



MARKETINSIGHTS | JULY 2015



**HAVI Global Solutions** | Grow Smarter

# BIOPOLYMER Breakthrough

Derived from renewable raw materials that may also be biodegradable, biopolymers can significantly improve the sustainability of packaging materials. But are the environmental benefits of using natural biopolymers worth the added cost to packaging?



## WEIGHING COSTS VS. BENEFITS

Experts at the Biobased Packaging Conference (BioPac) in Amsterdam debated this question as they compared and contrasted bioplastics against the petro-polymers used in commodity packaging (e.g., carbonated soft drink and wide-mouth food packaging).<sup>1</sup> When the goal is to make commodity packaging less expensive but the use of biopolymers actually increases pricing, companies must decide whether the potential benefits of promoting a natural, biodegradable packaging solution creates enough of a marketing advantage to make its pursuit economically worthwhile.

## BIOBASED BOTTLES

**Coca-Cola** debuted the world's first 100 percent natural, biobased bottle, **PlantBottle 2.0**, at the World Expo in Milan.<sup>2</sup> Manufactured using materials made from all-natural beet sugars, the bottle is the result of proprietary technology owned by biofuels and



biochemical company **Virent, Inc.** Virent produces plant-based BioFormPX (paraxylene) that is then converted by Taiwanese conglomerate **Far Eastern New Century** into renewable PET resin. Virent CEO Lee Edwards reported that the company is working with Coca-Cola to build a manufacturing plant that will allow the soft drink giant to mass produce the 100 percent biopolymer bottles and enable the company's vision to commercially produce the plant-based bottles by 2020.<sup>3</sup>

## BIODEGRADABLE BASE

**Metabolix**, an advanced biomaterials company that develops biopolymer solutions for use in manufacturing packaging, recently highlighted its high-performance PHA (polyhydroxyalkanoates) biopolymers at the International Plastics Showcase in Orlando, Florida. The new biopolymers are biodegradable in soil, compost, freshwater, and marine environments. Application of the new biopolymers in construction and packaging materials is expected to better enable companies to deliver against sustainability goals.<sup>4</sup>

# CLICK & COLLECT: Urban Delivery Evolution

With global e-commerce dollars now projected to exceed \$22 trillion USD,<sup>5</sup> addressing the challenge of secure and convenient package delivery has become even more critical. Facing an unprecedented demand for individual package deliveries, digital package lockers are gaining traction with retailers and consumers as an attractive yet economically feasible solution.



## CONSUMER CONVENIENCE

Amazon UK recently expanded the use of its Amazon Lockers service by installing a new locker at the Southport train station. The addition of lockers at popular train stations brings the total number of Amazon Locker locations across the UK to approximately 300, reflecting the success of its strategy to place them in high-traffic, convenient locations, including shopping centers, convenience stores, universities, and libraries. Amazon Lockers allow station passengers, visitors, and staff to retrieve their packages 24/7 using a unique pick-up code. The majority of

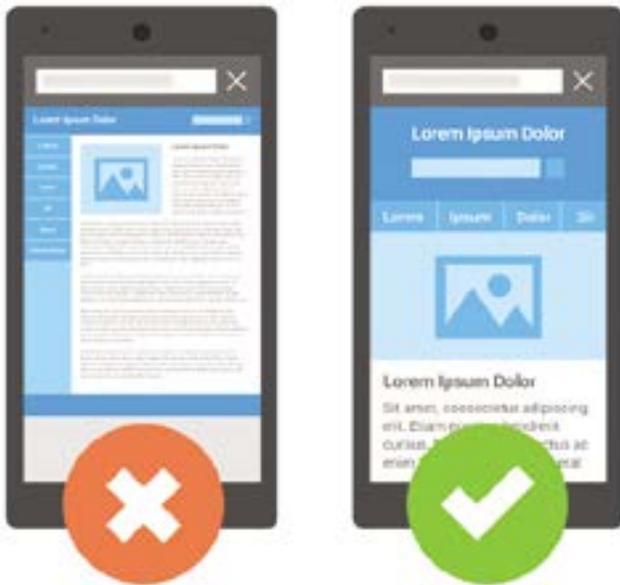
consumers receive one-day delivery service as a free benefit of their Amazon Prime membership. Consumers who are not Prime members pay an additional £1.99 to add one-day delivery to their orders.<sup>6</sup>

## COMMUNITY CONCIERGE

The challenge of efficiently managing secure package delivery is amplified in multihousing environments. Nearly one-quarter of apartment communities have invested in software to track package delivery and notify appropriate residents, the latter accomplished through text messaging, email alerts, and the like. In fact, efficient package delivery is so important to apartment residents that it is now the second most desired community amenity after fitness centers.<sup>7</sup> Boston-based **Package Concierge** seeks to improve security, delivery efficiency, and communication with its digital locker systems. The company's locker systems feature a streamlined wall of multisized steel lockers, a touchscreen control center, and 24/7 security cameras to monitor the e-lockers. Delivery carriers use unique PINs to access the system via the touchscreen, allowing them to open lockers and securely deliver packages. Once the carrier closes the locker, the resident is notified via email or text and can retrieve the package using a private PIN.<sup>8</sup>

# MOBILE WORLD: Search Favors Mobile-Friendly

When **Google** announced that mobile-friendliness would become an official ranking signal<sup>9</sup> in all languages worldwide, the updated algorithm was nicknamed “Mobilegeddon.” The strategic impact of Google’s new algorithm goes far beyond sparking fear of a mobile apocalypse across the globe; rather, Mobilegeddon reflects a marked change in consumer behavior that will fundamentally impact the way companies interact with customers.



## MOBILE OVERTAKES DESKTOPS

Although pundits have predicted that mobile usage would overtake desktop use for years, Google recently made it official, announcing that more searches now occur on mobile devices than desktops in ten countries, including the United States and Japan.<sup>10</sup> Although the other eight countries were not specified in the

announcement, likely candidates include other high-density smartphone markets, like China, India, Russia, Brazil, Indonesia, Germany, the UK, South Korea, and Mexico.

The behavioral shift reiterates consumers’ growing need and higher expectations for speedy access to information, requiring businesses to provide information to existing and prospective customers in an ever-increasingly efficient fashion. The upside to doing so is significant: Companies that provide an efficient mobile-friendly website experience should expect to enjoy more opportunities to connect with consumers on their purchasing paths.

## SMARTPHONE EXPLOSION

The need to consider mobile within the consumer path to purchase becomes increasingly evident when examining smartphone trends. Global smartphone usage is predicted to pass the 2 billion mark in 2016, a number that equates to more than one-quarter of the world’s population. Going further, projections for 2018 show that more than 2.5 billion people are expected to have smartphones, which is more than one-third of consumers worldwide.

## MARKETING

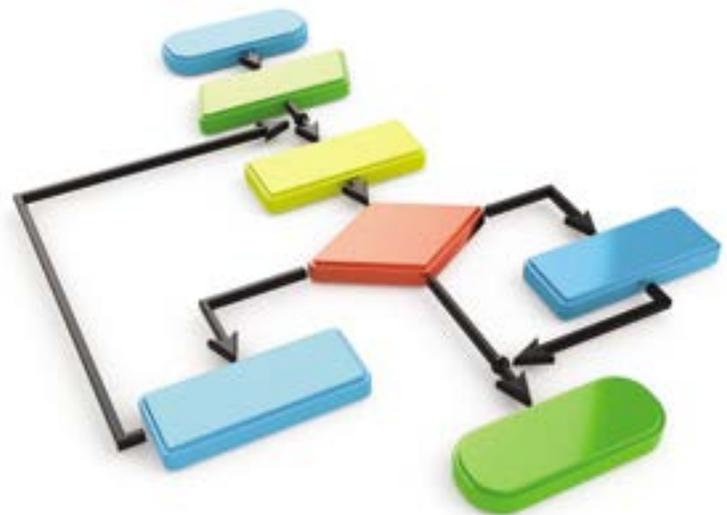
Additional expected milestones include:

- **2015:** Russia will pass Japan in having the fourth-largest smartphone population.
- **2016:** India will pass the United States as the second-largest population, with a projected 200 million users.
- **2017:** In the United States, approximately 65 percent of the population (200 million+ people) will use smartphones.
- **2018:** Indonesia will have 100 million users, becoming the fourth-largest user population.

## RANKING RULES

Mobilegeddon's implications are far-reaching for companies and brand owners that receive significant amounts of organic search engine traffic through mobile and tablet devices, though it is important to note that the algorithm does not directly affect search traffic gained through a paid-search model or true direct traffic (i.e., site visitors who type a company URL directly in the search bar). The algorithm ensures that mobile-friendly websites rank higher and appear more frequently when conducting keyword searches. Conversely, sites that are not mobile-friendly will likely experience drops in their organic rankings in Google and, as sites become less visible online, organic search engine traffic will naturally redirect itself to higher-ranking competitors.

Google's decision to respond to the change in consumer search behavior and the growth of smartphones with



an updated algorithm seems intuitive and proactive. The question that now remains for companies is how to best respond and/or leverage this new opportunity within their business agendas.

## ALGORITHM AFTERMATH

An independent study showed that nearly 50 percent of non-mobile-friendly URLs dropped in rank post-Mobilegeddon based on a comparison of the top ten results for approximately 15,000 search queries on April 17th with those from the week of May 18th.<sup>12</sup> The study also noted that Google performed a “quality update” during that time, which made it difficult to pinpoint which of the two changes—Mobilegeddon or the quality update—caused the ranking changes. Interestingly, a separate poll showed significant disagreement within the search engine optimization community about the true impact of Mobilegeddon, with only 11 percent of people surveyed seeing a change in rankings.<sup>13</sup>

Regardless of one's opinion on the impact of Mobilegeddon on site traffic, the general consensus is that the mobile-friendly algorithm is only step one of a macro shift that favors mobile search results. Indeed, with the rapidly growing usage of smartphones, companies that do not respond to increasingly mobile consumers with smartphone-friendly websites could experience revenue losses due to reduced organic search visibility, traffic, and the delivery of a substandard user experience.

# FRESH for Foodservice

In the restaurant industry, innovation drives success. For a restaurant to deliver best-in-class experiences, it must compete on multiple fronts, from food quality and safety to technology and the dining environment. At the 2015 National Restaurant Association show, several innovations recently debuted with themes of improved food safety, messaging, storage, and sustainability.

## SAFETY & SHELF LIFE

**Wilpack Packaging** won the National Restaurant Association Kitchen Innovations Award for its **Seal-a-Cup™ Cup Sealing System**, which uses heat and pressure to create tamper-evident seals to plastic cups used for yogurt, applesauce, and similar products.<sup>14</sup> The sealing machine works for cups that range from 0.37 ounce to 32 ounces, with diameters of 51, 75, and 115 millimeters. This sealer is described as lightweight and portable, and its effective seal extends product life.



Debuting at the Food Vision conference in the UK, the bioreactive **Bump Mark** is a prototype-labeling concept that allows consumers to run a finger over product labels to determine the food's freshness.<sup>15</sup> Initially inspired by the desire to create a food freshness system for the visually impaired, the label concept won the James Dyson Award for product design. A smooth label indicates that food is still fresh; a bumpy label indicates the product has passed its sell-by date. Gelatine was chosen as the label material for its protein base and ability to deteriorate along with the meat's life cycle.

## PRODUCT SHOWCASE

Packaged in 4.5-ounce, stand-up pouches, **lucy's Brownie Crisp, Triple Chocolate** allows marketing messaging to appear on all sides while emphasizing non-GMO status, as well as vegan and gluten-free certifications. **Sugar Creek Foods** displayed a space-saving, one-gallon jug without handles, the **Super Jug**.



The stackable Super Jug fits four jugs in the same footprint as three handled ones. Users simply pinch the blow-molded container to pick up and pour. Korean products company **Park Foods** featured its **Easy Café 4:1-strength drink syrups** for use in mixed drinks, teas, and more. The 40.6-ounce, high-density, polyethylene-handled carafes have a stable base and pour spout that promises 82 percent less leakage.

A 16-ounce version of these pulp-heavy purees is planned to debut in the United States.<sup>16</sup>

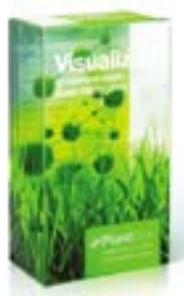


# MATERIAL IMPACT: The Latest Possibilities

Several advances in packaging were put on display at the Eastpack show in New York City, where attendees saw packaging innovations that emphasize environmental friendliness, attract the eye of consumers, and enhance product protection.

## SUSTAINABLE SOLUTIONS

New York-based HLP Klearfold introduced its **Klearfold PlantBox**, a more sustainable alternative to traditional plastic folding cartons. The PlantBox is crafted from up to 30 percent of box-grade biobased PET but retains the same properties as petro-based PET. The boxes also feature Klearfold's proprietary Soft Crease scoring technology, which better enables precise folding, uniform shaping, and structural retention.<sup>17</sup>



Also featured at Eastpack were wood-veneer labels from **Overnight Labels, Inc.** The labels could be a significant draw to consumers seeking environmentally friendly products with an authentic appeal. Printed on flexographic and UV digital inject presses, the premium labels could help enhance the brand positioning of gourmet food and high-end wines and spirits.



## BETTER BRANDING

Rohrer Corporation's heat-sealable cold foil blisters bring the technology and visual impact of cold foil—previously

limited to cosmetic and skincare packaging applications—to blister-packed products. The company's **Cold Foil Blister Card Combo Program** allows brands to seal blisters on top of cold-foil decorated blister cards. Rohrer can cost-effectively produce the Cold Foil Blister Cards in order quantities of approximately 6,250.



**Arlin Manufacturing Corporation**, a leading converter of plastic films and custom extrusion, showcased its innovative tamper-evident, multilayer, pressure-sensitive printed tape. The tape also adds packaging real estate for companies to add branding. Embedded security coatings provide additional protection, as does the printed layer that contains PET, demetallized film, or foil.<sup>18</sup>



# Credits

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