

# Embracing Automation

A Web-to-Print Solution  
that Thrives on Change

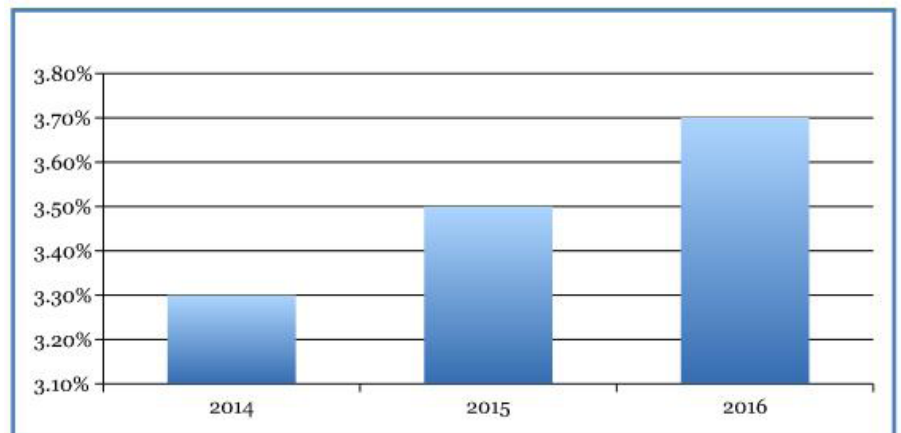
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# Introduction: Making Automation Work for Us

In 1850's America, over 60% of the working population was employed in the agricultural industry. The following century saw an upheaval of traditional farming methods that no one could have predicted at that time. Mechanical reapers, the steam engine, and now completely autonomous tractors and drones have displaced the human factor at each step while increasing productivity on an unprecedented level. As of 2008, less than 2% of the workforce was actively engaged in the agricultural process, but that fraction of the population was able to sustain millions of North Americans. Now, you might be asking yourself, how does this relate to the printing industry in any way at all? Well, the same way it is relevant to the manufacturing, customer service, and financial industries. Soon, it will also revolutionize the transportation, healthcare, and food service sectors of the economy. We are surrounded by it every day and nearly every industry will eventually be assimilated despite any resistance, similar to the Borg in Star Trek. Of course, I'm talking about the sometimes-worrisome word of **automation**.

Fig. 1-1: Global growth in the industry increases slowly but steadily every year.



The printing industry is no stranger to automation and it carries many different connotations for different people. The primary concern for many is the diminishing human factor that often accompanies an automated workflow. Despite these fears, the American printing

industry is still quite healthy and annual market growth (Fig. 1-1) is hovering at 3.7% worldwide<sup>1</sup>. Perhaps we should then shift our focus to the peripheral problem: how can we effectively integrate something that is an inevitable industry shift into our current workflow? How can we make automation work for us? The benefits of doing so would be numerous – quicker turnaround, lower margin of error, and a workflow that is capable of operating 24/7, to name a few. There are some solutions to this problem in place already, such as communicating job specifications to automated software with Extensible Markup Language (XML) files and automated preflighting. However, this is still not enough to prepare for the fast pace that the consumer of the future will demand.

## Automation and Web-to-Print Technology

Perhaps the most immediate link in the chain that can be strengthened is at the beginning of the workflow. Web-to-print technology is definitely on the scene, but despite all the chatter, the proportion of installations is still fairly low. Only 26% of printed products are ordered through a web-to-print portal<sup>2</sup>. The tides of change are pulling this number up every year, but some reluctance is palpable. There are many web-to-print options available today, but only a few of them address three major concerns that print shops have in regard to adopting such a solution. The learning curve could be so high that it's a hindrance to the workflow rather than an improvement. Integration into existing systems may be too difficult to even bother with the cost of installation. Another worry is the lack of support available if something goes wrong with such specialized software, or the difficulty of customization to fit certain project requirements. Fortunately, there are already some powerful web-to-print solutions on the market that can tackle these three challenges effectively. These software products are easy-to-use web editors that are rooted in HTML5 with strong API features that allow them to be integrated into any existing website. Throughout this paper, we will examine how such ready-made toolkits can specifically address these problems.

## Ducking the Learning Curve

Even a perfect solution to a problem is only as effective as the person implementing it. A perhaps justifiable fear many printers have in rolling out a web-to-print component for their businesses is the steep learning curve for new soft-

<sup>2</sup> Drupa, 2016.

## Integration into Existing Systems

ware. These HTML5 web-to-print editors are easy to install, can be embedded into any website for customer use, and allow for integration with Adobe Photoshop, thus drastically reducing the learning curve for print service providers. Photoshop support is especially exciting for those who cannot commit the time to learning another program but are already experts with Adobe products. The ability to import pre-designed product templates from Photoshop will positively impact the way busy printers think about web-to-print in the future.

If it's not broken, then don't fix it. It is an understandable attitude to have when making changes to a delicate workflow where time is money. Many printers are hesitant to adopt a web-to-print component or update their current system to an HTML5 solution for this reason. Clients increasingly want a more hands-on and personalized approach when it comes to their printed products, and integrating a client-side web editor with the same bells and whistles that the major players have has never been easier. These newer web-to-print solutions can be deployed via any ASP.NET/IIS server and cloud-based subscription services are often available as an alternative. This class of web-to-print solution can be directly embedded into the HTML code of an existing website, causing little to no disruption in existing setups.

## The Support Side of Web-to-Print

Although these technologies are easy to learn and use, they are not infallible. What if there is a hiccup while a major order is in progress? You do not need to be a major corporation with a staff of developers to implement or troubleshoot these products as most of the companies behind them have a strong support element. They understand the fears that come with integrating something new into an existing workflow. Vendors are also aware that more support may be needed as this technology is normalized in the industry. Installation and troubleshooting will be common areas of concern, but customization for specific project parameters is also a must for many printers. Thankfully, customizability

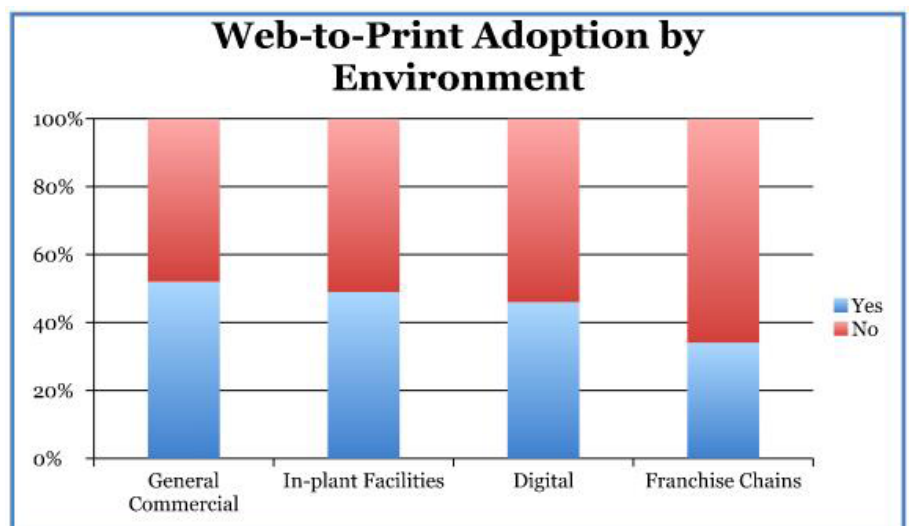
is perhaps one of the greatest strengths of today's web-to-print technology, and vendors are prepared to tailor these solutions as needed.

The rapid transition to an automated printing industry is a challenge we all face, and web-to-print technology has continued to evolve, in tandem with digital printing, to meet this challenge. If adopted correctly, these solutions are poised to harness automation as an engine of increased productivity, precision, and profits. Let us explore further web-to-print's current state in the industry, so that we can better understand its role, the challenges its implementation may pose, and the benefits we stand to gain.

# Understanding Web-to-Print's Role

At the moment, North America is the global leader in web-to-print with 46% of providers adopting such a solution<sup>3</sup>. While it is a bit of a shame that this number has not bridged the gap into the majority of printers, 2015 saw a compound annual growth rate of 9% for web-to-print solutions, and the trend is not expected to slow down in the future. As of 2011, 52% of general commercial printers have made the shift. The further breakdown (Fig. 1-2) shows that 49% of in-plant facilities, 46% of digital printers, and 34% of franchise chains have also adopted a web-to-print solution. We can bloat on how wonderful the numbers are all day long. They still do not address the questions that the average printer has in mind: Is a web-to-print solution appropriate for my business? How can it fit into my existing workflow, and how can it improve my customers' experience? In this section we will examine why such a large share of the market is transitioning to web-to-print, some of the industry challenges that motivated the switch, and the markets they are hoping to crack with a W2P solution in place. By looking into how web-to-print is currently being utilized, we can find out what the average printer stands to gain by adding it to their workflow.

Fig. 1-2: This chart shows web-to-print adoption by environment as of 2016.



<sup>3</sup> InfoTrends, 2012.

## Why Companies are Making the Shift

The frank answer to this question is dollars and cents. Web-to-print tools are enabling businesses to save money and then pass these savings on to their customers. The main enabler for this is, of course, automation. The time saved through further automating the workflow is also resulting in higher profit margins for companies that choose to adopt. Especially for companies that have followed the cutting edge of automation technologies like PrePress, Workflow, and MIS, web-to-print is the next logical step in increasing automation in the workflow. In addition to the benefits of automation, printers are turning to web-to-print as a means to access new marketing channels. The digital age has heralded in a new consumer, one who wants instant gratification through an online storefront. The success of companies like Vistaprint and Moo are evidence that consumers would like to purchase their print products in the same way if the option is available. The online portal not only benefits customers, as print providers would like the option to cast a wider net to gain customers from all over the country rather than being limited to the local area.

## Embracing Automation

First, let us explore how web-to-print can enhance an automated workflow. On a fundamental level, automation is great for two reasons: 1) it keeps costs in line due to less labor hours, and 2) quality is improved and more consistent. Web-to-print only pushes this further. From the beginning, order submission is more streamlined through a standardized workflow that almost guarantees receipt of the accurate files required by production software. This is important, as it caters to today's popularity of small, highly customized projects as opposed to large-volume runs. These unique, smaller projects flow into a shop in a continuous stream and need to be managed efficiently for the work to be profitable. Web-to-print solutions can manage these jobs with more precision than a human ever could, and in less time. Digital printing technology is evolving just as fast as web-to-print, and together they can tackle this influx of customized, high-value applications at a speed that makes them almost as lucrative as the long-run projects that we are seeing less of.



## Embracing New Marketing Channels

Not only are these customized jobs in demand; customers want a customized user experience as well. Convenience is also a major priority, and today's consumer will usually opt for an online storefront first if it's available to them. In 2016, Americans bought more of their products online than in brick-and-mortar businesses for the first time since data was kept<sup>4</sup>. If the average consumer is getting 51% of their goods online, then there is no good reason that a print shop should not adapt their strategy to meet this demand. With web-to-print, it's now possible for even small print shops to have their own little version of Amazon. The online component of newer web-to-print solutions are highly customizable and make an experience similar to big players like Vistaprint's more accessible to any printer. Expanding your business online is also a potential goldmine of new customers, as anyone with an Internet connection and within your shipping boundaries can do business with you. This new market can also place orders 24/7 and the preparations for the job are made even if the shop is closed. Print shops are only limited by the online strategy they choose to employ and how much volume they can handle. It is hard to avoid sounding hyperbolic, but web-to-print really can change a print shop's outlook by providing access to this new online channel.

## Client Niches for Web-to-Print Solutions

Now that we can see the potential motivations for adopting web-to-print technology, let us take a look at the client niches that can be successfully targeted with a solution in place. Business-to-business printing (B2B) is especially important today as web-to-print has given us unparalleled branding control. Large corporations can now be assured that their materials will stay consistent over time. Although the runs are smaller, business-to-consumer (B2C) still holds an important roll today. These jobs are highly varied, and web-to-print gives the customer the ability to design these products in an online editor. There was a time when many in the industry believed that the Internet was going to be a deathblow to print. Perhaps it's ironic now that the Internet has given print yet another new niche to fulfill in the form of cross-media marketing platforms

<sup>4</sup> Stevens, 2016.

like email marketing, mail marketing, and other services. Let us see how web-to-print can make each of these niches more within reach for today's average printer.

## Web-to-Print and Business- to-Business

Large businesses need to have a myriad of different collateral and additional printed marketing materials, as well as other print products that are used internally. These jobs can be high-volume, which means that easily avoidable mistakes can be costly. Web-to-print enables printing companies to offer an interface that can accept orders from other businesses. These interfaces can even be customized for each business. To avoid the aforementioned errors, businesses can upload the standard templates for products like business cards and letterhead and then put certain restrictions on these templates. For example, maybe an employee can edit their name and email address on a business card in the editor, but they cannot move or change crucial elements like the background and company logo. Other than spelling errors on the user's part, it is now impossible for a mistake to occur with the design itself. Guaranteed precision is something that large corporations look for with their materials, especially when something such as employee business cards is largely an afterthought in their day-to-day operations. Later, we will discuss a revolutionary feature called markers that enables these restrictions and permissions in an unprecedented manner.

## Web-to-Print and Business- to-Consumer

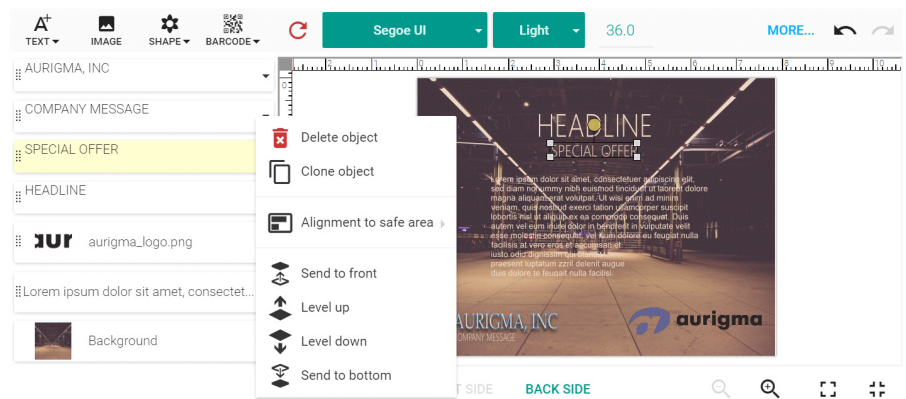
For the days that a print shop does not have massive orders from big corporations pouring in, they need to be able to accept any job, anytime, and from anyone. There was a time not too long ago when this was not possible. If a customer walked into the shop with a JPEG of their pet cat on a flash drive and asked if they could have it printed on a single mouse pad, the owner would probably not turn them away, but it is a drain on resources to have to take the time to do such a small, specialized job for a small return. While you still cannot question your client's taste, web-to-print will now allow you to take small jobs like this cat mouse pad

without blinking. The same online portal that you can offer B2B clients can be used by anyone as long as it's embedded into your public website. With this portal, your customers can now design their own highly customized products in an online HTML5-based editor with a user-friendly interface. This lifts a burden off of your in-house designers who can then direct their time to other projects. With the template controls we mentioned earlier, even those who are not print-savvy can create their own designs with little help and a low threshold for mistakes. From mouse pads to custom photo books, clients from anywhere in the country can submit their orders at anytime, resulting in a continuous stream that makes these low-volume jobs a lucrative market.

## Cross-Media Marketing Platforms

Much like the increase we are seeing in small-run, high-value jobs, another niche that is taking the industry by storm are cross-media marketing solutions. Those in the industry who have stopped fighting against the Internet and have turned to embrace it are finding that print and the Web can work together. Many businesses are finding great success with cross-media marketing campaigns that use multiple media channels to deliver a message. There is a large generational divide amongst consumers and it can be difficult for a company to know what their audience responds best to. The solution is a shotgun blast of print, email, and mobile strategies with SMS and/or QR codes. Web-to-print working in tandem with variable data can develop a very broad, yet personalized campaign. According to a joint survey with the USPS and Digital Marketing Association, 78% of Americans sort through their mail while standing over a garbage can. Cross-media relies on more than just print, but it can help print shops remain profitable even if a large portion of their customers' audience falls into the category that does not respond well to direct mail.

Fig. 1-3: An online web-to-print editor based on HTML5.



## HTML5: The Next Step for W2P

When discussing the current state of web-to-print, it is important to keep in mind the outside technological forces that the solution must adapt to. The fact of the matter is that some web-to-print solutions that are already on the market are quickly becoming obsolete. This is directly related to the demise of Adobe's Flash platform, which is being phased out in lieu of HTML5. The less we see of Flash, the more compatibility problems and general technical issues customers will see in web-to-print online editors, which no one needs a long paper to explain how this can result in frustration and lost sales. This is not a secret to the innovative web-to-print vendors out there that have kept up with these technological trends. The next step in the evolution of web-to-print is rooted in HTML5 (Fig. 1-3), the convenience of which is proving to be far more superior to Flash. The beauty of HTML5 is that any online component of W2P can be integrated seamlessly with an existing website simply by injecting the HTML code of the program, or as easy as copying and pasting. Additionally, Flash was never made to be compatible with mobile phones and tablets, and it is not likely to ever be as it is phased out. This is problematic for web-to-print solutions that use Flash because we are starting to see a major shift in e-commerce traffic to mobile platforms. HTML5 solutions can be implemented just as easily for mobile devices, thus customers will not lose functionality for the online portal whether they are on a laptop or a tablet.

# Rolling Out the New Normal

There was a time when web-to-print's efficacy was very uncertain. That time is quickly receding in the rear-view mirror. It's only a matter of time before web-to-print becomes normalized and those who continue to choose to procrastinate on adopting a solution may miss out on their share of the market. However, it is important to discuss the obstacles between the average printer and a web-to-print solution that is appropriate for their purposes. Only after vendors recognize these challenges and try to address them can we expect the trend towards adopting web-to-print technology to continue robustly. Once a printer does become interested in adopting web-to-print for the first time, or updating a current system, they will need to be aware of the options available to them. The beauty of any technology's eventual crystallization into the market of a given industry is the competition that produces several options that are appropriate for all players, and when it comes to web-to-print, there are several. After taking an honest look at the challenges involved with W2P, we will explore the three main categories of web-to-print solutions in hopes of helping any print shop find what works best for their situation.

## The Challenges of Adopting W2P

Even after understanding the multiple benefits of a more automated workflow and recognizing the new markets that a web-to-print solution can provide access to, it is only prudent to also become acquainted with the possible challenges associated with W2P. For any shop that does not have experience with web-to-print, as well as those that want to update the existing systems in place, there are some valid concerns. The first and foremost is the learning curve that comes with new technology, not only in how to use it, but also in how it can be integrated into an existing workflow without throwing it off kilter. Some smaller printers that are lacking an IT department or tech-savvy employees would also be concerned

with the support component of a new system. Vendors must provide their own skilled employees that can install and troubleshoot the software; otherwise, we are back at square one – the insurmountable learning curve. There may be some technical limitations, for example, is the software powerful enough to take into account image resolution requirements, design optimization, or special image processing algorithms that are necessary for a well-functioning workflow? Even after all of the above is considered, what about the costs? Surely any solution hailed as a magic bullet for all the printing industry's woes must be prohibitively expensive. We will elaborate on the reality of these challenges below.

## Maintaining User Friendliness

The workflow of a print shop – large corporations and small businesses alike – is finely tuned and sensitive to even minor changes. The old adage “time is money” is never truer than when a small hiccup holds up a high volume job with many more waiting in line behind it. It's not too surprising then that some printers are reluctant to adopt a web-to-print solution, or update an outdated one, due to fears of a time-consuming learning curve. Money spent on time lost to figuring out the quirks of a new program is perhaps a cost that some web-to-print vendors don't think about when promoting – or even developing – their software. Not everyone is a developer, nor does every shop have one on site. What printers really want is something they're already familiar with; perhaps a little program called Photoshop? It would be great if there were a web-to-print solution out there with an editor capable of supporting Photoshop templates. The fantastic news is that something like this does exist, and we will discuss this timesaving functionality in more detail later.

## Difficulties in Effective Integration

The learning curve for web-to-print technology can be considered on two fronts. Once the user learns how the software works, they must also learn how to integrate it into the existing workflow. Of course, there is no point in paying for the newest technology if there is no utilitarian purpose

for it. For a busy print shop that has no pause button, there is only time for the simple equation of costs and return on investment. Some of these costs could be bigger than the sticker price of a vendor's solution if the workflow must be halted for a longer amount of time than expected to integrate it. There is also a real possibility that the solution could waste time rather than save it if it is not implemented properly. All web-to-print technology is not created equal, and solutions that would work for a large facility will not apply to the small mom-and-pop shop. Therefore, education on the part of the printer in this regard is incredibly important, equally so is a vendor that knows how to audit a workflow properly before deciding how best to integrate a web-to-print solution.

## Lack of Technical Support

That brings us to the support component of web-to-print technology. In many cases, printers have taken in a lot of information and anecdotes on how web-to-print can make their business more profitable, but their technical knowledge outside of the presses they run may be limited. To pull on what is becoming a common thread, it all comes down to time. Printers should not be left with their shiny new technology without any idea how to use it, nor should they be expected to learn all of the intricacies on their own. Vendors of web-to-print solutions need to have a strong technical support team in place for consulting, installation, and troubleshooting. This should be considered as part of the package that customers are paying for. Unfortunately, this is not always the case. As with any industry, there are going to be unscrupulous vendors out there that only want to close a transaction and then move on to the next. The result is the continued perception of web-to-print as something that is too complicated for the small printer; something that is only appropriate for large teams that have the know-how to implement it.

## Technical Limitations on the Backend

All of the technical support in the world cannot fix the limitations that are built into a product. Whether some features were too expensive to develop or impossible given the skill and time put into development, some web-to-print solutions show their weaknesses when faced with certain challenges. For example, there are special image processing algorithms that must be applied to designs within the internal workflow between job submission and print fulfillment. These algorithms are usually not available in the form of complete web-to-print toolkits. Furthermore, the file sizes of print designs are often much too large to be transferred to the frontend of web-to-print software and cannot be opened in a web browser. For the full system to work effectively, special techniques are required to optimize these designs on the backend before they can be displayed in customer portals online. These two limitations are unseen, but their functionality is crucial. However, the user interface of web-to-print's online software is very visible and its functionality is going to be one of the first criteria that the effectiveness of the solution is judged upon. A user friendly UI that has a similar feel to that of programs like Photoshop is very challenging to create, and it requires a very skilled programmer to be up to the task.

## Prohibitive Costs Lock Out Small Printers

Not all of the barriers between printers and web-to-print technology are technical. A full web-to-print solution often carries a hefty price, while vendors hope that the promises of higher volume, higher profits, and cost savings in the long run are enough to convince printers to open their wallets. This is often the case with licensed software products as opposed to software as a service (SaaS), which can be hosted rather than purchased outright. A licensed product is usually purchased and installed by the vendor on-site with a much higher cost upfront. Some of the larger vendors carrying the most state-of-the-art products with the highest compatibility for existing file types, such as Adobe's InDesign CC Server, are completely out of reach for small



providers to the tune of several thousand dollars per year. So, even after overcoming all of the other challenges listed above, it's not difficult to understand how a steep pay-wall could be keeping printers from implementing a web-to-print solution.

## Obtaining a Web-to-Print Solution

The vendors of web-to-print software are more aware of these challenges than anyone, and they address them with varying rates of success. For printers, there is no one-size-fits-all answer. It depends on the logistics of the operation and can often be dependent on an owner's personal preferences as well. At the moment, the web-to-print solutions on the market generally fall into three categories: complete packaged platforms, entirely custom platforms, and 3rd party ready-to-use platforms. Packaged platforms work well for printers who want an immediate solution and also do not need so much customization. Custom platforms are just as they sound – completely unique, and usually developed by the behemoth printers with equally behemoth budgets. 3rd party solutions offer the best of both worlds with their own software that is used together with standard solutions, or can be built as a custom project. To determine what works best for your print shop, let's get into the details.

## Packaged Web-to-Print Platforms

There is something about a nicely packaged, complete, and closed system that can be beautiful. If this were not the case, then Steve Jobs would have never succeeded as much as he did with Apple and the first Macintoshes. People like having a solution provided for them as is, and are content to keep their hands out of the insides. There is nothing wrong with this, that is, until you need the system to do something beyond its rigid boundaries. For most people, however, it works well enough. The same could be said for complete web-to-print platforms. They come with all the bells and whistles: a web-to-print editor, an e-commerce system, CMS, and are often available on a subscription basis, making them more affordable than licensed products. It's a great solution for a printer who only plans on coloring in the lines and doesn't need much customization.

For some printers, canned solutions are boring and do not do enough to differentiate them from their competitors, which is often the whole point of adopting a web-to-print solution. Packaged solutions may be easier to come by, but if all of the competition is using the same thing, then everyone ends up with websites that look too similar, have the same features, and no customizability to improve. Therefore, those with more custom solutions stand out among the crowd. Maybe you already have a website and just want to add web-to-print technology to it. Unfortunately, a packaged solution may require you to move to a different platform in order to use an online portal, which will wipe out all of the hard work and strategy you put into your existing site. Once you move from an existing website domain to a new one, it resets your domain metrics in search engines to zero. This is nearly unacceptable today due to effective SEO's importance in any online marketing strategy.

Furthermore, many printers specialize in highly custom items that a canned solution will likely not be able to support. To throw out an example, if a shop has locked down the niche of custom hockey masks, there is probably not an ordering workflow available from packaged platforms for such a unique job. Therefore, it makes no sense for this hypothetical printer to invest in this platform and they will be better off pursuing a more custom solution.

Finally, many complete web-to-print platforms do not support predesigned files from templates made in Adobe programs due to Adobe's prohibitive pricing. This brings us back to our learning curve problem. Without support for formats like Photoshop templates, designers will find themselves learning how to use the platform's software to recreate designs directly on the website, or use non-intuitive formats like XML to define templates in the system. This also renders any readymade templates useless, and valuable time will be wasted recreating them to be compatible with the new platform.

## Creating a System as a Custom Solution

If a completely packaged web-to-print solution is too limiting, then the obvious answer must be a custom solution, right? This is not necessarily the case. It goes without saying that creating an entire web-to-print platform is incredibly complex and it's not a job that every developer can tackle. Even moderately sized facilities may not have an IT department with the skills to build a complete system that works as effectively as a product offered by software vendors. For that reason, custom solutions are usually only built internally by large corporations that have a team of experts to devote their skills and time to it.

Keeping this in mind, it's no surprise that a completely custom solution built uniquely from the ground up would also be incredibly expensive. Custom solutions often include Adobe's InDesign CC Server, which we have already mentioned before as a culprit that can lock smaller printers out of the market due to its large price tag. While a boutique web-to-print system may solve all of a particular shop's problems, it is simply not realistic for the average printer out there.

## Third-Party Ready-to-Use Platforms

So, not everyone wants a canned solution to the web-to-print problem and building a custom solution from the ground up is going to be much too difficult for many printers out there, even if they do have some tech-savvy staff on hand. Whenever there are two absolutes, there's always a middle ground. There are vendors out there that know printers want the best of both worlds and provide their own ready-to-use web-to-print technology that can be complemented with existing open source or commercial solutions for a complete solution. This allows for the customizability that is lacking in a neatly packaged platform while the vendors providing this solution can pick up the technical slack for the smaller printers out there.

Speaking of customization, many shops are beginning to find a lot of business in marrying web and print through

the aforementioned cross-media marketing niche, which includes personalized URLs, QR codes, and custom calls to action. This requires variable data technology that can be used in tandem with a web-to-print solution. This is usually not available out of the box and would require creating a tailored solution. That's where a third-party vendor comes in to save the day by building such a platform that can handle these increasingly popular types of jobs.

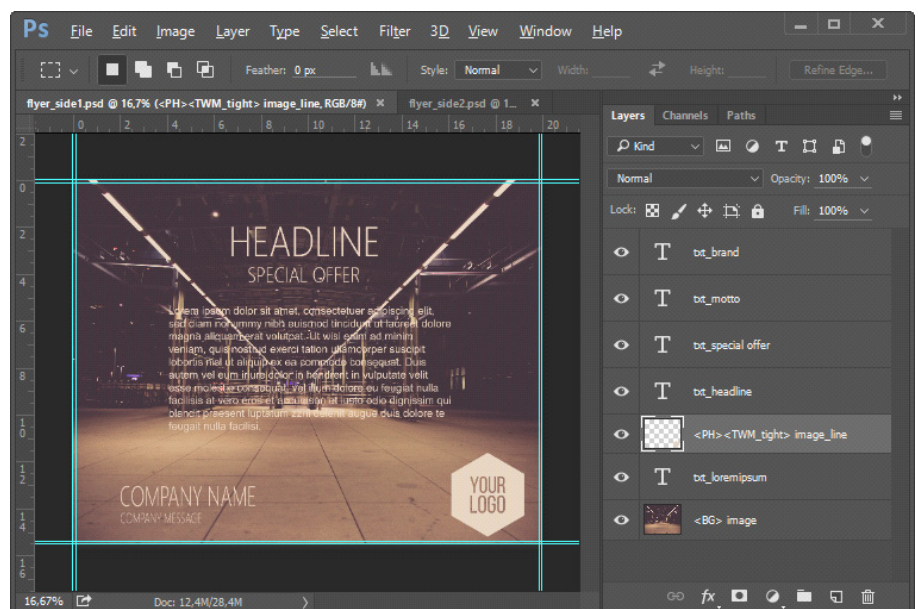
Furthermore, this solution is also great for shops that would like to add a web-to-print component to an existing website. Because these editors are rooted in HTML5, they can easily be copied and pasted into your website's code. The last thing anyone wants is to throw away the time, money, and hard work that went into their website only to pick up and move to another platform. These third-party HTML5 web-to-print editors can preserve your current SEO and content-driven strategies that you created to drive traffic to your website.

Customizability and easy integration are strong selling points to be sure, but the feature to get really excited about is Photoshop support. As mentioned earlier, several canned solutions don't support Adobe formats due to Adobe's prohibitive pricing. However, a few vendors do offer web-to-print technology that can work with Photoshop templates, such as Customer's Canvas from Aurigma. You can simply import a multi-layer PSD template with images, text, shapes, and smart layers. You or your clients can then edit these elements with the HTML5 editor embedded in your website. Having this ability in your tool kit can save you time that would otherwise be wasted recreating the template from scratch on your site.

Every printing company has someone who speaks Photoshop, and using this universal language that we all know and love helps to drastically reduce the dreaded learning curve present with web-to-print. Markers are another special

feature that can be used with Photoshop integration. Once these markers are added directly to a layer name (Fig. 1-4), they can define certain permissions for each layer that the web-to-print software then executes when a template is uploaded. For example, if you're printing business cards, the logo is a design element that you probably do not want to be changed or moved between runs, so you can simply add a marker to prevent this. Once in the HTML5 editor, you can also disallow clients from making changes, thus avoiding costly mistakes.

Fig. 1-4: Markers within brackets can be inserted into layers to disallow users from editing certain elements. The highlighted layer contains markers for an image placeholder and text wrapping.



As fitting as the third-party option might sound for a wide range of printers, the technology doesn't run on rainbows and unicorns. It is sophisticated stuff, especially creating a custom system for data technologies and niche jobs. The vendors that carry these solutions built them with a more intuitive web-to-print solution in mind and have the expertise to dial in the product to suit your needs. They can often be hired on a contractual basis to develop an interface for whatever niche that happens to be your bread and butter, whether it's personalized Frisbees for disc golf teams or graphic mouse pads for gamers.

# Conclusion

As automation inches its way into more steps within the print workflow, and the benefits of this become too many to ignore, web-to-print pushes the envelope further. Where apprehension existed before, we can now be confident in web-to-print technology's application for printers of any size. The learning curve can be shortened by platforms like Customer's Canvas that support Photoshop templates. Integration into your workflow has never been easier with online solutions that are based in HTML5 and can be inserted directly into a new or existing website without damaging any of the hard work, time, and money you have put into your online strategy. Qualified experts from vendors have the knowledge to tailor a web-to-print system to your unique needs and will be on call to troubleshoot and augment your solution when new updates roll out. Third-party ready-to-use platforms are able to provide all of these robust features while keeping costs down through subscription-based services, allowing every printer to access this technology. Print shops of any size should be encouraged to look into these versatile third-party platforms as soon as possible, because the future of their business does depend on it.

## Adopt Early and Future-proof Your Business

Investing in a web-to-print solution such as Customer's Canvas will not only streamline your workflow, increase precision from order submission to order fulfillment, and open up new marketing channels, it's also something that every printer should consider as the trajectory of the industry continues to shift in this direction. Technology only gets more advanced, and eventually we will be left with two groups: those who chose to adopt W2P and those who were left behind. A web-to-print solution is a crucial step in future-proofing your business by keeping up with the latest developments in automation technologies and getting that extra competitive edge by expanding your client base through an online portal. Even those who have already invested in older W2P technology should heavily consider updating their system to support HTML5 web editors as Adobe Flash continues to be phased out.

We still have 54% of printers in the industry that have not chosen to adopt web-to-print. In other words, there is still tremendous opportunity for those who have not yet pulled the trigger. However, in a world where the Internet is increasingly considered as a basic right and commodity, this number is only going to decrease as adoption becomes necessary to remain competitive. The smaller that number gets, the more growth will level out as the technology becomes normalized, and you don't want to be the one who starts out on a plateau. Now is the time to absorb as much information about web-to-print as possible, talk to other printers who have successfully grown their businesses with this technology, and realize the awesome potential it has for your own business. With web-to-print, a new age of printing is here!

# Additional Resources

When faced with a new, industry-shaking technology, the most important thing we can do as business owners is educate ourselves. If you would like to find out more about web-to-print solutions and how they can revolutionize the way you do business, please read more at the following links.

drupa 3rd Global Trends Report: <http://bit.ly/2nEzSyX>

drupa 4th Global Trends Report: <http://bit.ly/2ngudhr>

Transforming Today's Print Business for Tomorrow's Market Place: The View from 2020: <http://bit.ly/2n2cpee>

# References

Drupa. (2016). 3rd drupa Global Trends Report 2016. Global Trends (p. 5). Düsseldorf: Drupa.

Drupa. (2016). 3rd drupa Global Trends Report 2016. Global Trends (p. 10). Düsseldorf: Drupa.

InfoTrends. (2012). InFocus: Web-to-Print. In-depth Report on the North American Web-to-print Market , 1.

Stevens, L. (2016, June). Survey Shows Rapid Growth in Online Shopping. The Wall Street Journal , 1.