



The Essentials of Custom Development for Printing Businesses

Whitepaper

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Introduction

Over the last several years, the printing market has steadily moved from analog to online. Today, the customer's primary requirement is for things to be done as fast and as effortlessly as possible. Consequently, only the products and services that cater to these priorities can take the top position in the market – and the majority of these products and services are digital.

Software development has allowed the printing industry to embrace this analog-to-digital trend by mainstreaming everything from web-to-print (W2P) solutions and CMS/CRM systems to automation and optimization approaches. All of these approaches are discussed in this white paper.

As a leading provider of custom IT outsourcing solutions, Sibers understands the potential that thoughtfully implemented software has for solving a business's problems, expanding its capabilities, and capably supporting its sales and marketing force. The keyword here is thoughtfully, because we believe that innovation can never be effective if it is not done thoughtfully.

When you begin exploring possible improvements in the printing market, don't be surprised if you're inundated with options. In fact, it is a real struggle not to get confused and lost in the many iterations that are available today. And it's likely you'll find yourself asking questions such as:

"How do these work?"

"Where should I start?"

"What does my business need?"

"What aspects can be innovated?"

"How do I choose the solution that is most suitable for me?"

The last question seems like the easiest. After all, when you need a pair of pants that fits perfectly, you go to a tailor. The same is true for software development. And since no two businesses are identical, every solution must be customized (or tailored) to each business. This is the only way to ensure that all of your unique needs are fully addressed.

In this white paper, Sibers provides a comprehensive overview of how to innovate your printing business using custom development. We will share our experiences, touch on successful case studies, describe the available solutions and newest approaches, and discuss the advantages and disadvantages of implementation. By the end of this paper, our hope is to have delivered an exhaustive analysis that serves as a roadmap to your success in today's printing market.

Industry Overview

Today, several trends are steadily transforming the printing industry. One of these is **marketing personalization** – the creation of personalized messages. This trend has heavily influenced the printing business in that printing companies no longer order one packaging for all their products – instead, they create five different types of packaging to convey ten different personalized messages. For the printing supplier, this means shorter print runs and a ten-fold increase in print jobs.

Another trend is **sustainability** – a trend that concerns every industry, but especially printing. People blame printing companies for wasting paper and polluting the air and water with toxic ink. The industry cannot ignore this fact, and there are lots of eco-initiatives that printing businesses can leverage to become more sustainable. As a printing business owner, you can't ignore the sustainability trend either – after all, the market is overcrowded and the fight for clients is fierce. Every advantage must be exploited.

As digital products and services increasingly replace actual printed materials, the printing industry is experiencing a decline. Over the last five years, the industry's two largest sectors – advertising and publishing – have gone almost exclusively on-line. Moreover, the growth in advertising spending over that time has not enhanced the printing industry, since this growth has taken place exclusively in digital channels. This is more proof that the demand for printing has been reduced.

In order to remain viable, the printing industry is rapidly expanding while simultaneously growing increasingly competitive. And to stay competitive, industry leaders have consistently reduced their prices, forcing smaller enterprises to try and find the optimum balance between lower prices and profit generation.

This combination of declining demand and price pressure is the biggest reason to start rethinking the printing business. Small enterprises that have tried solving this problem by integrating the latest equipment, technologies, and administrative improvements have found that this is still not enough. Yes, such additions have certainly improved their situation, but only to a point. Ultimately, **innovation** determines whether a business succeeds or fails.

What do we mean by innovation? We mean changing the way that your company provides its service. Innovation implies new business approaches and new ways of communicating with customers, as well as improvements to internal workflow and production processes. And of course, innovation should solve any problems your business is experiencing.

For the printing industry, a wide range of innovations is available: Web-to-Print, CRM, CMS to improve communication with customers; Automation and optimization solutions, Cloud Printing for issues with internal workflow and production; Print on Demand, Variable Data Printing for changing the business approach.

Web-to-print

Today, one of the most popular innovations is the Web-to-Print (W2P) market. This market is currently valued at US \$867.3B, with an estimated growth rate of 7.62% up to 2025.

Why is W2P so popular? According to DesignNBuy, printing companies are pursuing W2P technology in order to:

- Win new companies and scale their business [49%]
- Better service their existing customers [30%]
- Automate their back-office processes [21%]

What's so attractive about W2P technology, and how should it be implemented?

W2P allows your customers to self-handle such tasks as design and order fulfillment and cut out the middle-man (i.e. the design editor at a printing company). And editing is not the only possibility that W2P offers. Let's start at the beginning and discuss step by step. Firstly:

What are the obstacles to a company implementing web-to-print?

1. *No website/current website functions poorly*
2. *No understanding of how to integrate W2P into the existing website*
3. *Impractical CRM system*

A good online experience is not just about having a website – it's about having a website that is responsive and smart. Only when this happens can you take the next step (and the first step on the innovation path): implementation of a W2P solution. This typically consists of:

- 1. WYSIWYP (What You See Is What You Print) Design Editor.** The WYSIWYP Design Editor lets your client upload an image, create a mockup, preview the final result, and provide approval. Once the image is approved, the Design Editor automatically converts the file into the correct format for your printing device. From your client's point of view, the immediate preview and easy approval is very beneficial because it eliminates the potential problems associated with traditional communication – i.e. ambiguities, misunderstandings, and the risk of human error.
- 2. Order-settings and calculation tool.** This unique 'polyfunctional settings tool' not only automates order calculations but also serves as a simple online calculator with a built-in payments portal for your clients. This tool can handle invoicing and online payments, permitting an upfront cash flow and a more efficient use of your resources.
- 3. Content Management System (CMS).** A CMS facilitates easy website management. With the CMS's Admin panel you can quickly add, edit, and delete information. Moreover, a CMS provides access to your website's analytics and lets you monitor, control, and enhance your users' activity.
- 4. Customer Relationship Management (CRM).** A CRM offers seamless management of your customers. With a CRM you can efficiently communicate with clients via email, get performance data about all of your transactions, and predict future sales. A custom CRM solution also ensures that your clients' information is safe.

Here's an example of an effective CRM + W2P solution imagine a photobook publishing company that has a website and takes orders via phone and email. After optimizing their website and implementing a W2P, the company sees an influx of new clients.

How does this happen?

A strong marketing strategy comes first. The company's optimized website is now user-friendly and filled with useful, searchable terms and text in accordance with the latest trends and SEO optimization. This is where a CMS provides a big boost, as it allows for adding content, managing every action on the website, and seeing the statistics and the results of various marketing strategies – all of which helps attract new clients. From here, the website can be further optimized for search engine marketing and social media marketing – for example, generating push notifications, reviews, ratings, customer accounts, and automated/personalized email marketing.

So, the customers came. But what makes them stay?

They stay because they want to make a photobook and they want to do most of the design work on their own. In other words, they want the fastest, simplest, most cost-effective solution. No long explanations, no unnecessary dialogue, no wasting of precious time or money. If they want design ideas, the optimized website offers plenty of templates for inspiration. Also, if a question comes up during the process, the website has a special feedback form which clients can use to ensure a quick response. All of this complements an intuitive design editor, making the process of creating a photobook smooth, easy, and dare we say even fun for your clients – leaving them with a positive impression of your website and your company and greatly increasing the likelihood that they will place an order.

Finally, and most importantly: the customer placed an order. Now, what makes them come back?

As we outlined earlier, the key principles of comfort and effortlessness should be the foundation of every step in your sales process. This is especially true of the order/payment step, which is the 'point of no return' for the customer. Here is where they are most likely to turn back – and thus order calculation, payment process, and shipping must be exceptionally transparent. Without a doubt, transparency at every step of communication and production is key to not only winning but also keeping the customer's trust.

Synergy is also important, because a W2P tool is most effective when it's synergized with a CMS and a CRM. On the one hand, the CMS lets you integrate items on your website in any data form, while on the other hand the CRM collects your customers' data so that you can maximize your communication targets and positive responses. The CRM's collection process also includes performance data relating to all past/present deals and future sales forecasts.

To wrap up, the advantages of implementing a W2P are as follows:

- Accelerated work delivery
- Increased productivity by eliminating menial tasks
- Routine management tasks are automated
- Possible to offer template-based products that allow you to plan purchases in a more cost-efficient, budget-friendly way
- Lets you present your services in a way that maximizes their appeal and simplicity of use, especially for inexperienced customers

One final note: remember that a technology investment of this scope must be seamlessly integrated with the rest of your business while simultaneously complementing your customers' own policies and practices.

Automation

How do you satisfy growing demand while maintaining maximum quality?

In the printing industry, **automation** implies an upgrading of the prepress process and adding machinery so that less human intervention is required. The main intentions behind automation are to accelerate workflow, improve efficiency, and reduce the number of costly errors. This results in better service and reduced expenses.

But what happens when there are more orders than your managers are capable of dealing with? The most obvious and prosaic solution is to hire more managers. In a similar vein, you could increase your quality and order fulfillment time, buy a new printing machine, or rent a bigger office. However, all of these are costly solutions that unfortunately have been the de facto remedies for the past 20 - 30 years. Today though other solutions exist that are far more innovative and provide better value.

As you might have guessed, one such solution is **automation** – which leads us to an important question: *What parts of the printing process can be automated?*

The printing process is filled with time-consuming tasks: managing orders, managing customers, informing the customer about their order status, etc. All of these should be at the top of your 'for automation' list.

With W2P, you can automate your order management by creating a custom order

management system based on a CRM. This system functions as a control center that helps you reduce man-hours and human error while hastening the process of order completion. This system also allows your managers to focus on improving customer service.

Another aspect worthy of automation is **printing workflow**. This means connecting all of your production processes into one comprehensive system that is controlled by custom-developed software, allowing you take total control of production. Among the benefits of automating your printing workflow are fewer repetitive tasks, minimal errors, increased efficiency, and lower costs.

Job planning is another area where automation is crucial. A custom automation system lets you build process flow charts that offer real-time access to every production step at every stage, ensuring that everything goes according to plan.

Similar to job planning is **bureaucracy management**. For instance, when you link **job planning** to **administration**, your system can automatically send invoices, manage payments, and document the shipping of the final product. This type of automated approach not only helps your business run more smoothly, but it also creates a transparent environment for every stakeholder: workers, management, and last but certainly not least, your clients.

But perhaps the biggest advantage offered by automation is that it **works for businesses of all sizes**. No matter if your business is large, small, or in-between, a good automation approach will increase productivity and efficiency.

Now let's return to our photobook publishing company example. We've seen that their W2P solution has brought in new clients – but now the business faces new challenges. Here we answer the question: *how do we satisfy growing demand without sacrificing quality?*

When your company's workflow and job planning systems are harmonized, your managers do not need to waste time manually checking every order for accuracy. Instead, order fulfillment is handled by your job planning system, which means less people involved, fewer required steps, and less chance of human error. The system is optimized so that much time is saved, thereby increasing press capacity per hour increases and resulting in more completed jobs.

Here another potential issue arises: an **increased amount of documentation**.

The solution is to implement **paperflow automation**. This means linking accountancy and job-planning systems so that each production step is documented. Invoicing and payment processes can also be earmarked for automation, saving additional time and labor. Plus, your managers will have more time for quality control and feedback analysis. The resulting improvements in customer service mean that the photobook publishing company can easily manage the increased demand.

Now let's imagine this company wants to not only survive in the printing industry, but thrive and become a market leader. Here, a new set of tests arise that demand proactive solutions.

Optimization

Similar to the automation process, **optimization** involves creating a management system for organizing your printers. This is not an independent process, but rather works in collaboration with workflow and job planning automation. Usually, optimization is a logical continuation of a new automation solution. It allows the system to collect data related to performance, capacity, utilization status, etc., all of which is valuable information for future modifications and an invaluable tool for decision-making. Nowadays, optimization is an 'on-the-surface solution', but it should only be implemented after careful consideration of your business's weak points and goals.

When implementing optimization tools, several different growth vectors are involved: **environmental sustainability, device management, color management, and corporate solutions**. Although we will describe these here in general terms, it is worth mentioning that optimization is a personalized approach that may include all of these vectors, or just some.

Environmental sustainability

Sadly, the print industry today is often considered an environmental disruptor. Paper consumption, carbon footprint, and air and water pollution are the biggest negative reflections on the industry's activity. By optimizing your printing processes, you can help reduce materials waste and decrease excessive consumption. For example, the simple integration of workflow **automation** (as described above) allows for sending jobs to more efficient printers – resulting in reduced waste, saved toner, and optimized archives. Also, don't forget that automation reduces energy consumption too. And believe it or not, just by making a simple adjustment

to the layout of a PDF, you can reduce paper waste by 4x.

One more way to support the principles of environmental sustainability is to create an **Environmental Management System (EMS)** and get it certified. An EMS controls all of your company's environmentally-relevant production processes

Device Management

Businesses today must maximize device efficiency. A big part of this is being aware of all the costs related to each device. For example, it is crucial that a printer does not exceed its optimal recommended duty cycle. Also, choosing the right location for a device can help reduce costs – for example, situating your most cost-efficient printers in the busiest work areas. Print optimization software can help you understand which of your devices are under-utilized or over-utilized so you can properly match them to the print volume of your work areas. Once you've taken these steps, your printers will produce the optimal amount of work at the lowest cost.

Color Management

Optimization software can also solve your color management problems, allowing you to maximize printer capacity, easily calibrate your press, and repeat print jobs without color deviations. Through optimization software it is also possible to enable toner-saving settings that substantially reduce printing costs related to ink and toner.

Optimizing Print Files

The print process can be further streamlined by optimizing the size of your print files. This can be achieved by using a file compression tool that reduces bandwidth consumption while not compromising quality. Another thing you can do is optimize the print datastream sent to the printer spool. This too requires a compression of print files, because small files help ease network traffic.

Corporate Solutions

Ultimately, each business requires its own solutions for optimization. For some businesses, this means optimizing the corporate structure and human workflow processes. For example, a big manufacturer might find it wise to design user-friendly interfaces so that its employees spend less time trying to figure out how the device works, contacting technical support for assistance, etc.

Trends

Many print companies today not only create specific designs for specific products in specific regions, but also create exclusive, one-time designs for special occasions. Automation has broadened the scope of business and marketing opportunities in this area, to the point that an automated workflow and custom printing software can easily support this trend towards maximum personalization.

Cloud printing is a game-changing innovation that has already been embraced by big players such as Linux and Lexmark. Cloud printing is based on the idea that there is no need for on-premise employees and servers. Instead, print jobs are executed remotely, which enables driverless printing. No software driver is required to connect a device to a printer – instead, you have access to whatever you need to print, straight from the cloud service. Another reason for the growing popularity of Cloud printing is that it greatly improves device management.

Variable data printing is a printing technique for creating documents with ‘boilerplate’ text – that is, documents such as wedding invitations where all the information stays the same except for things such as names and dates. An extension of this is **variable image printing**, whereby a document’s text remains the same but the image changes.

Variable data printing is a perfect solution for personalized communication with clients, as it allows you to print unique messages and deliver them to your clients as a part of an ongoing marketing/advertising strategy.

Print-on-demand (POD) is a business approach that has already gained recognition amongst many e-commerce store owners. POD is an order fulfillment method wherein items are printed as soon as an order is made, often without order minimums. With POD, creators can print customized designs for a variety of products and then sell them. Some of the most common products for POD include books, t-shirts, baseball hats, and tote bags. A savvy company can make around \$5000 per month just from POD activities.

Sustainability and corporate examples. As previously noted, the printing business faces ever-increasing demands to be more environmentally conscious. This is an issue which no business can ignore. Whereas sustainable printing may have been an

option or a luxury in the past, today it is a necessity. Some actions to make printing more eco-friendly are:

- Using paper from renewable forestry harvests
- Using biorenewable ink
- Implementing energy efficiency programs
- Utilizing alternative sources of energy
- Integrating an online ordering system
- Using water-soluble/biodegradable/recyclable chemicals
- Collecting and recycling waste paper

On the corporate side, Hewlett-Packard (HP) has introduced low-carbon printing initiatives. Meanwhile, Print Authority is minimizing its use of chemicals by using soy- and vegetable-based inks, as well as plant-based toner. JakPrints plants a tree with every order, while Conquest Graphics saves approximately 6,500 trees each year by recycling. Last but not least, PsPrints offers its customers the option of using recycled paper and soy-based ink.

Ultimately, two things are clear: customers not only prefer sustainable companies to non-sustainable ones, but they are also becoming more vocal about their desire for companies to practice eco-friendliness.