

Strategic Packaging Trends Shape New Market Opportunities

The packaging industry continues to create significant value for consumer products companies through innovations that reduce production and shipping costs, and design advances that can help differentiate brands and boost their sales. As a result, mergers and acquisitions (M&A) activity in the packaging industry remains robust as private equity sponsors and corporate buyers alike are positioning themselves to add high-margin capabilities to their portfolios and access new growth areas. DS Smith's acquisition of SCA Packaging Holding B.V. for \$2B was the largest completed deal of 2012, and was one of nearly 1,500 M&A deals during the past five years, according to Capital IQ.

Based on L.E.K. Consulting's experience throughout the packaging value chain, we have identified three packaging categories that are demonstrating strong innovation and have a runway for growth – stand-up pouches; flexible, tamper-evident sleeve labels; and brand protection/anti-counterfeit packaging. We believe that these vastly different categories are compelling because they have the following characteristics:

1. They demonstrate exceptional growth potential driven by demand from consumer brands and the end consumer
2. The supplier base in each market is reasonably fragmented, which creates opportunities for consolidation

3. Distinct technologies in each market enable companies to differentiate themselves significantly and capture added value

L.E.K. examines these three packaging sectors and outlines key considerations for both strategic and corporate buyers.

Stand-up Pouches

U.S. growth in stand-up pouches has lagged behind Europe and other markets for years because their higher costs and poor stacking characteristics have made them less attractive compared to alternatives such as flat pouches and rigid packaging. Stand-up pouches have traditionally been reserved for single-serve products in categories such as food & beverage.

But that's changing as advances in barriers, laminations and fitments are expanding the number of applications for stand-up pouches. They now have greater shelf stability and can be produced in a greater variety of sizes, shapes and closures. And by holding increased weight, they can now be used for contents that are greater than five pounds.

The broad array of stand-up pouch capabilities is especially relevant for consumer packaged goods (CPG) companies looking to differentiate their products in an increasingly crowded marketplace. When Campbell's launched its new *Campbell's Go* soups brand to target the Millennial generation, it replaced its iconic metal soup cans with stand-up pouches covered with vibrant

Strategic Packaging Trends Shape New Market Opportunities was written by **Thilo Henkes** and **Carol Wingard**, both Vice Presidents of L.E.K. Consulting; and **Chris Kenney**, Vice President and Head of L.E.K. Consulting's North American Basic Industries Practice. Please contact us at industrial@lek.com for additional information.

images to attract their 18-to-34-year-old target segment. The new *Campbell's Go* brand is playing a key role in boosting the company's soup sales. Dole, Ocean Spray and other food brands are also increasing their adoption of stand-up pouches.

And the advantages of stand-up pouches continue to add up, as some industry leaders note that they can be up to 95% lighter than rigid containers and reduce some product footprints by 10%. These benefits help to trim transportation costs due to lighter shipments along with packaging material costs, and help brands increase the number of products that can be stocked on limited shelf space.

Based on our work in the packaging industry, we expect that the estimated \$1-1.5B U.S. market for stand-up pouches will see high single-digit annual growth domestically during the next five years.

This diverse segment includes traditional (standard) stand-up pouches with either fitments or substrates, as well as separate retort and aseptic offerings. Segment growth opportunities here correlate with each category's level of differentiation – from 78% CAGR for aseptic to 17% CAGR for standard stand-up pouches with fitments between 2013-2017 (see Figure 1).

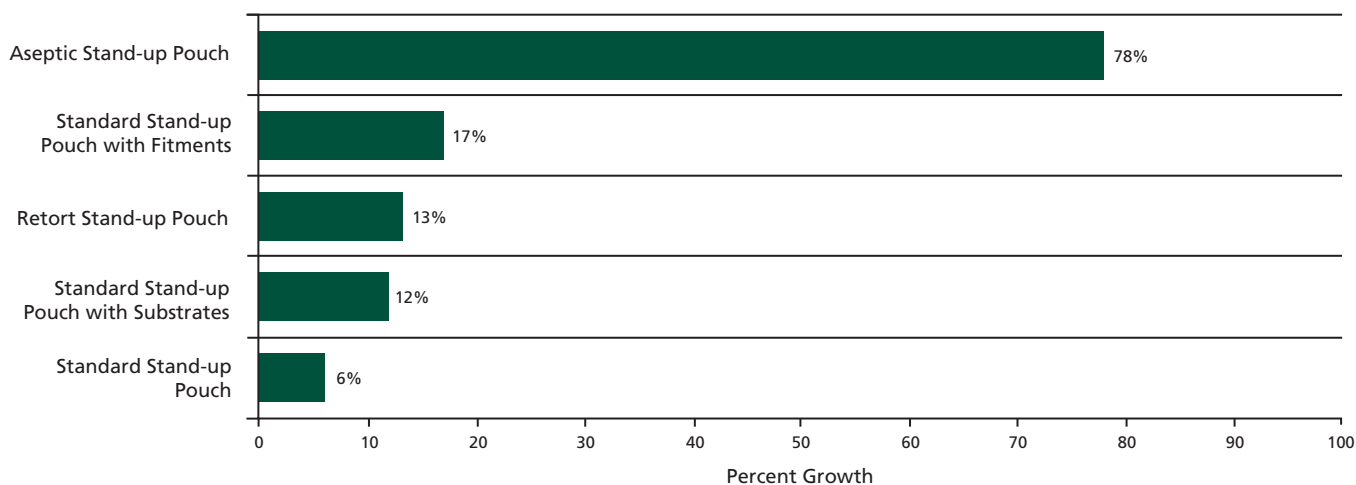
Aseptic packaging presents compelling fundamentals; however filling speed limitations will likely place a ceiling on this market. Demand for retorted food and pet food will keep the market growing for this shelf-stable packaging. Additionally, stand-up pouches that include fitments (spouts, handles, etc.) and substrates (with growing usage of pouches for high-end and organic products) also have healthy growth trajectories.

The need for specialized stand-up pouch manufacturing equipment can create financial barriers to enter these new product markets. As a result, this market includes a handful of large players that provide a suite of packaging options, along with mid-sized and smaller companies that primarily specialize in one or two capabilities. However, given the demand characteristics for stand-up pouches, we believe that CPGs will need more suppliers with scale who can offer products in multiple segments.

Flexible, Tamper-Evident Sleeve Labels

Flexible sleeve labels are providing new ways for CPG brands to blend design esthetics with safety (tamper-evident features) in both flexible and rigid packaging.

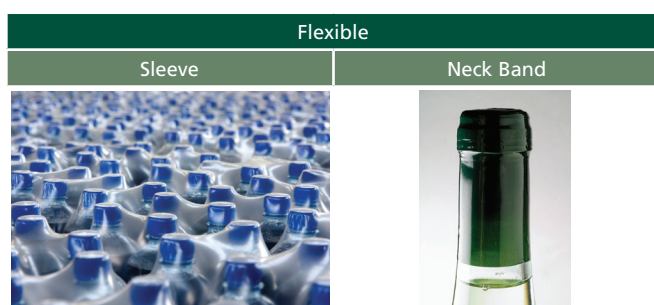
Figure 1
Projected Growth in Stand-up Pouch Market Segments (CAGR 2013-2017)



Source: L.E.K. Consulting

The U.S. market for flexible, tamper-evident packaging is approximately \$1-1.3B¹ and L.E.K. expects relatively attractive annual growth in this space for the next five years to be driven by a number of factors. First, technology improvements during the past decade have enabled sleeve labels to cover many types of packaging contours smoothly, thereby eliminating packaging creases known as “frowns and smiles” (see Figure 2).

Figure 2
Types of Flexible Sleeve Labels



Source: L.E.K. Consulting

Second, sleeve labels today can significantly improve shelf impact via 360-degree graphics from the tops to the bottoms of packages. Traditional labels typically allow 40% coverage while shrink-sleeve labels provide nearly 100% package coverage. This expanded coverage translates into 150% more container coverage and a differentiated “billboard effect” for brands.

Third, looking beyond expanded design esthetics, sleeve labels are especially alluring because they can incorporate/embed advanced tracking and security features such as ultraviolet light (UV) blocking capabilities, RFID chips, scannable QR codes, and tiny fragrance beads that release scents when opened.

Fourth, shrink sleeves can provide cost advantages for single-serve products. Shifting consumer trends are forcing brands to rethink package size as consumers are increasingly “on the go.” Companies in food & beverage and other industries are responding by providing smaller package sizes, and bundling smaller sizes together using a single shrink sleeve instead of

individual labels. This approach provides a packaging cost advantage because only one label shrink sleeve is needed instead of multiple sleeves or labels.

Lastly, tamper evidence is another growth driver for shrink sleeves. Historically, the U.S. federal government’s tamper-evident regulations have been heavily focused on the pharmaceutical industry. But that’s expanding as the Food & Drug Administration’s (FDA) 2011 U.S. Food Safety Modernization Act (FSMA) outlines the process for food manufacturers and distributors to implement controls to reduce foodborne illness. Steps for compliance could include increased tamper evidence requirements. Shrink sleeves are an attractive technology as the sleeve can cover the neck and closure, and provide a highly visible tamper evident seal.

A second, albeit smaller, tamper evident sub-category of note is induction seals. Demand for this type of seal is ubiquitous across CPG and over-the-counter (OTC) drug sectors, with growth forecast in the high single digits.

Brand Protection/Anti-counterfeit Packaging

Despite advances in categories such as liquor and high-end accessories from Coach and others, the brand protection/anti-counterfeiting segment is currently a smaller opportunity and perhaps less well known regarding the myriad of technologies in this space. To that end, L.E.K. has highlighted some emerging areas to watch, and believes that the overall demand for anti-counterfeiting solutions will continue to be strong. L.E.K. projects that this \$700M² market in North America will grow 5-6% annually, and features two sub-segments: taggants and inks & dyes.

A taggant is an invisible chemical marker that can be added to packaging materials. Unlike other security features, it cannot be copied by any printer. Because taggants cannot be seen, it makes it difficult for counterfeiters to identify this form of authentication. Once integrated into packaging, taggants

¹ Source: L.E.K. analysis, Freedonia Group, Alexander Watson Associates

² Source: Smithers Pira

can only be verified by specially engineered readers. Many packaging industry executives that we have interviewed on this topic believe that it is one of the fastest-growing brand protection/anti-counterfeit technologies. Taggants can be introduced easily into the packaging supply chain – from inks and varnishes to base components of materials such as extruded films or paperboard.

Like the early stages of many innovations, current taggant technology is relatively expensive and requires proprietary readers. As a standalone technology, it only authenticates products and is not currently bundled with any tracing capabilities.

The inks & dyes sub-category is larger and more diverse than taggant technologies, and features an array of security inks that are both visible and invisible (including UV and infrared inks). Security inks & dyes can be added to the printing process easily, either as a standalone security measure or combined with other

protective features. Manufacturers that can provide a diverse set of security inks & dyes – especially “invisible” inks – will be well positioned to differentiate themselves from their competitors and enjoy higher margins.

Charting Your Next Move

As a whole, the North American packaging industry is currently valued at \$169B³, with projected growth to \$186B⁴ by 2017. We have identified three segments: stand-up pouches, tamper evident sleeve labels and anti-counterfeit packaging sub-sectors, which are some of the most intriguing areas of the packaging industry based on potential future demand, investment opportunities, margin expansion opportunities, and areas for differentiation. Companies that make the right moves in these segments today may be well-positioned to capitalize quickly on emerging opportunities tomorrow.

³ Source: Smithers Pira

⁴ Source: Smithers Pira

L.E.K. Consulting is a global management consulting firm that uses deep industry expertise and analytical rigor to help clients solve their most critical business problems. Founded 30 years ago, L.E.K. employs more than 1,000 professionals in 21 offices across Europe, the Americas and Asia-Pacific. L.E.K. advises and supports global companies that are leaders in their industries – including the largest private and public sector organizations, private equity firms and emerging entrepreneurial businesses. L.E.K. helps business leaders consistently make better decisions, deliver improved business performance and create greater shareholder returns.

For further information contact:

Boston

75 State Street
19th Floor
Boston, MA 02109
Telephone: 617.951.9500
Facsimile: 617.951.9392

Chicago

One North Wacker Drive
39th Floor
Chicago, IL 60606
Telephone: 312.913.6400
Facsimile: 312.782.4583

Los Angeles

1100 Glendon Avenue
21st Floor
Los Angeles, CA 90024
Telephone: 310.209.9800
Facsimile: 310.209.9125

New York

1133 Sixth Avenue
29th Floor
New York, NY 10036
Telephone: 646.652.1900
Facsimile: 212.582.8505

San Francisco

100 Pine Street
Suite 2000
San Francisco, CA 94111
Telephone: 415.676.5500
Facsimile: 415.627.9071

International Offices:

Auckland
Bangkok
Beijing
Chennai
London
Melbourne
Milan
Mumbai
Munich
New Delhi
Paris
Shanghai
Singapore
Sydney
Tokyo
Wroclaw

L.E.K. Consulting is a registered trademark of L.E.K. Consulting LLC. All other products and brands mentioned in this document are properties of their respective owners.