Privacy-aware Personalization

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Part of this work was presented at the: NU:BRIEF – A Privacy-aware Newsletter Personalization Engine for Publishers (RecSys '21) Ernesto Diaz-Aviles, Claudia Orellana-Rodriguez, Igor Brigadir, and Reshma Narayanan Kutty.

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Why Recommender Systems and Personalization?



Personalization, Privacy, and Me

- There is **little to no transparency** in how the data collected is used for personalization.
- In the name of personalization, data is collected in excess
- People use their own tools to protect themselves online like ad-blockers, VPN and privacy preserving browsers
- There is a need to reach a balance between personalization experiences and privacy to reap the benefit of both.
- Survey details available at:
 https://www.recsyslabs.com/personalization-privacy-and-me/



"It's not that I've got something to hide.

I've got nothing that I want you to see"

Better Personalization. How?

- Private by Default Data should never be used against people in a way to benefit a third party – their identity belongs to them
- Control People should have the ability to adjust their recommendations or delete their entire digital identity at any time
- Delightful Discoveries Do not optimize for addictive behaviors
- People & Technology Editors and algorithms must work together

The Emergence of Neo-Media

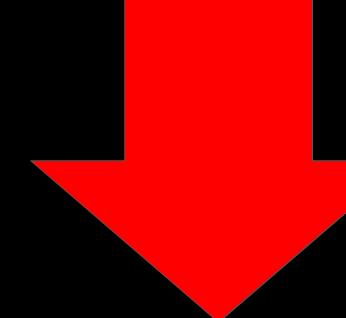
- As long as people want to be informed, entertained, and inspired, there will be profitable opportunities in publishing
- Publishers that innovate on their business models: move away from ads towards a focus on delight their audiences
- Think more like digital and product and technology company



Publishers need new revenue streams beyond intrusive advertising

-13%

digital ads 2020



Solution: Delight, Engage, Convert

Membership Revenue Model

- Personalized Newsletters: connect readers with personalized content that is worth paying for
- Proven model by big players. Currently manual process
- Our Tech: <u>Automatically</u> using <u>AI/Machine Learning</u>

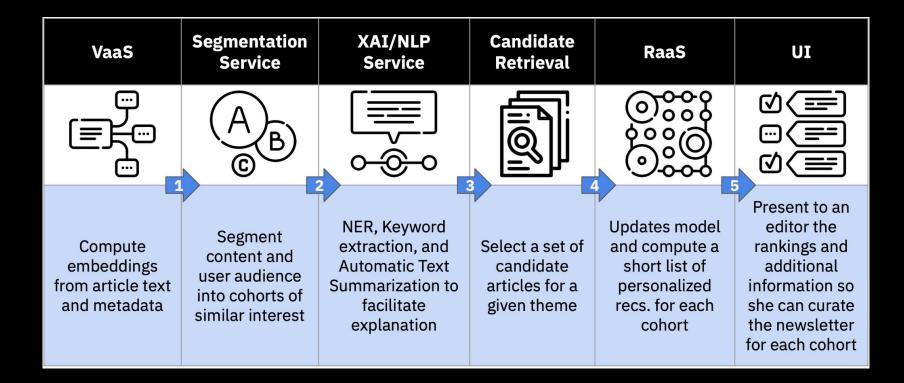
Secret Sauce

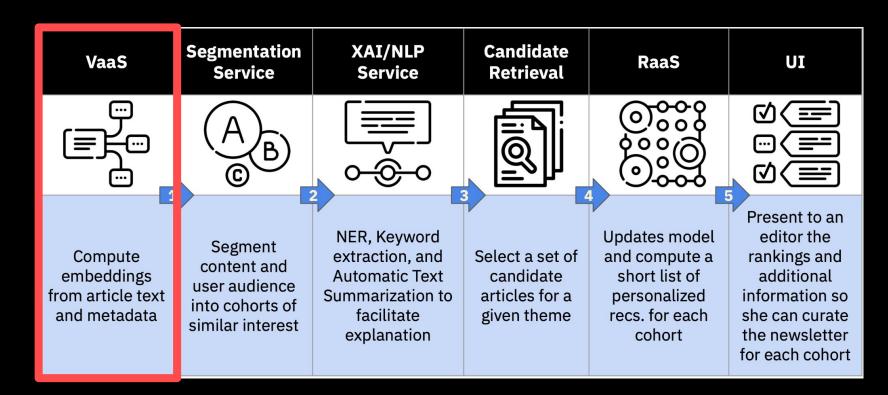
* +15 years research
combined on recommenders
systems and digital news
projects

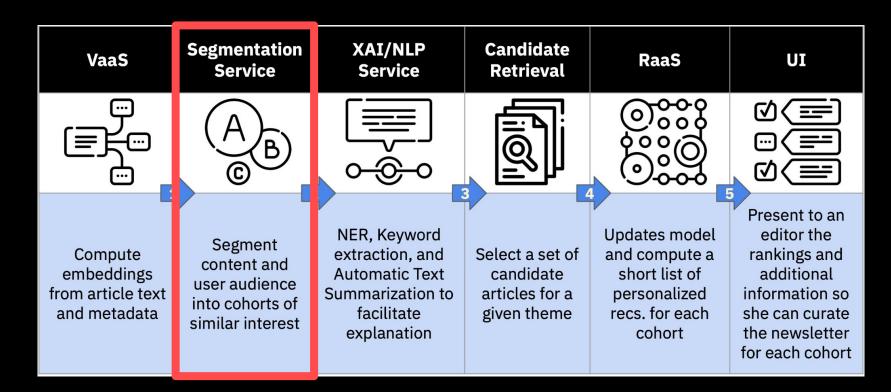
* Execution: ML in production

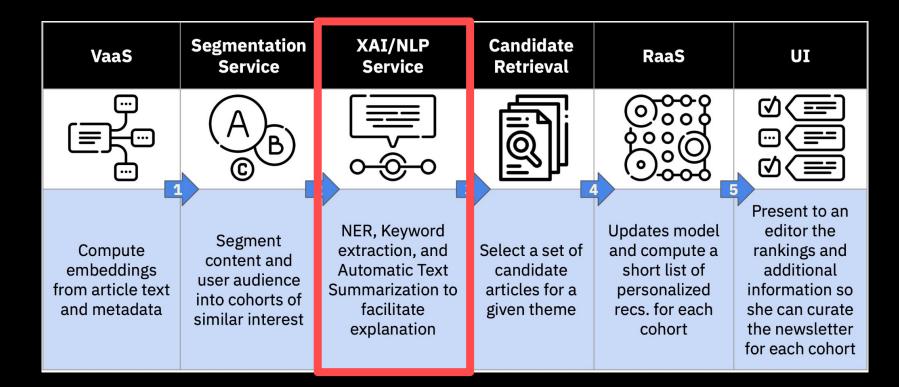
Personalization Engine Distributed ML; NLP Production **Privacy-preserving Explainable AI ML and Analytics** (XAI)

NU:BRIEF – A Privacy-aware Newsletter Personalization Engine for Publishers

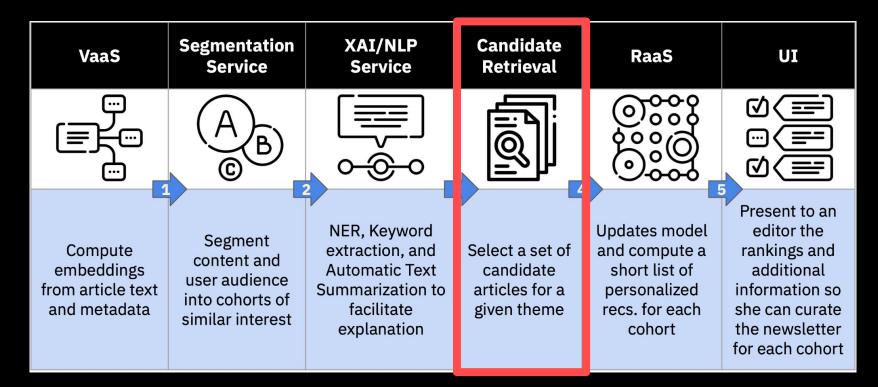


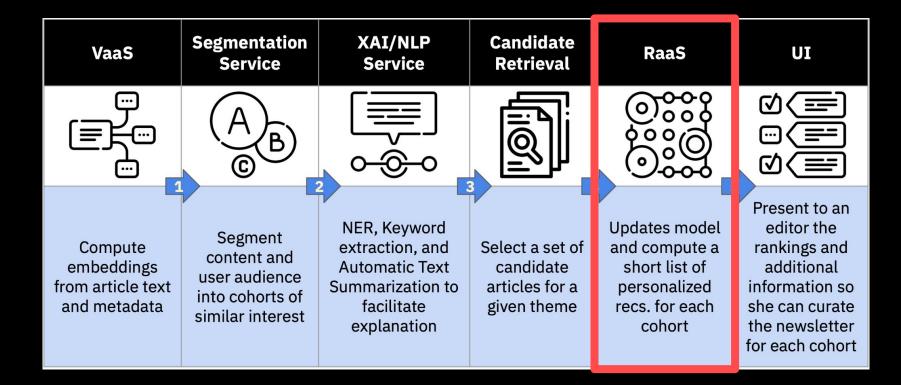


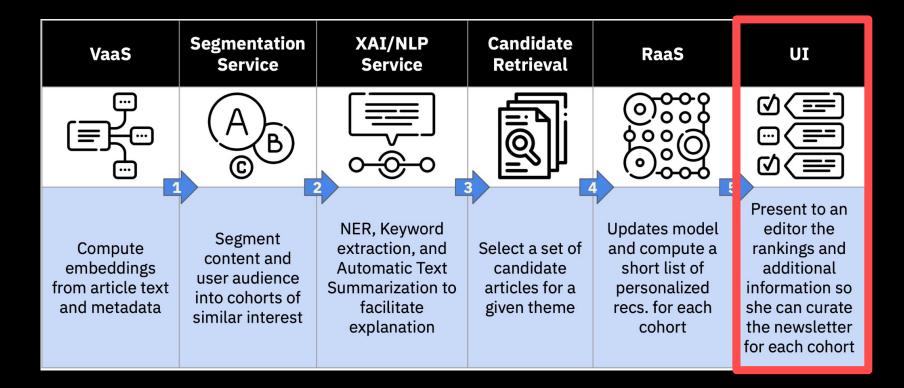




NU:BRIEF by recsyslabs



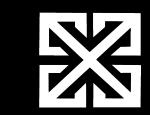




NU:BRIEF's personalized newsletters

- +34% user-generated revenue (conversions)
- 80% reduction in newsletter curation time
- 100% private by default: No Liability of storing Personal Identifiable Information. No regulator fines. Hackers can not steal what is not stored
- AI generated rankings at human level (only 3.43% error rate)

Enable disruption through a **better personalized Internet** that **respects individuals**









detour

A daily personalized selection of five long reads and slow news to give you a break from breaking news and pandemic-related content.

No cookies, no email address, no PII.

