

Connected
automation



how to make

print production



more valuable



and scalable



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Introduction

Why this white paper?

The inspiration for this white paper arose from an observation: today, whatever the country, **printers are consistently caught** between rising raw material and energy costs from one direction, and ever-decreasing prices from another. This trend has been compounded by the increasing shift towards buying print online.

The Covid crisis only intensified the situation: the e-commerce boom has accelerated the digitization of purchasing, particularly in B2B. Buyers appreciate the ease with which they can order online, compare prices and source the most affordable suppliers. The supply chain tensions experienced by our industry in 2021 have worsened the erosion of margins, particularly among printers who work with contracts negotiated over long periods, and who have not always passed on increases in the cost of paper, packaging or inks to their customers.

While the periods of confinement highlighted the importance of local producers and short distribution channels, we have to admit - unfortunately - that once the situation returned to normal, price once again became the leading factor in buyers' decisions. Furthermore, competition from foreign printers has aggravated the difficulties faced by domestic printers.

Against this backdrop, many traditional printers saw web-to-print as a lifeline, which pandemic-related government aid schemes helped to finance, at least in part. The problem is that many rushed into web-to-print without an overall strategy or vision, creating a siloed sales channel isolated from the rest of the company. Many managers have been blinded by the rhetoric of consultants or agencies, wrongly focusing on the visible part of the project: front-office, design, advertising campaigns... Lacking knowledge, they have neglected margin-generating vectors such as automation, customer retention and loyalty. A fatal error in many cases.

Our observation is not limited to commercial aspects, but also concerns the organization of printing plants' information systems: after working with companies of all sizes, in different countries, we noticed that many of them were still operating with software organized in watertight silos, inherited from the monolithic architectures of the 90s. The result? Under-utilized customer data, information that operators must constantly re-enter from one software package to another, wasted time and hampered growth. For sales staff, these legacy challenges result in a total absence of 360° vision of the customer's life, with information scattered across several heterogeneous tools.

The human aspect is also becoming critical: like many companies, printers are struggling to find qualified staff to replace experienced employees who are retiring, or to integrate the new skills required by developments in print-

ing techniques and online sales. It's also true that our industry is not very attractive to young people. These recruitment difficulties can slow down companies' growth, even if they have identified new outlets or avenues for development.

Today, many printers are in a bind: torn between a price war, raw material price increases, a web-to-print platform that doesn't generate enough margin, and bogged down by an information system that prevents them from developing, leaving their managers unable to find a positive dynamic.

There is however a solution to create value, to grow despite recruitment difficulties, to make web-to-print platforms profitable, in short... to accelerate the growth of printing plants: it's connected automation.

Restoring growth through scalability

With this white paper, we'd like to modestly give you some ideas for developing your business. In the lexicon of startups, we often speak of "scalability" as one of the keys to a project's success. This ability to create organizations capable of generating and supporting strong growth is essential to ensure constant development over the long term.

Scalability isn't just for startups: it's possible to transform industries like printing into scalable businesses. You need to start by looking at the customer as a whole, by modeling his multi-channel and multi-modal purchasing journey, in order to understand why your information system needs to open up and learn to exchange, communicate and interface.

Based on concrete examples, the fruit of our many years of experience and achievements in the field, we will show you how to identify areas for development and how to intelligently adapt your organization to this growth, thanks to connected automation.

That's what it's all about: regaining the upper hand, becoming competitive once again, returning to growth... in short, putting an end to suffering, and looking forward to the future with a positive outlook!

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Tom Peire,
CEO Four Pees

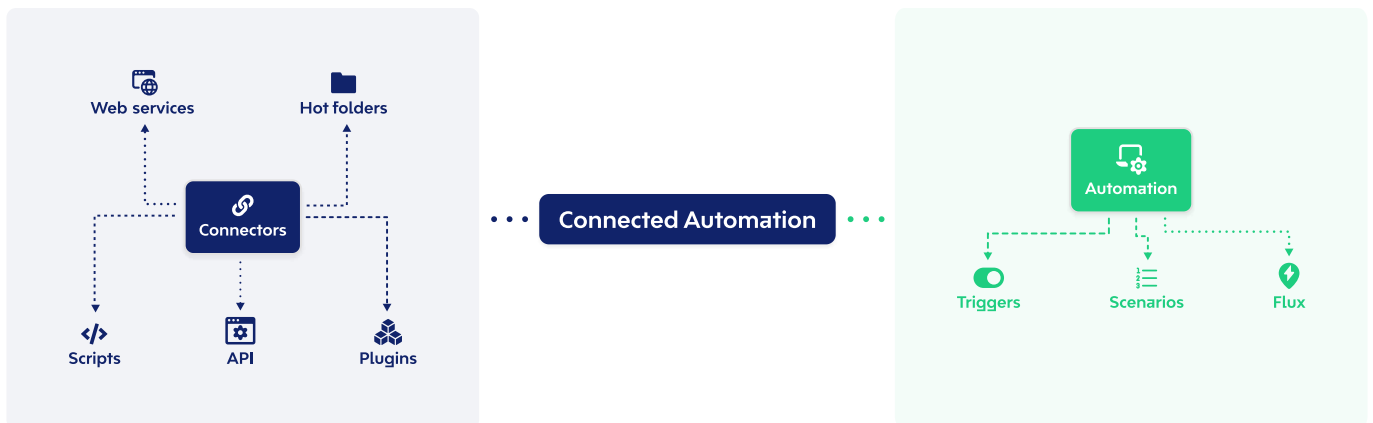


What is connected automation?

Definition and objectives

Connected automation is a concept for optimizing information systems and organizations. It is as much a method - indeed, a mindset - as a technological process. In this respect, the principle is based on two components:

1. **Connectors**, like USB sockets, are used to “plug in” different software programs that previously did not communicate;
2. **Automated systems**, which perform a succession of actions based on triggering events, pre-defined scenarios or data analysis, without manual intervention.



As mentioned in the introduction, like many companies in other sectors, the printing industry has developed information systems made up of relatively impenetrable software bricks, whether it's due to intrinsic limitations, technological choices made by software publishers, or a lack of optimization. This is commonly referred to as silo architecture, with each function or module isolated from others. In this context of compartmentalization, connected automation has been designed to allow information to circulate, in order to:

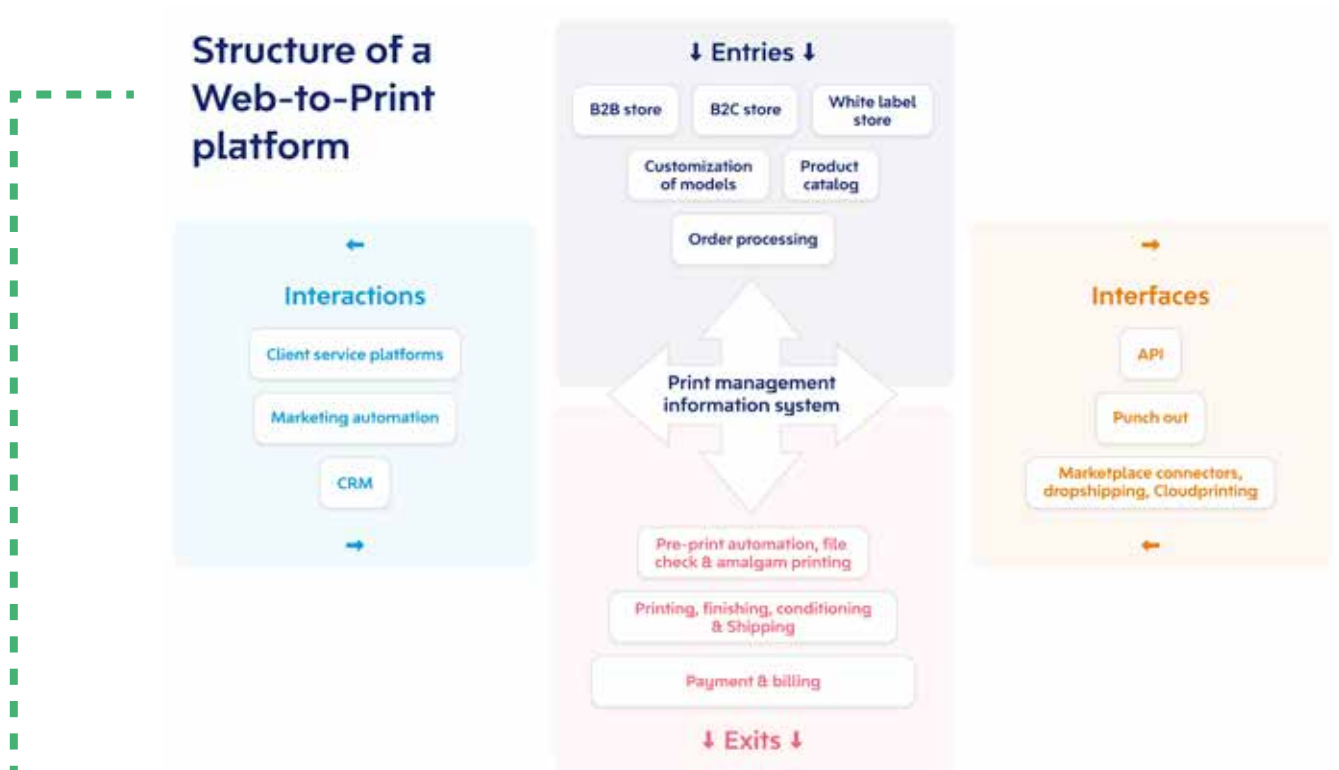
- **avoid tedious data re-entry** from one component to another
- **reduce information loss** between different components
- **consolidate data** from different sources to improve company management
- **open up the print shop's information system** to other systems, both input and output, to facilitate interconnection with customers, suppliers and partners.



Connected automation is not limited to a single tool or prepress workflow

Abuses of language and marketing concepts developed by some software publishers lead many people to think that connected automation is limited to file processing workflows in a print shop, or to this or that software.

This is incorrect: connected automation is both a concept and a method, which concerns all company functions and software, and is universal in its technological approach. Connectors and automation scripts can be implemented in a thousand different ways!



How does it work?

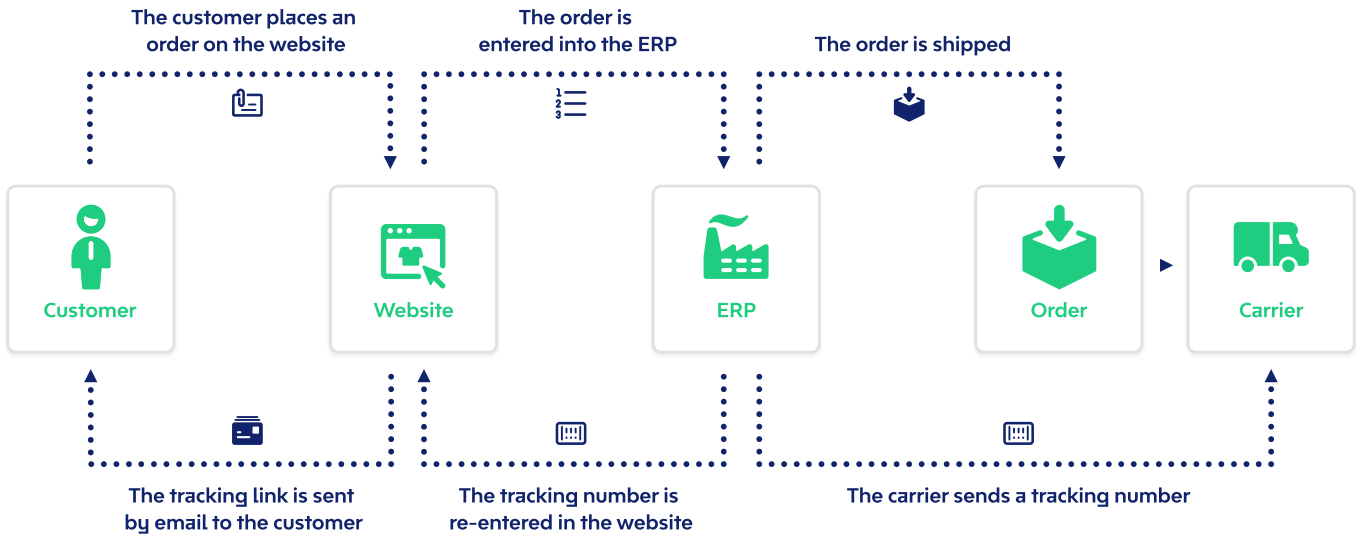
To illustrate this principle and quickly explain its benefits, let's take a very concrete example: receiving a parcel tracking link after placing an order on a website.

In a silo architecture, we will find 3 isolated software components:

- the storefront, where customers can place and pay for orders
- ERP to manage production, procurement, and shipping
- the carrier's information system, which manages the delivery of the parcel to the customer's address



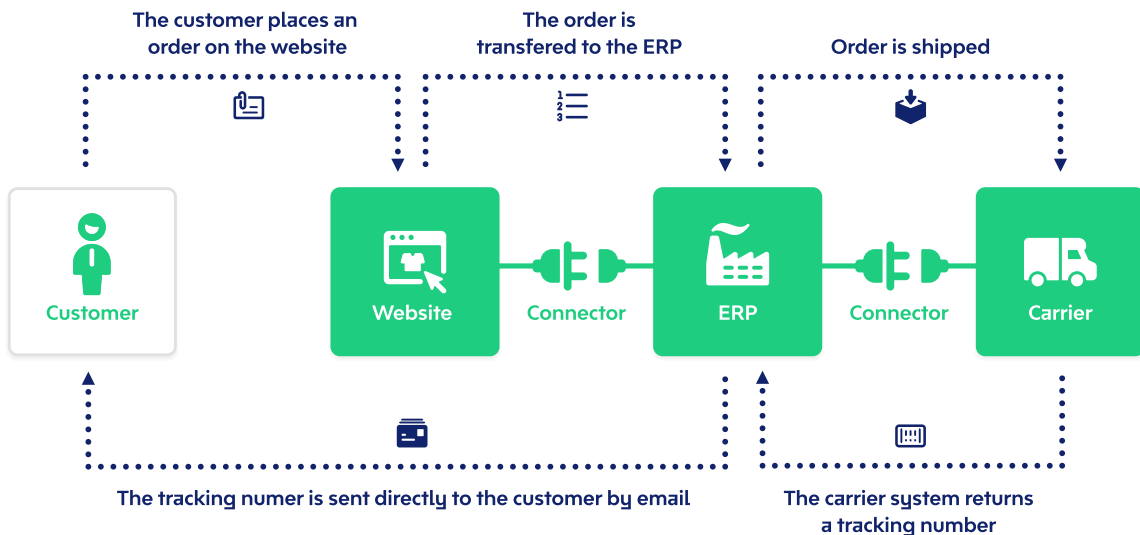
In this architecture, for the order to be fully honored, operators must manually copy the order details from the website into the ERP system so that it can be produced. They then edit the shipping labels. When the parcel is picked up, they receive an email from the carrier with a tracking number which they enter by hand into the ERP, and which they also enter back into the website, so that the customer can be informed and track his parcel.



In this example, connected automation will first involve setting up connectors between the website and the ERP system on the one hand, and the ERP system and the carrier's system on the other. This way, from the customer to the carrier, we have a continuous chain of information that allows information to circulate without constraint.

Scripts will be set up to use these connectors to transfer all order data automatically and without loss

of information, from the website to the ERP, and then from the ERP to the carrier's system. When the parcel is picked up the carrier issues a tracking number, which is automatically "pushed" to the ERP. There, a new automatism will detect the arrival of this information, and according to a pre-defined scenario, it will instantly send an email to the customer telling him how to track the shipment of his parcel by reconstructing the tracking link; at the same time, it will record this information in the order form of the ERP and website.



(Re)Creating value

Caught between soaring raw material costs on the one hand, and a downward spiral of price wars on the other, printers are now doing everything they can to create value and save their margins. But when it becomes impossible to pass on price rises to customers without losing business, the situation looks desperate.

Even in such a “tense” context, it is possible to recreate value and regenerate margins, without losing their competitive advantage in the market.

To achieve this, we need to free up our teams’ time - with a constant wage bill - by eliminating repetitive tasks and repositioning them on higher value-added missions. Another way of improving margins is to reduce the number of errors at each stage of the production chain, a point too often neglected in printing plants. Finally, providing customers with additional services at a constant price can make all the difference with certain competitors.

Freeing up resources, focusing on value-added tasks, improving quality, providing services... these are just some of the benefits that connected automation can bring to your print shop. Let’s take a closer look at each of these key benefits.

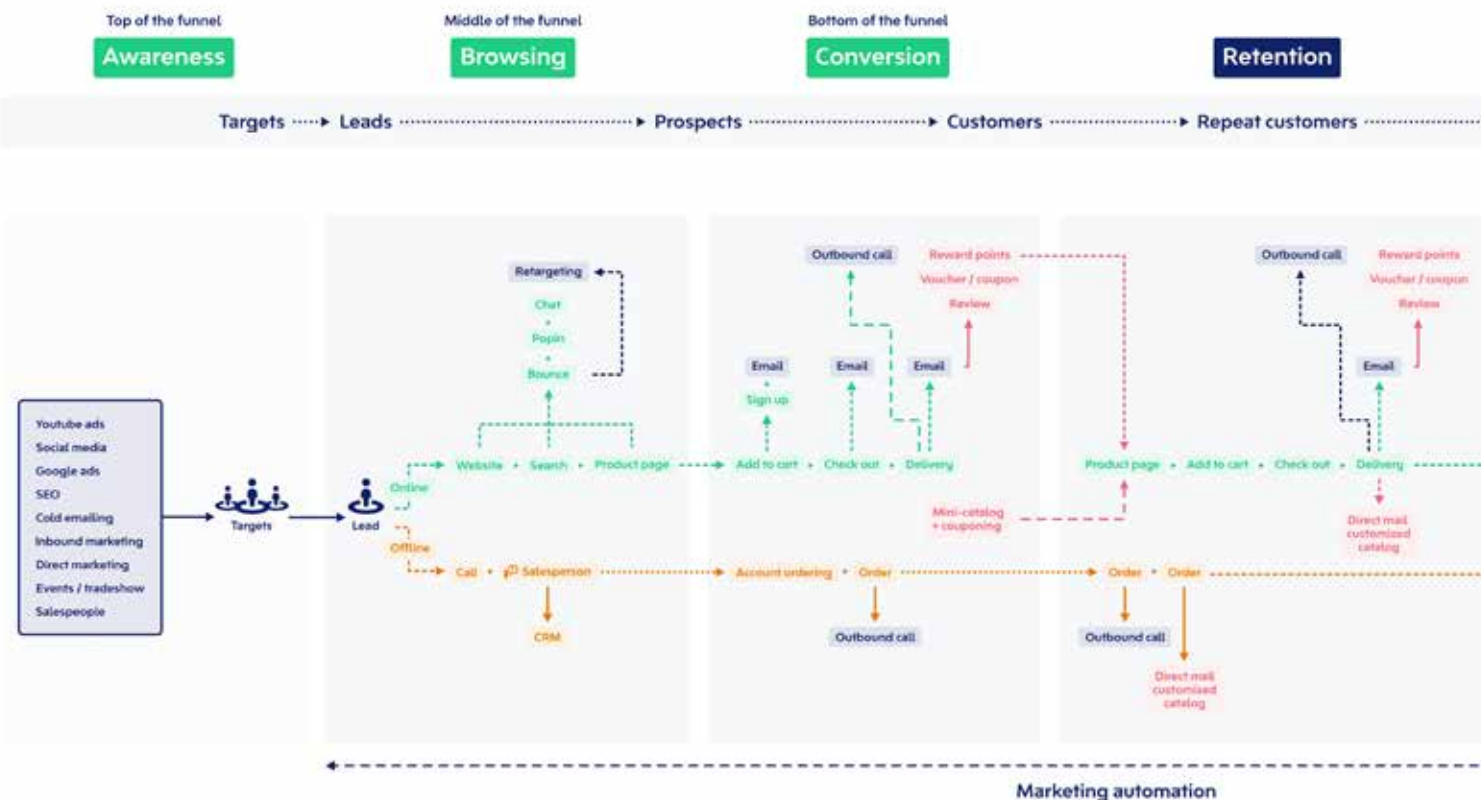
Adopt a global approach to the customer journey

Tracing customer and order paths

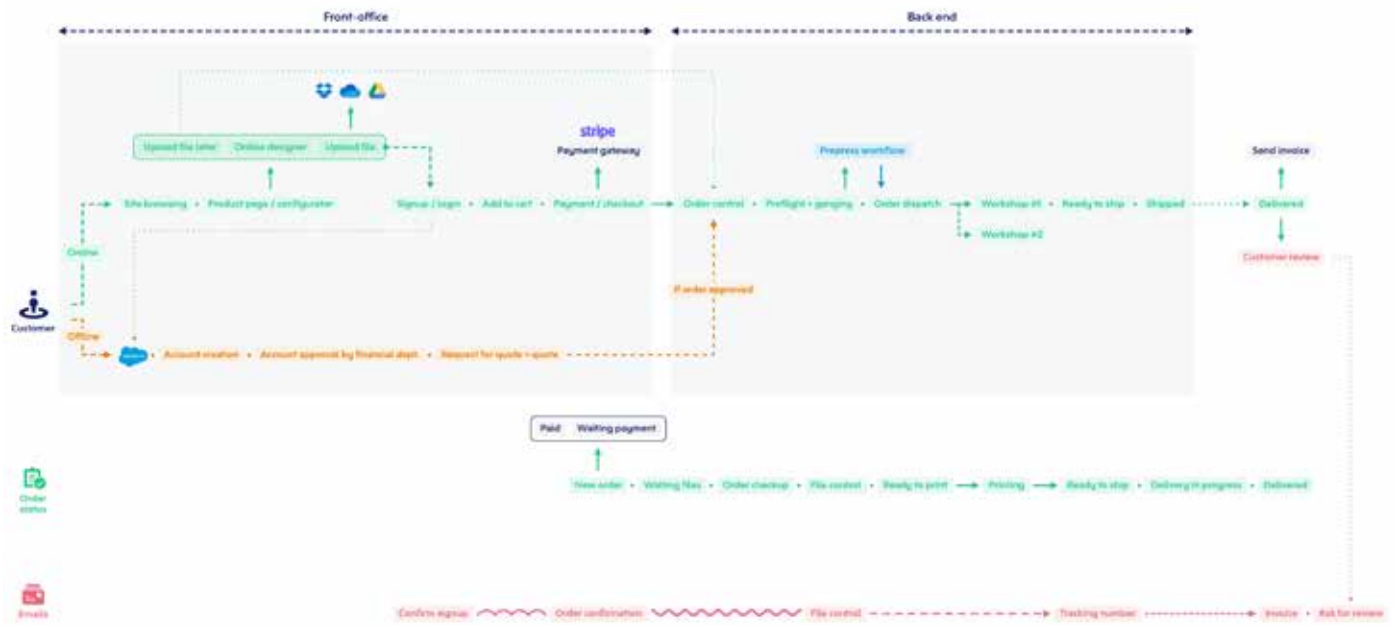
The first step is to design the workflow from A to Z, for both the customer and the order (they are different). Contrary to popular belief, workflow is not just about processing prepress files. It’s about looking at the entire customer journey, from the first point of contact right through to invoicing, and considering all possible order modes.

In concrete terms, customer/order flow diagrams represent all the steps involved in each phase of customer and order processing: account opening, quotation, file reception, control, production, dispatch, invoicing... It’s important to be as precise as possible, and to note all the operations carried out in the various tools, as this diagram will reveal all the tedious, repetitive operations that we’ve become accustomed to carrying out without ever questioning them.

User flow



Order flow



These diagrams will also highlight inconsistencies or pain points that may irritate customers or internal teams with their complexity. They will reveal sources of error that can have major consequences on the final quality of production.

Measuring processing times

Mapping out the customer journey can help you identify suspicious areas in your workflow. To confirm your suspicions, you'll need to measure certain indicators in the field, such as the time it takes to complete a task, the number of round trips, how many clicks an operator has to make...

These measurement indicators will prove very important for the future.

Reactivation / loyalty



Identify leakage points

Thanks to the customer journey diagram and the measurements you've taken, you'll be able to visualize the areas where, like on a plumbing network, you're leaking value. Because of overly complicated processes, inconsistencies in software or habits formed over the years, your company is losing money needlessly. On a positive note, once pain points have been identified, it's possible to treat them and make them disappear.

Define areas for improvement

Now that the leaks have been identified and isolated, an action plan can be drawn up with your integrator to deal with them. Connected automation will then act as a treatment that will eliminate these leaks and enable you to regain value, thanks to an increase in your teams' productivity or a reduction in their errors.

A concrete illustration: managing supply disruptions on a material



The scenario

A few months ago, printers were suffering the full brunt of paper tensions, with suppliers imposing delays, part number changes and price hikes on a weekly basis. Let's imagine a "traditional" print shop, in which the purchasing manager deals with these sudden changes single-handedly. Each time a product was out of stock, he had to inform all sales staff by email, withdraw the product from sale, and trigger alerts for customers with orders in hand so that they could either find an alternative or cancel their orders. This truly mammoth task inevitably led to errors and oversights in notification. The end result was potentially dissatisfied customers, with quality complaints leading to compensation claims or withdrawals.

The contribution of connected automation

Thanks to the work of the Four Pees team, it has been possible to connect the various components of the information system so that when the supplier withdraws a material from the sale, automatically:

- all sales staff are kept informed in near real-time
- the corresponding products are deactivated in the ERP system and on the website to prevent re-ordering
- all customers who had an order in progress on this material are alerted; their account managers are automatically assigned a call task in their daily mission list to find an alternative solution, or to cancel their order



This development has enabled the printing plant to be more responsive in an uncertain environment, lightening the workload of print suppliers and significantly reducing the cost of non-conformities and after-sales service.



Creating key differentiators

Connected automation isn't just about fixing problems in your workflow. Used intelligently, it can equip you with new weapons that will create a competitive advantage.

To do this, you need to identify not the leakage points in your customer journey but the friction points: in other words, the phases where customer experience falls short, either with you or your competitors. Thanks to connected automation, it will be possible to deal specifically with this point to simplify your customer's life and save him time.

Here are two very concrete examples from our own experience:



- **Sending files:** for print customers, sending files is often complicated, because the person sending the files is not always the graphic designer. Some use email, others use transfer spaces that don't accept all file formats, while others use specific services such as WeTransfer. Thanks to the intervention of the Four Pees team, it was possible to create a unified drop zone for the print shop's customers. In the form of a web page, customers choose the method that suits them best: they can import their file from their computer, they can connect their cloud storage such as Dropbox or OneDrive to access files directly, or they can paste in a WeTransfer URL, with the automations taking care of retrieving it. By connecting cloud services and automating file retrieval, we simplify the customer's life and save time. An excellent way to build long-term customer loyalty!



- **Reprocessing:** some sectors of the printing industry are highly seasonal, with similar orders being reprocessed year after year. Once again, this can prove complex for customers, either because they have "lost" their files, or because they are unsure which version was used for printing. By storing customers' files and enabling them to easily carry out a reprint via a web interface, the printer provides a high-quality service to his customers. Knowing that their files can be found and reordered in a matter of seconds, customers will be less tempted to go to a competitor, even if it's cheaper. Providing a service based on an understanding of customer issues is one of the major benefits of connected automation.

Refocus teams on value-added tasks

As we explained earlier, the customer journey is used to identify leakage and friction points for customers. Once the corrective measures have been deployed, the teams concerned save time: the automatons take care of repetitive, time-consuming tasks. But what to do with this time? A good practice is to devote this available resource to new services that can be leveraged, either to create key differentiators or to build new profit centers.

A concrete example: from DTP control to the graphics studio



One of the printers we worked with had a DTP department whose main task was to check the files sent in by customers, and sometimes correct them. Corrections were difficult to monetize, as customers were no longer willing to pay for this type of service. Thanks to connected automation, it was possible to create scenarios for file reception, automated checking and correction according to print type, and even management of press proofs. The graphic designers in the DTP department were freed from a heavy workload; the company's director decided to reposition them, initiating a graphic design mission by creating an in-house creative studio. As a result, the print shop has been able to expand its offering by providing a service that is eagerly awaited by its customers, and which it has succeeded in enhancing. In terms of human resources management, this change was very well received internally by the teams concerned.



Connected automation isn't just a gadget for the prepress workflow: it's a mindset and a method, based on critical analysis of the way a company operates and the constant search for optimizations. Like a precision mechanic in Formula 1, the aim is to find the "little" adjustments that will boost performance and enable the driver to win the race. In a highly competitive environment such as the printing industry, this is one of the keys to success.



Sidebar: **Web-to-print myths and the importance of connected automation**

Printers facing crisis often see web-to-print as their only salvation. This was particularly true during the Covid pandemic when travel restrictions condemned sales reps to staying put. Unfortunately, if they've been badly advised or blinded by overly seductive rhetoric, printers can easily get lost in web-to-print.



The truth about web-to-print

Without connected automation, you cannot grow

 <h3>Dark side</h3> <ul style="list-style-type: none">→ Price war→ Low margins→ Low baskets→ High costs of acquisition→ Poor customer loyalty→ High level of IT investments	 <h3>Adding value with connected automation</h3> <ul style="list-style-type: none">→ Preflight and automatic correction of files→ Prepress workflow automation and ganging→ Updated job information and circular information of customer→ Job lifecycle real-time analytics→ Scalability
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Web-to-print, an unforgiving world

Until you've experienced internet sales, you might think it was easy. All you have to do is advertise, set up a website, and the customer can take care of himself. What printers don't know, and what they often discover - too late - are the hidden depths of the iceberg:

- Online printers face a tough price war, aggravated by pressure from price comparison sites such as Google Shopping.
- Costs of Customer Acquisition (Google Ads, Facebook, LinkedIn) are constantly on the rise, and their operation is based on a bidding system: the more competitors there are, the higher the price of keywords, including that of your own brand!
- Customers aren't loyal: on the web they zap around, looking for the lowest price, the best deal, and at the slightest opportunity they destroy your reputation by leaving brutal comments...
- Average baskets are very low, much lower than in conventional distribution, but the complexity remains the same, so it's the margin that suffers.
- Finally, technological investments are heavy and ongoing. You have to constantly improve the performance and security of your systems and enhance the skills of your teams. Additionally, recruitment in this field is particularly complex and time-consuming.

Connected automation at the heart of web-to-print success

In such a difficult environment, you can only maintain your margins by perfectly optimizing the entire customer journey. Every re-entry of data, every piece of information transmitted incorrectly, every email that has to be sent manually, will erode your margin and lead to costly errors in terms of time, money and brand image. All these leakage points need to be eliminated.

Optimization begins by automating the transfer of orders from the eCommerce site to your ERP, using APIs and structured file transfers such as JSON, XML or JDF. Files supplied by customers need to be analyzed, corrected and ganged automatically, without any intervention from your teams, to save maximum

time and reduce the risk of errors. When it comes to ganging, automated processes reduce waste to a minimum, while optimizing ink consumption according to print parameters.

As we saw in the introductory illustration, it's essential that customer feedback is also automated, whether it's order acknowledgements, invoices, transport tracking information... not forgetting requests for customer feedback. A satisfied customer is good, but a satisfied customer who lets you know is even better! This will contribute to the "reassurance" that will boost the conversion rate of prospects to customers.

Securing your print shop

In the current climate, print shop managers are looking above all to fill their order books, while preserving their margins. This is their priority in the short, medium, and long term. They are also looking to secure their business over the long term. Here too, connected automation plays a key role in securing a printing plant's business on several levels.

Diversify your order-taking channels

In our work, we often find that fragile printers depend on a small number of key customers, or on a limited market segment, whereas the more robust ones have

succeeded in greatly diversifying their customer base and multiplying their sales channels.

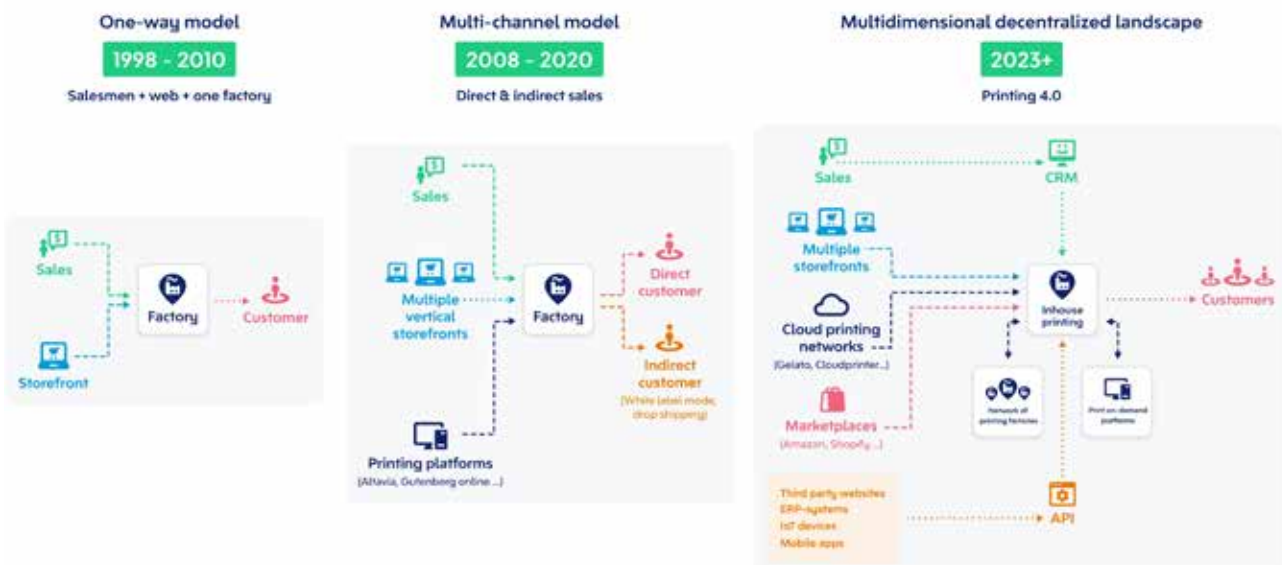
This distribution enables them to have enough diversified channels to act as shock absorbers in the event of a major downturn in business with a key customer or market segment. In our view, reducing the risk surface and dependence on too few customers is vital for printers. To achieve this goal, printers need to understand the ecosystem in which they operate today, and they must succeed in multiplying the points of contact with their customers.

A little history...

Over the past 25 years, the printing industry has gone through three major phases in its development:

- **From the late 1990s to the 2010s**, business models relied mainly on a large sales force, responsible for supplying printing plants with contracts and jobs; a few companies and a few pure players added an order-taking website to this system;
- **The 2010s** were then marked by a fantastic acceleration in eCommerce, with a major shift in buyer behavior. The number of web-to-print sites multiplied, some of which began to outsource production to partner workshops in drop shipping mode, while others developed their principle into multiple boutiques, in order to address specific market verticals. At the same time, the major printing platforms gained significant market share with large corporations and retailers;
- **Since 2020**, the landscape has become much more complex: of course, there are still sales forces who canvass customers directly. There are still online sales websites. But the ecosystem has been enriched by new sales channels, such as consumer (Amazon, Facebook) or professional (Alibaba) marketplaces, print-on-demand platforms connected to Shopify (Gelato, CloudPrinter) or APIs to interface with the ERP systems of key accounts. Printers produce for their own account, but they are also increasingly supplementing their business with jobs from other printers or platforms, when they are not subcontracting some production to fellow printers.

Evolution of the printing industry since 1998



Thanks to the potential of digital technology, the opportunities for customer contact are almost infinite. We have now moved from a fairly simple structure to very dense networks, based on the principle of "coopetition": operators are competitors in certain markets, but they also cooperate when their interests converge.

Multiply contact points with connected automation

To take advantage of the opportunities offered by this new world, your information system must be able to open up and interface with all these points of contact:

- Customer ERP and CRM via APIs and web services
- Connectors for print-on-demand platforms
- Marketplaces
- Hot folders

Your Information System needs to become intelligent and open, not only to be able to open up and

communicate, but also to successfully process jobs from heterogeneous sources in order to produce and dispatch them. This involves retrieving XML, JSON and JDF feeds, reprocessing them, ganging jobs and passing on information to contact points. Without connected automation tools, it will be impossible to meet such a challenge... and your print shop will remain isolated from this new world.

Building long-term customer loyalty

Meeting the new demands of B2B buyers

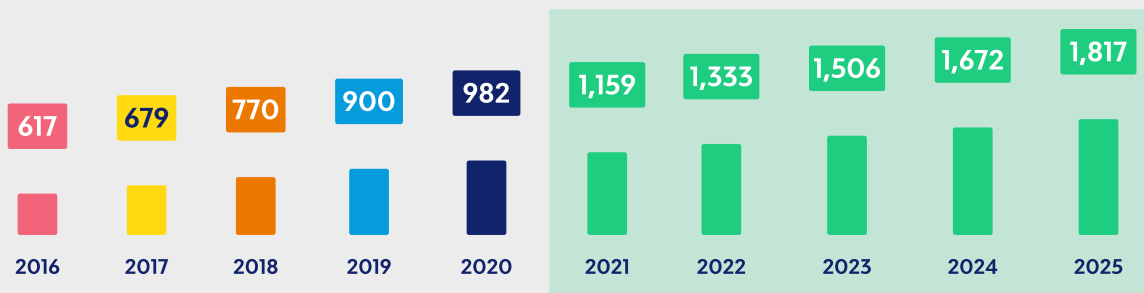
The Covid crisis has totally transformed the way contractors work.

B2B eCommerce has grown by over 10% year-on-year, more than B2C eCommerce, and there's no end in sight. Large companies and SMEs alike have upgraded their tools to work more efficiently, and they expect their service providers to adapt to their new requirements.

European Region B2B eCommerce Forecast to 2025

Manufacturers and services in the European region have seen steady online sales growth following European Retail eCommerce Consumer Forecast and trends, and total value of goods sold online in Europe reaching **\$1,8 trillion USD by 2025**.

Source of the market study: <https://www.trade.gov/european-b2b-e-commerce-markets-forecast>



↑
11,9%
through 2025

The European market is projected to grow at 11.9% through 2025

Connected automation makes a major contribution to strengthening relationships with key customers over the long term. How can this be achieved? For years, purchasers and suppliers asked printing plant sales representatives questions by email or via a web portal, received quotes and then issued a purchase order from their ERP, which was transmitted by email. This way of working was not optimized, but it was adequate enough for the old world. Companies' ERP systems have now evolved to become the cockpit of purchasing management, through which everything

must flow. The supplier catalog must be integrated into the system, in accordance with the conditions set out in the contract. The buyer or supplier issues orders from the ERP, which are then pushed to the printer's IT system, which in turn sends back production status, end-of-month invoice statements and statistical analyses.

Today, not all printers are able to interface their catalogs with their customers' ERP systems, or to synchronize production information in real time. With the right connectors and workflows, connected

automation can give you a competitive edge to win a market, but above all “lock in” your customer for the long term, thanks to the quality and completeness of the data you provide. **We live in a world of data, and only companies that speak the same language as their customers will survive.**

Retaining B2C customers

For printers who work with “small” B2C customers (individuals, associations, SMEs), the needs are of a different nature: with costs per click soaring, acquisition is expensive in Google Ads or Facebook Ads advertising campaigns. It is therefore essential to build customer loyalty to generate margins, yet a large proportion of web-to-print customers never place more than one order.

For this, many platforms offer loyalty points, but harnessing data offers a range of far more effective tools: by linking the web platform to your CRM, or to external systems for enriching customer data, you can carry out targeted operations based on particular events, or specific behaviors; this is what we call “triggered marketing”. Depending on the customer’s birthday, last purchase, basket evolution over time, or analysis of their web behavior, you can send them tailored offers

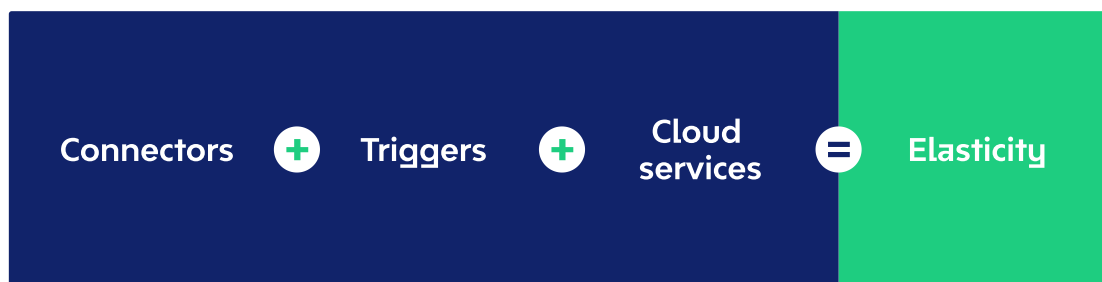
to encourage them to place new orders with you. But these systems aren’t limited to digital marketing: thanks to variable data printing, which combines print and data, some companies have succeeded in creating high-impact follow-up campaigns.

Thanks to connected automation, the link between the various components of your marketing information system improves customer loyalty and longevity, helping to make your acquisition campaigns more profitable.

Adapt in real time to the vagaries of business

If we take a look in the rear-view mirror, the past four years have been particularly eventful: the momentum of 2019 was followed by the Covid pandemic and successive confinements, which led to a boom in internet sales. Then in 2021, various shortages hit our industry, leading to a massive price rise in raw materials...

To survive in such an environment, printers need to be resilient and adaptable, to say the least. Unfortunately, many have realized that neither their organization nor their information systems are flexible and agile enough to adapt in near real time to market upheavals, be they upward or downward.



A modular architecture, based on connected automation and cloud services, provides companies with real elasticity: this flexibility enables them to cope with the ups and downs of business, and to resize quickly if necessary. By multiplying components, replacing a module that is too limited, or adding connectors, I.T. systems can greatly increase their capacity in a short space of time. The same logic applies to hosting: many printers choose to base their information systems on one or two servers, hosted on their premises. But the capacity of these servers is physically limited, creating potential bottlenecks. In a logic of connected automation, modules are hosted in the cloud on elastic servers, whose capacities (RAM, storage, CPU power) can be resized on demand.

Leveraging your strengths against a backdrop of market consolidation

Organizational elasticity is essential in the growth and seasonal contexts we have mentioned, but also in response to a new phenomenon that has appeared in our industry in recent years: consolidation. When they retire or face new challenges, many managers choose to sell their printing businesses to new groups emerging on the market. Whether generalists or specialists in self-adhesive labels or packaging, these groups, with annual revenues of several hundred million euros, rely on production units spread across Europe. **The adaptability, elasticity and scalability of information systems often constitute a major asset in attracting and enhancing the value of companies in the sales phase**, as for acquirers they guarantee seamless integration into the new entity.

Strengthen your cybersecurity

Like all companies, printing plants are exposed to cyber risks. In our view, this risk is even greater than in other sectors, due to a number of factors:

- monolithic software, which concentrates all the company's management functions
- local hosting, often on a single site
- production IT, poorly maintained and without updates
- an eCommerce business where security is rarely under control



The principles of connected automation help to reinforce the security and resilience of your information system:

- **Cloud services & disaster recovery:** the use of Cloud modules reduces the risk associated with local hosting, by offshoring key components to data centers and implementing redundancies. This facilitates business recovery in the event of a disaster, including those affecting the integrity of a building (fire or flood, for example);
- **Dilution of risk thanks to cloud and modular architectures:** the move from a monolithic system to an architecture based on interconnected modules, hosted in the cloud, considerably reduces risk. Each module and connector is maintained and updated by specialized editors. And instead of risk being

concentrated on a single system, it is diluted across several modules, which can be compartmentalized if necessary;

- **Destabilization:** locally hosted monolithic systems often resemble fortresses with fragile foundations. On the surface, they may appear highly protected, but their main weakness is their rigidity. All it takes is for the physical server to fail, for the fiber link to break or for the system to come under attack, for everything to grind to a halt... sometimes permanently. A modular architecture based on connectors and automation provides greater flexibility and, above all, the ability to replace an unavailable component with another. Let's take a simple example: an email server, which is often the cornerstone of customer communication, sending quotes, invoices or order tracking information. If

it's hosted locally, on the main server, and suffers a breakdown or an attack, you'll have to wait for it to be fully repaired before service can be restored. Its unavailability can paralyze business activity. In a modular architecture, messaging is managed by one or more cloud services, interfaced with ERP and CRM via connectors and automata. In the event of a component failure, it is perfectly possible to replace it with another service, to guarantee business continuity.

- **Maintainability & scalability:** cybersecurity depends to a large extent on the ability of organizations to keep all their software and operating systems up

to date - this is a basic principle. Unfortunately, the reality is that very few printers keep all their servers, virtual machines, operator workstations, websites, etc. up to date, due to lack of time, resources, or simply because they are using obsolete software. By combining cloud modules and local software, connected automation will reduce the burden of technical debt, by facilitating upgrades and scalability: even if "old" software can no longer be updated, the component and connector with which it interacts can be maintained in the latest versions, which minimizes risk and facilitates the scalability of the whole.

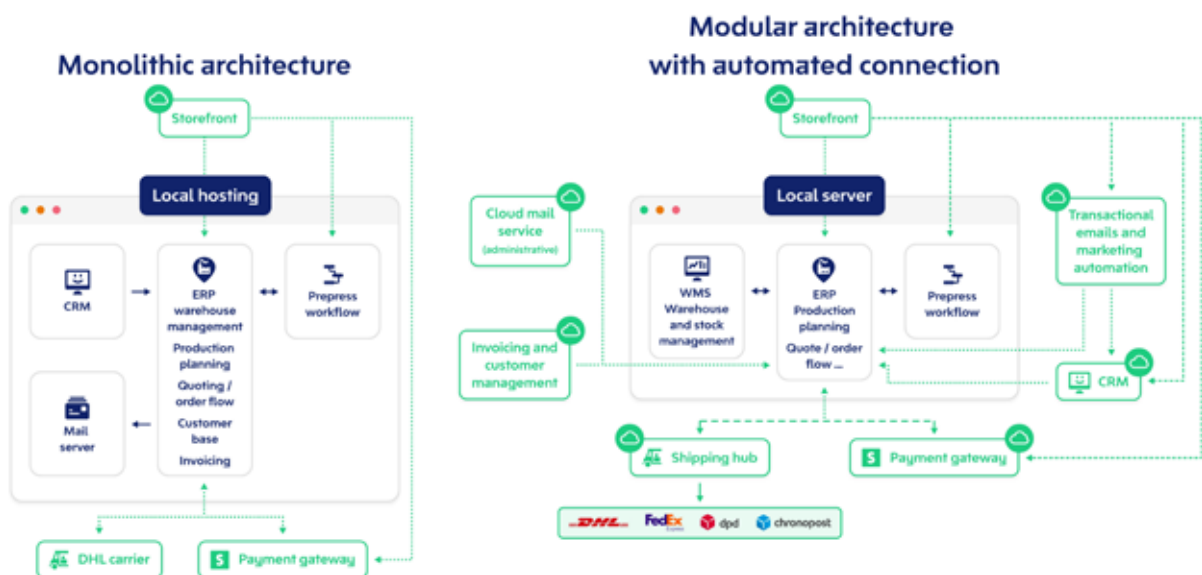


Reduce your IT dependency

Like all industrial companies, printers are extremely dependent on certain key software such as their ERP/MIS, and their prepress workflow manager... According to the logic that has prevailed over the last decade, these tools manage virtually everything in the company, from quotation design to invoicing, including production planning, stock management and shipping.

This makes printers totally dependent on quality, but also on the strategic choices made by software publishers. Following a takeover or a publisher's difficulties, many printers have found themselves totally blocked by a change of direction by their historical software publisher, with the only choice being to stop evolving or to change their entire system at great cost.

Monolithic architecture vs. modular architecture with Automated connection



Connected automation makes it possible to reduce the dependency surface by “taking out” from the central system all those services which are either not part of the core business, or for which more efficient or less expensive alternatives exist on the market. The integrator will “cut out” an activity from the ERP and replace it with a connection to an external service. Let’s take the example of shipment and carrier management: you know how complex and costly it is to interface your ERP with a carrier’s IT system. And

how this complexity prevents you from enriching your transport offer. As an integrator, we can replace your ERP’s native carrier management with a connector to cloud hubs, which, via a single connection, will open the doors to virtually every logistics provider on the market. This type of easy-to-implement upgrade reduces the scope of your core system, and consequently your dependence on its publisher, while at the same time giving you a new competitive edge that your sales force can leverage with customers.



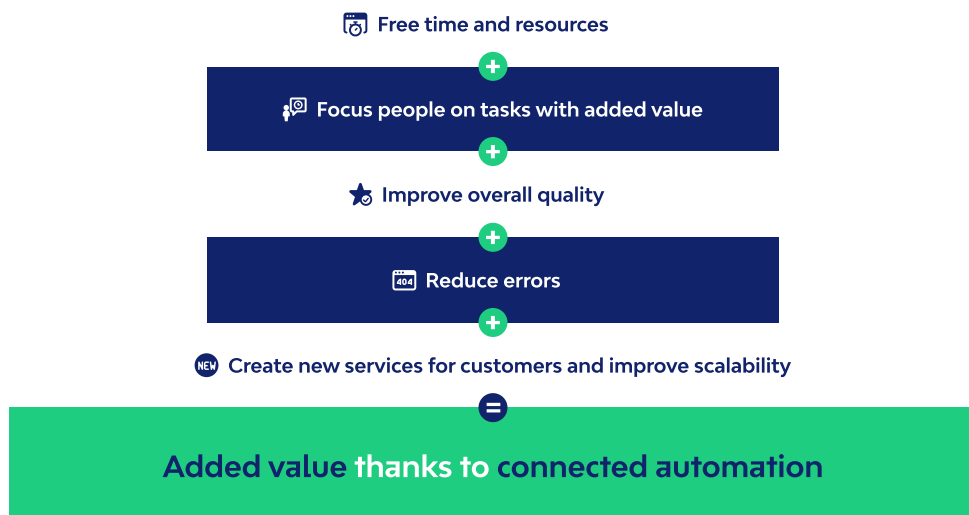
Scalability is the key to success

In an uncertain and changing environment, the companies that succeed will be those that are able to adapt. It’s not just a question of survival: even in difficult times, there are opportunities that must be seized quickly to create a new competitive advantage. We often talk about agility – sometimes wrongly. But that’s what it’s all about: companies need to be flexible, quick and cat-like to react quickly to changing environments, whether negative or positive.

All the points we’ve touched on above help to strengthen your ability to adapt:

- **to seize sales opportunities** via new markets, new consumption patterns or new order channels
- **to rapidly size your production** tool to accommodate additional order volumes or particular seasonal patterns
- **to absorb these transformations without** disrupting or overloading your teams, or creating bottlenecks due to recruitment difficulties
- **to maintain an excellent level of safety**

Thanks to the bridges it creates between all software and the elasticity of cloud solutions, connected automation brings real flexibility to businesses. It gives them the ability to resize very quickly, to adapt almost in real time to changes in their market.



Connected automation in printing: a few concrete examples

Now that we've covered the concept and benefits of connected automation, let's take a look at some concrete examples of connectors and automation that can be set up in a print shop, along the entire customer path.

PHASE	CONNECTION TYPES	PROFITS
LEAD NURTURING	CRM connection with email marketing platform	<ul style="list-style-type: none"> • Import trade show leads into CRM. • Trigger post-show email marketing campaigns to encourage orders. • Analytical tracking of the conversion of trade show prospects into buyers, and valuation of their order baskets.
LEAD NURTURING	Connecting the website with CRM	<ul style="list-style-type: none"> • Direct marketing campaigns including QR codes and promo codes. • Track promo code usage and clicks to calculate campaign performance.
ORDER FLOW	API connection with a customer's eCommerce platform	<ul style="list-style-type: none"> • Automatic retrieval of order information by the printer: files, job ticket, JDF / XML, comments. • Automatic transmission of order status updates and delivery information to the customer.
REORDERING PROCESS	Connection between website, customer file storage area and prepress workflows	<ul style="list-style-type: none"> • Customer loyalty thanks to "free" reprint service. • Fewer calls to customer service to search for and remove old orders.
CUSTOMER CARE	Connecting website chat to CRM, itself connected to ERP	<ul style="list-style-type: none"> • The agent answering the chat visualizes the caller's order history to provide a contextualized response. • In the case of an order placed by a new customer, identification that the purchase is the result of a chat thread.

PHASE	CONNECTION TYPES	PROFITS
CUSTOMER CARE	Website connection with CRM and ERP	<ul style="list-style-type: none"> • Consolidated customer information, whatever the sales channel. • Every member of the sales team has a 360° view of the customer's purchase history, broken down by channel, even when on the move. • The customer's global history is available in his customer area on the website.
FILE CHECKING	Automated file processing and connection to the production tool	<ul style="list-style-type: none"> • Automated file reception. • Check and correct customer files according to print type and output profiles. • Gang orders with the same paper/finishing/time characteristics. • Optimization of inking rates according to machine dispatching. • Preparation of cutting tools.
LOGISTICS	Connection between ERP and shipping system	<ul style="list-style-type: none"> • Help in choosing packaging cartons according to parcel characteristics. • Grouping parcels by destination. • Route planning for delivery trucks.
SHIPPING	Connection between ERP and hub-type shipping platform	<ul style="list-style-type: none"> • Intelligent dispatching of orders to multiple carriers according to predefined scenarios. • Management of carrier exclusions in specific zones. • Choice of transporters with electric vehicles for downtown deliveries. • Carbon footprint calculations uploaded to ERP and website.
BILLING	Connection between sales management software and website	<ul style="list-style-type: none"> • When the invoice is issued, it is automatically sent from the sales management software to the website, where it is made available in the web customer area. • Automatic email with secure link to invoice.

PHASE	CONNECTION TYPES	PROFITS
SUBCONTRACTING: COMPLIANCE WITH SLA¹	Automation with triggers	<ul style="list-style-type: none"> • For orders from an eCommerce platform, subject to SLAs, prioritization of jobs in the production workflow. • Trigger preventive alerts in the event of schedule delays and risk of SLA overruns. • Real-time SLA compliance dashboard.
CUSTOMER LOYALTY / CHURN²	Connecting CRM, website and marketing automation platform	<ul style="list-style-type: none"> • Detection of declining customer activity (e.g., absence of orders for 3 months). • Trigger an automated scenario to send a personalized email and a conversation on Facebook Messenger, with a special offer including a discount on the eCommerce site.
SATISFACTION SURVEYS	Connection between CRM, website, and customer feedback system	<ul style="list-style-type: none"> • After each order on the website, we automatically send you a customer feedback request. • After a pre-determined number of online and traditional orders, a satisfaction survey telephone call is triggered. • If the score is less than 4/5, an alert is sent to the Sales Manager for an appointment and a customer visit.

¹ SLA: Service Level Agreement

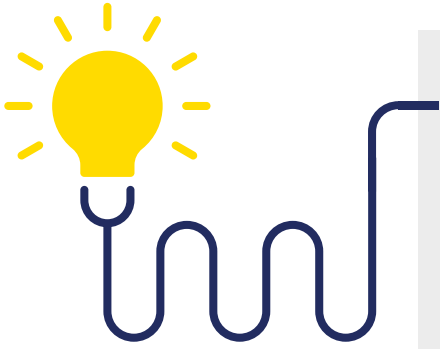
² Loss of customer



Key stages in the successful implementation of a connected automation project

If reading this white paper has convinced you of the benefits of connected automation, it's only logical that you should be eager to get started on such a project as soon as possible. To help you begin the connected automation journey, we recommend the following sequence of steps:





In conclusion...

We sincerely hope that this white paper has offered a new perspective for optimizing your printing operation. Connected automation is not a recipe, nor is it a magic tool that solves all your problems. It's first and foremost a state of mind, or even a work philosophy, which consists of constantly analyzing customer and order workflows within the company, and constantly improving them through links and automation.

This extremely powerful concept is behind the success of many printing companies, particularly in the web-to-print world, where visionaries were quick to see the benefits in terms of competitiveness and scalability.

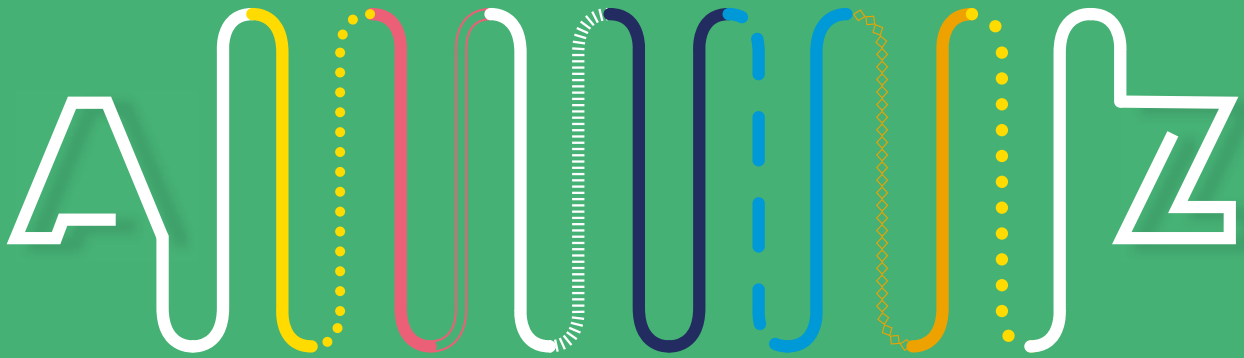
But connected automation isn't just for online printers: every company in our sector, whatever their size, can benefit from optimizations on their own scale. At Four Pees, thanks to our experience and the wide range of skills of our experts, we can guide you in identifying areas for improvement within your company, as well as in the development of connectors and automation.

See you soon on our website, at one of our many webinars, or at an upcoming trade show!



We automate your print production from A to Z

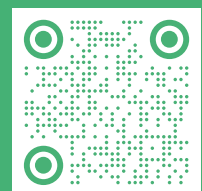
Reimagine your print production. At Four Pees, we help print operations succeed by implementing hassle-free automation. Not only will it make your work easier, but your print organization will thrive. We provide solutions to streamline the entire print and packaging production. Whether it is with advice, a software product or a seamlessly integrated solution from ideation, design and customization all the way up to fully automated production.



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