

How Piano built a propensity paywall for publishers — and what it’s learned so far

“Having a machine-learning framework to say who’s likely to churn, register, and subscribe has been a critical step in us making those experiences more tailored.”

By **CHRISTINE SCHMIDT** @newsbyschmidt Aug. 6, 2019, 10:09 a.m.



They went from being the kid nobody wanted to talk with to one of the cool kids on the block. (Apparently showing the other kids how to make money helps.)

Paywall tech company Piano has now introduced a propensity paywall — taking what The Wall Street Journal, Financial Times, Schibsted, and others are doing internally to nudge the errant site visitor or intrigued newsletter subscriber to pony up and pay up.

It’s got the fancy moniker of LT[X], pronounced with the brackets and intended to be thought of as “likelihood to (action).”

Propensity/dynamic/intelligent/other slick-sounding-named paywalls use dozens of signals to measure each visitor’s likelihood of subscribing and determine the prods they need to improve their score. (Piano’s system uses 76 metrics to start.) It could be, for instance, an extra free article or two each month, a newsletter invitation when you’re about to close the page, or a targeted social media ad with special deals. Now publishers don’t have to DIY it, but be aware: It takes Piano two to three weeks to set up each outlet’s paywall based on the signals and past data they need to crunch. Another thing that lasts two or so weeks: the window of time to really snag a new subscriber, according to Piano CEO Trevor Kaufman.

“People’s focus on a site tends to be very intense at given periods of time...90 days from now, your loyal audience will largely be a different group of individuals with maybe 30 to 40 percent overlap,” he said. “We wanted to make our system more adaptable to accommodate that. Having a machine learning framework to say who’s likely to churn, register, and subscribe has been a critical step in us making those experiences more tailored.”

Propensity doesn’t stop at the paywall, though; this is about getting people involved beyond a single subscription and making the most of their lifetime value. How likely is it that a regular subscriber will buy an event ticket? Or sign up for another newsletter?

“Even with subscription websites, the page metrics [tend to be] metrics that have driven short-term value, as opposed to long-term value,” said Michael Silberman, Piano’s SVP of strategy (he was previously at New York Media). “That starts to transform the way you think about operating a media business, from pageview to customer lifetime value.”

That is a sensible, if not earth-shattering, statement. But it helps to have the tools and the metrics to actually put it into action.

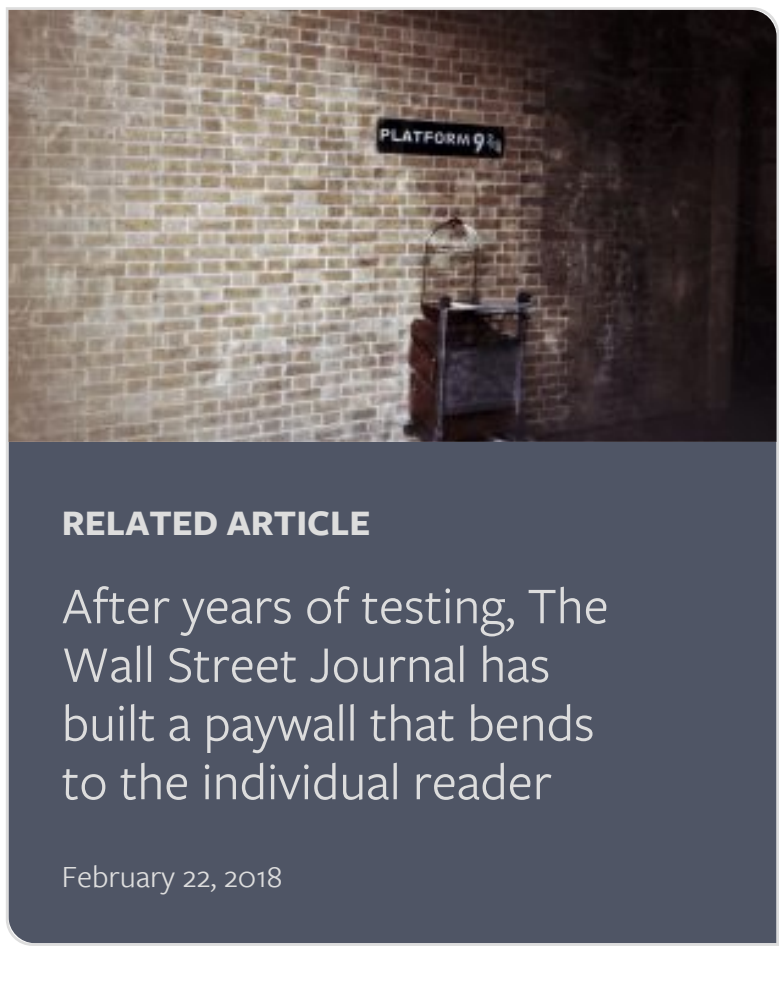
Since launching the propensity paywall in June, Piano has witnessed it in action for two clients: one saw a 20 percent increase in its paid conversion rate and the second saw a 75 percent increase in visitors converting to subscribers. Now it’s in place for five clients across eight sites — they decide who goes first based “a lot on client need and potential impact,” Silberman said. In general, Piano services 1,300 publishers like The Economist, Hearst, Business Insider, and TechCrunch, though publishers need to opt into this paywall setup. (Piano wouldn’t share which clients are using it, but that would be useful information to have, considering the range of news organizations and their audiences and varying propensities to subscribe.)



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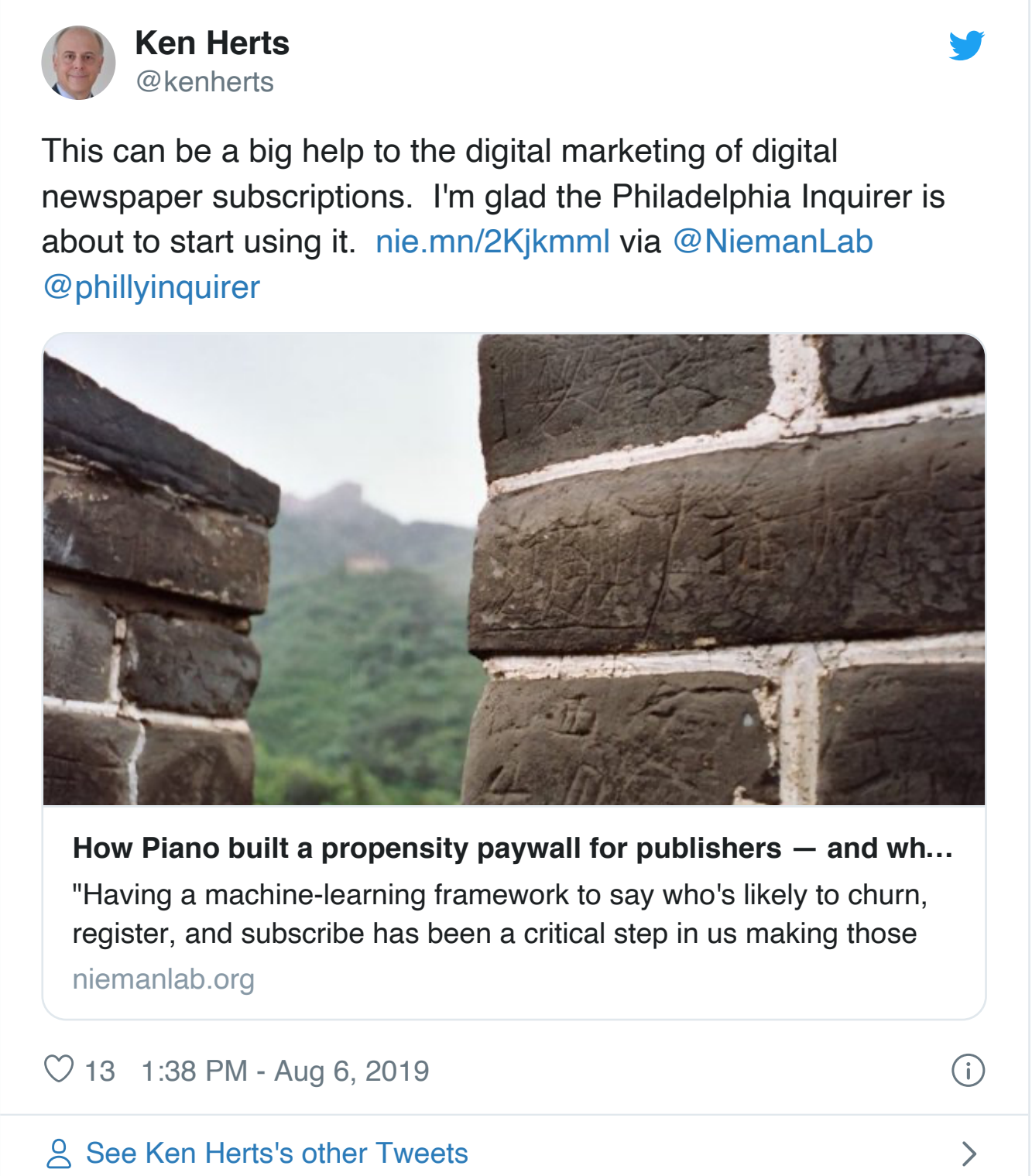
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Silberman’s team built the machine-learning algorithm that’s the bedrock of the propensity paywall using the random forest technique. They beta-tested with the aforementioned one site for two months to suss out its reaction to live prediction data and also the proper situations to use it. “Do you show the subscription offer plus the offer to register for temporary access? Do you show them just the offer and not register? Another use case might be that different meter height for users depending on their subscription propensity score,” Silberman said.

Each site also can fine-tune its propensity factors: “For a local newspaper website, one of the things we’ve discovered — no surprise — designated market area [DMA] is important. For at least one of them it’s not where the user is in terms of DMA but if the content is from that local DMA,” he said. “Another client knew going in that a lot of their users were converting on the content of one particular author. We added ‘count of articles read by x-author’ as a metric as opposed to generic ‘number of authors read’ in the algorithm.”

When the system is live, Piano scores users in sets of 10 from 0 to 100 to assess the existing propensity distribution, with the biggest group usually in the second or third lowest scoring section. Then the LT[X] paywall kicks in, giving visitors more options and hopefully the publisher more subscriptions.

“Commercial experiences in general are becoming more 1:1,” Kaufman said. “It’s not just the messaging, but the pricing, the purchase experience you have, the products you’re offered — should all be relevant to you.”

IMAGE OF A WALL — BUT WITH AN OPENING! — BY LARA TURNER USED UNDER A CREATIVE COMMONS LICENSE.

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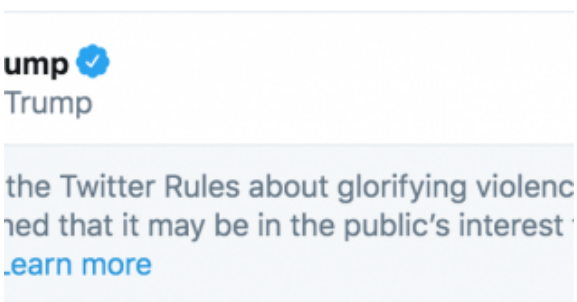
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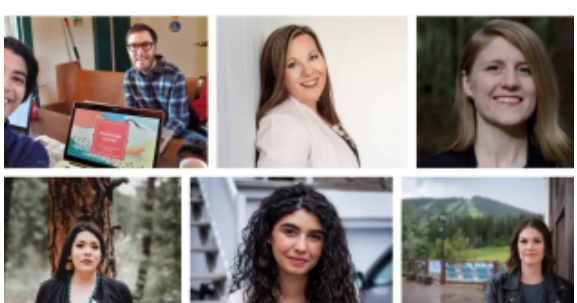
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