









Consumers in the grocery store usually don't expect shelf talkers to actually talk to them.

But during a recent in-store trial by global consumer products company Unilever for its venerable Knorr food brand, that's exactly what they did.

We've all seen shelf talkers – those printed cards or signs clipped on a shelf to draw our attention to specific products and promotions. These have traditionally been static displays – ink and paper with no capacity for interaction.

Through its Foundry program, Unilever partnered with Novalia to lever the capabilities of printable and flexible electronics so shelf talkers can engage with consumers on multiple levels. Unilever Foundry is an entry point for innovators to collaborate and work with the consumer giant's 400+ brands.

Paper thin touch sensors and displays that talk

Novalia creates paper and plastic products with beautiful graphics that have capacitive touch capability. A touch results in either sound being played from the product as in Unilever's application or a Bluetooth signal being sent to a smartphone and over the Internet. The technology incorporates sensors, speakers, batteries and communication devices. This functionality can be added to range of unexpected materials, include paper, carton board and synthetic substrates that are thin and flexible.

Unilever and Novalia worked together to create paper-thin touch sensors attached to a micro controller, using printed conductive ink. When shoppers touch the display, they hear audio through a battery-powered mini speaker. The display responds to touch as if it were an interactive screen with up to 20 touchpoints.

For the Knorr brand, known for its soups and bouillons, this was a fresh way to interact with shoppers to bring the brand experience alive in the busy food aisle. The shelf talkers put a face to the chefs who work in Knorr's kitchens and offered dinner and food pairing ideas to consumers.

More consumer engagement, higher sales

The case study took place in April 2016 with a leading supermarket chain in 20 select stores for a duration of six weeks. A retail study evaluated sales impact of stores with the interactive shelf talker vs. stores with a static shelf talker, and polled consumers for their impressions.

The interactive display technology positively enhanced the existing shelf and point of sale material, providing a point of differentiation and engagement in a category – in this case Stock Bouillon & Seasoning – which shoppers do not typically spend a lot of time browsing.

The pilot successfully attracted and engaged shoppers, resulting in greater sales and improved shopper engagement. The takeaways from the trial are expected to help Unilever increase engagement and sales for its other brands in the future.



"With the ability to transform traditional print material into interactive solutions, printed electronics is providing new ways to engage with shoppers at the point of sale," said Christina Cvetan, co-chair of the intelliPACK Leadership Council and Global R&D Capability, Innovating Retail at Unilever.

Reuse, Repurpose, Less Material

This is a low power consumption solution that can be re-used and re-purposed. The ability to maintain the printed electronic circuit and electronic components enables the re-use of these components across multiple campaigns by changing the custom graphic. After several uses the display enters into the material recovery streams. The design allows the electronics to be entirely separable from the printed sensors to follow existing established handling and recycling processes.

"With its products sold in 190 countries and used by about two billion people a day, Unilever is setting the standard for adding intelligent interaction to the grocery aisle," said Peter Kallai, President and CEO of the CPEIA. "Forward-thinking brands understand this is the future of retail."

"By all reports, people were pleasantly surprised to find a paper-based display could speak to them," said James Downham, President and CEO of PAC, Packaging Consortium. "Consumers are ready for this kind of digital engagement when it adds value and helps them make more informed purchasing decisions."

You can view a **short video on this project on Youtube**.



About

intelliPACK BUSINESS NETWORK

intelliPACK

intelliPACK is a smart packaging innovation accelerator co-founded by intelliFLEX Innovation Alliance, PAC, Packaging Consortium and their Members. intelliPACK collaborates with supply chain stakeholders to create awareness, educate and facilitate the broad adoption of solutions for smart packaging – an active or intelligent interactive packaging system that delivers benefits and added functionality to the value chain. intelliPACK unites leading organizations across the packaging value chain, to collaboratively explore, evaluate and mobilize innovative smart packaging solutions. intelliPACK serves North America while sharing solutions globally.

Learn more at: intelliflex.org or pac.ca



intelliFLEX

intelliFLEX, a not-for-profit industry alliance, is a vital partner for accelerating the growth of the printable, flexible, hybrid and related electronics sector in Canada. Our technologies add intelligence and connect ordinary objects to enable the Internet of Everything. We unite our 100+ members to build an effective ecosystem of supply chains for flexible, 3D printable electronics, 2D large area printable electronics, wearable electronics, smart textiles and hybrid electronics including related semiconductors, integrated circuits and software. Our programs accelerate the adoption of these innovations for Smart Packaging, Intelligent Buildings and Connected Homes, Aerospace and Defence, Automotive and Industrial Applications, Health and Wellness, Intelligent Documents, and Consumer Electronics.

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