

The art of responsible personalization

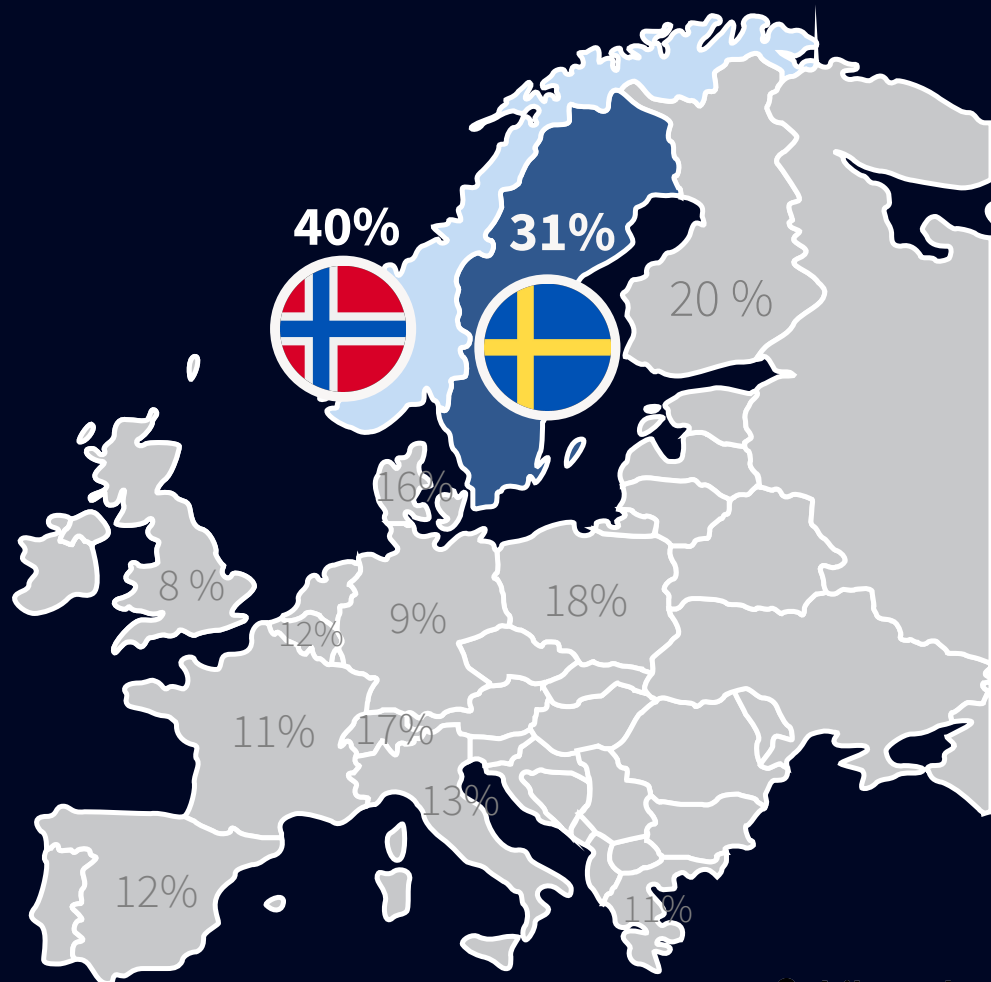
...and thinking beyond the article

KARL OSKAR TEIEN
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Schibsted Subscription News



Norway and Sweden are outliers when it comes to **willingness to pay for online news.**

The corresponding figure for the US is 22%.



Schibsted's Premium Subscription Newspapers

Nearly **600 000** subscriptions across Scandinavia



Other Schibsted products see major subscription growth

Expansion of paid subscription in both existing and new brands



Aftenposten introduced the first home page algorithm in 2017.

Today, most Schibsted-brands use the same system for personalization.

Our home page algorithm solves a key problem:
different visit frequencies + different interests

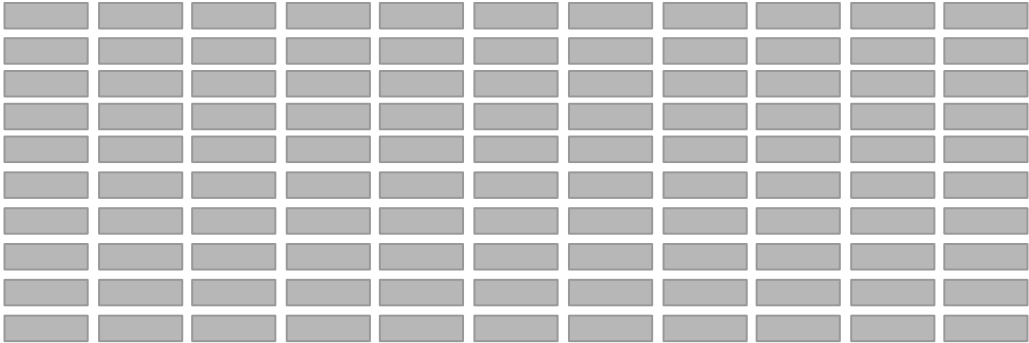
Our home page algorithm solves a key problem:
different visit frequencies + different interests

Our solution dynamically balances two concerns:
what you should know + what you're interested in

What sets us apart is our dynamic blend of
editorial judgement and **personalization**.

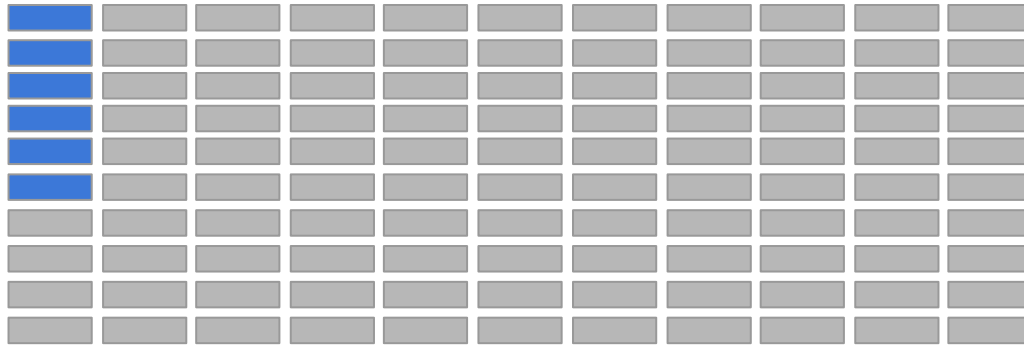


Our front page consists of about 80 teasers

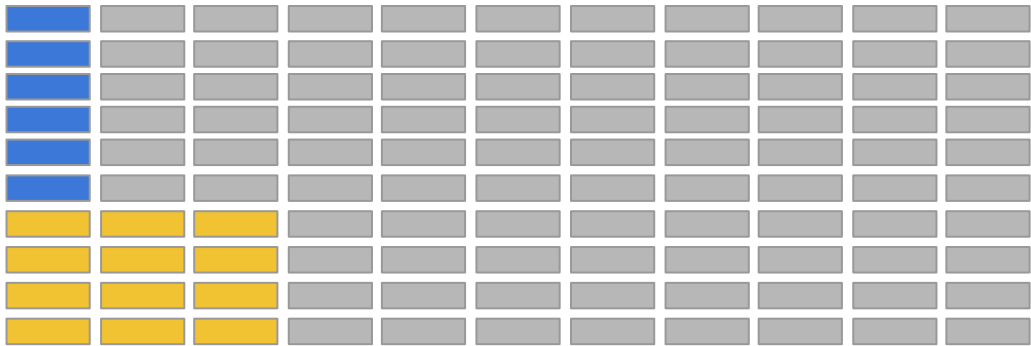


**Editors set news value and lifetime on all articles.
This is essential input for our rankers.**

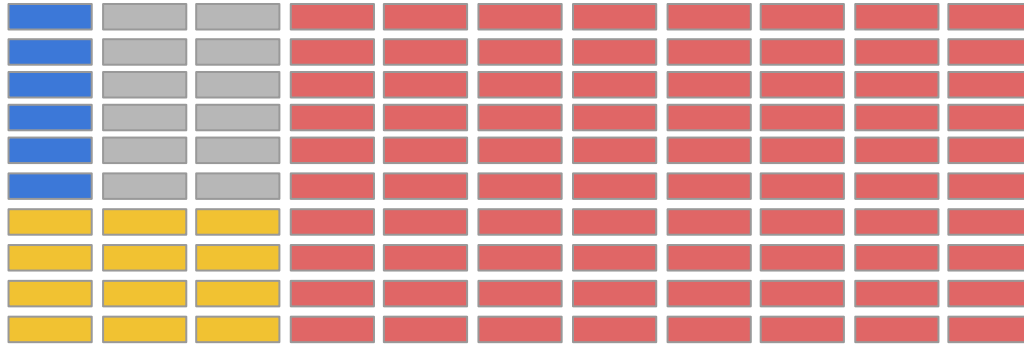
**We select 3-6 top stories manually.
This number keeps going down.**



We also reserve some spots based on our journalistic mission, despite “lower performance”.



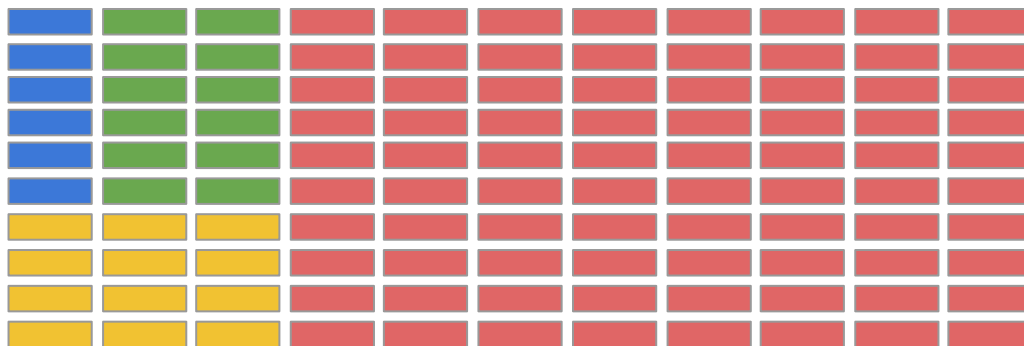
But most positions are optimized for engagement.



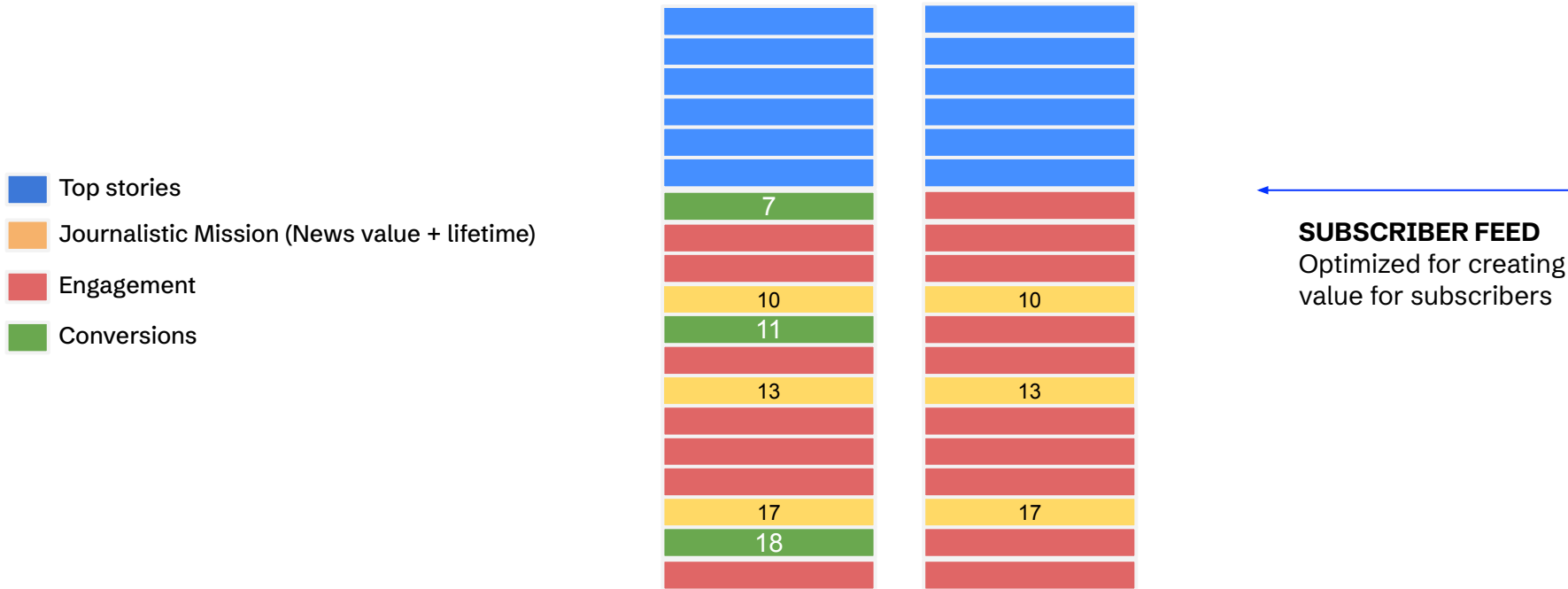
Weighted ranking by:

News value
Time published
Relative popularity
Click rate
Read or seen by user

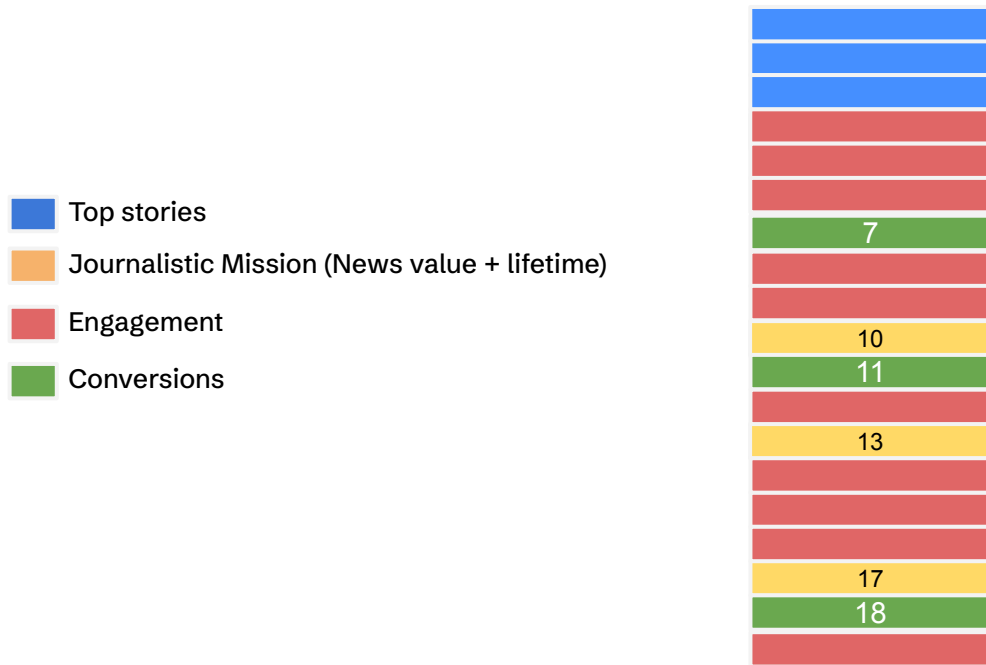
For non-subscribers, we show a high share of high-conversion articles.



Non-subscribers get a different feed



Over time, we've come to trust the algorithm to rank a larger share of the front page.



Every teaser is ranked based on the total weights given to each factor.

- Top stories
- Journalistic Mission (News value + lifetime)
- Engagement
- Conversions**



Placement based purely on conversions

Verden | Krigen i Ukraina

Disse bildene kan tyde på at Russland nå frykter angrep nær Norge

Russisk bildekk-paranoia har nådd en flybase nærmere grensen.



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Factoring in news value + lifetime

Placement based purely on conversions

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User engagement
lifts teaser further

Factoring in news
value + lifetime

Placement based
purely on conversions

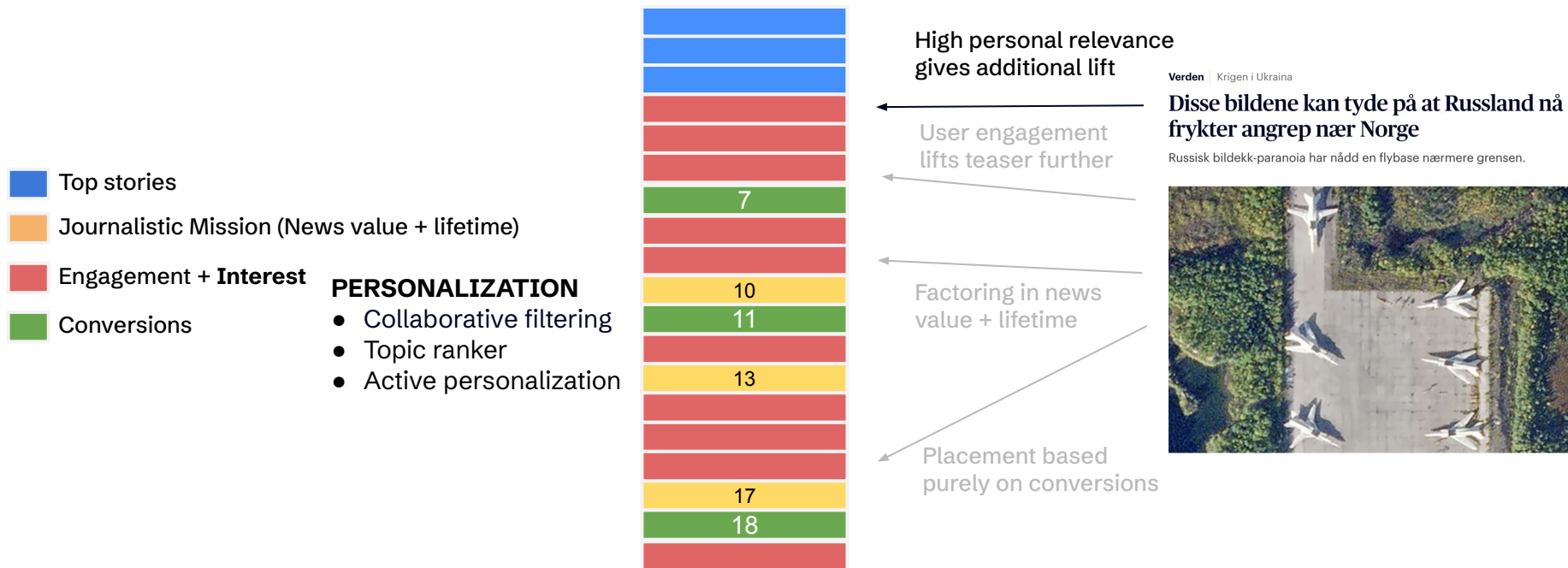
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Adding personalization gives additional weight to personal relevance in our rankers

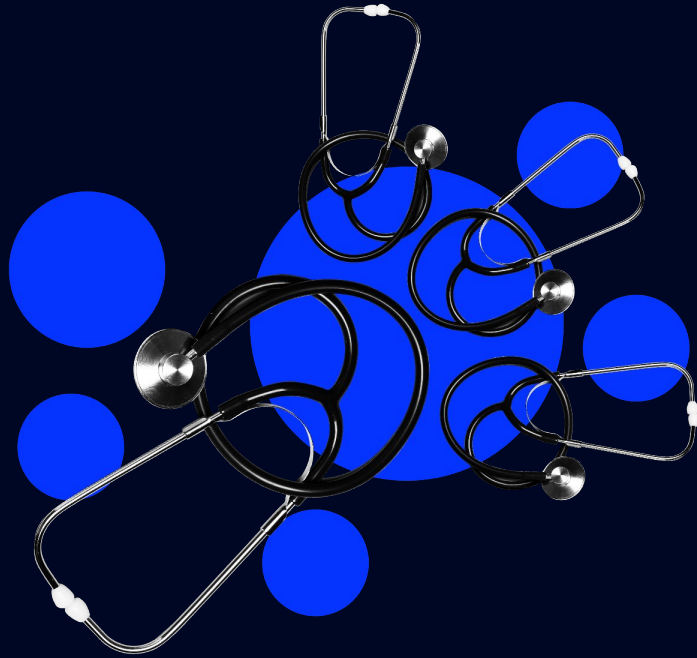


The share of personalized articles depends on
how many articles everyone needs to see.

When there's a lot going on, there will be a **higher share of “show to all”** articles, while **on quieter days there is more “for you”** teasers.

The **dynamic share of personalization** means we can responsibly **personalize the newsfeed more when there is less going on.**

Results

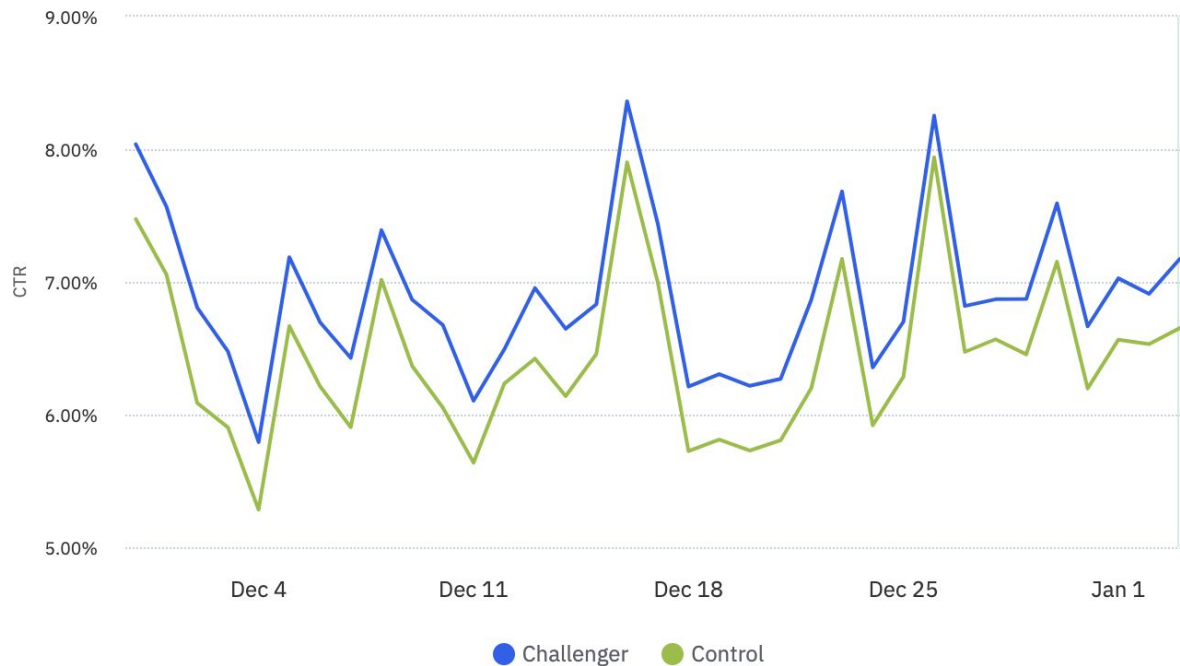


When adding up the effect of test iterations
on the front page over the past ten months...

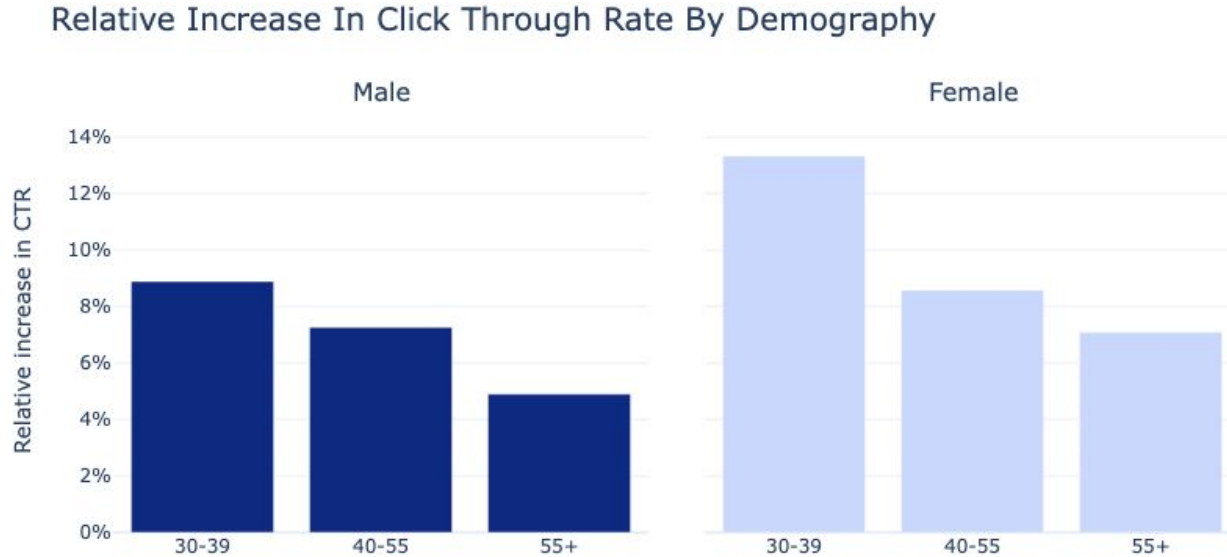
...we have **grown subscriber clickthrough
rates (CTR) on article entries on the front
page by around 25% in less than a year.**

Subscriber engagement A/B test over 40 days

>8% lift in CTR



Segmented results are even more encouraging:
Female users aged 30-39 show an engagement boost of 13%(!)



Also, **minority user segments engage with a wider breadth of our content** in the personalised version of the front page.

In other words, personalization **helps us serve minority user segments better** than a feed biased toward optimising for the older male majority.

What's next?



Beyond **articles** as the unit of storytelling.



Right format to the right user:
Expanding to audio and video,
in addition to various text versions

Right offer to the right customer:

Intelligent up/downgrades
according to users' habits/WTP

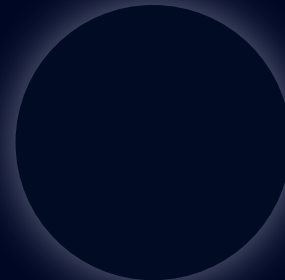


Product experience:

Dynamic adjustment of the product experience
based on mode and access level/subscription tier

A long term vision

A product that adjust to user preferences and willingness to pay, reducing the need for repeat customer acquisition and activation.



Lessons learned

1

A dynamic blend of editorial judgement and personalization **solves our journalistic mission in a better way than full manual curation.**

2

Algorithms help justify **a more diverse content mix**, since you get the right stuff to the right user. We see higher engagement **overall and per segment.**

3

Personalization will be about more than matching **articles** to users. The impact of **personalizing subscription tiers and products** may have even larger impact.

Questions?

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