Data-trackers turn from cookies to phone sensors
21 September 2020, by Peter Grad

Lou Montulli and the late Ruth Wakefield share a common bond. Sort of. Ruth invented the chocolate chip cookie, which has fueled many programmers through long trying hours into the evening testing code and tracking down bugs. Lou invented the digital cookie, which tracks computer users' behavior and has been the foundation of the marriage between commerce and web browsing for decades.

We think today of Lou—notable also as the developer of two of the earliest web browsers, Lynx and Netscape, as well as the guy who brought the infamous "blink" tag to HTML—as the era of cookies comes to a close.

At least that's the assessment of one British tech company chief who sees growing restrictions on the deployment of cookies by major companies and the increasing pushback by consumers wary of the loss of privacy as two factors pushing those digital identifiers into oblivion.

As Google moved earlier this year to ban third-party cookies on its Chrome browsers and Apple plans to restrict tracking in its next iOS build, Abhishek Sen, cofounder of a British analytics startup NumberEight, says companies are looking beyond cookies as they explore new avenues to tap into consumer behavior.

"We see Apple's announcements, consumers getting more conscious of privacy, and the death of the cookie," Sen said recently in an interview with Wired magazine.

Instead, Sen said, a new era of examining consumer behavior will guide businesses to smarter targeted advertising. His company focuses on what he calls "behavioral context." Instead of compiling data such as personal preferences or demographics through cookies, NumberEight examines how consumers use their apps and notes the environmental context in which they use the apps.

They achieve this by gathering information provided from their smartphones. Data from such tools as accelerometers and magnetometers signal whether a user is just waking up, working out in a gym, out for a walk in the park or driving to work.

Coupled with a music app, for instance, such information can help determine whether to play upbeat tunes for the motorist on the way to work or soothing melodies for the individual just waking up. Apps can presume a user wakes up by noting a long period of inactivity followed by a sudden raising and use of the phone.

A jogger listening to a podcast at a local park might be presented with ads for running apparel or be given tips on specials at eateries bordering various exits of the park.

Sen sees the technology being utilized in music streaming, podcasts, audiobooks, online publishing, social networks and gaming.
NumberEight cofounder Chris Watts said his company is mindful of intrusive app behavior.

"User privacy was at the heart of our decisions from day one," he said in a company blog. "The common approach of collecting bulk user data for analysis in the cloud introduces difficult consent issues, so we instead researched new algorithms," he said, eventually leading to the use of specialized hardware in users' phones.

"The result," Watts said, "is an easy-to-use platform where sensor data never leaves the user's device, and privacy is preserved."

Data is discarded from the phones once it is processed. The company said that camera and microphone data is not accessed and added that users may opt into or decline usage of their GPS.

In an era of growing privacy concerns, "brands are forced to rethink their campaigns, which have always been, 'I want to know the individual and know their preferences,'" Sen said. "You don't need to know the individual. You just need to know whether your product or service is going to land with the right audience."

So cookies are on the way out, and magnetometers and accelerometers are in.

And we still have chocolate chip cookies.

More information: Via Wired.

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