

MarketLine Case Study

Frito-Lay SunChips Case Study

When sustainable packaging
conflicts with consumers' sensory
needs

MarketLine

OVERVIEW

Catalyst

Savory snack giant Frito-Lay re-launched its popular SunChips healthier snacking range in the US and Canada in plant-based, 100%-compostable packaging, but the noise created when the product was used led to a significant consumer backlash. As a result, the company has reverted to conventional packaging for most of its SunChips lines in the US, although it has retained the compostable packaging in Canada. This case study examines how a lack of attention paid to the packaging's sensory qualities, to consumers' key needs from snack packaging, and to managing potential problems in advance, undermined Frito-Lay's re-launch.

Summary

- Environmental concerns are becoming extremely important in the food and drinks industry, with a particular consumer focus on packaging and recyclability, and manufacturers need to act on these concerns.
- SunChips had the right product profile to use for a shift over to more sustainable packaging, with a greater existing focus on health and sustainability concerns than most products in the savory snacks category.
- With sustainable packaging design still not a mature industry, there is a greater risk that new products will have unexpected traits that lead to a negative consumer experience than in product areas that are more tried and tested. Consumers are not willing to compromise on other key traits for sustainability, so this can lead to negative impacts as this particular case illustrates.
- The tagline for SunChips focused on the concept of "compostability" to the exclusion of the sustainable, plant-based nature of the new packaging. With few consumers regularly composting, and with the industry not yet mature, it is likely that the environmental benefits were not as well understood as they might have been for a broader campaign showing SunChips' environmental advantages.
- The US marketing campaign initially sought to minimize the noise associated with SunChips, whereas it was put forward as a positive in Canada from the initial launch. This left Frito-Lay on the back foot when consumer complaints occurred in the US, whereas in Canada the company controlled the narrative. It is possible that a Canadian-style campaign in the US could have made consumers more willing to accommodate the brand.

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ANALYSIS

Consumer goods companies are coming under increasing pressure from consumers, non-governmental organizations (NGOs), and regulators to ensure that their products, facilities, and supply chains meet environmental sustainability goals. In April 2009, snack giant Frito-Lay announced that it would meet these pressures and build a reputation for sustainability by re-launching its SunChips snack range in the US and Canada in a 100%-compostable, plant-based bag made from polylactic acid.

On its launch in January 2010, the range was clearly marketed as sustainable, with 30% of the space on the front of the pack dedicated to claims about compostability. Frito-Lay rapidly rolled out the new packaging across the US, with full nationwide distribution achieved for Earth Day on April 22, 2010, accompanied by a big-budget marketing campaign that not only promoted SunChips as a brand, but also allied with the US Composting Council and environmental services company Earth 911 to promote composting in American households.

However, the new bag had another important trait: due to its composition, it was extremely noisy when used, to the point that consumers rebelled. Following a reported double-digit fall in sales after the new bag was launched, Frito-Lay decided to withdraw the bag for most SunChips varieties in the US, although it retained the new packaging for the "original" variety in the US, and for all varieties in Canada. The SunChips saga is a reminder that while consumers profess to approve of sustainable solutions, they will not always opt for sustainability when they feel that it conflicts with their other needs. It also highlights some other key errors that can be made when rolling out new sustainable products.

Environmental awareness has led consumers to endorse sustainable solutions

Environmental sustainability has become a vital part of the corporate business for companies in all industries over the last 10 years, particularly those which market products directly to consumers, as concerns about man-made climate change have become an increasingly important part of the political sphere. For the food industry, sustainability is not only important from a climate change point of view, but also because consumers are more eager to understand the sourcing and processing of the products that they and their families eat.

Canadean surveyed US consumers in summer 2010 on their attitudes towards the environment. 76% of those surveyed said that protecting the environment was important or very important to them, up slightly from 74% in 2008. This ties in with data from the Pew Global Attitudes Project, showing that 62% of US consumers surveyed in spring 2010 agreed with the statement that "protecting the environment should be given priority even if it causes slower economic growth and some loss of jobs," although this was unsurprisingly down slightly from 66% in 2007, before the global financial crisis began. Canadian consumers were even more focused on environmental issues, with 76% agreeing with the statement.

In general, the importance of sustainability increases with age, except for a standout result among the 25–34 age group where there was almost the highest attributed level of importance, second only to the 65-year-old and above group. Women were more likely to appreciate sustainability in their lives than men, as is often the case with the more intangible, "softer" issues in life and consumerism.

However, such attitudinal questions do not always fully capture consumers' actual priorities, particularly when there is a "social desirability bias" to pick the "ethical" answer. Canadean's Green Consumer Survey in June 2010 found that only 18% of US consumers claimed that packaging sustainability had a "high" or "very high" amount of influence on their selection of products. Similarly, when surveyed in summer 2008, only 17% of US consumers said that packaging design was an "important" or "very important" factor in their food product selection.

Frito-Lay recognized that packaging is a crucial aspect of sustainability for food and drinks

Packaging is an important aspect of food sustainability, with a backlash against processed food products that contain multiple layers of apparently redundant packaging on environmental grounds, and a greater focus on recycled and recyclable pack designs. This comes not only from consumers and environmentalist NGOs, but also directly from major companies within the consumer packaged goods (CPG) industry.

Retail giant Wal-Mart has pledged to become "packaging neutral" by 2025, meaning that through recycling and reusing, it will try to recover as much material as is used in the packaging that flows through its stores. Meanwhile, Tony Burns, Procter & Gamble's associate director of sustainability for its global package and device development (GPDD) group, was quoted in Packaging World as saying: "...viewed through the lens of our consumers, packaging is the first thing and also the last thing that they experience with our brands. Therefore if it is important to our consumers, then it is important to us."

"Under constant pressure from government, the media, customers, and consumers, the packaging industry is increasingly being forced to consider how its products can be made more sustainable."

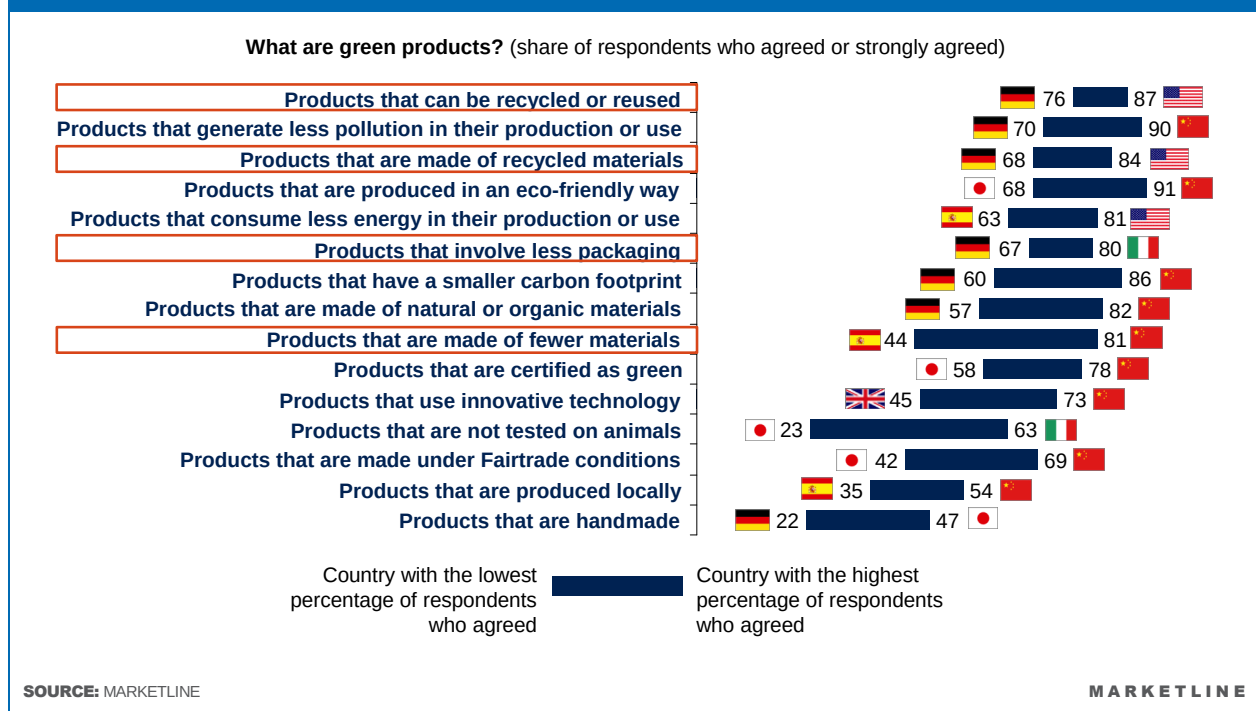
PricewaterhouseCoopers' Sustainable packaging: threat or opportunity? report, 2010

The product trait that consumers perceive as most closely associated with being environmentally friendly is recyclability or being made from recycled products. 87% of US respondents to Canadean's summer 2010 survey deemed recyclability as intrinsic to defining a "green" product. A similar finding was also presented in the journal Design Management Review. When asked what makes packaging systems environmentally friendly, participants from China, the UK, the US, and Germany "consistently offered a one-word answer: recycling" (Young, 2008).

"In all markets, a clear majority of shoppers cited 'made from recyclable materials' as the primary factor they used to determine if a package was environmentally friendly. This magic word appears to trump other considerations, including quantity of packaging material used. In addition.....most shoppers do not distinguish between 'made from recycled materials' and 'recyclable' – although the two are mutually exclusive."

Scott Young in Design Management Review, 2008

Figure 1: Packaging and associated waste is an important green issue for consumers



A specific form of recycling that has entered the mainstream in very recent times is compostability, whereby products are designed to rot rapidly in consumers' home compost bins, and turn into plant food. This is a step beyond biodegradable products, which are merely designed to rot away to nothing in the long term, over a period of months or years. Compostability requires special packaging materials and designs to ensure that the product is not compromised between manufacture and consumption, while also ensuring that the pack is fully composted after consumption.

"Like the term "renewable," there is a sense that use of the term "biodegradable" communicates something inherently environmentally virtuous. Biodegradable is perceived as positive by consumers, and there is widespread belief that biodegradable means that something disappears."

Anne Johnson, program director of the Sustainable Packaging Coalition, in *Converting Today* magazine

The majority of consumers say that "reduced packaging" and "recyclable/compostable" claims would lead to a favorable perception of a grocery product. Well over half (55%) of respondents in the 20 countries included in Canadean's July/August 2010 research perceived "reduced packaging" as a claim that would exert a favorable influence on what they buy. "Recyclable/compostable" claims are looked upon even more favorably, with nearly two-thirds (63%) saying that such a claim would lead to a more favorable perception, with nearly a quarter (22%) saying that it would lead to a "significantly more favorable perception." The data support those of the *Green Living Pulse* 2009 study, which established that the most favorably perceived description of packaging was that it was "naturally biodegradable," followed by its recyclability and whether or not it was made of recycled materials. The "halo effect" of these claims is somewhat unsurprising; after all, recycling is regarded and embraced by consumers as one of the most environmentally friendly actions (see Figure 1 previously). More generally, the findings suggest that packagers must communicate to their customers the virtues of their sustainability-guided innovation in some shape or form, because there is "marketing currency" in sustainability. However, doing this is a balancing act, as exemplified in Figure 2 below.

Figure 2: Promoting green credentials, whether more sustainable packaging or other related claims, necessitates finding the right balance in marketing communications



SOURCE: MARKETLINE

MARKETLINE

Table 1: Perceived influence of claims on a grocery product across 20 countries, by gender and age, 2010

If you saw the following information or claim about a grocery product, what influence do you think it would have?
Reduced packaging

	Significantly more favorable perception	More favorable perception	Total more favorable perception	No difference	Less favorable perception	Significantly less favorable perception	Total less favorable perception
OVERALL							
Overall	15%	40%	55%	40%	4%	1%	5%
GENDER							
Female							
total	18%	42%	60%	36%	3%	1%	4%
Male							
total	13%	38%	50%	44%	4%	1%	6%
AGE							
18–24							
total	17%	35%	51%	43%	5%	1%	6%
25–34							
total	16%	37%	53%	41%	4%	1%	5%
35–44							
total	15%	41%	56%	40%	4%	1%	4%
45–54							
total	15%	40%	55%	41%	4%	0%	4%
55–64							
total	15%	43%	58%	38%	3%	1%	4%
65+ total	13%	48%	61%	35%	3%	1%	4%

If you saw the following information or claim about a grocery product, what influence do you think it would have?
Recyclable/compostable

	Significantly more favorable perception	More favorable perception	Total more favorable perception	No difference	Less favorable perception	Significantly less favorable perception	Total less favorable perception
OVERALL							
Overall	22%	41%	62%	34%	3%	1%	4%
GENDER							
Female							
total	25%	42%	67%	30%	2%	1%	3%
Male							
total	18%	39%	57%	38%	3%	2%	5%
AGE							
18–24							
total	24%	37%	61%	35%	3%	1%	4%
25–34							
total	21%	38%	60%	35%	3%	2%	5%
35–44							
total	21%	41%	62%	35%	2%	1%	3%
45–54							
total	20%	41%	62%	35%	2%	1%	3%
55–64							
total	22%	43%	65%	32%	2%	1%	3%
65+ total	20%	45%	65%	32%	2%	1%	3%

Note: figures may not total due to rounding

SOURCE: MARKETLINE

MARKETLINE

The new sustainable packaging for SunChips was launched with a heavy marketing investment

SunChips has been one of Frito-Lay's flagship brands for a number of years, following its launch in 1991. The brand was initially positioned as a healthier version of regular savory snacks, made from multigrain, with lower fat and lower cholesterol than regular potato chips. As is often the case, due to an overlap of consumer trends driving the purchase of healthy foods and the purchase of environmentally friendly foods, the brand has gradually also adopted an environmental sustainability positioning. Frito-Lay proudly notes that the chips are cooked with steam from solar energy (albeit at only one of the seven manufacturing plants in North America where the chips are made). The brand has also partnered with National Geographic to launch the Green Effect grants program to support consumer-led environmental initiatives. Ahead of the decision to re-launch the brand in renewably sourced, compostable packs, the company's research concluded that "environmentally friendly packaging is a priority for [the] SunChips consumer."

Frito-Lay enthusiastically communicated the virtues of its SunChips snacks as the "greener" choice when launching the compostable packaging from January 2010 onwards. In the months before the new SunChips bag was even released, a TV commercial communicated the intention. Frito-Lay rapidly rolled out the new packaging across the US, with full nationwide distribution achieved for Earth Day on April 22, 2010, accompanied by a big-budget marketing campaign that promoted not only SunChips as a brand, but also allied with the US Composting Council and Earth 911 to promote composting in American households. Made from more than 90% renewable, plant-based materials, the new packaging facilitated compostable breakdown in a hot, active compost pile in around 14 weeks (the original bags, made from polymers such as polypropylene and polyethylene, were not recyclable).

"The plan we wanted to execute was 'let's make people very aware of this.' It screams on the package."

Brad Rodgers, Frito-Lay's manager of sustainable packaging, in BioCycle, August 2010

The company touted its move as a "world first," and claimed it would change the way consumers "hear, see, and think about product packaging in the future" (Just-Food.com, February 2010). Even at the time, some experts were skeptical that Frito-Lay's rhetoric may have gone too far, and that it could be a liability in the future:

"[If compostable packaging becomes a liability,] how can Frito-Lay ever divorce itself from composting, having anointed it as unconditionally good for the planet? How can SunChips ever un-become the brand in the compostable bag, when the brand virtually has been branded with that designation?"

Sterling Anthony, packaging expert, in Packaging World, June 2010

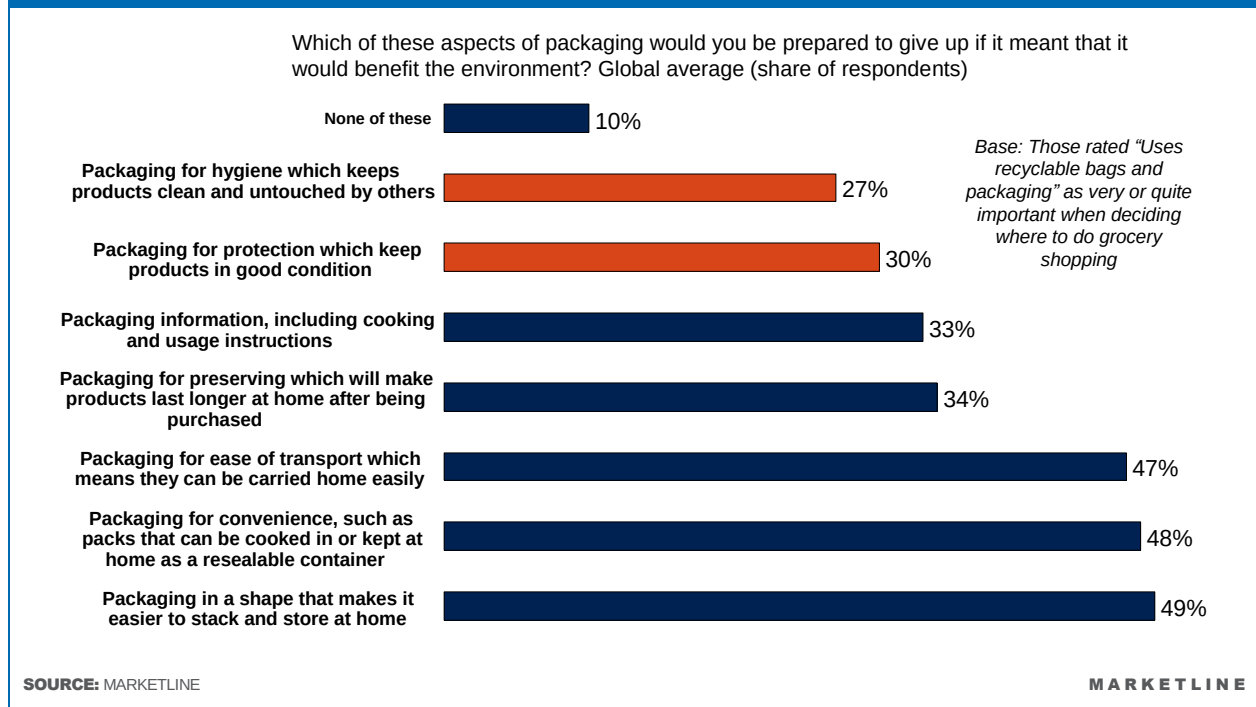
Consumers are not always willing to make sacrifices for sustainability

The problem facing any CPG company that attempts to capitalize on sustainability is the consumer attitude/behavior gap. People say that they want to purchase products that are environmentally friendly, but often do not do so, especially when the choice involves either a large cost difference, or sacrificing other key benefits. In the Journal of Consumer Marketing in 2010, Leila Hamzaoui Essoussi and Jonathan D. Linton explored the price premium that consumers claim they are willing to pay for products with reused or recycled content. The authors, albeit with a focus on non-food products, concluded that "it is also important to recognize that a positive evaluation of recycled products does not always imply a willingness to pay premium prices."

This is borne out by Canadian's research. In a 2008 survey, only 43% of US consumers "agreed" or "strongly agreed" that they actively seek out environmentally friendly products. This suggests that more than 30% of Americans, despite saying that they are concerned about the environment, do not actually let this concern impact on their shopping behavior. Even this figure could be an overstatement, since this is another question where there is some social pressure to give the

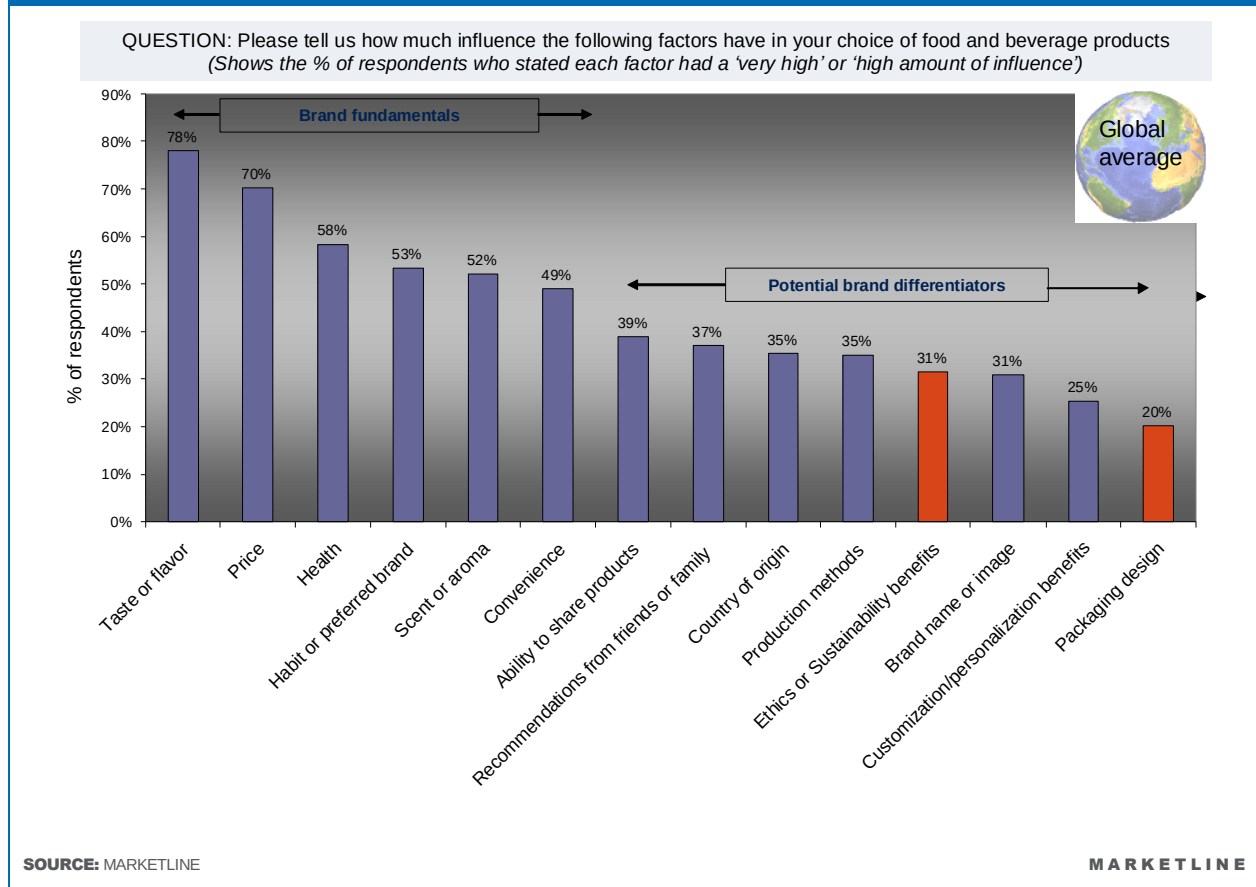
"right" answer, and even for consumers who do actively seek out environmentally friendly products *sometimes*, this does not necessarily mean that their shopping behavior is always focused on green products. Looking more specifically at packaging, a Nielsen survey found that consumers were highly unwilling to compromise on the other functions of packaging in exchange for environmental benefits.

Figure 3: Consumers in general are unwilling to sacrifice packaging functionality for environmental concerns



Canadean's consumer survey in the same year yielded a similar outcome: when asking consumers how they chose food and beverage products, environmental concerns came 11th out of 14 factors considered. Packaging design was even less important, coming 14th, while taste and price were listed as the top concerns.

Figure 4: Sustainability and packaging design are both rated as fairly unimportant by consumers when making a product choice



Packaging noise drove US consumers away, despite the environmental benefits

At the time of the US launch, Frito-Lay was quiet about the fact that the new SunChips packaging was rather noisy. Due to the physical composition of the new bag, it was more rigid than plastic or foil chip packaging, and therefore made a loud noise when manipulated.

The noise has since been compared to everything from lawnmowers to jet engines. In August 2010, the Wall Street Journal (WSJ) reported on "chip eaters griping about the loud crackling sounds the new bag makes. Some have compared it to a 'revving motorcycle' and 'glass breaking.'" Other feedback involved YouTube videos talking about the "noise pollution" from the "super-noisy" SunChips bag. Even an active Facebook group emerged with more than 50,000 "likes" (as of mid-November 2010) existing under the name of "Sorry But I Can't Hear You Over This SunChips Bag."

So, although many initially applauded the company's move toward the recyclable bags, public opinion appears to have turned against the brand. According to the WSJ article, SymphonyIRI's point-of-sale scan data showed that year-on-year sales of SunChips fell each month from January 2010. USA Today also quoted SymphonyIRI's data, stating that SunChips sales had fallen by 11% year-on-year between September 2009 and September 2010. The company was forced to face up to the negative sentiment:

"The noise of the bag could have played a role in any sort of effect on the sales. And quite frankly, we are very interested in hearing what consumers are saying about the bag. What we're trying to do is use that feedback as we develop the next generation bag."

Director of public relations, Frito-Lay North America, quoted on National Public Radio, October 2010

Figure 5: Frito-Lay's new environmentally aligned packaging for the SunChips brand quickly became the target of negative attention, due to the high levels of noise associated with it



The company reacted to the controversy in the US by providing in-store promotional materials saying: "Yes, the bag is loud, that's what change sounds like." However, competitors rapidly came up with a different take. Boulder Canyon Natural Foods issued a press release saying: "Green snacking doesn't have to wake the neighbors to be effective. Unlike the famously loud corn starch-based compostable bag introduced by Frito-Lay earlier this year, Boulder Canyon Natural Foods has introduced a fully compostable bag to its kettle-cooked potato chip line that feels and sounds like a traditional bag of chips should."

The difference is that Boulder Canyon's bag is not made from 100% renewable inputs, but rather contains a proportion of petrochemical-derived plastic. Frito-Lay could have launched a similar product if it had been willing to compromise on sourcing. However, because of its sole focus on compostability rather than the wider benefits of the product's sourcing in the marketing campaign, this message was lost on consumers.

In Canada, meanwhile, the marketing campaign for SunChips referenced the packaging's noise from day one. The initial Canadian launch campaign in February 2010 directed journalists to a dedicated page on the Frito-Lay Canada website called "New Sound of Green," which played a recording of the noise made by the bag. The noise was integrated into marketing campaigns, and consumers' expectations were shaped accordingly. Although no data have been released by Frito-Lay or by scan-data providers, it is believed and has been implied in Frito-Lay's commentary in Canada that SunChips sales in the country have not shown the same decline as those in the US. In late November 2010, this prompted the following rhetorical question in the New York Times (among 19 other marketing reflections):

“Could executives at the Frito-Lay division of PepsiCo have reversed a decision to stop selling biodegradable bags of SunChips, which were discontinued after consumers complained the packages were too noisy, if they had followed the example of their counterparts at Frito-Lay Canada and run humorous ads promising earplugs for disgruntled snackers?”

Stuart Elliot, writing in the New York Times, November 2010

Partial withdrawal created a mini-backlash among green campaigners

In early October 2010, Frito-Lay announced that it would partially drop its biodegradable SunChips bag in the US, just six months after national rollout. The compostable packaging has been dropped from five of the six SunChips flavors, but is unchanged for the top-selling original flavor. The other five flavors will, for the time being, return to the previous non-recyclable packaging. The company says that it will, as soon as possible, transition all SunChips packaging to a newer, more acceptable compostable packaging that it is developing.

The announcement provoked a great deal of public debate, much of it centering on the point that US consumers apparently were unwilling to make a relatively minor trade-off in convenience in exchange for environmental benefits. Kate Sheppard, writing in the political magazine Mother Jones, summed up the reaction among environmentalist commentators: “In the grand scheme of things, this is the absolute, bare-minimum level of sacrifice Americans are asked to make. They still get to eat the same chips, they just come from a different bag... But apparently that’s still too much. If the sound of a crinkly eco-chip bag is too much to handle, then the human species really is screwed,”

However, a short piece in the Harvard Business Review by environmental consultants Jacquelyn Ottman and Mark Eisen took a more thoughtful approach to the problem. It pointed out that, particularly because compostability is an emerging trend and is not as well understood or followed as more established behaviors such as recycling, consumers simply did not feel they were getting enough benefit from the product to make up for the fact that it was less convenient to use:

“Most consumers today don’t compost, either in their backyards or in their communities, so the value of compostability as a product attribute is questionable.”

Jacquelyn Ottman and Mark Eisen, Harvard Business Review, October 2010

In Canada, Frito-Lay has not only stuck with the noisy packaging, but has stepped up the marketing campaign in its favor. It has created full-page newspaper ads, YouTube videos, and Facebook support pages, all based on the slogan “a little more noise for a little less waste.” The company has also launched a tongue-in-cheek offer aimed at consumers: if customers believe the bags are too noisy, they can send a letter to Frito-Lay explaining why they are “happy to be making some noise about helping the environment,” and in exchange will receive a free pair of earplugs.

Compostable packaging is not yet a mature industry with clearly understood benefits

A recent report by the Sustainable Packaging Coalition (SPC) identified that a large chasm exists between those producing and utilizing compostable packaging and those doing the composting. "Compostable Packaging: The Reality on the Ground" is based on survey results of 40 composting facilities that accept food waste. Diversity in terms of facility size, composting method, and geographic location were used when selecting sites to survey. Questions covered types of food waste accepted, composting methods utilized, how packaging is handled, and what problems facilities encounter in accepting packaging. Among the findings was the fact that 82% want a more universally recognizable label of compostability:

"There is a disconnect between compostable packaging design and the composting facilities who deal with those materials. Composting is an effective end-of-life option for food and beverage soiled paper packaging, as well as compostable plastics. We hope this report sheds light on how compostable packaging is actually treated and ... how we can improve the fate of compostable packaging in this country."

Liz Shoch, SPC project manager, summarizing the research findings on www.sustainablepackaging.org

A standardized system would also help prevent "greenwashing," said the composters, who perceive that some companies are misleading consumers with unsubstantiated marketing claims about biodegradability. Other issues highlighted by the report included difficulty in distinguishing between compostable and conventional products, and compostable packaging and tableware not breaking down quickly enough.

Conclusion and implications

The SunChips saga, both in the US and Canada, has implications not only for sustainability, but also for wider concerns about product launches:

- **Changing the familiar can be a risky move** – It is easy to underestimate consumers' threshold for change or their attachment to a particular package design. PepsiCo was also victim to this scenario in 2009, when the company abandoned its new packaging for the Tropicana orange juice variant following complaints from juice drinkers about the new look (see the rebranding case study cited under Further Reading).
- **Marketers can go too far in the quest for environmentally friendly products** – This is a problem especially when environmental features compromise other aspects of the consumption experience that consumers deem more important, and Canadean's consumer insight research shows that there are a large number of aspects that consumers deem more important than sustainability. Developers need to balance the interest in sustainability with a wider range of features/benefits that are thought to be more important by consumers.
- **Focusing on emerging environmental niches can backfire** – Although the compostability positioning allowed SunChips to call itself a "world first," the fact that most US consumers do not compost meant that the tangible environmental benefits the product provided were relatively limited. This meant that consumers were being asked to accept a less enjoyable consumption experience for benefits that were less clearly understood than those of recyclable, low-carbon, or Fairtrade products.
- **Do not attempt to sweep problems under the carpet** – The US and Canada are different markets, and it is true that Canadian consumers have a higher degree of environmental awareness and concern than US consumers. However, it is notable that the initial US marketing campaign ignored the noise issue associated with the SunChips package, whereas the initial Canadian marketing campaign singled out the noise as an iconic brand feature. The attempts to repeat this in the US only took place after launch and after sales had started to slip, so instead of controlling the conversation, Frito-Lay was reacting to negative comments from elsewhere. This may partially explain why the brand performed better in Canada than in the US.

APPENDIX

Ask the analyst

We hope that the data and analysis in this brief will help you make informed and imaginative business decisions. If you have any questions or further requirements, MarketLine's research team may be able to help you. The MarketLine Research team can be contacted at ReachUs@MarketLine.com.

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