The Changing Face of Packaging: Brand Owners—and Printers—Respond to New Consumer Behaviors

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WhatTheyThink?

Abstract

The past several years have seen wholesale changes in consumer behavior, which have taken place concurrently with the adoption of digital printing and the proliferation of brand communication channels. Consumers' relationships with brands, and thus with packaging, have also been transformed, and brand owners have had to adapt. What do these trends mean for print service providers, and how can print service providers take advantage of them?

Introduction

A comment one hears often in conversation with printers and vendors throughout the industry is that "run lengths are declining," often in conjunction with "print is becoming more personalized." This is also certainly true in packaging printing and converting. However, it's not enough to say that "run lengths are declining" or "packaging is becoming more customized and personalized." These are general trends, but it's worth looking at them in the context of how consumers themselves are changing. Arguably more than any other kind of printing, packaging is the most intimately connected with the behavior of consumers, and as consumer behaviors and attitudes change, so, too, must packaging—and by extension packagers and packaging printers—adapt to those changes.

Procter & Gamble has referred to factors such as the FMOT ("first moment of truth"), the point when a package on a store shelf first attracts the attention of a consumer. What is it that makes that consumer pick up a particular package in the first place and put it in their shopping cart? The relationship doesn't end there. There is then the SMOT ("second moment of truth"), the relationship that a consumer has with a package once s/he gets it home. It can be positive (think of Apple products and the attention to detail that an iPhone's packaging boasts, or even a food package that has nutrition information clearly presented), or it can be negative (think of items—from electronics to toothbrushes—that come in impenetrable plastic blister packaging that is either impossible to get into and/or rips open your flesh as you're trying[1]).

The prevailing trends in packaging, like those in other printing segments, are driving packaging in digital directions, or at the very least to hybrid analog/digital processes. In the packaging market, the standard drivers of digital printing—shorter runs, customization, personalization—are combined with things like micro-segmentation, a dramatic increase in SKUs (stock keeping units), faster time-to-market demands, prototyping, and true packaging personalization to help drive digital packaging printing.

This white paper will look at these trends from the point of view of the consumer, how the consumer is changing, and what role the print service provider or converter can play.

[1] *Consumer Reports* magazine used to have what it called the "Oyster Awards" (http://www.packworld.com/package-type/thermoformed-packaging/bad-packaging-consumer-reports-2007-oyster-awards) or the most difficult-to-open consumer packaging. It's actually fairly encouraging that thanks to the efforts of Amazon and others, packaging has become more user-friendly and *Consumer Reports* has discontinued the Oysters. I suspect sales of Band-Aids have dropped correspondingly.

Detailing the Drivers

Let's look at some of the traditional digital-enabling drivers a little bit more closely.

Declining Run Lengths

In packaging, the statement that "runs lengths are declining" or "short-run printing" is increasing" is attributable to a number of factors.[2] The first is the proliferation of SKUs (stock keeping units). Instead of one long run of packaging for a single SKU, there are now different variations of a basic package design created for each related SKU. The best example is perhaps toothpaste. If you visit the toothpaste aisle of a grocery store or chemist's (and nine out of 10 dentists recommend that you do), you no doubt have seen that where once there would have been a single SKU for a brand of toothpaste—and thus a long packaging run—there are now a dozen or more smaller SKUs: Extra Whitening, Tartar Control, Sensitive Teeth, Sensitive Teeth with Extra Whitening, Sensitive Teeth with Extra Whitening and Tartar Control, Extra Powerful Sensitive Teeth Whitening with Extra Zesty Tartar Control Mint Flakes and Spam… and on and on. Each of those SKUs thus needs its own smaller packaging run.

Other factors affecting run length include experimentation with package designs—to determine which package will have the most effective FMOT, for example—and even new products. Companies can selectively introduce new products into small test markets without the need for a long packaging run to sit in a warehouse to be recycled or discarded if the product doesn't take off. They can print only what they need.

Then there is…

Customization/Personalization

These terms are not used entirely consistently throughout the industry, so let's clarify them, at least for our purposes in this white paper:

- *Customization*: The creation of printed materials whose content varies in some way from run to run, but is based on a similar overall design.
- *Personalization*: The creation of printed materials in which every piece varies in some way that is unique to each intended recipient.

Packages can be customized based on geography—for example, cases of beer can be customized by state or region and bear the logo of whatever sports team is located in that region—or even according to the kind of store they are sold in (see below).

True personalization may seem incompatible with packaging, but we'll look at some true personalization examples later in this white paper.[3]

[2] The usual caution here is what we mean by "short run." Ask any 10 printers what "short run" is and you'll likely get 10 different answers. For some commercial printers, under 1,000 is short-run, but for publication printers, anything under a million may be short run. The other question is, how do you count something variably printed, where each impression is unique? Is it one 10,000-impression run, or is it 10,000 one-impression runs?

[3] The famous "Share a Coke" campaign was wasn't *truly* personalized, but consisted of 250 of the most common first names of teens and millennials (http://www.coca-colacompany.com/coca-cola-unbottled/is-your-name-on-a-coke-bottle-find-out-here).

By the way, "point of purchase" and "point of sale" (POP/POS) displays are often included under the umbrella term "packaging," since such displays are often an extension of the package holding a physical product.

Changing Consumer Dynamics

The premise of marketing, starting in the late 20th century, was that consumers are individuals, and as such their purchases should reflect their own individuality. But the question always was, how is that possible when consumer goods need to be mass-produced in order to be cost effective?[4]

Many types of consumer goods—largely—don't need to be mass-produced anymore. Digital printing technologies can now allow us to create our own individual clothing, interior décor, even automobiles (vehicle wraps, e.g.). We are still in the early stages of this true personalization, but there is no reason to think that it won't accelerate.

This may seem like we're getting a bit far afield of packaging, but consumer goods, naturally, come *in* packaging. As more of our lives become on-demand, we will demand that the content that we interact with be relevant to us. And what is more relevant than content that is personalized? That becomes part of that "first moment of truth": one-to-one appeals that catch our attention.

No Time to Lose

Related to the fact that we are all individuals is the fact that we have our own individual schedules, and if there is any common denominator to those schedules, it's that there is not enough time in them. Increasingly, even personal appointments and events need to be coordinated through electronic calendar invites.

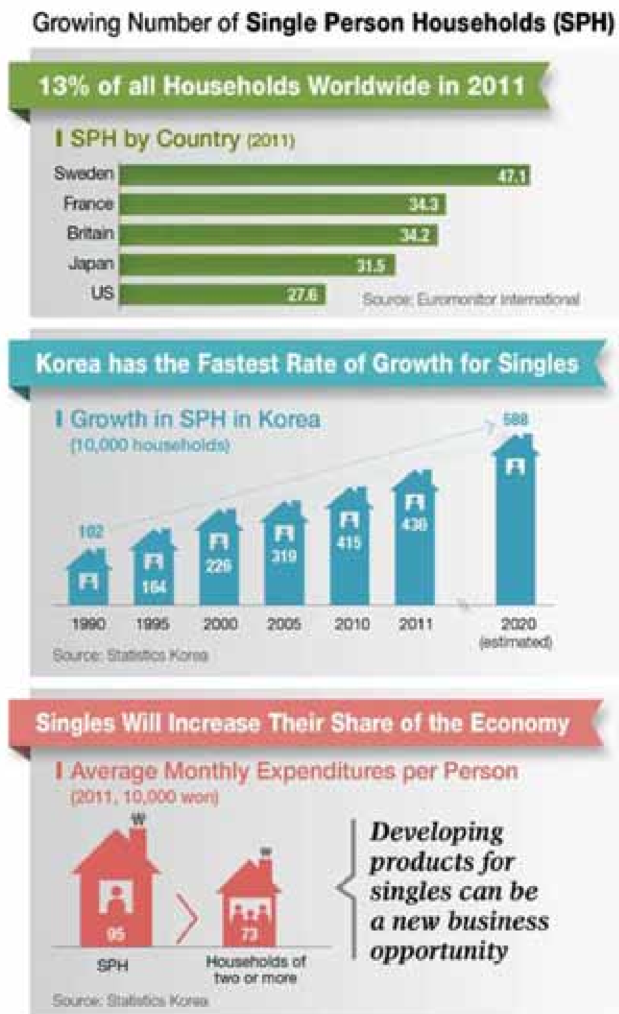
Here's a chicken-and-egg question, though: which comes first, technologies that save us time, or the need to save that time? It's probably a little of both. Take the acceleration of written communication; from the mailed letter, to FedEx, to email, to instant messaging and texting—did we always have the need to communicate immediately, or did new technologies create the expectation that now we *can* communicate instantaneously? Again, probably a little of both. Regardless, the fact remains that we all, for better or worse, live time-constrained lives. We don't have time to dwell on things for very long anymore. We want instant gratification, or at least some kind of immediacy. Whether this is good for society is a question for sociologists, but it exists, and brand owners are responding to it, and that means that their own suppliers and vendors have to respond correspondingly.

Demographic Shifts

Demographic shifts are also impacting the relationships that consumers have with brands, and thus how brand owners are tailoring the packaging for consumer products. In particular, worldwide, the number of single-person households has increased, in some cases quite dramatically. Of Western nations, Sweden, with 47.1 percent, has the greatest percentage

[4] Shades of Henry Ford's quote about the Model T automobile: "Any customer can have a car painted any color that he wants so long as it is black."

of one-person households. Even though the U.S. trails at 27.4 percent, that still represents a rise from 17 percent in 1970.[5] In terms of what this means for consumer goods, it means an emphasis on single-serving or single-use packs, and fewer "family size" packages; smaller appliances; an emphasis on items tailored for small house or apartment dwellers; and other "singles" lifestyle products. And while it's tempting to think that the rise of single-person households is just younger people putting off marriage, it also represents a growth of divorced or widowed individuals and, in the latter category, single-person senior households, with a rise in demand for consumer goods targeted at seniors. Adult education and self-improvement products have also been on the rise. This is also the result of demographic changes as the Baby Boomers are now reaching their 60s and 70s.



Ecommerce and the Role of Packaging

It should come as no surprise to anyone that ecommerce has been on the rise, and if there is anything surprising about ecommerce, it's that it only represents less than 10 percent of all retail sales, at least in the U.S. According to the Census Bureau, in Q4 2014, ecommerce accounted for 6.70 percent of all retail sales which represents "a quarterly annualized growth rate of 6.06 percent, compared to a long term average annualized growth rate of 16.82 percent."[6] If you have tried to buy things in a bricks-and-mortar store lately, you know that selections have become very limited, certainly compared to what you can get online. Prices tend to be cheaper online, as well; some retailers have complained about being the "showroom for Amazon": shoppers scope out a product like a flat screen TV or other large electronic item at a physical store, then order it more cheaply online—sometimes right in the store from their cellphone.[7]

[5] Lisa Mahapatra, "Living Alone: More US Residents Forming Single-Person Households Than Before," *International Business Times*, August 29, 2013, http://www.ibtimes.com/living-alone-more-us-residents-forming-single-person-households-charts-1401580.
[6] See http://ycharts.com/indicators/ecommerce_sales_as_percent_retail_sales.
[7] Today, brands are responding to this trend with something called "showrooming": they set up flagship stores as showrooms in which you can see and feel the product, try on shoes or clothing, for example, but the product can only be purchased online, either from a mobile phone or through in-store terminals.

The growth of ecommerce means a couple of things for packaging. The first is that, while it's tempting to think that goods sold online don't need eye-catching packaging since there really is no "first moment of truth," brand owners don't see it like that because a) the same item will—usually—be sold in a physical store and it would be more costly to have two or more sets of packaging for the different retail channels, and b) there is still a "second moment of truth," when the package arrives in the mail.[8] If you buy an iPhone from Apple, you get the same packaging regardless of whether you buy it at a physical Apple Store or from Apple.com.

Ecommerce also opens the doors to new opportunities for digital short-run packaging. Ecommerce has facilitated the growth of small and "boutique" businesses and can solve one of the knottiest problems that any product manufacturer has: distribution. These companies can now sell directly to the consumer online without worrying about selling into any kind of retail store. These small companies don't need hundreds of thousands of packages—maybe only a few hundred or at most a few thousand at a time would suffice. Many solve this with labels, but as low-cost short-run corrugated and other types of packaging printing becomes more and more feasible, it opens up opportunities for small companies to have packaging that matches what much larger consumer goods companies can produce.

Packaging Trends in the Context of Changing Consumer Dynamics

We've seen a little bit of how these changing consumer dynamics have impacted packaging, but let's take a closer look.

Customization and Personalization Revisited

We touched on customization and personalization earlier. We tend to think of these processes as putting people's names on printed materials, or creating packages that are geographically specific or versioned in some way. But some companies have developed approaches to customized packaging that are dependent upon where an item is being sold.

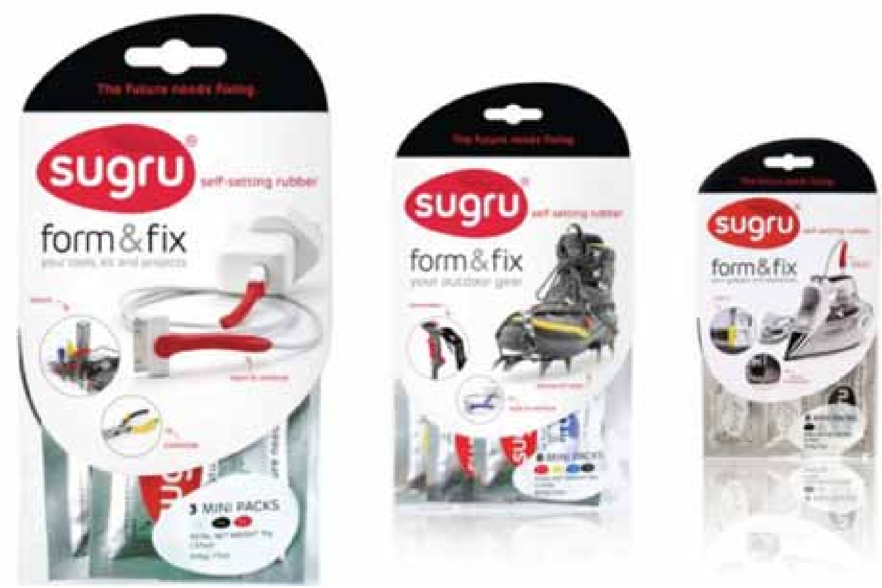
Sugru[9] is a moldable silicone-based product that, when hardened, turns into a rubber-like substance. It is used to stick items together, to make small repairs, and for other household or office uses. Such are the myriad uses for the product that the package can be altered to reflect the store in which it is sold. Sell it in an electronics store, and the package depicts Sugru used for power or connector cable repair; sell it in a sporting goods store, and the package depicts a running shoe; sell it in a housewares store, and the package depicts the material being used to repair small appliances. The same material is thus targeted to—or is made relevant to—specific types of consumers.

If we want to think of it in terms of the "run lengths are declining" conversation, it's an example of one situation where run lengths are declining simply because one long run is divided up into a number of smaller runs, like the proliferation of SKUs we looked at earlier.

Where Personalization Works—and Where It Doesn't

The "Share a Coke" bottle campaign was very successful, and other product brands have done

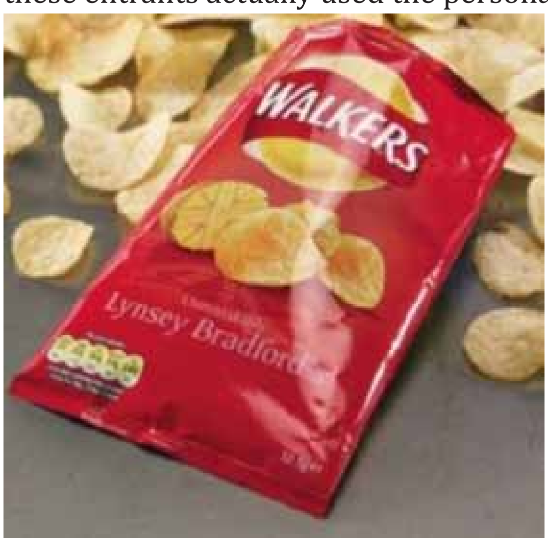
[8] Or by UPS, or by drone, depending how home delivery of ecommerce sales takes place.
[9] See https://sugru.com.



Sugru self-setting rubber is sold in packages that are customized based on the store the product will be sold in. Sell it in an electronics store, and the package illustration shows it used to mend iPhone or iPod cabling (left); sell it in a sporting goods store, the package shows it used to mend athletic gear (center); and in a housewares store, the package shows it used to mend small appliances.

similar things. Since 1934, General Mills' Wheaties breakfast cereal has featured notable athletes on its boxes,[10] such that it has become an American cultural icon. General Mills has also added to its ecommerce site the ability for consumers to upload custom photos and have them printed on a Wheaties box, so now even the most lethargic couch potato can grace the same package that features Bruce Jenner, Mary Lou Retton, and Michael Jordan.

Speaking of potatoes, in the UK, Walkers brand crisps[11] launched a campaign whereby 2,000 entrants could get their names or a unique message printed on bags of crisps. (Twelve of these entrants actually used the personalized bags to propose marriage.[12] Make of that what you will.)



Walkers offered 2,000 entrants the opportunity to create personalized chip bag messages.

It's a fair assumption that images of any or all of these personalized items ended up Facebook, Instagram, or Pinterest. Such has become the power of social media.

The point is that these types of personalization efforts help build brand loyalty and in some ways gives consumers something of a stake in the brand. And these types of one-to-one packages can only be produced digitally.

Of course, not every product necessarily lends itself to this kind of personalized approach and I would argue that it would in large part be a function of the product in question. A lifestyle product like Coke, Wheaties, or Walkers lends itself to that kind

10 Cocktail party trivia: the first athlete depicted on a Wheaties box was baseball great Lou Gehrig.
11 Aka potato chips.
12 See http://www.pepsicotogo.com/Story/Walkers-says-I-Love-You-with-personalized-bags12192013.aspx.

of personalization; a personalized health-and-beauty-care product like a deodorant or a hemorrhoid cream may not be as enthusiastically received by the marketplace.[13]

Adapting to These Trends

Brand owners and the various links in the supply chain have no control over these consumer trends. All they can do is respond to them, and adapt their own processes—creative and production—to the best advantage. Digital processes have become ideally suited to helping print providers help brand owners capitalize on shorter-run, customized, personalized, and just-in-time packaging.

How Do Printers and Converters Cope?

And how can companies like Esko help?

Understanding these demographic changes and the effects they are having on packaging is important background information to have, but it's important to look at the practical side of what all this means. How can the printer/converter, armed with this information, be more of a partner to the brand owner, helping them achieve their objectives and streamline production?

Opportunities abound for print service providers in packaging, and a comprehensive look at how to break into that market is beyond the scope of this white paper. But suffice to say, vendors like Esko can serve as valuable information resources to learn more about both the production basics and the details of that particular part of the printing industry.

Then there are tools for helping foster and grow that partnership with the brand owner. Esko offers many tools for print production providers to link with designers and brand owners and streamline the entire packaging production process. Packaging is much more akin to a manufacturing process than a printing process, and this has a lot more "moving parts" that need to be coordinated.

Packaging Management

Effective packaging management—project management for packaging—is imperative. Like any large, complex project, packaging's devils are in its details. Managing a packaging project from preproduction through the entire life cycle of the project is essential, and solutions such as Esko's WebCenter can put all these myriad details in one easily accessible place. WebCenter is a cloud-based platform that manages pre-production specifications, design, approval, and all the way through print production and converting/finishing. It is an asset manager (storing libraries of technical keylines, artwork, graphics, logos, images, brand colors, and other elements), an online editor (allowing the modification of packaging content), an approval system (allowing the review and sign-off of text and graphic elements), and an archiving system for completed projects.

[13] But I could be wrong about that. Indeed, perhaps companies that make these products could use personalization to confer ownership, such as for identifying toothbrushes or other personal toiletry or medicinal items in crowded households or roommate environments. It just takes one creative idea to kickstart a market.

Workflow Automation

More and more print production workflows today are requiring higher and higher degrees of automation, the goal being to reduce the "touchpoints," or points of human interaction and intervention. Automation is all about increasing productivity, getting jobs in and out as quickly and as error-free as possible. How do you get files from design, through prepress, and onto the press as efficiently as possible while ensuring quality control?

Packaging production has its own demands and as a result requires a compatible workflow automation system optimized for the various stages of packaging production. It requires a workflow automation system, like Esko's Automation Engine, that is scalable and easy to integrate with other parts of the business.

Prepress Integration with Business Systems

Although this varies by the size of the print business, the clear trend is to link all the various departments of the enterprise together, either in one system, or by integrating all the various sub-systems: MIS, prepress/RIP, inventory/supplies management, estimating, and so on. So a packaging management system like WebCenter and a workflow automation system like Automation Engine can be integrated with pre-existing, third-party business systems, ensuring that all the departments if the enterprise talk to each other.

Design and Production

And let's not forget structural design software tools such as ArtiosCAD, specifically created for packaging design. Such applications streamline design, product development, virtual prototyping, and manufacturing. ArtiosCAD offers 2D and 3D design, rebuildable models that let users create designs based on common standards, a library of materials, and asset management.

Knowing how changing demographics is changing the face of packaging, being able to partner with brand owners in a much more collaborative way than as just a service provider, and being familiar with the information resources are software tools that are available will all go a long way to enabling today's print service provider to play a key role in a highly dynamic sector of the printing industry.

And a big part of that will also involve keeping an eye on the road ahead.

The Near Future of Packaging

You see them everywhere. If you have been out in a public location recently, you no doubt have become intimately aware of the fact that more and more people walk around glued to their mobile phones. It's tempting to think that these "screen people" are teens or millennials, but they are not limited to any demographic category. The smartphone has simply become the way that people interact with the world, and thus with brands. It's no coincidence that one of the biggest entrants in modern transportation—Uber—is not actually a transportation company (read its Terms of Service and you'll discover this pretty quickly), but is a smartphone application platform. While this has gotten the company in a bit of trouble with many municipalities, the fact is that while many of older folks are content to hail a taxi or take public transport,[14] the mobile-enabled rider thinks nothing of using a smartphone app to call for an Uber car. Companies like Airbnb are doing the same for the hospitality industry.

What does this have to do with packaging?

As people become more dependent upon ad inextricably connected with their mobile devices, they will have the expectation that there will be some way of interacting with a product and a brand via their smartphones. There are already examples of this; technologies like QR codes and augmented reality (AR)—ways of "making print interactive"—are already being widely used (the former more so than the latter at present) and as these evolve, more creative implementations are likely to occur.

The New Supply Chain

Where does this all leave us? We have:

- changes in consumer behavior driven by (or perhaps driving) changes in technology, such as on-the-go lifestyles, greater time constraints, and the desire to be seen as individuals;
- changes in consumer demographics, such as more single-person households, especially among seniors;
- changes in the purpose of packaging, from simply being a container for products to an increasingly crucial piece of advertising, marketing, and brand management;
- the demand for an environmentally sustainable supply chain;
- the proliferation of SKUs and sub-SKUs, or different variations of the same basic product (the toothpaste variations);
- the ability to customize packaging thus target it, laser-like, in a variety of ways, from geography to the type of store a product is sold in;
- the ability to personalize individual packages (à la Coke, Wheaties, or Walkers);
- the emergence of smart packaging that can add interactive media or electronic capabilities to packaging.

These may seem like a wildly disparate group of trends, but there is one common denominator to them all: they can all be facilitated by digital printing.

Conclusion

WhatTheyThink's Patrick Henry recently wrote a blog post called "Packaging Plants Are On the Rise,"[15] a rundown of some high-profile expansions among packaging printers and converters. But there are opportunities for smaller service providers to exploit unique digital niches that take advantage of the changing consumer dynamics we have been exploring in this white paper.

[14] And even then the smartphone can be used to plan trips, or find out when the next train or bus is due to arrive. Many public transportation systems now have smartphone apps that let you track train and bus status.
[15] See http://whattheythink.com/articles/73008-packaging-plants-are-rise/.

Admittedly, packaging has been a traditionally tough market for new players to get into. There are substantial barriers to entry, not only in terms of equipment investment, but also navigating the regulatory landscape, as well as gaining the trust of consumer products companies and other brand owners who often see their packaging lines as proprietary manufacturing processes.

But as few traditional packaging printers/converters have a background in digital and how to leverage digital technologies to take advantage of the major packaging trends outlined in this white paper, the door is open for those with digital expertise. Whether it be in label printing or in other forms of short-run packaging, brand owners are looking for not just packaging printers, but partners in brand management. And the savvy print provider who can service those needs, supported by a different business model that embraces mobile technology a la Uber or Airbnb, may be just what the brand owner is looking for.

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