

Personalization, Relevancy & the Rise of AI

Unravelling the tech shaping
digital publishing



E-GUIDE



A Zuora Company

With [74% of customers](#) feeling frustrated when website content isn't customized, it's clear that personalization is a crucial aspect of digital publishing that can't be overlooked. With today's generations expecting relevant content from their experiences, it's down to publishers to employ personalization tactics **that increase engagement and drive business success.**

As the industry progresses, personalized experiences are taking on a more advanced role. Historically, digital publishers would rely on metrics such as article views and comment feedback to make guesses as to what content was resonating with audiences best. But nowadays, things have evolved to the point where publishers have the **ability to analyze customer data at scale** and **make accurate predictions** never previously thought possible.

The most powerful technology for achieving this advanced level of personalization is **artificial intelligence (AI)**. AI is a buzzword that often gets used across the industry without much clarity of what it actually entails.

In the context of personalization, AI can be used to deliver personalized article recommendations by **analyzing data and spotting subtle patterns** at scales that would be impossible to do otherwise. Publishers can then use these known patterns to tailor article suggestions to the interests and preferences of individual users.

But AI and personalization can be difficult to navigate. In this e-guide, we'll cover the **different strategies for personalization** and content recommendations that exist today. We'll discuss the key metrics to be aware of, the best practices for implementing a content recommendation model, and delve into the world of AI analysis.

By the end of this guide, you'll have a clear understanding of **how to deliver personalized article recommendations**, as well as how AI might advance in future to make these processes even more streamlined and effective.

The Push for Personalization


58%

In Forrester's report "How Content Marketing Builds Lasting Relationships", a study found that 58% of B2B users described the content they saw as focused more on 'style than substance'.

Pulling back the curtain on this insight, the issue becomes clear: marketers could be spending too much of their time creating content that prioritizes promotional messages over their customers' informational needs and preferences.

But it's not just B2B publications facing this pressure. [77% of Gen-Z](#) believe it's also important for B2C businesses to customize interactions, while **76% are looking for B2C companies** to send them digital communications that they themselves can customize based on their own preferences.

With these stats showing the future of news readers expressing a clear desire for tailored content suggestions, personalization has become a crucial aspect of focus for digital publishing moving forward. Firstly, by allowing publishers to deliver the highly relevant content users are desperately seeking, customer satisfaction becomes far easier to achieve. Backed by data, these strategies can ensure that the articles being seen are of greater value to the user, which can lead to increased user retention and loyalty, ultimately driving longer-lasting customer relationships.



Additionally, personalization allows publishers to gain a better understanding of their audience in order to make data-driven decisions about **future content strategies** and distribution too. By analyzing data on user behavior, publishers can identify **which types of content are most popular**, and which are not resonating with their audience. This information can then be used to make informed decisions about which topics to dedicate resources to in future, which helps to **build the longevity of the brand**.

In short, not only does it benefit publishers and revenue in the long run, but it's also preferred by the users who are **seeking better value** from their content too. Additionally, having access to endless amounts of content online means picking the best source can be tricky. By creating an experience where relevant content is suggested, publishers can **increase the chances of keeping their audiences engaged**, coming back for more and most importantly loyal. Ultimately, boosting their chances of being able to **stand out in a saturated market**.

In summary, **personalization** is rapidly becoming a **crucial key to success for digital publishers**. With this in mind, where is the best place to start when trying to implement a content recommendation strategy?

Getting a head start — We're lost without the right data

It might sound self-explanatory, but in order to be able to customize user experiences, publishers need **to know** about their users first! This means collecting data, specifically first-party data.

First-party data is data that is collected directly from a user with their consent. This could include website interactions, content preferences, and demographics. Armed with this information, publishers can then build their strategies around the interests and preferences of users.

First-party data has garnered a lot of attention in the industry over recent years since [Google announced](#) that it will phase out third-party cookies from its Chrome Browser. While this did come as a surprise for many publishers, it might not be the worst move, since third party data can be less accurate and may not provide a complete picture of user behavior.

“(First-party data) is about to become imperative for digital marketing. Big-tech will no longer track users around the internet on behalf of marketers, they must take responsibility for their own first-party data collection.”

Daniel Gilbert, Chief Executive, Brainlabs

The Push for Personalization

First-party data collection is critical for accurate personalization moving forward, and could help publishers build a very competitive advantage, since this data is not widely available to other competitors.

So how can publishers go about collecting first-party data directly from users?

Often the best practice for first-party data collection is to offer something in return for the data. One way publishers can do this is through registration forms. For example, a user might click onto an article which is free to consume, but in order to read it they will have to register with their email and fill in a few details about their interests. Furthermore, it's important to be explicit on how the data is being used. The value exchange should be clear, for example, by providing information about their interests the user will receive a more customized and enhanced experience. This will lead to users willingly taking action and providing the necessary data.

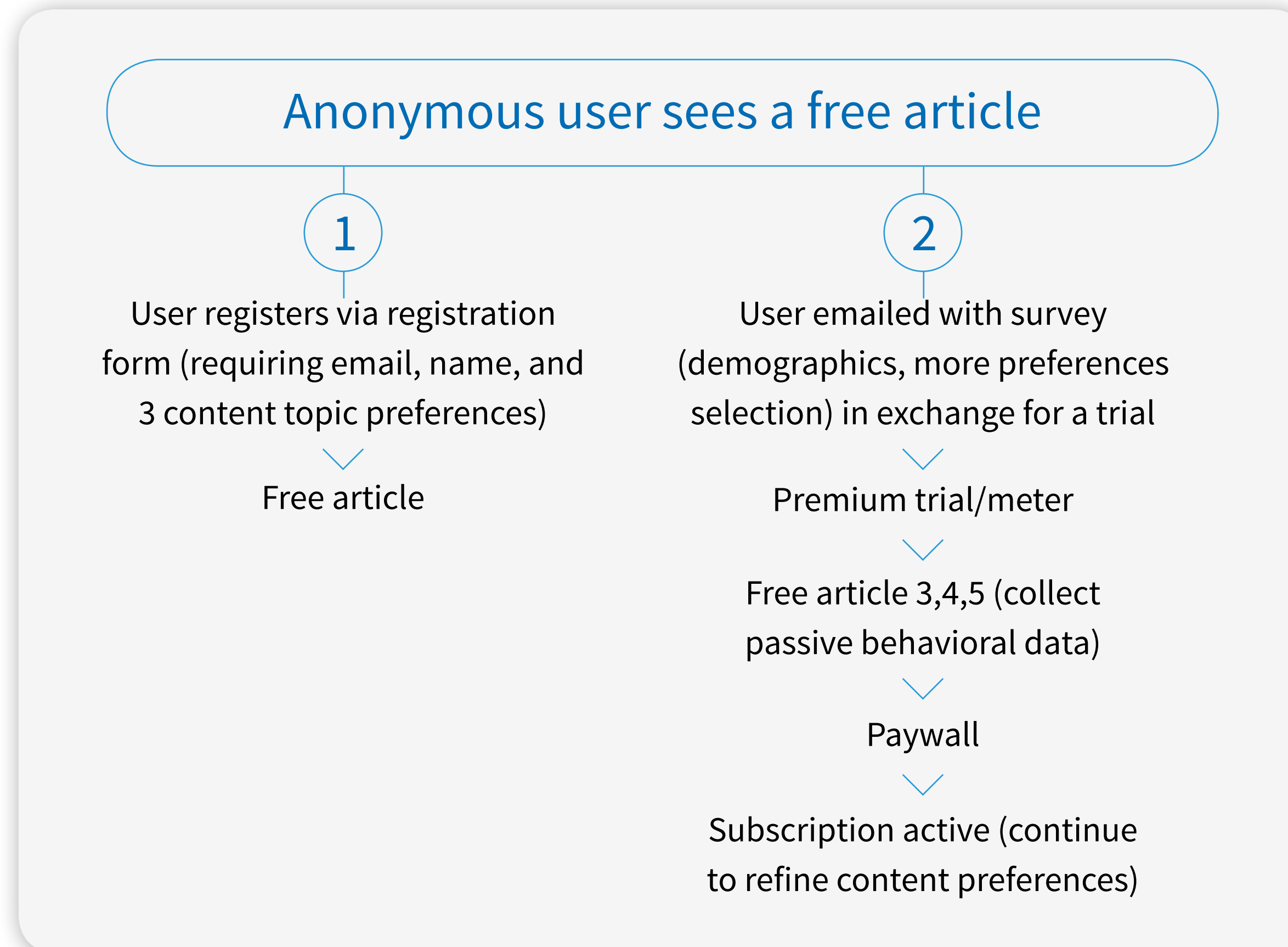
83%

83% of consumers are willing to share their data if it means they're able to receive a more personalized experience.


But collecting useful first-party data from users requires a balanced approach. It's important to strike the right balance between getting enough good quality information to make accurate content recommendations and predictions, without being too invasive and putting users off.

The Importance of Progressive Profiling

Progressive profiling involves **collecting data from users** in a gradual way, rather than asking for a lot of information all at once. This helps to **build trust with users** and ensures that the overall data collected is detailed and relevant without feeling intrusive.



As you can see, the data collection process runs throughout the entire user journey and even continues past the paywall and subscription stage. In order to be truly effective, progressive profiling should continue to evolve as a user's preferences change over time. By using this real-time, accurate information to deliver personalized content recommendations, publishers can increase the chances that users will continue to return to their site and engage with their content for the long term.



“[Progressive profiling] means your users can immediately engage with your product, experiencing it first before you overload them with questions. You might only get a small amount of data at first, but once they start... they will be far happier to give you more.”

Martin Gontovnikas, Co-Founder and GTM Advisor, HyperGrowth Partners

As with all data collection, progressive profiling should be done in a way that respects the user’s privacy. The user should be informed about the data that is being collected and have the option to opt-out. Being transparent with this information is beneficial as it builds trust and makes users less likely to feel uncomfortable about sharing valuable insights.

In summary, progressive profiling is an important technique for personalizing content suggestions and improving the user experience.

Embracing artificial intelligence for personalization

Artificial intelligence (AI) will likely play a critical role in the future of personalization by providing the ability to analyze large amounts of data and make predictions automatically.

“Artificial intelligence presents an opportunity to tailor personalization beyond traditional segmentation. The power of AI can discern the nuanced needs of the end-user in a way that was simply not possible with traditional personalization journeys. Companies like Spotify have pioneered this with investment in music recommendations that enhance the user’s experience of the product. This highly personal experience reflects a shifting consumer trend to the value of novelty and curated experiences through AI.”

Kiuran Naidoo, Senior Software Developer, Zephr, A Zuora Company

1. Collaborative filtering

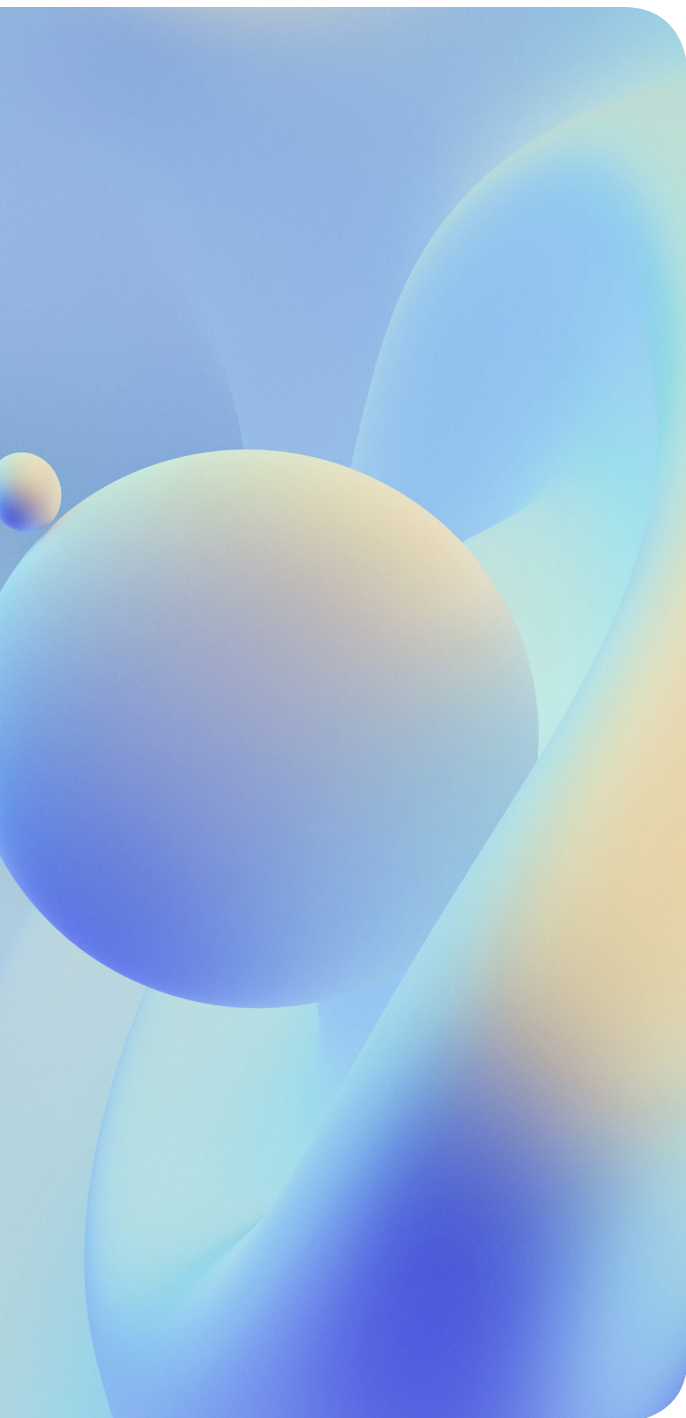
This type of algorithm uses data on user behavior, such as browsing history, to identify patterns in the content that users are engaging with (whether it’s video, articles, or podcasts). It then uses this information to make accurate and automatic predictions about which types of content a particular user is likely to be interested in. By recommending content that is similar to what the user has engaged with before, collaborative filtering has a high likelihood of being able to find content a user will engage with again. Collaborative filtering can even identify patterns that would otherwise be difficult to track, such as whether a person is more likely to read political news at a certain time of day.

2. Content-based filtering

This type of algorithm uses data on the content itself, such as keywords, topic tags, and themes, to make predictions about which types of content a particular user is likely to be interested in. The process is also called natural language processing (NLP) which enables AI to understand and interpret human language (to an extent). By analyzing text-based content, content-based filtering can see if there’s patterns in behavior. For example, does a particular user tend to read more articles with political keywords, themes or tags, or perhaps they read articles where a particular celebrity’s name occurs most often. This information can then be used to analyze live and real-time content as it’s published, and recommend articles that mention these relevant words or phrases a user has shown a preference for.

3. Hybrid algorithms

These algorithms combine both collaborative filtering and content-based filtering to make personalized content recommendations. By combining the strengths of both types of algorithms, hybrid algorithms can deliver even more accurate and relevant content recommendations.



Finally, taking things a step further, AI can be used to analyze images and videos, this technology is also known as ‘**computer vision**’. It can be used to identify objects, scenes, and activities in visual content, much like tags and keywords in written articles. This information can be used to deliver **personalized content recommendations** that are relevant to the user’s interests for any content that isn’t writing-based. Computer vision still has a way to go before it’s adopted by **mainstream digital publishers**, but it’s interesting to see how advanced things will likely become in the near future.

In summary, AI currently has an **increasingly important role in personalization** by providing the ability to analyze large amounts of data, make automated predictions, and deliver personalized content recommendations more accurately than before. But is AI the only way forward?

Embracing artificial intelligence for personalization

While AI may very well be the future of personalized content recommendations, it can be expensive to implement and difficult to train and implement across teams.

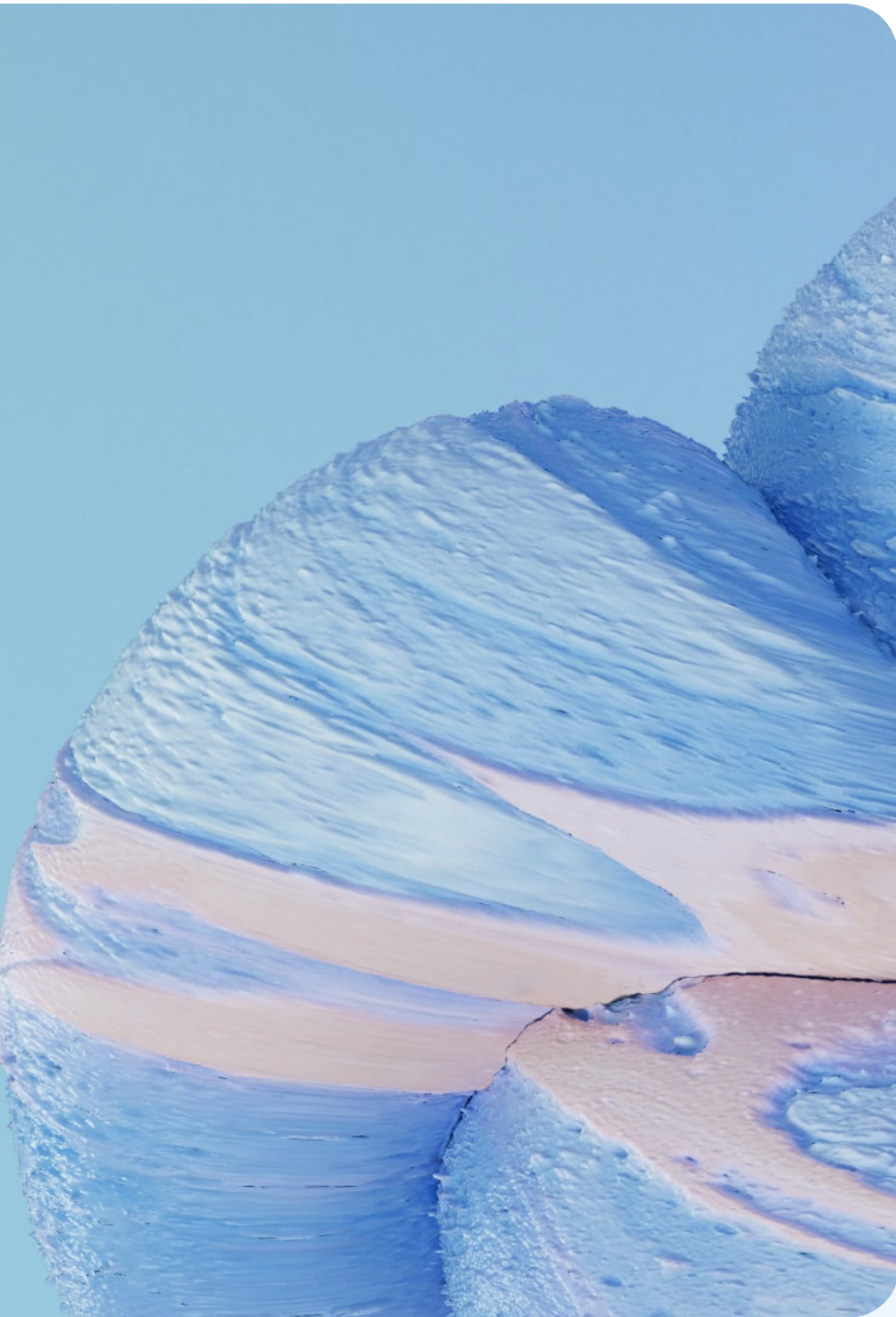
The research report “People Plus Machines” by Frontier and the Publisher’s Association states:

Often the best practice for first-party data collection is to offer something in return for the data. One way publishers can do this is through registration forms. For example, a user might click onto an article which is free to consume, but in order to read it they will have to register with their email and fill in a few details about their interests. Furthermore, it’s important to be explicit on how the data is being used. The value exchange should be clear, for example, by providing information about their interests the user will receive a more customized and enhanced experience. This will lead to users willingly taking action and providing the necessary data.”

The report goes on to say:

“Lack of awareness of the potential benefits of AI also appears to be a significant barrier for large publishers. This lack of scientific knowledge by investment decision-makers may be attributable to the fast rate of technological change currently seen for AI.”

With these challenges in mind, it may be worth considering alternatives to AI in the meantime in order to implement **personalization** more quickly.



One solution is to incorporate technology that allows for the rapid building and **deployment of registration walls** with varying inputs. With these registration walls collecting valuable data on users, subscription experience platforms can segment users via demographics or other preferences, and then enable custom user journeys to be created for each. This can include aspects such as how many articles a user can see before a paywall, what types of content they see, and how frequently they're contacted via email. In this way, fast registration and journey iterations can enable publishers to **deploy custom experiences** and gain a deeper understanding of their audience without having to use complex or

costly AI solutions.

Regardless of what tech stack a publisher has now, or how they go about personalizing content recommendations, one thing is for certain - the **ability to adapt to emerging technology quickly** in the near future will be advantageous. This means many publishers are looking at ways to 'future proof' their tech stacks.

Using best of breed solutions future-proof compared to using a single, **all-in-one solution**. As technology continues to evolve, new and better solutions will become available, and by using best of breed solutions, publishers can more easily incorporate these new solutions into their existing systems, rather than being locked into a single, outdated solution.

So should we rely on AI entirely for personalization? Not necessarily. But should we **prepare technology and systems for a future** where AI could have an increasing role in content recommendations? It seems sensible.

Regardless of how personalization is implemented in a publishing business, **monitoring and evaluating the effectiveness of suggested content** regularly is key to ensuring it's optimized and effective. By doing so, publishers can identify areas where their **personalization efforts can be improved** and make adjustments as needed. Taking a test, learn, and iterate approach here can be a powerful tool to drive business success.

Measuring the Success of Personalized Content Recommendations

In general, it's difficult to measure like-for-like results from personalized content recommendations, but we can make some accurate assumptions based on the following metrics:



Engagement

Engagement metrics measure how much time users are spending on a website, or whether a particular piece of content gets clicks. Increased time on a page, decreased bounce rate, multiple visits to a page, or comments/shares all suggest the recommended content is resonating with audiences.



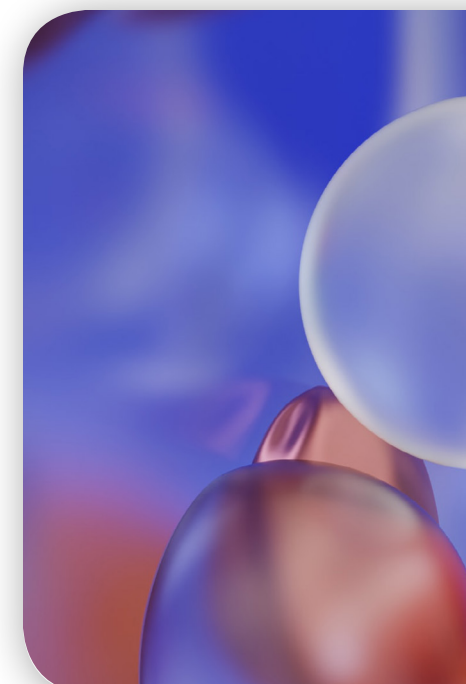
User retention

User retention measures whether users are staying subscribed. A higher user retention rate indicates that they're finding more of the content valuable and engaging, meaning they are happy to pay in order to continue returning to the website and receiving that value in the future.



Revenue

Revenue metrics, while tied with retention, offer another way to measure recommendation effectiveness. By measuring increases in revenue, publishers can identify if broader content across the site is appealing, and if it encourages users to enter premium subscriptions, or cross sells.



Feedback

A simple way to measure content effectiveness, although harder to quantify, is direct feedback from users. The importance of user feedback can often go overlooked, but offers a unique source of information that's unavailable to competitors. By collecting feedback from surveys, interviews, and comments, publishers can access deeper insights that give a competitive edge. It's important for publishers to track these metrics over time and regularly review to ensure everything is optimized. To understand more about personalization effectiveness, let's delve into the best practices from leading publishers in the industry.

Best Practices for Personalized Content Recommendations

Personalization can be a complex area to navigate, with many factors that ought to be considered to ensure its effectiveness. To help, here's some guidelines from the industry:

Communicate with users:

Keep users informed about the personalization process and explain how recommendations are being generated. Not only does this transparency ensure compliance with GDPR and CCPA, it also builds trust with audiences and makes them more likely to share valuable information.

55%

With 55% of consumers saying that trustworthiness and transparency are the most critical factors for them to engage with a brand, there's clear benefit in fostering a two-way conversation with users.

1

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Prioritize user privacy:

When collecting and analyzing data for personalization, it's important to ensure that user privacy is protected. Publishers might consider speaking with a data protection specialist to ensure they have the right precautions in place. As a general rule of thumb, this means [providing evidence for questions such as](#):

- Can we show how our data will be used and what it will be used for?
- Can we prove that the data collected is used only for the purposes explicitly specified at the time of collection?
- Can we limit our data collection to specifically what is necessary to serve the purpose for which it is collected?
- Can we prove that we can prevent the data from being used by unauthorized parties?

With megalithic companies like Meta recently being fined **€390m for data breaches** across Facebook and Instagram, user privacy and protection is essential for any personalization strategy.

3

Provide opt-out options:

As well as demonstrating to users what their data will be used for, giving the option to opt-out is also recommended. Not only does this help to comply with the relevant guidelines, but it also shows users that their opinion matters and they are valued and treated fairly. All factors that will boost the trustability of a brand.

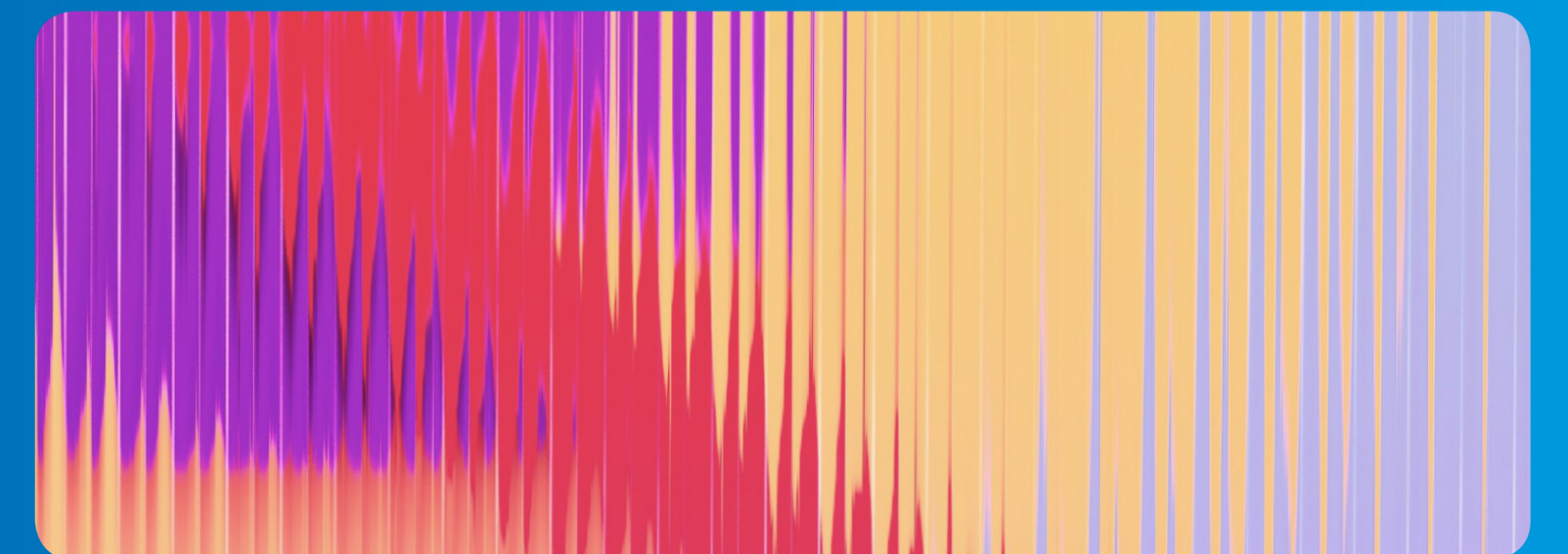
Test and optimize:

By continuously testing and optimizing personalized content recommendations, publishers can compare the effectiveness of different personalization strategies and make data-driven decisions to optimize their efforts. This might include running A/B tests for different registration form entries, or experimenting with changes to the user journey for a particular audience segment.

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“Publishers who have been most successful with their strategy have iterated regularly and gradually layered on the complexity for the reader experience in ways that are targeted. This allows them to make informed decisions about how and why they change things for readers, rather than just guessing.”

James Carter, Head of Solutions Consulting,
Zephr, A Zuora Company



5

Keep it simple:

Make sure the personalization process is simple, clear and easy to understand. Overly complex strategies can overwhelm users with too many options, leading to choice paralysis and decreased engagement, while simple strategies are more likely to be consistent and can be easier to test and optimize.

Future implications

In conclusion, **personalization is a powerful tool** for digital publishers looking to increase engagement, drive business success, and deliver better user experiences. **Artificial intelligence and subscription experience tech** have seen a rise in recent years, specifically for their use in analyzing vast amounts of data on user behaviors, preferences, and interests.

As AI is continually advancing, this rapid innovation means publishers may want to consider future proofing their business in order to keep up. Taking a forward thinking approach to a tech stack will ensure they're able to meet current personalization needs, and be ready for new AI developments as they evolve in future.

But while AI models are likely to become more and more mainstream in years to come, it doesn't take much to get started and begin personalizing user experiences. Publishers can deliver personalized content recommendations with simple tools that aren't as challenging to onboard.

Finally, when we think about personalization of any sort, it's always important to follow best practices when delivering content recommendations. This includes prioritizing user privacy, providing opt-out options, communicating with users about how their data is used, testing and optimizing form types, and being mindful of ethical considerations.

In summary, personalization is a valuable strategy for digital publishers seeking to

enhance user engagement. While many are considering AI and more advanced personalization strategies in the coming years, publishers who start sooner with simpler personalization tools will likely gain a head start over competition.

For more information about effective personalization using data, take a look our guide ["7 best ways to leverage first-party data capture strategies for a competitive advantage"](#).



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For more help planning a successful digital publishing strategy for the years ahead, take a look at our guide [“Starter Kit: Succeed With Digital Subscriptions”](#).

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