Harvard Business Review

Using AI to Track How Customers Feel In Real Time

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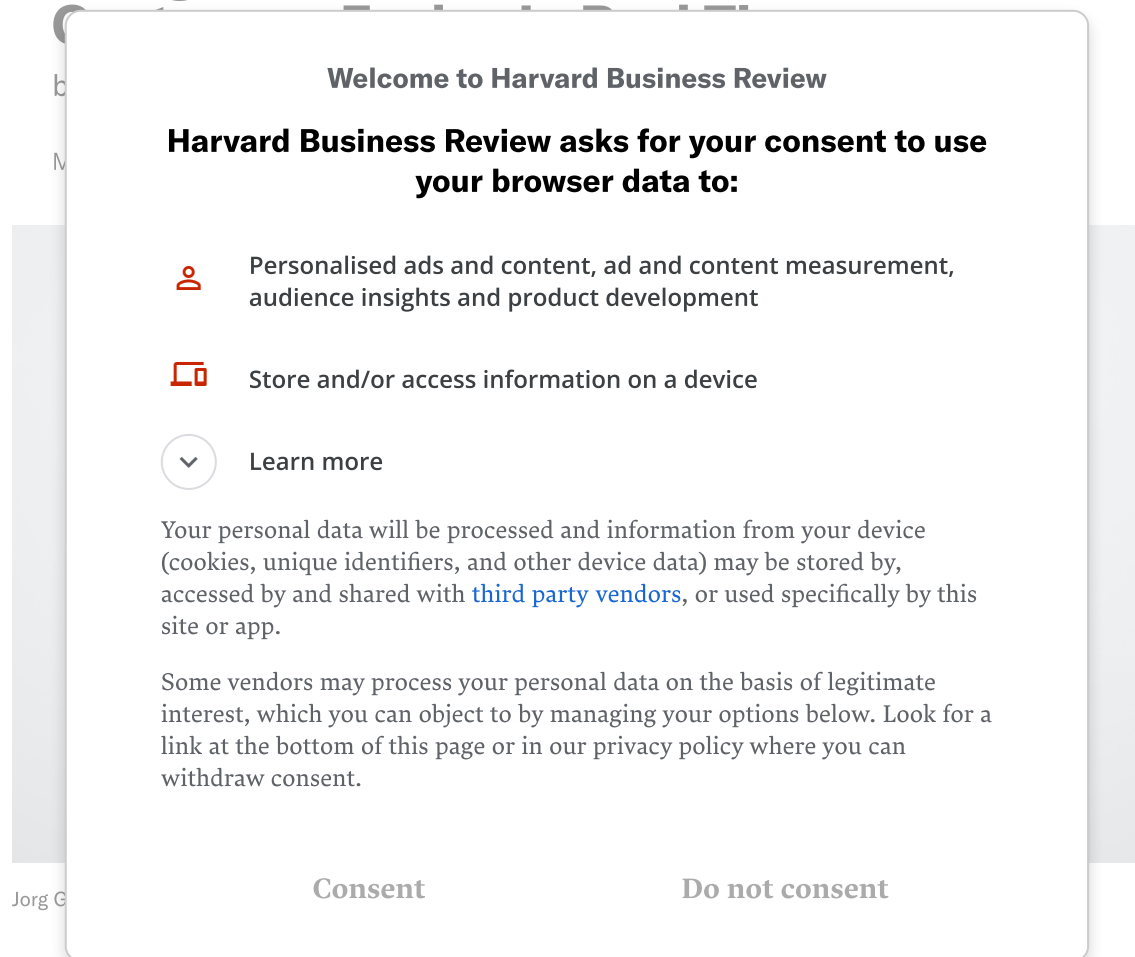
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Summary. The most common methods of tracking customer sentiments has a big blind spot: They can't pick up on important emotional responses. As a result, qualitative surveys, like Net Promoter Score, end up missing critically important feedback. Even if they provide a... **more**

In order to succeed, firms need to understand what their customers are thinking and feeling. Companies spend huge amounts of time and money in efforts to get to know their customers better. But despite this hefty investment, most firms

are not very good at listening to customers. It's not for lack of trying, though — the tools they're using and what they're trying to measure may just not be up to the task. Our research shows that the two most widely used measures, customer satisfaction (CSAT) and Net Promoter Scores (NPS), fail to tell companies what customers really think and feel, and can even mask serious problems.

For years, quantitative surveys have been the industry standard. They ask customers a single question: On a scale of 0-10, how

look and how to analyze it. Customers often reveal their true thoughts and feelings in the open-ended comment boxes typically provided at the end of surveys. In general, the content of these comments offers a much more reliable predictor of a customer's behavior. Yet, these are often ignored, and if used at all, are typically used after the scores are computed.

The good news is that most companies have the power to correct this oversight relatively quickly. We developed an AI-driven approach that practitioners can use as a model to adjust their

customer feedback processes accordingly.

How AI Can Help

It's easy to see why quantitative surveys became popular: They're a way to ask a huge number of customers how they felt. Qualitative approaches, like focus groups or manually reading and analyzing customer feedback, were too labor intensive to scale. Now, technology has changed what's possible, and tactics need to catch up.

(e.g., knowledge, system, product, skills, etc.); activities (e.g., fixing, ordering, service delivery, etc.); context, or situations affect the experience (e.g., weekend); interactions (e.g. calling, chatting, etc.); and customer role (e.g., provides suggestions or neutral). We then identify both customer emotions (joy, love, sadness, anger, and surprise) and cognitive responses (compliments, complaints, and suggestions) at touchpoints.

For example, one customer gave 10 out of 10 in CSAT score. However, they also offered the following comment: "The only thing that we were a bit disappointed with is to do with repairs. It seems that every time they come out it's over $1,000 in service. The fitters seem to be struggling with diagnosing the issue and it always seems to be more expensive." We applied linguistics-based natural language processing (NLP) approach to extract and map keywords in this comment. For example, "repairs" is associated to "touchpoints," "fitters" is mapped to resources, "diagnosing the issue" is classified under activities, "a bit disappointed" is
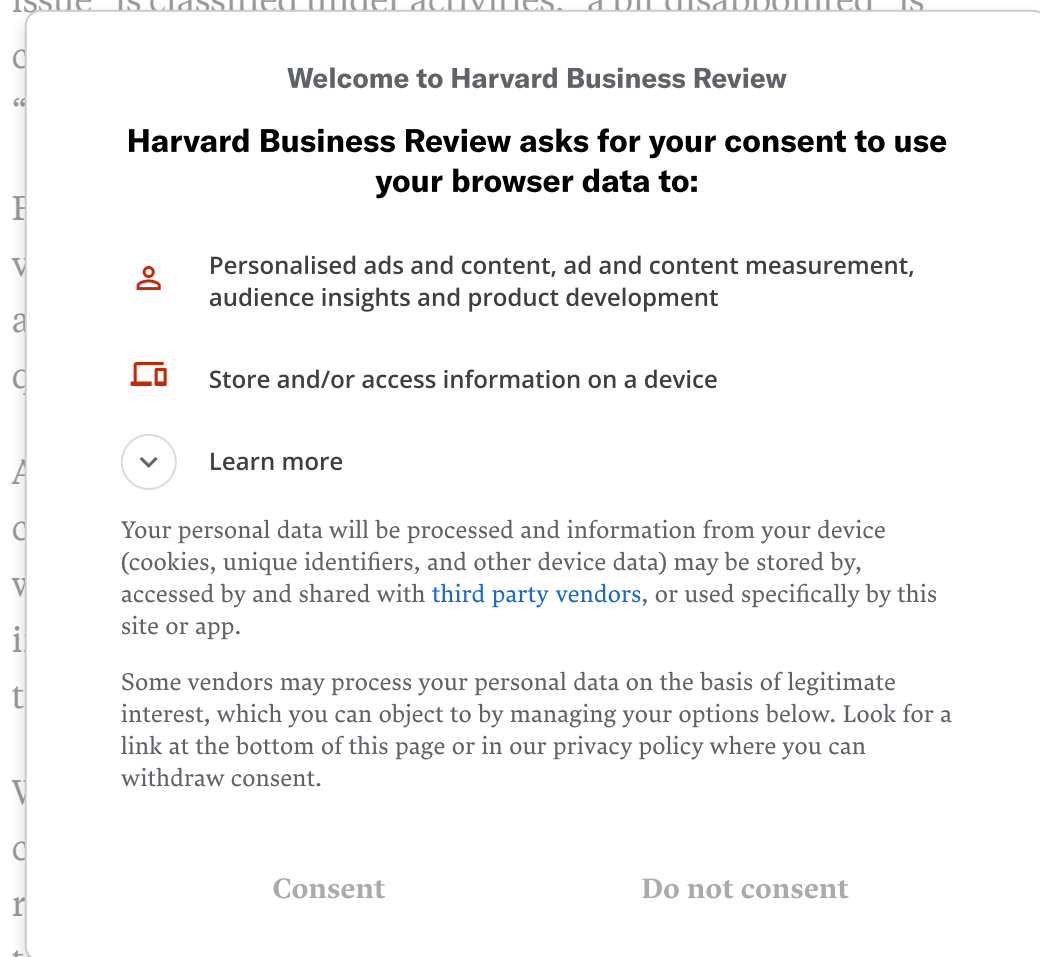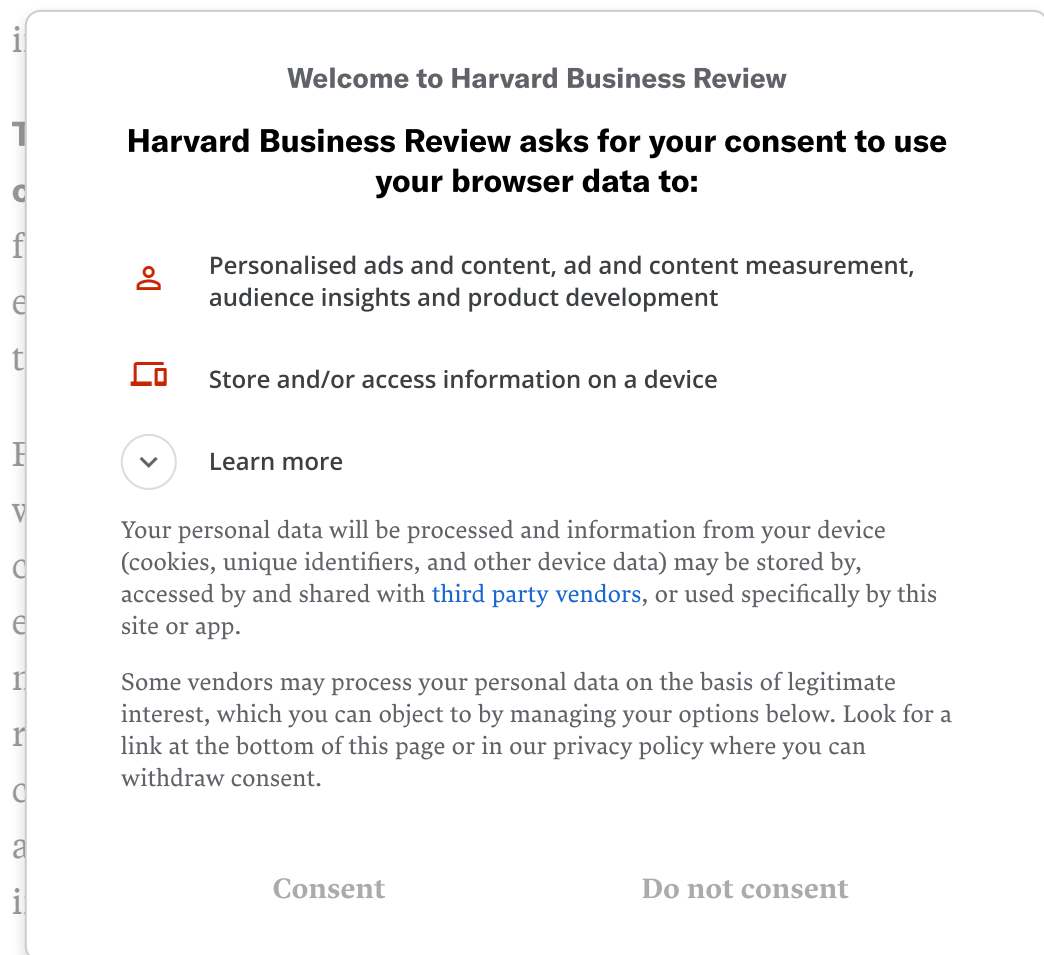
their services using the traditional CSAT and NPS metrics and tack on an open-ended final question. While the data we used came specifically from these survey questions, data from any kind of qualitative source would work. Here's what we learned.

Six Key Benefits from Using AI

In our research, we found that AI can transform how firms think about and measure customer experience, but six benefits in particular stood out.

AI can show you what you're missing. Companies often misjudge what their customers really want. We found that the touchpoints that customers really care about may not be the ones that firms expect. Importantly, this AI-driven qualitative approach can show you what you're missing, and therefore how to fix it.

For example, one firm was focusing only on sales, parts, field service, and workshop touchpoints, but customers generally considered credit financing and invoicing touchpoints to be more critical in their interaction with the firm. As a result of this

Determine root causes. To fix a problem, you need to understand it. When it comes to customer experience, companies can use AI-produced insights to glean not only where there are problems, but also what's causing them.

In one case, communication was a major pain point. Insights gained were used to repair relationships with customers who were identified as likely to defect. The company undertook decisive actions. First account managers started to follow up with these

identified customers to really get to know what their concerns were. Then the firm invited key customers to a corporate event to discuss in one-on-one meetings the reasons for the service failures.

Capture customers' emotional and cognitive responses in real time. Firms should capture how customers feel about the service through discrete emotions — joy, love, surprise, anger, sadness, and fear — and extract cognitive responses, conceptualized through customer evaluations (e.g., complaints, compliments,

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around $6 million in lost sales. This insight could alert firms to any decline in sales, and help them reduce costs associated with losing customers and acquiring new customers. Spotting when a customer has slipped to a lower category score, enabled the firm to interfere to avoid losing that customer.

Prioritize actions to improve customer experience. Finally, firms can use these insights to diagnose the underlying factors causing pain for customers and then prioritize which root causes need attention. This enables managers to stop doing certain actions

(complaints), start doing new actions (suggestions), and continue doing actions (compliments).

This process can be codified and automated, so companies can see in real-time how particular areas are performing, drill down, and intervene on any emerging issues. The analysis also gives employees a view across the entire journey, enabling employees across the organization to have the same view of the customer, so that if problems arise all frontline employees are able to see what has happened and act accordingly.

use data stemming not only from their own touchpoints but also from external touchpoints in the digital, physical, and social channels with the primary goals of continuously and proactively adopting customer experience to retain customers and achieve customer loyalty and long-term growth.

MZ

Mohamed Zaki is Deputy Director of the Cambridge Service Alliance (CSA) at the University of Cambridge. His research interests lie in developing novel machine learning methods to manage and measure customer experience and predict customer loyalty. He has published widely in highly rated academic journals has received international awards (2016 and 2017) from the Marketing Science Institute on customer experience analytics and digital customer initiatives.

Cambridge academics work with global companies to solve challenging business issues. Professor Neely is currently Pro-Vice-Chancellor for Business and Enterprise and Director of the Centre for Digital Built Britain at the University of Cambridge. In 2018 he was elected a Fellow of the Royal Academy of Engineering in 2018.

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