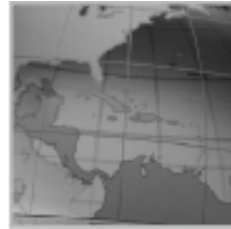


White Paper



April 2016

Shelf Impact: A New Frontier for Digital

Opportunities in Packaging with Digital Color Printing

Prepared for Konica Minolta PROKOM



Prepared By



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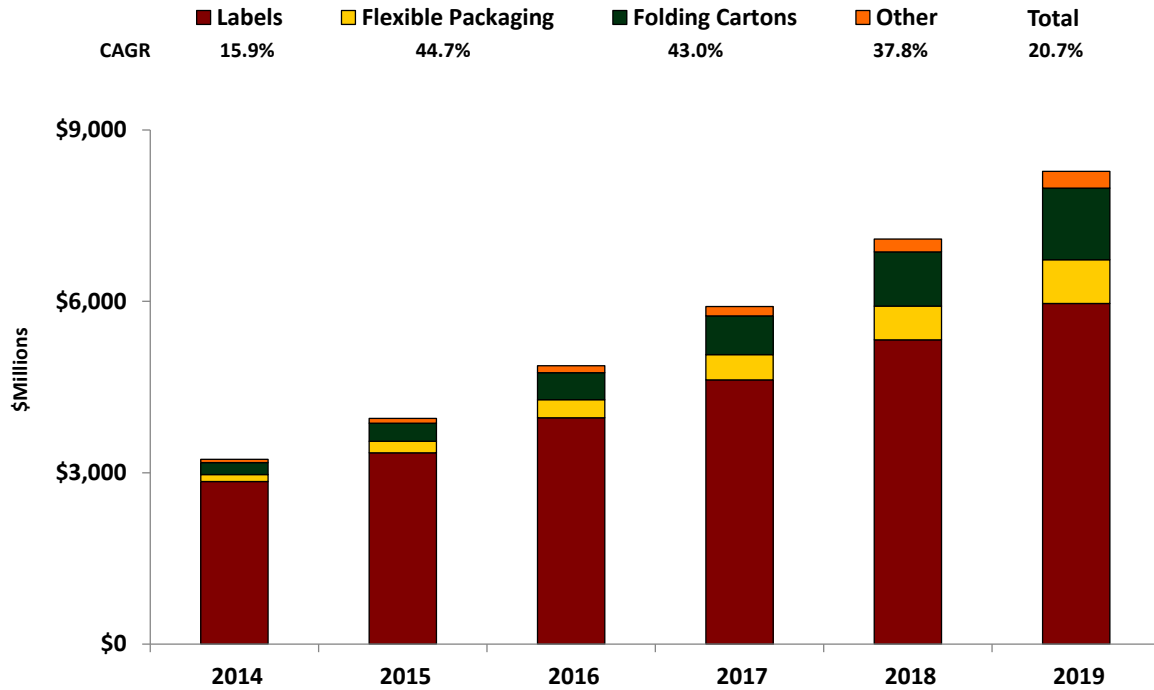
Introduction

When it comes to fully embracing digital printing, packaging is the next frontier. Innovations in printing hardware and workflow software are unlocking market potential by solving brand owners' core challenges. Today's market is demanding shorter runs and more targeted versioning, and brand owners are leveraging digital output as an alternative to offset- or flexo- printed packages and labels while also uncovering new solutions for packaging concerns like counterfeiting and safety. Digital packaging now offers solutions that overcome a wide variety of challenges, including shorter product cycles, increased personalization, versatility in substrates, production of limited quantities, and frequent promotions.

The Market Opportunity

Packaging represents a substantial opportunity for print providers. Almost all items are sold with some form of packaging, and this is an application that cannot be displaced by digital media. With fierce competition on retail shelves, marketers are willing to test the waters with digital printing to capture shoppers' attention and share of wallet. In many cases, brand owners change their packaging designs more often than they change their actual products. The market is also seeing a continual demand for prototypes, versioning, short-run printing, and customized printing/cutting. Brand owners are keen to streamline their packaging operations with better supply chain management, and there are also a number of innovations in product packaging for today's security and anti-counterfeiting initiatives.

The packaging market is poised to experience a significant transformation as digital printing moves from niche applications to more widespread use. Digital printing is improving workflow, enabling innovative marketing, and getting products to market faster than ever before. In fact, packaging is a double-digit growth market for digital print technology. InfoTrends' latest forecast data projects that digitally produced packaging will demonstrate a compound annual growth rate (CAGR) of 20.7% between 2014 and 2019.

Figure 1: Global Press Value of Print by Application: 2014-2019

Source: *Color Digital Label and Packaging Press Market Forecast: 2014-2019*, InfoTrends 2015
 Note: "Other" category includes non-packaging applications produced on packaging printers (e.g., posters)

Digital printing or print on demand (POD) for packaging builds on some of the same techniques that have been used by commercial printers, in-plant shops, and corporate offices for quite some time in document-oriented applications. This technology is now poised to transform packaging design and inventory as well as supply chain management. Using variable data, it offers the ability to create versions and respond rapidly to changing design, brand management, security, and regulatory requirements. It represents the next frontier for digital printing.

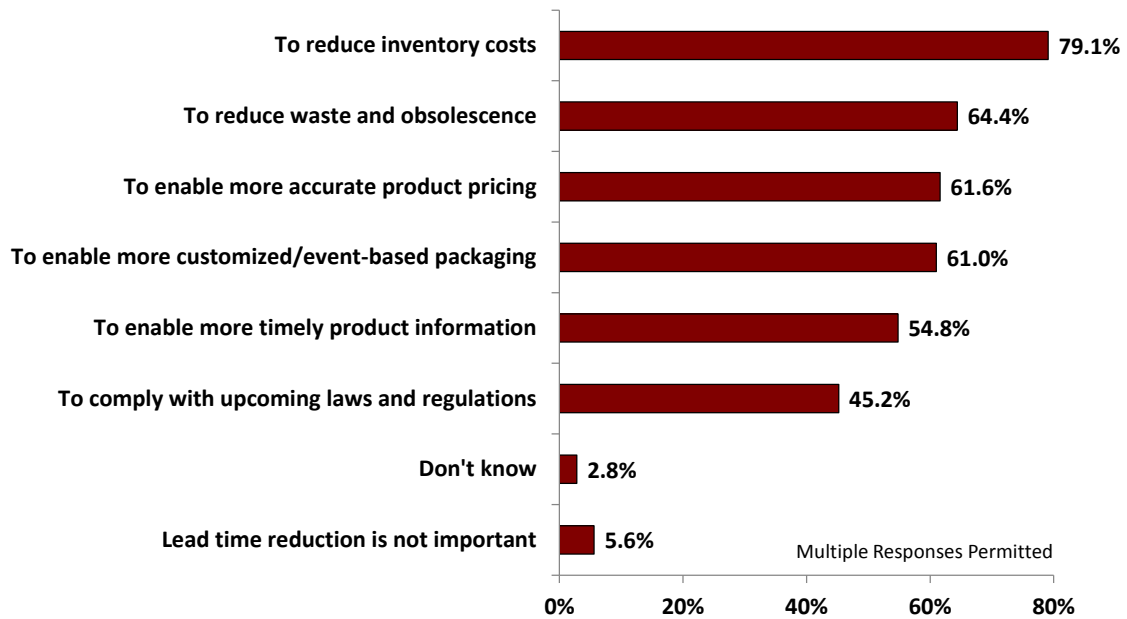
Brand Owners Are Seeking Solutions!

In 2015, InfoTrends completed a multi-client study entitled *The Future of Digital Packaging Workflows*. During the course of this study, over 150 converters and 150 brand owners of consumer products were surveyed to determine the challenges in today's market and gather perspectives on the implications of digital technology.

Most converters first consider purchasing a digital press so they can satisfy the demand for short-run jobs. More and more brand owners are turning to converters for versioning, specialized short-run jobs with consecutive numbering, bar coding, and variable text applications that cannot easily be done on any other type of device. The potential business impact of digital print is becoming well-understood, and converters realize that they cannot ignore the growth in this market.

Among the brand owners that InfoTrends surveyed, the objectives are clear—they want to reduce the costs associated with inventorying packaging materials as well as potential obsolescence. Today’s brand owners are demanding solutions that enable more accurate pricing, make it easier to customize, provide more timely product information, and comply with ever-changing laws and regulations.

Figure 2: Why is lead time reduction important to label and packaging management?

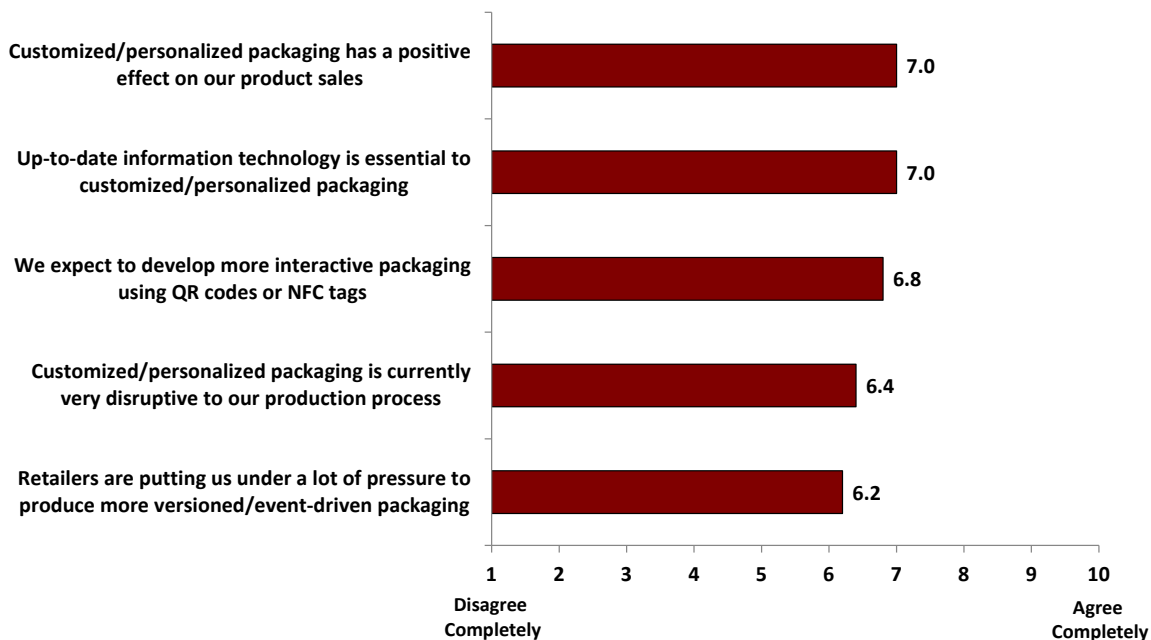


N – 177 Brand Owners

Source: *The Future of Digital Packaging Workflows*, InfoTrends 2015

These brand owners also understand that packaging is integral to overall selling activities. InfoTrends’ survey data shows a clear movement toward more customization, personalization, and versioning. When asked to specify their level of agreement with various key statements, brand owners place an emphasis on making packaging more personalized and interactive to drive consumer engagement.

Figure 3: To what extent do you agree or disagree with the following statements? (Means)



N – 177 Brand Owners

Source: *The Future of Digital Packaging Workflows*, InfoTrends 2015

There is no doubt that today's brand owners are seeking solutions. Digital technologies and the ability to cost-effectively deliver short-run products resolve a number of issues and enable a number of creative marketing opportunities.

Unwrapping the Benefits of Digital Packaging

Converters and print service providers that understand the value of digital printing can become a strong asset to brand owners in their packaging strategies and production efforts. Opportunities exist in a variety of markets, including healthcare and pharmaceuticals, cosmetics and luxury products, and technology. The value proposition is clear when it comes to communicating with brand owners.:

Flexibility

Brand owners are under enormous pressure from their channels (namely retailers, distributors, and wholesalers) to reduce costs, comply with regulations related to sustainability and food labeling, and increase speed to market. Digital packaging and labels offer brand managers the flexibility to fine-tune their efforts by running smaller quantities for test marketing, regional marketing, and seasonal marketing. Digital production eliminates expensive setup costs as well as long lead times.

Furthermore, marketers can use packaging to structure interactive dialogues and communities with end consumers. They are creating packages with quick response (QR) codes, augmented reality, and near-field communication (NFC) tags to encourage brand recognition as well as customer interaction.

Package Testing

New products are the lifeblood of nearly every company's growth strategy, not to mention a source of enormous investments in development, research, and advertising. The success of a new product is often largely dependent on effective packaging. For established brands, many shoppers come to the shelf seeking a specific product. The primary role of the packaging is to ensure easy recognition of the brand/product that these people know and trust. Packaging is often the last step of an extended process. After years of new product development and concept testing, packaging is likely to be rushed to meet an introductory deadline. Digital package printing technology enables companies to accelerate testing processes and procedures and shorten the associated time to market.

Supply Chain Optimization

Digital printing technology is transforming the packaging supply chain by cutting costs, shrinking cycle time, and minimizing errors and defects. Supply chain managers typically expect their printing partners to deliver high reliability and premium quality, minimal errors and defects, short cycle times from order entry to delivery, the management of multi-lingual requirements, integration with supply chain manufacturing and technology, and fulfillment of orders in desired (not forced) quantities.

The savings associated with digital printing technology resonate with supply chain managers. On-demand printing makes it possible to individually tailor packaging to specific clients while saving on raw materials, and it also releases capital that might otherwise be tied up in stock. The migration to "just-in-time on-demand" means a reduction in warehouse demands that can be directly linked to cost savings.

More SKUs

An increase in the number of product SKUs (i.e., stock-keeping units, in other words, individual, purchasable items) has been a major trend in recent years. Consumer goods manufacturers have expanded their product offerings to accommodate shifting customer demographics. For example, the increase in single-person households has created a need for products in smaller amounts. These manufacturers must also accommodate retail channel demands for specific product versions while also communicating special and/or seasonal promotions on their packaging.

Customization for Target Markets or Events

Marketers understand that the ability to produce unique printed products creates a wide variety of opportunities while also helping to ensure brand and image integrity. Apart from production quality and convenience, items like wine labels can include hotel or restaurant names and images, or even be personalized for special occasions or very loyal guests. Cosmetics and toiletries can be branded to specific retail outlets or particular locations. Golf ball cartons can be customized for tournaments, which ultimately can make them collector's items. Packaging that is versioned for specific markets or incorporates multi-lingual support is proving to be tremendously valuable to brand owners. Marketers can easily do seasonal promotions for holidays like Christmas, Easter, Valentine's Day or Mother's Day.

Personalization and Versioning

More and more customers are approaching converters and print providers with specialized jobs involving consecutive numbering, barcoding, multiple languages, and variable text that cannot be completed on conventional printing presses. Converters are beginning to understand the potential business impact of digital, and they can no longer ignore the growth in digital demand.

Sustainability

Consumers are pressuring manufacturers to produce sustainable products, and this effort includes a product's packaging. Digital printing is a sustainable process. Environmental advantages include savings in ink,

materials, and support processes, owing to a streamlined make-ready that produces good labels and folding cartons within a few minutes. In addition, the elimination of printing plates reduces waste and expenses while also contributing to a more environmentally friendly process.

Capturing the Opportunity

How can you capture a share in this profitable new business opportunity? This section provides some key tips and steps for succeeding in digital packaging.

Define and Deliver the Value Proposition

It's important to find the right sales contact that will understand the marketing value as well as the cost savings associated with digital packaging printing. The value of digital printing will not appeal to a buyer that only cares about cost per piece. The best sales contacts will have a total view of their organization's goals and costs and will also be in a position to advocate change. You need a big reach into a customer organization to get the attention of the right decision-makers.

Your next steps: Expand your reach deep into customer organizations. Host an educational event or open house and invite customers that have the most to gain. You must overcome the customer knowledge hurdle with education efforts. Many brand owners don't understand the value of digitally printed packaging, while others believe that it is too expensive or difficult to manage.

Establish the Right Workflow to Maximize Automation

A key challenge that is facing converters and packaging printers is reducing manual labor in the production process, all while producing an increasing number of jobs. This is a common trend for label and folding carton printers. Having a fully automated workflow that starts with online ordering is essential.

Your next steps: Talk to your customers and discuss how you can integrate with their workflows to build more efficient and agile supply chains. Software investments should be ongoing; businesses that invest in software tend to outperform their competitors. By investing in workflow automation, you can free up your people to focus on activities that add value to your business.

Recognize the Importance of Color Management

Brand owners expect the colors on their packages to be accurate and consistent. Strong color management skills are table stakes for serving the packaging market. Color management is a multi-step, continuous process that all print service providers—offset and digital alike—struggle with. Over time, the process of delivering consistent and repeatable color across a fleet of equipment has only increased in complexity.

Your next steps: Consider working with an expert. Many print providers and converters seek the support of color management professionals to obtain color quality certifications and other services to improve their processes.

Understand Your Media Options

Technological innovations are expanding the substrate choices for digital packaging. As media options expand, so do the market opportunities for label and packaging applications.

Your next steps: Investigate and test your substrate options. The availability of pre-converted and dimensional materials can eliminate steps (gluing, perforating, scoring) from your workflow. Create a sample book so you can showcase your options to customers.

The Bottom Line

There is a fundamental market transformation relative to how packaging can be most effectively and efficiently produced. This change is being driven by innovations in digital printing equipment, the rise of collaborative and more productive workflow tools, and the desire among brand owners to exploit digital technologies for better customer engagement.

Brand owners are turning to packaging vendors for new application ideas that manage the supply chain more effectively and make products come to life on store shelves. Digital printing of labels and packaging creates an entirely new set of capabilities that can enable brand owners to maximize their packaging investments and drive business results.

Although the global packaging industry is only just beginning to adopt color digital printing as a key tool, brand owners will likely catch on quickly as they seek new and innovative ways to differentiate their products in the eyes of consumers. Today's changing technologies are creating major opportunities for those who are willing to make the effort.

Market demand from brand owners and the benefits associated with streamlining the supply chain will make this a growth opportunity that print service providers and label converters cannot ignore. If you haven't already explored the digital packaging opportunity, now is the time!

About the Author



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A digital printing and publishing pioneer as well as a marketing expert, Barb Pellow helps companies develop multi-media strategies. She assists businesses in creating strategies to launch new products, building strategic marketing plans, and educating the sales force on delivering value.

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