

VR MERCHANDISING: A NEW REALITY FOR MARKET RESEARCH



The optimization of product placement and assortment in-store and on-shelf helps maximize sales and reduce costs. Using mobile VR with embedded eye-tracking, Accenture teamed with Qualcomm and Kellogg's to reinvent how brands and retailers gather consumer data and perform research—more rapidly and affordably at larger scale.

Kellogg's was launching Pop Tarts Bites and needed market data to determine placement, assortment and promotion. Traditional tests—online surveys and in-home user tests—showed that consumers expected to find new products higher up on a shelf.

Using Qualcomm's reference headset powered by the Snapdragon 845 with embedded eye-tracking, and software from InContext Solutions and Cognitive3D, Accenture Extended Reality (XR) developed a pilot VR solution that immersed consumers in a full-scale, simulated store, enabling them to move through the space, shop, pick up products and place them in carts—all while tracking what consumers were looking at, for how long and why.

The pilot proved the high degree of correlation between the VR test results and those of traditional testing methods. More importantly, eye-tracking provided deeper behavioral data that led to a different merchandising conclusion—to place Pop Tarts Bites on a lower shelf, increasing total brand sales by 18 percent during testing.

“When trying to best assess a future product’s shelf placement, this new methodology provided optimal guidance from both a product and category perspective. The methodology used included eye-tracking, behavioral sales and attitudinal data. This approach provided multiple data outputs, which in turn, created a holistic solution that would drive success for both the category and product.

Jenny McDaniels, Senior Manager Category Strategy, Kellogg’s



BUSINESS CASE

Brands of all types—especially consumer product goods and retailers—spend considerable time and money on manual planogram activities to determine the optimal product placement and assortment on store shelves, as well as the ideal pricing strategy. However, traditional approaches to consumer testing have drawbacks in terms of cost, timeliness, reach and depth of data.

Up to now, companies have either had to: 1) build an expensive physical store environment and invite focus groups to “shop” the shelves and then fill out a survey; 2) create a virtual store on a 2D computer screen in an attempt to replicate the shopping experience, but interrupt testers with questions to gather reactions while they shop; 3) mail products for consumers to try at home and then collect feedback via physical or online forms, which lacks the real-world shopping context and requires a long lead time.

VR Merchandising, performed with mobile VR headsets with embedded eye-tracking, provides deeper data, expedites the process and reduces costs at scale. (To review an introductory video, [click here](#)). The approach:



Expands testing reach to diverse locations. Companies can invite geographically dispersed consumers to use the mobile VR headsets for product testing in their homes, at brick and mortar stores, during product roadshows or at any large consumer gatherings.



Improves experience in branded environment. VR Merchandising allows shoppers to walk through a realistic and branded virtual store model, look at shelves at their discretion, pick up and examine products, and place selections directly into their carts.



Increases dataset for analytics. During the shopping process, companies can gather better data using eye-tracking technology that is built into the VR headsets in a manner that does not interrupt the shopping experience. The resulting analytics provide detailed insights into actual consumer behavior, such as which products attract their attention, where they look first or gaze longest, and what helps to trigger buying decisions.

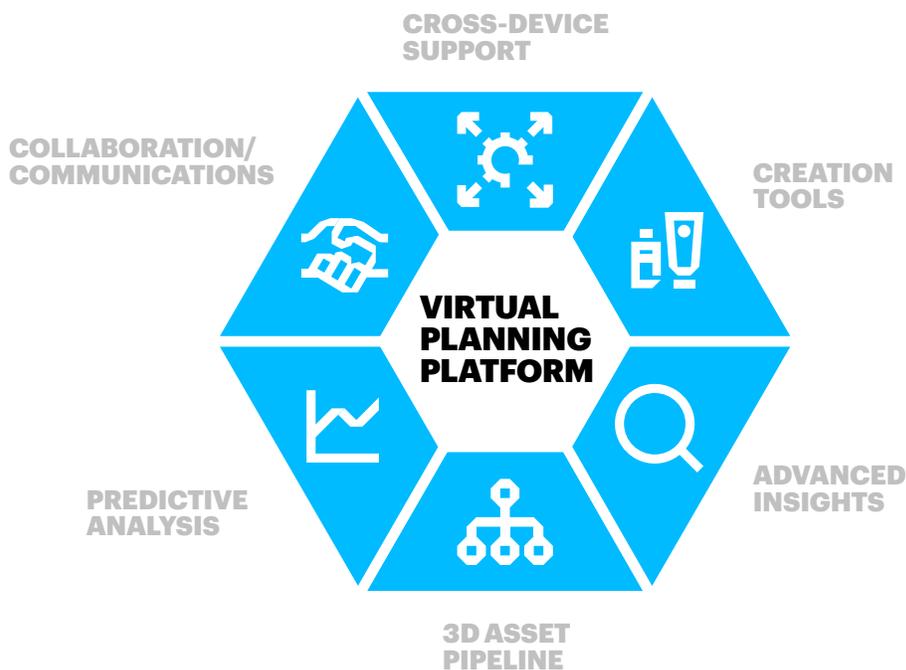


Decreases costs while improving flexibility. The VR based solution makes it easy to test a variety of planogram combinations, cost effectively. In a matter of minutes, brands and retailers can modify store and shelf layouts in the VR environment, rotate product inventory and experiment with pricing to determine an optimized plan.

TRANSFORMING THE MERCHANDISING PROCESS

Accenture's VR Merchandising offering - powered by virtual reality (VR) and artificial intelligence (AI) - streamlines and simplifies the merchandising process. It eliminates inefficient steps and coordinates the balance of talent and automation to create, evaluate and deploy optimized shopping experiences.

Using this solution, Accenture believes companies can unlock newfound speed and savings: to reset and revision unproductive store labor, replace test and learn costs, digitize in-store merchandising communication, decrease on-hand inventory, reduce risk on unproductive store design/merchandising decisions and minimize time to decision.



There would be no retail if it weren't for merchandising, so why isn't anyone talking about it anymore?

Rachel Shechtman, Founder, Manhattan-based Concept Store, Story

TESTING VR MERCHANDISING SOLUTION IN REAL-WORLD PRODUCT LAUNCH

OVERVIEW

Accenture and Qualcomm partnered to demonstrate how a mobile VR headset with a Qualcomm 845 chip and built-in eye-tracking software could enhance initial merchandising research and support new product launch decisions. (Mobile VR headsets with eye-tracking capability are expected to be available in the market by early 2019.)

Accenture's Extended Reality (XR) practice designed an immersive experience based on Kellogg's real-world business need to test the planogram, assortment and pricing strategy for its launch of Kellogg's Pop Tarts Bites. Analytics from the eye-tracking technology provided an additional layer of insights on product viewing not available with any other method, with correlations that impact shopper consideration and purchase.

PROCESS

In an initial feasibility test, Accenture and Qualcomm ran two focus groups through the immersive VR testing process for merchandising the Kellogg's Pop Tarts Bites, placing the new product and promotional signage on two different shelves—one higher and one lower. Kellogg's had already run traditional in-home user tests and online attitudinal studies. The VR results showed a high degree of correlation with real-life results from Kellogg's more traditional testing scenarios. Both showed that consumers expected to find new products higher up on a shelf.

RESULTS

What truly set the VR results apart were the additional insights available from the eye-tracking analytics. These insights are not possible through traditional physical, in-home, online or survey merchandising methods.

Five companies, one solution.

Accenture. The Accenture Extended Reality (XR) practice uses human-centered design principles, deep industry knowledge, global scale, and expertise in combinatorial technologies such as AI and IoT, to help Global 2000 companies imagine, create and deliver impactful XR experiences. Accenture XR also helps companies strategically evaluate how XR can unlock new business value and monetization opportunities.

Qualcomm invents breakthrough technologies that transform how the world connects, computes and communicates. Building on 30+ years of mobile innovation, the company is extending into the XR ecosystem, driving a new caliber of experiences and transforming the enterprise industry by powering the most immersive and untethered mobile XR solutions.

With the immersive VR Merchandising experience, Accenture, Qualcomm and Kellogg's were able to see what consumers were looking at, when and in relation to which action.

Eye-tracking stats available in the immersive experience included: total gaze time for each scene, each element and product; sequence of products and elements by gaze time; product interaction relative to gaze; and specific sequenced user gaze data. This is behavioral data that is not available using traditional merchandising methods.

Specifically, when looking at the signage and the Kellogg's Pop Tarts Bites, consumers' eyes were also drawn to nearby products. On a higher up shelf (where consumers normally expect to find new products), this meant they paid more attention to private label products, which were placed directly above. However, when looking at the signage and Kellogg's Pop Tarts Bites placed on the lower shelf, consumers also paid more attention to the other surrounding Pop Tarts products, stimulating additional sales of Pop Tarts items with an overall 18 percent brand sales increase, during testing. Thus, the VR headsets with eye-tracking analytics delivered a different, more informed merchandising conclusion.

CONCLUSION

Applying VR Merchandising consumer testing at scale with an easy-to-use mobile VR headset equipped with eye-tracking produces deeper data and more informed conclusions, leading to more optimal product placement, assortment and pricing results. It also allows brands and retailers to test a larger, dispersed group of people and reduce time and cost when performing research at scale.

Based on these outcomes, brands, retailers and consumer packaged goods companies can build a virtual store once and replace virtual product sets as needed to perform better consumer testing scenarios across more geographies, ultimately contributing to additional revenue generation potential.

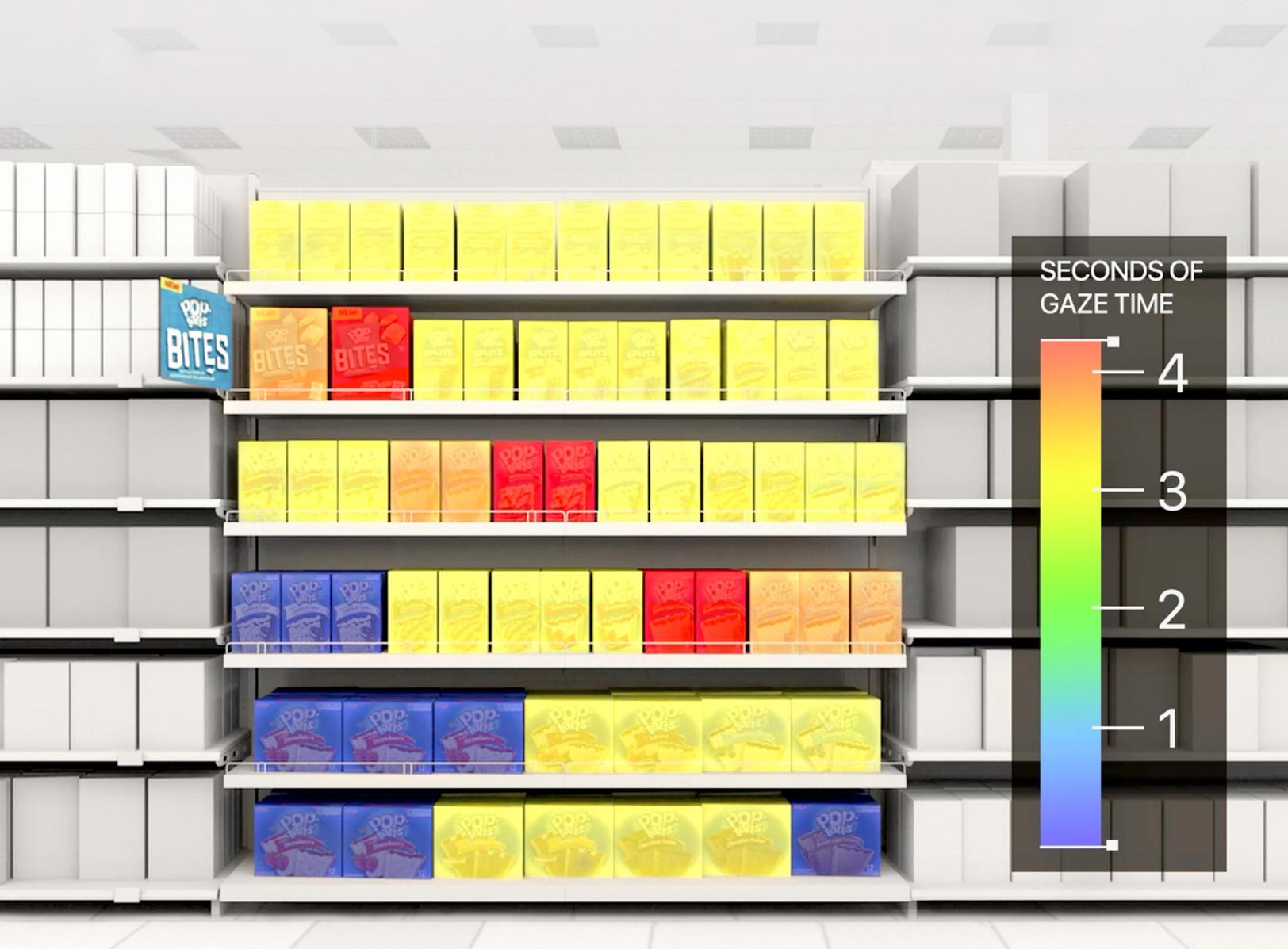
Kellogg's was getting ready to launch a new product—Pop Tarts Bites—and figuring out which category and aisle to place the product in stores, relative placement on the shelf, box count and price point. Kellogg's added its brand element to test the feasibility of the VR Merchandising pilot solution versus traditional approaches.

InContext Solutions offers a Mixed Reality software platform for visualizing and testing Retail merchandising strategies.

Cognitive3D provides an eye-tracking and data analytics package for XR experiences.

VR Merchandising with eye-tracking enables brands and retailers to reach more holistic placement and assortment conclusions. These decisions account for the whole of consumer buying behavior and total brand sales versus single product sales. The solution also allows companies to extend reach to more geographically dispersed participants, performing research faster, more affordably and at larger scale.

Raffaella Camera, Global Head of Innovation & Market Strategy, Accenture Extended Reality (XR)



BENEFITS OF VR MERCHANDISING PILOT SOLUTION

In addition to proving that product consideration and sales results from VR Merchandising tests are highly correlated to traditional testing methods, the pilot solution highlighted the following additional benefits:

- VR tests closely simulate and better capture the overall shopping in-store experience.
- The proliferation of less expensive, untethered VR headsets offer access to larger and geographically dispersed tester pools, providing more accurate quantitative results.
- VR eye-tracking provides attitudinal data and deeper insights, which can produce better business decisions.
- VR Merchandising is a more flexible, faster and cost-efficient solution when deployed at scale.



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SUGGESTIONS TO GET STARTED

To begin exploring the benefits of VR Merchandising in your company:

- 1** Define how VR Merchandising will fit into the entire merchandising process versus viewing it in a silo.
- 2** Define and capture the benefits of reusing layout visualizations developed in VR for testing, including how to transfer and operationalize the desired new layouts into stores.
- 3** Encourage merchant adoption by demonstrating how this type of solution will allow them to free up their time to focus on more strategic tasks instead of spending excessive time on physical mock-ups and manual testing.
- 4** Take a platform approach that includes capabilities such as experience builder, analytics, 3D asset pipeline, etc.
- 5** Plan for a VR hardware solution that is cost efficient and allows for easy participation from dispersed consumer groups.

Using a powerful mobile VR headset with embedded eye-tracking, allows companies to test innovative ideas to launch products faster with a higher degree of confidence in the results without costly and lengthy brick-and-mortar experimentation.

Patrick Costello, Senior Director, North America, Business Development at Qualcomm Technologies



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Merchandising pilot in your enterprise,
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