

# Flexible Packaging Production

## Fitting Your Press to Your Commodity or Value-Added Business Model

Wallace Nard

Some segments of flexible packaging have become a commodity business with low margins, multiple SKUs and shorter runs, all of which impact the cost to compete in a changing landscape. This has some printers looking to “value-added” attractions that improve their ability to stand out in the crowded grocery aisles. Those same differentiating factors offer CPCs ways to maintain their brands and attract impulse buying.

The value-added approach could incorporate heat seal, cold seal, special coatings or possibly cold foil, cast and cure, or a digital hybrid solution with inline personalization. It may rely on HD flexo and capitalize on implementation of expanded gamut (EG) and G7 capabilities. Those approaches, which have gained a great deal of interest, require a different level of discipline and workflow. Some say this can reduce print cost when fully implemented. However, there is still a big divide as many stay with spot colors or a combination of both.

Other developments include:

- Electron beam or UV/LED ink systems that utilize low-migration/low-odor, food-safe inks, offer huge advantages to implement EG/G7 because the inks are more stable on press. This enables printers to more consistently hit set target points
- Color matching on press is one of the biggest contributors of material waste and press downtime, so you have to factor in higher costs to gain improved skill sets vs. savings in material waste and improved press output
- For long runs, solvent inks that can run at high speeds will be around for some time

“There are advantages to tailoring equipment for niche markets and to specific requirements.”

- Environmentally friendly, water-based inks on paper will still remain strong for high-speed commodity packaging

All these factors are challenging to converters today.

Recognizing the changing nature of flexible packaging, it will serve you well, as a packaging provider, to look at all press possibilities and determine which fits the business model at each of your plants. Mergers and acquisitions, long on the rise in our world, have brought together many plants, a variety of workflows and a multitude of packaging requirements. With that in mind, as a printer, you should tailor a press to each individual plant's requirements and each niche market.

Disruptive forces will continue to bring about changes in how printers/converters meet challenges and will alter the press needed to compete in each area in order to remain profitable. Flexo printers have to ask, "What's happening and where is it all going?"

## DISRUPTIVE FORCES

So much is transpiring and its influence—both large and small—is being felt in every flexible packaging print shop. Some trends are rooted in consumer behavior; others in process improvement and evolution; still others in shifting commerce channels and on-demand fulfillment activities.

Let's list out and look at these disruptive forces, before strategizing on making accommodations to them—right out on the pressroom floor. Some are obvious; others have been with us for quite some time and are exerting stronger and stronger impact; still others are just starting to come to light, but are destined to become forces with which to be reckoned. Critical concerns include:

- Digital printing further segmenting certain areas of packaging and labels with short runs and promotional offerings
- Holistic packaging with the development of new, environmentally friendly materials will constantly change the way packaging and labels are delivered, driven by CPCs
- Downgauging of materials and special coatings to reduce material consumption are under widespread development
- Laminations that use multi-layer structures can make recycle and reuse more difficult
- Today, less than 14 percent of plastic packaging is being recycled worldwide, which demands change—Nestlé committed to 100 percent recyclable or reusable packaging. Procter & Gamble plans on making 20 leadership brands 100 percent recyclable or reusable by 2030
- Baby boomers and millennials with smaller households demand smaller portion sizes, which require flexibility of run size and faster changeovers

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## NEXT UP

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There is another change in the wind with e-commerce and online grocery sales. The phenomenon is predicted to capture 20 percent of total grocery sales by 2025. According to a recent study from the Association for Packaging and Processing Technologies, e-commerce sales jumped 16 percent in 2016 alone. This could become the next major source of disruption as the numbers keep growing.

Amazon and Walmart models indicate packages could very well be designed especially for home delivery, in custom formats and with promotional offerings. Some packages might be engineered to be less prone to leaking and damage for home delivery. This is very fluid at this point and yet to be determined, however, it could change the way groceries are packaged and lead to further commodification.

There will still be the need for packages with long shelf life and food safety preservation for some products, but their graphics could be simplified to reduce costs for online shopping. In-store shopping will still require packages in the grocery aisle compete with each other and impulse buying will still be a player in the market. In addition, dollar/general stores require smaller-portion packages, whereas club stores sell in bulk.

All of this is making one thing questionable for converters: "Is it worth the cost to stock different SKUs for different channels, especially since some packages and labels are becoming more complex?"

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**NO SINGLE FIT**

Most flexo press manufacturers design, engineer and build equipment according to how they perceive the overall market, and then other press manufacturers follow suit, competing one to one. It is the old “cookie cutter” approach. In my opinion, there is very little difference between the technologies each press manufacturer offers today. No longer does the old mantra, “One size fits all,” apply.

Converters are not always competing in the same markets or for the same customers. There are advantages to tailoring equipment for niche markets and to specific requirements. Also, using component suppliers you have found perform better in your operation and with your employees can improve productivity.

Since there is already a problem stemming from retirement of the experienced workforce and reluctance of younger people to enter flexo, it might just prove to your advantage to work with a company that will listen to your needs and be flexible to meet your requirements where possible.

Commodity businesses might need a central impression (CI) press to run multiple SKUs across the web at high speed. At value-added shops, that sometimes limits speed. The higher-priced CI press, with a longer return on investment (ROI), may not always be the best choice. The value-added approach could move you in another direction, such as a mid web press, if value-added short runs are your market.

CI presses have been the mainstay of the flexible packaging industry for many years, given their ability to hold close register. In today’s world of servo presses and high-precision register systems, equally close register and high print quality can now be achieved with a servo stack press, without some of the inherent problems associated with CI presses.

A stack press can offer many advantages and features a CI press cannot. With a CI press, you are always committed to the full circle of the CI drum, no matter how many colors you are printing. Not so with a servo stack press, where:

- You can bypass some decks and use only those needed, to shorten the web path

- You can truly shut down some decks and safely change jobs while the press is running
- You can print or coat front and back of the web when required

A stack deck is more operator friendly than a CI. Plus, it dispenses with the arduous task of keeping the CI drum clean. What has worked best in the past does not always apply to the future in this changing environment.

Using an all servo stack press, printers/converters now have the ability to run multiple SKUs across the web, with different run lengths. Why? How? You can drop in different SKUs according to each run length at intervals very quickly using standard ink sets.

New coatings are being offered to replace some forms of lamination, but this will not happen in all cases. Therefore, a press capable of both laminations and coating inline is best for long runs. For short runs, laminations out of line are still more productive. Following this practice, coatings can be applied inline with a downstream station—either flexo or gravure—without detrimental effects to setup and material waste. Keep in mind, there is always more waste when two separate operations are involved.

New developments with electron beam ink systems and UV/LED inks that utilize low-migration/low-odor, food-safe inks and the all servo stack press serve to eliminate the ever-present concern with heat against the CI drum. The stack’s shorter web path can drastically reduce the material waste during setup—only 26-ft. of material is needed for register and impression setting. ■

*About the Author: Wallace Nard, president of Novaflex Inc in Carol Stream, IL, has more than 50 years’ experience in the flexible packaging industry in all areas of flexo, gravure and web offset presses. Given that experience, he knows well this changing landscape. Wally has been active in FTA for decades and is a member of its Hall of Fame. Please feel free to contact him at [wnard@novaflex-inc.com](mailto:wnard@novaflex-inc.com) for additional information on disruptive forces in packaging and customizing a press to meet your needs. To learn more about Novaflex Inc, visit [www.novaflex-inc.com](http://www.novaflex-inc.com).*

