Grass to Glass Traceability & Consumer Engagement

Introduction

FrieslandCampina wants to share the journey of its infant formula directly with their customers. For their leading infant nutrition brand Friso, they developed together with their technology partner Kezzler an app called TrackEasy, which is based on GS1 standards. The industry’s first smart packaging innovation that enables parents to experience the journey of Friso’s formula milk at their fingertips, starting from Dutch farms.

A QR code on the packaging uses the GS1 Digital Link standard which allows customers to learn more about the provenance of the product, receive a confirmation that what they have purchased is in fact a genuine can of Friso infant formula.

TrackEasy was launched in Hong Kong during August 2019 and was further rolled out globally in Mainland China, Southeast Asia and Europe.

Background

As outlined by the Food and Agricultural Organisation of the United Nations (FAO), consumers need access to clear, reliable information to make food choices to address rising complexity of food safety. This rising trend among consumers to trace food source and demand more transparency in food production is also seen in the infant formula industry.

According to various reports, 93% of mums in Mainland China and Hong Kong find that current information on product packaging is insufficient, and they often need to search for more information from other different channels. Mums are especially eager to trace more details around quality check during production (71%) and food source (63%), production environment (65%) and how the product is made (63%). Respondents claim that this information helps to reassure product quality (94%) and allow them to be confident they are making the best choice (77%) for their child.
Chinese consumers are still embracing imported infant formula for more than ten years after the scandal in which six babies died and thousands more were hospitalised. Since then, the Chinese government has put substantial effort into improving their Food Safety systems in general and for infant formula in particular. Six of the top 10 brands in China are still foreign, but analysts now estimate domestic formula production to be at around 40 percent.

Beijing has recently laid out a plan to increase the domestically produced formula’s share of the overall market to 60 percent. Although that number might be hard to reach, it still means that the competition amongst foreign brands will be fierce going forward.

As the Chinese FDA is now reshaping their traceability legislation and systems for the pharmaceutical industry, similar requirements are waiting in the wings for infant formula and other product categories. Infant formula has had several incidents with counterfeit products in the market. It is anticipated that a potential traceability legislation will require individual tracing of every manufactured product, even for foreign manufacturers, with reporting requirements to the Chinese government. Such changes in legislation might come into force with short deadlines. Failing to comply, even for a short time period, could result in a fall in market share that will be hard to recover from.

Source: Financial Times «China’s baby formula plan hits foreign producers»

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**Friso TrackEasy**

FrieslandCampina is on a mission to full transparency of their dairy chain, from grass to glass. With the TrackEasy solution, the consumers can actually experience the care that the Dutch farmer puts into the production of the milk used for infant nutrition.

Consumers can scan the Friso products using their phone and experience the grass-to-glass journey of the exact product in hand. They can check authenticity, learn more about the the product and it’s origin. The TrackEasy solution is integrated with China’s popular WeChat platform, allowing consumers to scan directly from within the app. A unique QR code is printed on the bottom of the can for tracking and traceability purposes.

The project involves the application of unique, secure and traceable identities to every single product. By tracking the products from farmer to consumer, the solution supports confidence in Friso infant formula by eliminating concerns regarding fraudulent products in-market and enabling Friso to engage consumers directly.

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**Solution**

In the first phase of the project, Kezzler is serialising the complete annual production of formula destined for China.

One unique QR code on the bottom of the can is used for tracking and tracing through the supply chain. In the Kezzler solution, FrieslandCampina can trace a unit all the way from manufacturing to the end consumer.

Stakeholders throughout the supply chain are able to validate the product in real-time and access the relevant information by scanning the external code, thus delivering true grass-to-glass traceability.
Manufacturing
Unique IDs, generated by Kezzler’s encryption-based serialization technology, are printed, paired and activated on the FrieslandCampina production line. Upstream information related to the milk (farm and milking date) is associated with the cans to give the user full traceability from grass to glass. The solution also registers product and manufacturing data like GTIN (Global Trade Item Number), manufacturing date and expiry date. In addition, the packaging hierarchies, unitbox-pallet, are built and registered at the end of the manufacturing line with SSCC (Serial Shipping Container Code) used.

Warehouses and distribution
Before shipment, quality approval information and the government clearance certificate for export are registered. Top level packaging hierarchies (pallet–container) are registered, and also relevant shipping information.

The aggregation allows for explicit hierarchy details to be visible from can through to box, pallet and container level. The movement of the products from distributors to retailers is tracked all the way out to the intended retail store. Every supply chain tracking event is shared using the EPCIS (Electronic Product Code Information Services) standard.

All kinds of consumer information at one click of the QR code
Before or after the purchase of a product, the consumers use a phone to scan the QR code at the bottom of the product to see the actual journey from the farm for the product in their hand.

The same QR code can be used for digital promotional activities. The QR code uses the GS1 Digital Link Standard, which makes it possible to assign different types of data to the same code. By having one code that contains all the necessary information about a product, there is no need to have multiple barcodes on a single package. Finally, because it is a QR code, it does not require a dedicated app or device to be read.

Benefits
With TrackEasy based on GS1 standards and with GS1 Digital Link in particular, mums will be able to see when their tin of Friso product is produced, from when the milk is collected from farms, to the quality assurance checks. Such details are made possible through full chain control, where Friso owns all steps from the cows in Dutch farms to the final product. With the launch of TrackEasy, parents can now trace their product from grass to glass and feel reassured that they are providing the best nutrition for their children.

More information
Find out more about FrieslandCampina
www.frieslandcampina.com

Learn more about Kezzler
www.kezzler.com

For more information about GS1 Netherlands and GS1 standards visit
www.gs1.nl