

Electronic Certificate of Analysis (e-COA)

An automated, electronic documentation process that helps manage qualityrelated transactions between customers, suppliers and other trading partners.

Enterprise Resource Planning (ERP)

Business process management software that digitizes, integrates and optimizes business, management and operational functions within an organization.

Implementation

The process of rolling out a new system, technology or software within a supply chain or business process environment. Often refers to the nuts-and-bolts process of planning, installation, testing, etc.

Internet of Things (IoT)

The fourth Industrial Revolution, Industry 4.0 refers to a movement to enable more manufacturing efficiency, higher quality and better economics through the application of high-performance data collection and analytics, as well as a variety of advanced technologies.

Logistics

Logistics is the planning, organization, execution, control and assessment of how goods are moved, staged, stored or fulfilled between trading partners within a supply chain.

Module

A component of a Solutions Suite which enables the digitization, connection or automation of a specific transaction or capability.

Optical Character Recognition (OCR)

A technology that enables written, printed or photo information to be converted into recognizably formatted computer data so it can be utilized by digital systems and environments.

Book of **Elemica** • Appendix

Order-to-Cash Cycle

All of a company's collective business processes comprising the entirety of the order processing function.

Purchase Order

A document sent to a seller from a buyer that serves as a formal request for products or services, including a number that helps track the request for all parties.

Safety Stock

Extra inventory of materials, parts, end products, etc. that a business keeps on hand to prevent a stockout that could potentially disrupt sales or operations.

Shipping Receipt

A notice issued upon the arrival of a shipment of goods at its intended destination.

Solution Suite

A collection of capability modules focused around a function area of business or operations (buying, selling, moving, etc.).

Sourcing

The process of identifying, comparing, ranking, engaging and transacting with suppliers of a product.

Stock-Out

The act of running out of mission-critical inventory, materials, parts, etc. that constitute lost business or the disruption of operations.

Supply Chain

All transactions and processes involved in the manufacturing, distribution, sales and consumption of commercial goods—including all of the processes required in the making, purchase, etc. of input materials, components, services, etc.

Universal Business Document

An electronic business document used to facilitate and organize business signals in a way that enables digital collaboration and visibility across the supply chain.

Universal Translator™

A patented Elemica technology that enables disparate supply chain parties to interpret transaction data while adjusting for currencies, time zones, taxes and other localization factors.

Vendor Managed Inventory

The ability to see and manage the inventory of a supplier to help ensure they can meet your needs sufficiently.

Visibility

The ability for supply chain parties to understand the past, current and forecasted status and progress of operations or transactions outside of their enterprise.

Book of **Elemica** • Appendix

Elemica Clients

















































"I can't imagine going back to our old way of doing things. Elemica has helped us completely digitize our supply chain around the world. There's so much less chaos. So much less time spent on doing things the hard way. So much less guesswork. And, honestly, with 2020 happening, I don't know what we would have done without them."

Global Supply Chain Officer

Fortune 500 Manufacturer

Elemica

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