What is the Value of Knowing a Reader?

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Deciding what resources to invest in moving anonymous users to known users depends on the lifetime value of a subscriber, the amount of digital advertising revenue at risk, and the incremental lift in subscriptions from knowing the reader relative to an unknown user.

Registration walls are a common tactic in Europe, South America, and successful digital media businesses. Taking cues from the New York Times (which launched a registration wall in late 2019), local publishers in the United States began evaluating and testing this tactic in 2020.

A frequent question our clients ask is: What amount of resources should be invested to move readers from anonymous users to known users?

The answer to this question depends on the lifetime value of a subscriber, the amount of digital advertising revenue at risk, and the incremental lift in subscriptions from knowing the reader relative to an unknown user.

Econometrics and Machine Learning Measure Statistical Lift from Known Users

We have developed customised propensity models for many publishers around the world that provide an estimated probability of registering an individual user. A common finding is that knowing a reader lifts subscription propensity more than four times if everything else is held constant.

Interpreted literally, if two readers were the same in every respect except one had registered with a news site and the other had not, the registered reader would be four times more likely to subscribe.

Figure 1
User Segments and Conversion Probability

![Figure 1](image-url)
Machine learning models estimating propensity to subscribe will test the predictive power of many variables, typically 50 or more, to see which customer attributes and behaviours are most important to the likelihood of subscribing. These variables include engagement metrics, such as visits, pageviews, article pageviews, unique days, time on site, scroll depth, and content breadth.

The models also include location variables, device information, day part and day of the week, content preferences, paywall interactions, deviations from behavioural patterns, and ratios such as pageviews per visit.

For the publisher above, the known user status by itself explains 20% of the propensity score. Engagement metrics collectively explain about three-quarters while remaining environmental and paywall interaction variables explain less than 10% of the propensity score.

Engagement and Advertising

Readers that register with a news site indicate they care enough about the content to become part of the publisher's online community. This initial transaction enables the site to personalise the relationship with the reader and improve the user experience with suggested content and invitations to receive newsletters. We find that known readers increase their time on site and pageviews, which further increases their propensity to subscribe.

Unfortunately, we do not often observe a significant difference in advertising CPMs for known versus unknown readers. First-party data is still an elusive goal for many publishers and far too many advertisers still maximise impression quantity rather than focusing on quality.

For now, historical trends do not suggest significant incremental advertising revenue from registering a user. But with the forthcoming end of third-party cookies and a network effect of millions of known readers on publisher Web sites, perhaps the next decade will monetise known users more effectively.
Now, some quick math. Assuming about US$0.01 of digital advertising revenue per page and an average of two pageviews per user, the user advertising value is US$0.02. Tracking cookie-level data reveals that 91% of users each month are “new” cookies, suggesting high volatility retaining anonymous readers.

CPM pressure and the upheaval in the ad market due to COVID-19 also adds significant risk. Considering these factors, we calculate a five-year digital advertising value of US$0.12. Assuming a baseline conversion probability of 0.015%, we can calculate the probable five-year lifetime value as US$0.10.

For known users, the probability is about 0.063%, which brings the probable five-year lifetime value to US$0.41. Applying these assumptions to the example market referenced earlier, we can aggregate the lifetime value from a single month of activity.

**Show me the Money**

Lifetime value models can range from simple calculations of subscription revenue to date and more advanced techniques using predictive modeling, net present value, and holistic digital revenue (both subscription and advertising) like ones developed by our team.

The calculated value can vary depending on many factors. However, we found in a study of one large publisher the five-year value of a digital subscriber is about US$650.
The key takeaways from this analysis are:

- On the margin, there is a 3.4X gain in net revenue from converting an anonymous reader to a known reader when accounting for lost advertising revenue.

- A hard registration wall for all readers is still too risky due to greater advertising loss than gained subscription value.

- Identifying the right point in the user journey to target the user with a registration wall will ensure maximum lift in CLV with minimal risk to advertising.

- Segmenting and testing varying calls to action to identify the right way to deploy a registration will be a key area of interest for publishers in the next one to two years.

What should you do?

Registration walls have been successfully used by mature digital subscription businesses. Predictive modeling shows a four-fold lift in conversion probability and a 3.4X gain in net revenue from converting a reader from anonymous to known. Not every reader will be amenable to giving their e-mail address, so avoid applying this gain across all users.

There must also be a clear value exchange — such as additional content, access to newsletters, or other features key to your value proposition. Marketers are well aware that a “qualified lead” converts at a higher rate with many publishers observing a 10-fold conversion rate from the e-mail channel than the paywall channel, but the total volume of these qualified leads is often much lower than leads at the top of the funnel.

There are many factors specific to a publication and its readers. As next steps, we recommend to each publisher:

- Measure the conversion rate of your anonymous readers compared to your known readers via the paywall, e-mail, voluntary, and other acquisition channels.

- Determine a lifetime value formula and apply this to your subscribers, analysing differences by acquisition channel, price, tenure, and other factors.

- Segment your audience to identify users who are willing to provide an e-mail address and A/B test tactics to validate your hypotheses.

- Evaluate your digital subscription maturity and benchmark your performance against other publishers to identify if the investment in a registration wall will pay off.

- Implement a registration wall as part of a broad audience development strategy and set expectations for the impact on your audience funnel (rather than a silver bullet).

Feel free to contact us with any questions. We look forward to speaking with you.