Bridging the gap: Leveraging a trained Sensory Bot for enhanced product understanding

Dr Ansie Collier - Global Innovation Director, MMR Research

2024 SSP Conference, October 2-4, 2024, Pittsburgh, PA USA **POSTER NO:**



WHAT WAS THE CHALLENGE?

Recent years have witnessed a surge of interest in unpacking product experiences. Traditionally, decoding the intricate sensory touchpoints that shape user experiences of products demanded significant investments of specialized sensory expertise, and direct consumer-researcher engagement where product evaluation was often not assessed 'in-the-moment' of use.

WHY A BOT?

Leveraging Conversational AI to enable an end-to-end chatbot engagement takes whole-hearted consumer engagement to the next level. In early tests, it led to an 80% improvement compared to traditional open-ended survey questions. Recent tests comparing our first-generation chatbot with the latest AI-powered version showed a 135% increase in data collected. In this way, it is possible to combine depth and breadth of discovery to access deep diagnostic power.

As a window into the consumer's world, into their lived product moments, chatbots offer extraordinary diagnostic value. In product experience research, intuitive chatbot engagement is less intrusive, allowing research to fit more comfortably into people's everyday lives. As a result, this approach significantly enhances our ability to capture real world product experiences, outside the confines of the sensory lab, providing rich, granular insights during actual usage moments. As competition to deliver superior products intensifies, understanding these nuanced experiences, in depth at scale, become ever more important.

WHY A SENSORY BOT?

The Sensory Bot is a highly specialized application of AI, crafted not to sell but to seek out the heart of consumer experiences, in both data collection and analysis. As a new methodological approach, trained by sensory scientists, it guides hundreds of consumers at a time through their product experience, combining granularity with scale.

It is in this AI-powered engagement where we find the potential to decode the interaction between product and consumers – consumers just like you and me. Guided by a deeper understanding of sensory experiences, the Sensory Bot has become adept at eliciting descriptive responses, giving us a window into real-world product experiences.

SENSORY DETAIL





As you chew the crisps, focus on the texture. Tell me about everything you experience! Since you've already mentioned the crisp and non-greasy aspects, feel free to elaborate on that or on other aspects related to the packet of crisps.

The crisps are light and very crispy. They melt in your mouth - a great experience. There is no after taste just the vinegary flavor.

Live in the moment probing



Excellent, I'm starting to understand your experience better! Do any of the aspects you just mentioned about texture matter to you more than others? Can you please explain why that is so... or perhaps why not?



Yes - I like the lightweight taste to them. I like the fact they are non greasy. I love a crunch when I eat a crisp- I like to hear it! They are not oily on my fingertips- no residue. A great crunchy crisp - all the things a crisp should be!

Each Sensory Bot engagement is dynamic and adaptive to what the consumer shares and what matters to them. It intuitively moves from one sensory touchpoint to the next, capturing the descriptive responses, along with what it signals to the consumer. It also automatically detects the level of descriptive depth captured per touchpoint, to know when to move on or when to probe for more. This is where the "what" and the "why" happily meet in conversation to deliver a holistic understanding of the total product experience journey.

DOES IT DELIVER?

To assess the Sensory Bot capabilities, we designed a two-cell in-home usage test, with 30 consumers per cell to assess a popular salt & vinegar crisp brand in the UK. In both cells, consumers were asked about their current usage and behaviours, desired experience before providing sensory feedback across the full product journey.

For Cell 1: The online community ran over 3-days and was moderated by a sensory experience specialist.

For Cell 2: The sensory bot was run as a one-off engagement which took consumers on average 45 minutes to complete.

WHAT DID WE FIND?

SENSORY DETAIL

By guiding consumers through their product experience in the moment, the bot captured over 15,000 words, delivering deeply granular insight into the role of sensory attributes in the consumer experience of a product. Importantly, the bot holds contextual memory – it remembers what happened earlier in the conversation, supporting a more human-like engagement. In contrast, a human moderator in a community supports flexibility across areas and methods of exploration, with the benefit of a better understanding of semantics. However, as a moderator works across a community, and may not always be online, probing may not always take place in the moment of experience.

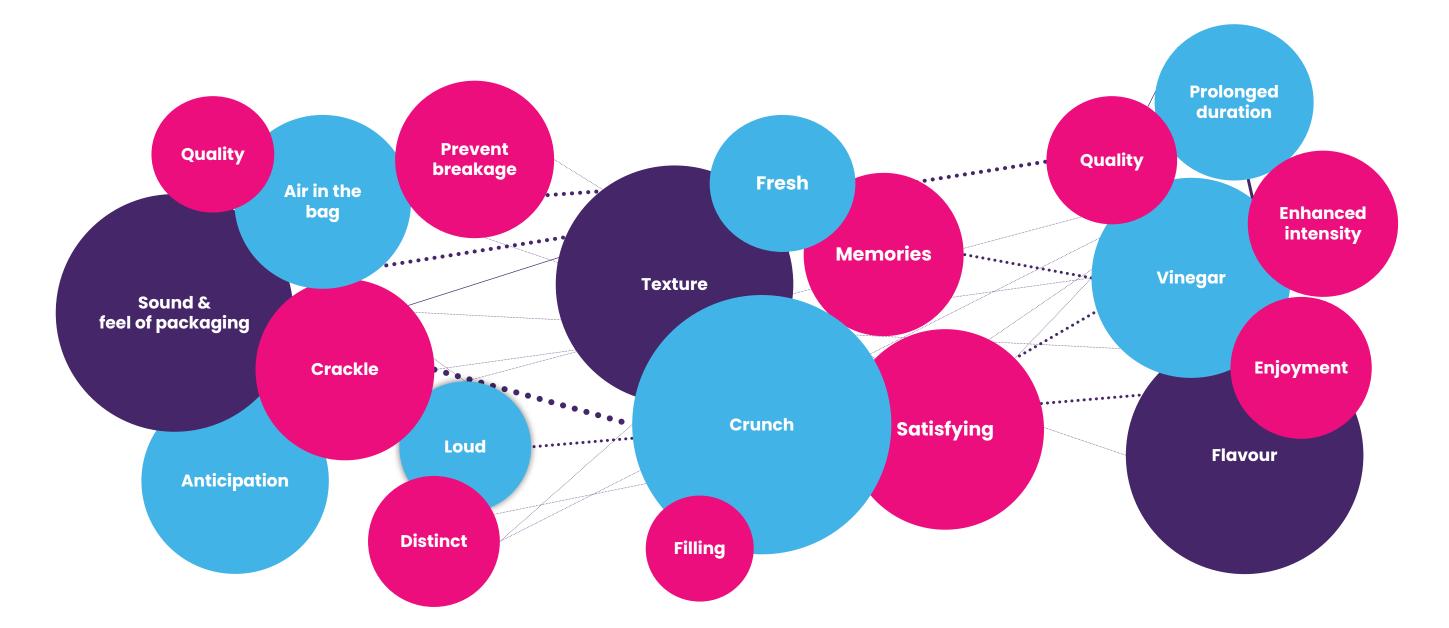
PARTICIPANT ENGAGEMENT

We know that online communities enjoy a high level of participant engagement, supported through the variety of tasks the moderator's role in responding and probing in detail. Attrition is low, and experience ratings are high. We were delighted to discover that even a relatively long 45-min Sensory Bot engagement could match this experience, delivering an average rating of 4.5 out of 5. In addition to this, participants shared how the bot prompted them to reflect more deeply on their own experience, often in ways they haven't considered before, allowing them to share their experience with extraordinary depth and authenticity.

LINKAGES

The Sensory Bot's ability to surface and quantify the connections across the sensory product experience journey is singular. It not only reveals the multitude of sensory interactions within and across product touchpoints, but also these interact with the consumer, shaping their interpretation of the emotional and functional benefits the sensory experience of a product ladders up to. **Exposing and synthesizing this rich interconnectedness is essential to holistically deconstructing the total product experience.**

LINKAGES



OUR CONCLUSION?

The Sensory Bot's ability to decode holistic, sensory-rich insights that brings the product experience journey to life provides designers with a deeper understanding of how products resonate in the lived product moment.

As such, our research shows the promise of the Sensory Bot as a method to access product experience insights, at any scale, that will pave the way for product designers to create products that prioritize experience.

By doing so, designers can craft products that become integral to consumers' lives, enriching their daily routines and rituals. This holistic approach, informed by sensory science and consumer insights, paves the way for innovative and engaging products that truly capture the hearts and minds of people everywhere.