

A COO'S GUIDE TO SUPPLY CHAIN AUTOMATION

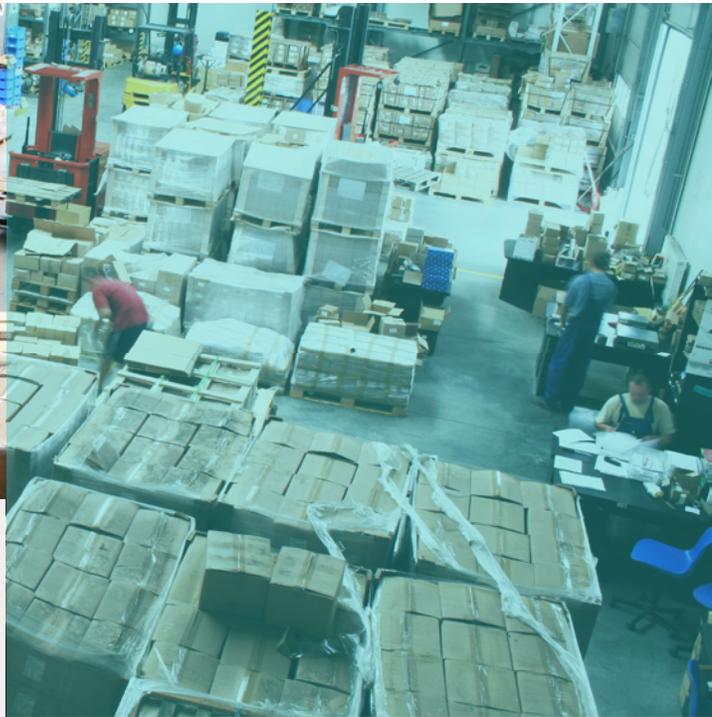
How To Gain A Competitive
Advantage Through Automation

TABLE OF CONTENTS

1. Introduction
2. Why Automate? The Benefits of Supply Chain Automation
3. Analyze and Evaluate the Need for Automation
4. Identifying Opportunities for Automation
5. Recommendations and Designing Workflow Automation
6. Automation in an Organization
7. Evaluating Automation
8. Conclusion
9. About SYSPRO

i

INTRODUCTION



AS A CHIEF OPERATING OFFICER, you may have considered automating some or all parts of your supply chain in an effort to reduce operating costs. If automating your supply chain seems like a daunting task, and the thought of evaluating every business process to find ways to replace manual and time-consuming tasks with a more efficient solution seems overwhelming, rest assured—it is worth the time and effort you put into it—as the benefits of automation far outweigh the costs associated with it. Finding ways to improve the efficiency of your organization through automation can provide a flawless experience for both your customers and employees—ultimately saving you time and money.

Simply put, automating your supply chain can accelerate the rate in which your product or service moves from supplier to the customer—while reducing costs and growing your bottom line in the process.

INTRODUCTION

WHAT DOES SUPPLY CHAIN AUTOMATION LOOK LIKE?

Supply chain automation can come in a variety of forms. It can mean automating part of a task to improve an employee's productivity, or it can mean replacing an entire task with an automated process—eliminating the need for any human intervention. In some instances, the customer experience can be one of complete automation. One where a customer goes online to place and pay for an order electronically, receives the order and shipping confirmation electronically, and receives the product directly from the

manufacturer or wholesaler with no effort by the retailer to physically transport the product—complete automation.

In this digital age, it's hard to believe that some companies still continue to exhaust their resources with manual, labor-intensive tasks. These tasks are detrimental to the growth of the organization as they will drain resources. Complete automation of processes—as outlined by the scenario just described—the matter in which a product is ordered and delivered to the customer with complete automation, should be the goal of every large organization.

According to the [Aberdeen Group](#), for a company that processes 500,000 invoices per year, the cost to process a manual invoice can be reduced by 60 percent or more when automation is implemented.

Automating your supply chain takes time and resources, but the cost-savings can be substantial to your business.

▶ **THIS EBOOK WILL COVER INFORMATION BENEFICIAL TO AN ORGANIZATION CONSIDERING AUTOMATION, INCLUDING:**



1. Why Automate? The Benefits of Supply Chain Automation



2. How to Analyze and Evaluate the Need for Automation



3. Identifying Opportunity for Automation



4. Recommendations and Designing Workflow Automation



5. Examples of Automation in an Organization



6. Evaluating Automation



WHY AUTOMATE? THE BENEFITS OF SUPPLY CHAIN AUTOMATION

Increased revenue and decreased operating costs are obvious benefits of automation and the key driver for many COO's. In fact, 77% of organizations indicate that their most compelling reason for implementing automation is to increase revenue. But there are other benefits for automation—benefits that may directly or indirectly impact operating costs and profit.



REDUCED ENVIRONMENTAL FOOTPRINT

Automation can impact the environment in a positive way, especially if your organization's objective is to go paperless. Automation can impact your carbon footprint by eliminating the paper and energy necessary to print documents. For example, Verizon automated an estimated 40 billion business-to-business transactions that they undertake each year which resulted in the following savings:



2.3 BILLION

pounds of CO₂, the equivalent of taking 206,672 cars off the road for a year or reducing gasoline consumption by 434 million gallons or 8.9 million barrels of oil



1,386,667 TONS

of wood, the equivalent of 9.6 million trees



15.3 MILLION

BTUs of total energy consumption, the equivalent of about 168,633 homes per year



7.6 BILLION

gallons of wastewater, the equivalent of about 11,553 swimming pools, and 911 million pounds of solid waste, the equivalent of about 32,548 garbage trucks



WHY AUTOMATE? THE BENEFITS OF SUPPLY CHAIN AUTOMATION



DECREASED OPERATING COSTS

Automation can greatly reduce the operating costs of your business. Automation will not only reduce your labor costs, but in some instances where automation impacts inventory, warehouse overhead costs associated with storing inventory, such as rent, labor and energy costs, may be substantially reduced.



INCREASED VOLUME

In a manufacturing scenario, automation can increase the volume of product that can be produced. Automation will incorporate the skills of trained workers with the accuracy of automated equipment—increasing productivity.



INCREASE PRODUCTIVITY

Automation can increase productivity by optimizing current resources, and in the best case scenario, automated systems will work around the clock—24/7. Companies can gain 20 percent more productivity in areas they've automated.



IMPROVED WORKPLACE SAFETY

Automated equipment is a good way to prevent worker injuries, due to the fewer “human” resources required—as labor-intensive hands-on work is left to the machines—keeping humans safe.



IMPROVED ACCURACY

Automation can greatly reduce the number of human errors, as well as administration errors that can occur from manual entry of data. Automation also helps with planning cost control by providing up-to-the-minute inventory levels, for accurate and real-time access to your operating costs.



INTEGRATION WITH LARGE SUPPLIERS

The ability to integrate systems with that of large suppliers is a huge advantage to automation, and often a pre-requisite to a partnership with conglomerates.



WHY AUTOMATE? THE BENEFITS OF SUPPLY CHAIN AUTOMATION



What About Integration with Customers?



TIME-SAVINGS

Automation streamlines business processes—saving organizations time and ultimately money. For departments such as accounting, the time savings of streamlining and automating invoicing will dramatically reduce the time associated with implementing these labor-intensive tasks. Migrating the manual process of administrating paper invoices to an automated process could save hours or days.



COMPLIANCE

Depending on the industry, automation can greatly help your organization's ability to comply with industry standards. Compliance can be maintained via automation by standardizing pricing, products and vendors.



ANALYZE AND EVALUATE THE NEED FOR AUTOMATION

The first step is to analyze and evaluate all business processes of the organization to identify potential opportunities for automation. By clearly reviewing the workflow of all tasks within an organization, any bottlenecks and inefficiencies can be identified to determine whether or not full or partial automation will suffice.



WORKFLOW ANALYSIS

A lean supply chain will provide an organization with the flexibility to evolve to market demands. In order to achieve a lean supply chain, a workflow analysis must be conducted to examine the day-to-day operations to help identify obsolete practices, and areas of operations that can be optimized by automation. The goal of a workflow analysis is to streamline manual operations to make them more efficient, and utilize automation where appropriate. When conducting a workflow analysis, each process and task in the organization should be examined, and the following questions should be asked:



**WHAT ARE THE
TASKS?**



**WHO COMPLETES
THE TASKS?**



**HOW LONG DOES
EACH TASK TAKE?**



**WHERE ARE THE
BOTTLENECKS
AND
INEFFICIENCIES?**



**IS THERE
DUPLICATION
OF THE TASKS
ANYWHERE ELSE?**

It's important to use individuals who do the tasks to map the current workflow of all processes and tasks. If you are a [Lean Organization](#), you may want to use [Value Stream Mapping](#), as it will identify any bottlenecks and inefficiencies that are causing roadblocks in the workflow.



ANALYZE AND EVALUATE THE NEED FOR AUTOMATION



Once the current flow of operations has been mapped out from supplier to customer, inefficiencies can be easily identified and evaluated, in regards to whether automation may help.

WHEN EXAMINING EACH BUSINESS UNIT, REMEMBER TO CONSIDER THE FOLLOWING:

- Collect all forms, worksheets and reports that are part of a particular process—it's important that these are reviewed. Look for reports that need to be manually filled-out and opportunities to move paper forms to an online environment. The less shuffling of paper—the better.
- Look for instances where people have to physically bring or move over items—from one department to another.
- Identify any instance where someone has to wait on another resource.
- Review what you currently have automated and how it can be improved.
- Identify any bottlenecks or disruptions in the workflow, and determine the root cause. Ensure to study the following:
 - Delays
 - Duplicating efforts
 - Unnecessary steps
 - Long lead times
 - Lack of quality control and standardization



ANALYZE AND EVALUATE THE NEED FOR AUTOMATION



ORGANIZATION INTERVIEWS

Interviewing senior management, as well as employees who are doing the work is a good place to get valuable information. Interviews can be done by an in-house facilitator or by an unbiased, third-party representative. If there is low employee morale or a strong resistance to change, the latter may be better for the business.



SENIOR MANAGEMENT

When interviewing senior management, it's important to uncover what they feel is working for the organization, and what they feel needs to be improved. Identify what senior management's ultimate goal or vision is for the company, and what they hope to gain from a workflow analysis and automation.



MANAGERS AND EMPLOYEES WITHIN ALL DEPARTMENTS

Interview managers and employees across all other levels of the organization to get a clearer understanding of how the organization is run on a day-to-day basis. This may seem time-consuming, but is extremely important. All departments, from human resources to marketing should be evaluated with a fine tooth comb—right down to individual tasks and the steps to accomplish each task.



DOCUMENT RESOURCES

Once all business processes in the organization have been evaluated and it has been determined how much time and effort is spent on each task, the costs associated with each task can then be determined. This will allow for the prioritization of tasks—with the highest costs associated—and provide an opportunity to red flag anything that is impeding workflow.



IDENTIFY OPPORTUNITIES FOR AUTOMATION

Once a workflow analysis has been completed for all business processes and priority established based on the cost to the business, opportunities for automation can be determined, based on these results. Some common themes for potential opportunities may include:



UNACCEPTABLE ERROR RATES

High error rates with a particular task or department may be mitigated with automation by reducing the chance of human error. If an accounting department is manually inputting invoices, automating the accounting function can remove the manual task and reduce the amount of processing errors.



CUSTOMER SERVICE ISSUES

Customer service should constantly improve and should not decline—if it does there is a serious problem that needs to be addressed. If there are issues with customer service, either an increase in calls or an increase in the number of issues with a particular product or service—look into why this is happening.



EMPLOYEE PRODUCTIVITY

There may be evidence that productivity is being hindered by the overwhelming pressure for staff to perform menial and mundane tasks. These tasks may be preventing staff from working on more productive tasks that will be a better use of their time. For example, look for employees performing repetitive instances, where there is a lag in productivity, due to the fulfillment of a time-consuming task.



SECURITY ISSUES

Are there security issues that need to be addressed or that can be alleviated by addressing the process? Are there confidential files that are stored in a cabinet that can be accessed by an entire department that could be moved online—to a secure environment that can only be accessed by authorized individuals?



IDENTIFY OPPORTUNITIES FOR AUTOMATION



MANUAL TASKS

Look for employees doing repetitive tasks that can be easily automated. Is the marketing department manually sending out email campaigns? Look for cases where software can possibly replace or reduce the manual work done by employees.



WORK DELAYS

Are there long lags in wait time on resources? Look for areas where there the product doesn't move smoothly through the supply chain—and find out the reason why.



HIGHLY-REGULATED INDUSTRY

Are there compliance issues that the organization must adhere to, that can be better implemented through automation? Automation helps make an audit trail that will help with industry compliance and regulations.



MANAGER SIGN-OFF

Are there delays in the workflow due to waiting on management approval or sign-off? Are the tasks that require management sign-off critical? If there are delays, review if sign-off is absolutely necessary.



EMPLOYEES WORKING REMOTELY

Are there a number of employees who work remotely? Are there consultants that are being paid that aren't providing the value they once did? There may be an opportunity to consolidate tasks and remove excess resources.



SEVERAL BUSINESS PROCESSES TO COMPLETE TASK

Look for processes where there are several business processes required to complete the task. Maybe an employee is required to check email, enter information into a CRM, and then respond to a customer—via email and log the result in an Excel file. Automation will tie together business processes.



RECOMMENDATIONS AND DESIGNING WORKFLOW AUTOMATION

After identifying the inefficiencies in the organization, create a comprehensive plan to recommend areas where automation can help eliminate any process deficiencies. By using the initial workflow analysis, revised maps can be used to reflect the new processes where automation will be of benefit to achieve desired improvements.

Rather than trying to automate every scenario, look to automate processes that will have the most impact on resources and costs. Remember that you are trying to solve business problems, so these problems must be addressed. When looking for what to automate, take the following into consideration:

- Try to utilize existing infrastructure, technology and systems before investing in new
- Find tasks to streamline easily that can be implemented with little resources in a short time-frame; these will provide some immediate results
- Don't try to automate everything—do what makes sense for the business
- Make sure you are sensitive to your employees and how automation will impact their lives
- Determine the best way to communicate any change to your organization, that will bring the least amount of disruption to the business



90% of the business value will come from about 10% of your processes, so think about processes in terms of cost, frequency and value.



RECOMMENDATIONS AND DESIGNING WORKFLOW AUTOMATION



FOR EACH FUNCTION OF THE BUSINESS WHERE THERE IS AN OPPORTUNITY FOR AUTOMATION, THE FOLLOWING STEPS CAN BE TAKEN:

1. Analyze your manual method of operation. It's important to understand the manual method before devising an automated method.
2. Determine the best approach to automating the function.
3. Test automation of this particular function in a development environment.
4. Revise automation techniques based on the test environment.
5. Measure the performance of the automated process and fine-tune them for efficiency.
6. When all automated functions run smoothly—implement.
7. Prioritize areas to implement, implementing the most value—the fastest.
8. Define the processes, changes and improvements.
9. Involve everyone impacted by the automation—employees, management, suppliers and vendors and inform them of what changes will be happening, and how they will be impacted.
10. Ensure that you communicate the importance of any new processes to your employees—getting buy-in prior to implementation is important.
11. Define your ROI—how will success be measured and how will you collect the data.
12. Ensure that someone in the organization is accountable for the entire automation project. They can be responsible for training, communicating progress as well as, answering any questions.



AUTOMATION IN AN ORGANIZATION

Automation can take various forms—partial to complete automation. Here's a few examples of what common automation tasks look like in an organization:

- 1. AUTOMATIC PURCHASING**
When inventory levels drop below a certain level, orders with vendors are automatically placed to maintain inventory levels.
- 2. AUTOMATIC PAYMENT PROCESSES**
Regular accounts receivables are automatically reviewed and processed.
- 3. AUTOMATIC EMAIL RESPONSE**
Emails are automatically generated to respond to general inquiries.
- 4. AUTOMATED PROCUREMENT PROCESSES**
A direct integration with partner web portals provides automatic updates on supplier inventory levels.
- 5. INVENTORY MANAGEMENT**
Real-time access to inventory levels is permitted through automation software.
- 6. REAL-TIME ACCESS TO DATA**
Instant access to inventory, purchasing and production data is permitted for decision-making purposes.
- 7. AUTOMATE RETURNS MANAGEMENT**
Returned products are quickly re-processed or re-manufactured automatically.
- 8. JUST-IN-TIME (JIT) INVENTORY MANAGEMENT**
Inventory is received only when needed—decreasing inventory costs and increasing inventory turnover—allowing the organization to operate at the optimal inventory levels and reduce warehouse costs.
- 9. STREAMLINE ACCOUNTING**
Automating accounting tasks will move paper to online—reducing the payment processing administration and associated wait times.
- 10. MARKETING AUTOMATION**
The use of software platforms can be used to reach multiple channels such as email, social media and web.



EVALUATING AUTOMATION

Regardless of what process you choose to automate, how you evaluate your strategies should be determined when you create your initial strategy.

After you have completed your workflow analysis, and identified your areas for improvement, you should create benchmarks for each area to determine what success will look like. There are a number of factors to take into consideration when measuring the success of your supply chain automation. Factors include:



SALES



**EMPLOYEE
FEEDBACK**



**DECREASE IN
LABOR COSTS**



**EMPLOYEE
PRODUCTIVITY**



**COST-
SAVINGS**



**DECREASE IN
OPERATING COSTS**



**COMPATIBILITY WITH
OTHER SYSTEMS AND
RESOURCES**



**INCREASE IN
SALES**



**MATERIAL COSTS
AND OVERHEAD**

C

CONCLUSION

If you believe that automation will work for your business, finding a good automation partner is your next step.

Like any good partnership, there are some that work better than others. Finding a good automation partner will determine how productive your resources will be, which is critical to the long-term success of your business.

Before you search for a partner, identify what the main objective of your partnership will be. Will it be a one-time project, a system build or software implementation? Identify your project needs first, and then make sure your potential partner has the right capabilities, resources, expertise, experience, support and technology—to service your needs.

Technology is key to successful automation. Finding a partner with the right technological experience is imperative. Enterprise Resource Planning (ERP) is key to an automation project. ERP software automates and integrates core business processes such as customer orders, scheduling operations, inventory records and financial data. ERP software can drive huge improvements in the effectiveness of any organization, including manufacturing, distribution, finance and reporting and analysis.

If you are interested in learning more about how SYSPRO can help your organization implement Enterprise Resource Planning (ERP), and integrate core business processes for operational efficiency, [contact us today](#).

ERP SYSTEMS CAN HELP REDUCE COSTS BY AUTOMATING PARTS OF YOUR BUSINESS BY:



ASSISTING YOU IN DEFINING YOUR BUSINESS PROCESSES, AND ENSURING THEY ARE COMPLIANT THROUGHOUT THE SUPPLY CHAIN



PROTECTING YOUR CRITICAL BUSINESS DATA, THROUGH WELL-DEFINED ROLES AND SECURITY ACCESS



ENABLING YOU TO PLAN YOUR WORKLOAD, BASED ON EXISTING ORDERS AND FORECASTS



PROVIDING YOU WITH THE TOOLS, TO GIVE A HIGH LEVEL OF SERVICE TO YOUR CUSTOMERS



TRANSLATING YOUR DATA INTO DECISION-MAKING INFORMATION

ABOUT SYSPRO

SYSPRO is a global leader in providing Enterprise Resource Planning Solutions.

We're not just another ERP Vendor—we are The ERP Partner that simplifies your success. Your partnership with SYSPRO ERP ensures continued success from the discovery phase right throughout the implementation, training, and on-going support of your system.

Why choose SYSPRO as your ERP Partner?



GLOBAL LEADER IN ERP
SYSPRO is one of the longest-standing, independent, international vendors of ERP business software solutions and services.



OVER 1600 ERP PARTNERS
SYSPRO has a proven track record of managed sustainable growth and is operational in over 60 countries, across six continents with over 1500 channel and support partners.



98% CUSTOMER RETENTION
Human relations is key to our approach, and as such, we have a 98% customer retention rate and an equally impressive staff retention rate.



CLOUD OR ON-PREMISE ERP SOLUTION
The SYSPRO Software solution is accessible for cloud or on-premise utilization.



37 YEARS' ERP EXPERIENCE
We have a wealth of knowledge to assist you in configuring a system tailored specifically to your business needs.



MORE THAN 15000 CUSTOMERS
Backed by a dedicated and professional team, SYSPRO provides ERP software solutions and services to more than 15000 customers within vertical markets ranging from manufacturing and distribution to financial services.



EFFICIENT ERP IMPLEMENTATION
By building a strong relationship with the right people in your organization, we create the perfect marriage of skillsets to ensure a smooth and efficient ERP implementation.



FULL INTEGRATION
SYSPRO's fully-integrated ERP Solutions will simplify your business success.