





# PACK NEW PUNCH INTO THE PACKAGING PROTOTYPING PROCESS

#### A CANON SOLUTIONS AMERICA WHITEPAPER

### ADVANCED DIGITAL TECHNOLOGIES OPEN THE DOOR TO BUSINESS-EXPANDING OPPORTUNITY

Packaging is more crucial than ever when it comes to enticing consumers to buy products in today's intensely competitive marketplace, ramping up the need for better, faster, cheaper prototypes. Packaging effectiveness is determined in large part by prototyping, which enables companies, marketing professionals and packaging designers and engineers to review and test a variety of factors ranging from color, shape and form, to brand identity, to manufacturing feasibility before finalizing the design.



In many ways, however, the current typical package prototyping process is less than ideal. Often, packaging designers and manufacturers are either cutting paper-board with a razor or possibly a digital sample cutter as they determine the structural design. Once that is decided, the graphics are printed on another device such as a proofer, small offset press, inkjet or color laser printer. The graphics are applied separately before or after cutting.

This time-consuming, labor-intensive approach is prone to error and often delivers low quality packaging prototypes that may differ significantly from the final product. To complicate matters further, multiple prototypes are frequently required for numerous focus groups, brand managers and others who need to evaluate the latest design iteration. The lengthy prototype process and related costs may limit the number of prototypes possible and can even delay final production.

The good news is that these challenges can translate into business-expanding opportunity for commercial printers prepared to transform the package prototyping process with the right digital printing, cutting and software technology.

## GOOD THINGS COME IN PROTOTYPE, SHORT-RUN AND CUSTOMIZED PACKAGING

Think about it – just about every item sold requires some type of packaging. So it's no surprise that packaging is a large, established, relatively stable industry that offers plenty of opportunity for printing businesses willing to think a bit outside the box. Or, more specifically, for those willing to get creative – and smart – about digital printing of prototype, short-run and customized packaging.

A new report, "The Future of Digital vs. Offset Printing to 2022," predicts that digital printing of packaging will grow more than 20 percent over the next five years. Several factors are expected to fuel this growth, especially in prototyping and short run customization:

- To keep products competitive, packaging designs change frequently. This creates steady demand for prototypes.
- Interest is booming in customization and personalization of packaging for different markets.
   To name just a few, packaging for different languages, microbrews and serialization of drugs or







food for safety reasons all benefit from the ability to food print short, cost-effective runs.

- The desire for quick turnaround on products related to special events such as the Olympics, the Super Bowl, music festivals or regional celebrations spurs additional need.
- The need for rapid or virtual prototyping used for situations such as customer focus groups, where a series of high quality packaging prototypes can be created for evaluation or feedback before an ultimate design is chosen. In these situations, high quality digitally printed prototypes need to be created quickly and cost-effectively.

### CUTTING TO THE CHASE: DIGITIAL TECHNOLOGY ADVANCES RESHAPE THE POSSIBILITIES

Advances in large-format digital printing technologies are game-changers when it comes to creating packaging prototypes. Packaging designers generally outsource

prototyping because they rarely have the space or budget to purchase the necessary equipment onsite, which means investing in the right mix of printing and cutting hardware and software can pay big dividends for commercial printers.

With the ability to speed turnaround, reduce costs and improve quality for packaging prototypes as well as handle custom printing jobs or cost-effective short runs for test marketing or special events, you can better serve customers, helping to build relationships and generate future business. In addition, higher quality prototypes can result in more business for your big presses, while digital printing of prototypes frees up your offset presses to handle other jobs.

Here are the key components you need to capitalize on this opportunity:

• A high-quality flatbed printer. Flatbed printers use a stationary table where the print gantry moves over the media rather than moving the media under it. With the stationary table, you can count on precise registration and avoid distortion problems in the cutting stage.

The original flatbed inkjet printers eliminated the time, labor and risk involved in the print-mount-laminate-trim



prints onto boards. Graphics shops looking for a competitive edge quickly recognized flatbed printers as "must-have" devices.

Meanwhile, digital UV inks and grayscale printhead technologies rapidly advanced, replacing solvent inks which were durable but posed potential environmental issues. Next-generation UV flatbed printers became the fastest growing segment of the digital printing market.

Today, available UV flatbed printer options provide an exceptional color gamut and easily handle irregularly shaped or precut items of various sizes, up to 4'x 8' sheets. Flatbed printers that offer the ability to print onto roll media can be particularly beneficial for printing prototypes that use both rigid and flexible substrates, assuring the client the same color fidelity and high quality no matter which media is used.

Selecting a flatbed printer with white ink capability is also valuable because it enables you to print prototypes directly onto colored or clear media and substrates.

• A digital cutting system. This system should include a robust cutting table paired with software that automates image nesting and streamlines workflow. The cutting table should include a wide variety of easy-to-use tools for cutting, creasing, routing and trimming —a smart investment across the board, not just for creating packaging prototypes.

The software system will enable you to confirm the cutting and creasing tools are assigned to the correct lines, or make necessary adjustments. It will also automatically and intelligently nest shapes for optimum fit on the selected sheet size.

### GET THE WORD OUT—AND BOLSTER YOUR BOTTOM LINE

Marketing professionals, product designers and others in the creative community may not be familiar with how digital technologies can change the way they design and work. To make the most of these new digital



capabilities, you have to educate your customers about the technology's potential to create high quality prototyping that helps them optimize consumer appeal, support informed decision-making, and save time and money.

In a visual business like printing, seeing is believing – so help your customers reimagine the possibilities by showing them what you can do:

- Create eye-catching packaging prototype samples using cutting-edge digital equipment
- Showcase your work—and your equipment—by inviting customers to an open house at your facility
- Use direct mail, email, social media and your website to highlight your expanded, value-added capabilities and the samples you've created
- Quantify and highlight how end-users can save time and money

There's no better time than now to see how advanced digital printing technologies can make a world of difference for your customers who need packaging prototypes or customized and personalized printing – and, at the same time, open the door to a world of opportunity for expanding your business.

### WHY CANON SOLUTIONS AMERICA.

Canon Solutions America recommends forward-thinking strategies to achieve the highest levels of information management efficiency for your unique business needs. Using superior technology and innovative services, we then design, implement and track solutions that improve information flow throughout your organization in environmentally conscious ways, resulting in greater productivity and reduced costs.

There are many reasons why you should choose Canon Solutions America as your provider for document management solutions. Benefits include:

- A Canon U.S.A. Company
- Business Services
- Professional Services
- Global Capabilities
- Certified Training and Support
- Flexible Finance Options
- Single-Source Solutions Provider

- Managed Document Services
- Nationwide Coverage
- Customized Industry Solutions
- Genuine Canon and Océ Parts and Supplies
- Diverse Range of Input-to-Output Technology

But that's not all. As a company that is dedicated to your needs, we support our solutions with highly skilled professionals and advanced diagnostic systems to maintain peak performance. And with ongoing consultation, we can further your document management capabilities to ensure the highest level of satisfaction and productivity.



LARGE FORMAT SOLUTIONS
100 PARK BOULEVARD, ITASCA, IL 60143