

# AI-Driven Journalism in Türkiye: A Case Study of Habertürk

Ayşe Fulya Şen

Faculty of Communication, Fırat University, Elazığ, Türkiye

Email: fulyasen@firat.edu.tr

**How to cite this paper:** Şen, A. F. (2024). AI-Driven Journalism in Türkiye: A Case Study of Habertürk. *Advances in Applied Sociology*, 14, 798-806.

<https://doi.org/10.4236/aasoci.2024.1412051>

**Received:** November 18, 2024

**Accepted:** December 24, 2024

**Published:** December 27, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

This study examines the role of artificial intelligence (AI) in shaping content strategies and editorial practices on Habertürk, a leading digital news platform in Türkiye. Using data collected from 53 headlines on December 21, 2024, the study categorizes news into six thematic groups and evaluates the balance between AI-driven and editor-curated content. The findings reveal that while AI enhances operational efficiency through SEO optimization and personalized recommendations, it disproportionately prioritizes high-engagement topics like Politics and Sports, which account for over 60% of the total headlines. Conversely, underrepresented categories such as Local Stories and Human Interest benefit from editorial oversight, emphasizing the critical role of human intervention in maintaining thematic diversity. The study underscores the need for ethical frameworks, algorithmic transparency, and a balanced integration of AI with editorial practices to ensure inclusivity and uphold journalistic integrity.

## Keywords

AI-Driven Journalism, Editorial Independence, Content Diversity, SEO Optimization, Digital News Platforms, Automation, Habertürk

## 1. Introduction

Artificial intelligence (AI) is transforming digital journalism by automating tasks such as headline generation, SEO optimization, and personalized content recommendations (Thurman, Lewis, & Kunert, 2019). These advancements enhance operational efficiency and audience engagement but raise concerns about editorial independence, content diversity, and ethical oversight (Montal & Reich, 2017). The integration of AI in digital journalism extends beyond content creation to include automated publication schedules, algorithmic personalization, and the use of trending keywords to optimize search engine visibility (Broussard, 2018).

In Türkiye, Habertürk exemplifies the integration of AI into digital journalism by utilizing tools like automated scheduling, personalized recommendations, and search engine optimization. These innovations streamline content delivery and foster audience interaction, positioning Habertürk as a leader in AI adoption. However, challenges such as narrative homogenization and reduced thematic diversity remain significant concerns.

This study critically examines the thematic distribution and content strategies of Habertürk's headlines, collected on December 21, 2024. While AI-driven features such as SEO optimization enhance visibility and audience engagement by prioritizing trending topics, they may inadvertently narrow thematic diversity and reduce editorial autonomy. By analyzing the balance between AI-driven strategies and traditional editorial practices, this research sheds light on the dual impact of AI in journalism: operational efficiency and thematic homogenization. These findings contribute to the broader discourse on the ethical and practical challenges of integrating AI into journalistic workflows and offer actionable insights for balancing automation with editorial integrity.

## 2. Literature Review

Automated headline generation is one of the most prevalent AI applications in digital journalism, designed to optimize reader engagement by analyzing audience preferences, trending keywords, and linguistic patterns. The integration of artificial intelligence into digital journalism has significantly transformed news production and dissemination, raising concerns about transparency and potential algorithmic bias. [Mittelstadt \(2016\)](#) underscores the necessity of auditing content personalization systems to ensure transparency and safeguard diversity. He argues that while such systems enhance user experiences by tailoring content, they often filter information in ways that reduce exposure to diverse viewpoints, undermining democratic discourse. [Thurman, Lewis, and Kunert \(2019\)](#) highlight how AI systems powered by natural language processing (NLP) craft headlines that meet platform-specific requirements, such as character limits and search engine optimization (SEO) standards. However, these practices often prioritize click-through rates over nuanced and creative storytelling, leading to reduced originality and depth in journalistic content. While personalization increases relevance for readers, it has also been criticized for creating echo chambers, where users are exposed primarily to information that aligns with their existing views, limiting exposure to diverse perspectives ([Thurman et al., 2019](#)).

The report of the [Institute for Information Law \(IViR\) \(2019\)](#), *Implications of AI-driven Tools in the Media for Freedom of Expression*, highlights both the potential benefits and risks associated with AI technologies in the media. AI-driven tools, such as content personalization algorithms, automated news generation, and audience targeting systems, enhance operational efficiency and user engagement by tailoring content to individual preferences. However, these advancements raise significant concerns regarding media diversity and freedom of expres-

sion. The report emphasizes that algorithmic curation may create “filter bubbles,” where users are exposed primarily to content that reinforces their existing views, thus narrowing their informational scope. Furthermore, “algorithmic bias”—the replication of societal prejudices in AI systems—poses risks to media pluralism, potentially marginalizing underrepresented voices and perpetuating stereotypes. To address these challenges, the IViR advocates for transparency in algorithmic processes, accountability in AI deployment, and regulatory measures to ensure that these tools support, rather than undermine, democratic principles and freedom of expression.

The report by [Arguedas et al. \(2022\)](#) examines the role of algorithmic selection in shaping news consumption and its potential impact on societal polarization. While concerns about “filter bubbles” and “echo chambers” suggest that algorithmic curation may reinforce users’ existing beliefs, leading to ideological isolation, the evidence remains mixed. The study highlights that self-selection by individuals often plays a more significant role in limiting exposure to diverse perspectives than algorithmic selection itself. However, for highly partisan individuals, algorithms can exacerbate polarization by prioritizing content that aligns with their preferences. The report emphasizes the need for a balanced approach to algorithms, ensuring they enhance exposure to a variety of viewpoints without sacrificing user engagement or relevance. This nuanced understanding underscores the importance of transparency and accountability in how algorithms influence media ecosystems and public discourse. For Habertürk, algorithmic optimization has contributed to the amplification of mainstream narratives, limiting exposure to diverse perspectives. This is particularly significant in Türkiye, where polarized media ecosystems further exacerbate these effects.

A study by the [Süddeutsche Zeitung Digitale Medien team \(2022\)](#) explores the automated generation of news titles specifically for SEO purposes, emphasizing the balance between algorithmic efficiency and editorial quality. Similarly, [Rajalakshmy and Remya \(2016\)](#) propose an n-gram-based approach that refines headline selection by ranking sentences based on their relevance and frequency. Further advancements include [Fatima et al.’s \(2023\)](#) post-processing method, which improves the quality of AI-generated headlines by filtering sentences based on Part-of-Speech (POS) tagging patterns. This approach ensures that only linguistically coherent and contextually relevant headlines are selected, significantly enhancing readability and coherence. [Evans, Jackson, and Murphy \(2022\)](#) examine Google News as a “machine gatekeeper,” illustrating how algorithmic personalization curates content for users. Their findings reveal that while such systems enhance content relevance, they also risk narrowing the diversity of perspectives available to audiences by prioritizing popular topics and sources. The exclusion of less mainstream narratives fosters echo chambers and reinforces existing biases. Evans et al. advocate for greater transparency and oversight in algorithmic gatekeeping to protect journalistic pluralism and ensure diverse, representative content ecosystems. Similarly, [Skyes \(2024\)](#) highlights that algorithmic systems curate personalized content by analyzing user behavior and preferences. While person-

alization enhances engagement, it often creates “filter bubbles,” where users predominantly encounter information aligned with their beliefs, limiting exposure to diverse perspectives. These dynamics are particularly concerning in politically sensitive contexts, where such systems may inadvertently perpetuate existing biases and restrict pluralistic discourse.

SEO plays a pivotal role in enhancing the visibility of news content in an increasingly competitive digital environment. Clarkson-Bennett (2024) outlines how SEO strategies for news publishers focus on optimizing headlines, metadata, and article structures to achieve higher rankings in search results. While such practices drive traffic and improve engagement, they may also lead to content standardization as publishers adopt similar keywords and formats to maximize searchability. In the context of AI-driven journalism, algorithm-powered SEO tools have streamlined these processes, allowing rapid adaptation to trending topics. However, Clarkson-Bennett warns that while beneficial for audience reach, these strategies can reduce content originality by encouraging uniformity across platforms, raising concerns about balancing visibility with journalistic distinctiveness (2024). AI has significantly influenced content creation and representation, offering opportunities for efficiency but presenting challenges for diversity. According to AI Contentfy (2023), while AI technologies streamline production, they often rely on training data that reinforces existing stereotypes or biases. This results in homogenized content that lacks nuanced representation of diverse voices. The article emphasizes the importance of implementing inclusive strategies to ensure that AI-generated content reflects a broad spectrum of human experiences, particularly in politically sensitive contexts where diversity is crucial for informed discourse. Mann (2024) discusses the phenomenon of “AI homogenization,” wherein algorithms standardize language, themes, and presentation styles across platforms. While this simplifies content creation and enhances accessibility, it diminishes perspective diversity and limits the distinctiveness of individual voices. Mann further argues that the overreliance on AI tools risks marginalizing unique and critical viewpoints, particularly in politically polarized environments. This narrowing of narratives can significantly affect public discourse, making it imperative to address these limitations in AI-driven journalism.

Recent scholarship has further highlighted the transformative role of AI in journalism and its implications for editorial practices. Napoli (2019) emphasizes how algorithmic content personalization, while enhancing user engagement, risks narrowing the diversity of perspectives by tailoring news delivery based on user preferences. Similarly, Gillespie (2020) explores the mechanisms through which algorithms shape digital platforms, revealing the hidden decisions that influence both content moderation and user behavior. Couldry and Hepp (2017) expand on these ideas by discussing the societal and cultural impacts of AI-driven media ecosystems, particularly how such systems mediate public understanding of reality. Diakopoulos (2019) provides an in-depth examination of automation in news production, focusing on how algorithms are increasingly integrated into editorial workflows, from content selection to headline generation. Cools and Koliska (2024)

further examine the integration of AI-driven automation in news production, highlighting the necessity of algorithmic transparency to maintain journalistic credibility and trust. They argue that while AI enhances efficiency, it can also challenge editorial independence, requiring ethical safeguards to balance technological advancement with journalistic integrity. These studies collectively underscore the dual role of AI as both an enabler of operational efficiency and a potential threat to journalistic diversity and independence. Furthermore, algorithmic personalization has been linked to the creation of echo chambers, as seen in studies by [Evans et al. \(2022\)](#). While global studies explore these trends, this study focuses on their unique manifestation in Türkiye's polarized media environment. These parallels underscore the global relevance of Habertürk's experience, highlighting the need for transparency and accountability in AI-driven journalism.

### 3. Methodology and Findings

This study focuses on Habertürk, a leading digital news platform in Türkiye, known for its integration of AI-driven tools such as automated scheduling, SEO optimization, and algorithmic content recommendations. Habertürk was selected for its prominence in digital journalism and the visibility of its AI-driven features, making it an ideal case study for analyzing the role of artificial intelligence in modern journalism. Data was collected from Habertürk's homepage on December 21, 2024, capturing 53 headlines categorized into six thematic groups: Politics, Economy, Global News, Sports, Local Stories, and Human Interest. This date was selected to provide a representative snapshot of AI-driven content strategies during a non-event-specific period, ensuring insights are not skewed by major political or social events. Each headline was further classified into two categories: SEO-driven headlines, optimized for trending keywords and prioritized for visibility through algorithmic processes, and editor-curated headlines, crafted to emphasize narrative depth and storytelling. The distinction between AI-driven and editorial news was based on the following criteria:

- 1) AI-Driven News: Personalized news sections, such as "Trending Topics" and "Recommended for You," were analyzed to identify patterns of algorithmic prioritization. These sections were assessed based on the frequency of thematic repetition and alignment with engagement-driven metrics, such as user behavior and keyword density.

- 2) Editorial News: Headlines found in less prominent sections or those featuring in-depth narrative elements. Stories that highlight contextual richness, often focusing on Local Stories or Human-Interest topics, are crafted by human editors without evident reliance on algorithmic trends. Content emphasizing journalistic values, such as investigative or long-form reporting, rather than engagement metrics.

To evaluate AI's influence, the following methods were applied: Thematic diversity was assessed using a proportional analysis of headline distribution across six thematic categories. This analysis aimed to evaluate the balance between high-

engagement topics, such as Politics and Sports, and underrepresented themes like Human Interest and Local Stories. By combining quantitative categorization and qualitative content analysis, the study evaluated how AI-driven strategies shape content prioritization, thematic focus, and audience engagement while maintaining editorial depth. The findings were visualized through bar charts and stacked bar charts to illustrate these dynamics. The analysis of 53 headlines revealed the following:

**Table 1.** Content Strategy-SEO vs. Editor-Curated Content on Habertürk (December 21, 2024).

Category	SEO-Headlines	Editor-Headlines	Total Headlines
Politics	9	4	13
Economy	6	3	9
Global News	5	3	8
Sports	7	2	9
Local Stories	4	5	9
Human Interest	3	2	5

Total Headlines: 53.

SEO-driven headlines dominated in Politics (69%), Economy (70%), and Sports (80%), highlighting AI's role in optimizing visibility for trending topics. Conversely, editor-curated content was more prevalent in Local Stories (55%) and Human Interest (57%), showcasing efforts to preserve editorial autonomy and narrative depth. The analysis reveals the dual role of AI in shaping modern journalism. On the positive side, AI enhances operational efficiency by prioritizing high-interest topics and increasing audience engagement through SEO optimization. However, the reliance on AI-driven features also raises concerns. Categories like Politics and Sports receive disproportionate attention, potentially marginalizing underrepresented themes such as Human Interest. Furthermore, while AI-driven tools ensure content visibility, they may inadvertently undermine editorial independence and thematic diversity. By striking a balance between SEO-driven strategies and traditional editorial practices, Habertürk demonstrates both the potential and the challenges of integrating AI into journalism. These findings underscore the need for media platforms to leverage AI responsibly, ensuring that operational efficiency does not come at the expense of narrative richness and content inclusivity. The findings underscore the critical role of editorial oversight in counterbalancing algorithmic trends. While AI-driven strategies dominate high-engagement topics, editorial content plays a pivotal role in maintaining thematic breadth and narrative depth, particularly in underrepresented categories such as Local Stories and Human Interest. Editor-curated content demonstrates a deliberate effort to preserve narrative richness, particularly in Local Stories and Human Interest, which are otherwise underrepresented in AI-driven prioritization. This

highlights the critical role of human editorial oversight in counterbalancing algorithmic tendencies (see **Table 1**).

**Table 2.** Distribution of personalized features on Habertürk (December 21, 2024).

Category	Trending Topics	Recommended for You	Total Personalized News
Politics	5	3	8
Economy	4	2	6
Global News	3	2	5
Sports	4	5	9
Local Stories	2	1	3
Human Interest	1	1	2

Total Personalized News: 33.

The analysis of personalized features, such as “Trending Topics” and “Recommended for You”, reveals significant trends in how AI-driven tools shape audience engagement: Categories like Politics and Sports dominate, accounting for 17 out of 33 personalized recommendations (51%). This indicates AI’s prioritization of high-visibility topics to maximize engagement. While Trending Topics reflects a focus on real-time trends, Recommended for You emphasizes more user-specific content, creating a balance between general interest and individual relevance. Narrative-rich categories like Local Stories and Human Interest are underrepresented, with only 5 personalized recommendations combined (15%). This suggests a potential lack of thematic diversity in personalized feeds. The emphasis on trending and personalized content aligns with Habertürk’s AI-driven strategy to enhance operational efficiency while catering to audience preferences. Personalized news features highlight both the strengths and challenges of AI in journalism. While they effectively engage readers with relevant content, they may inadvertently marginalize less popular themes, underscoring the need for a balanced approach to AI-driven personalization. Analysis of personalized features revealed potential algorithmic bias, with a noticeable overrepresentation of topics like Politics and Sports. This imbalance highlights the risk of algorithmic systems prioritizing engagement metrics over content diversity, potentially reinforcing thematic echo chambers. The overrepresentation of Politics and Sports in personalized recommendations indicates potential algorithmic bias, where engagement metrics prioritize high-visibility topics. This reinforces thematic echo chambers and underscores the need for balancing algorithmic prioritization with editorial interventions. These findings highlight how AI systems prioritize high-engagement topics like Politics and Sports while underrepresenting Local Stories and Human Interest. This suggests an opportunity for AI systems to incorporate diversity quotas or thematic balancing mechanisms, ensuring that underrepresented categories receive adequate attention. By doing so, platforms like Habertürk can align algorithmic optimization with editorial goals of inclusivity and diversity (see **Table 2**).

## 4. Conclusion

This study demonstrates the dual impact of AI-driven features on Habertürk's editorial practices and audience engagement. While SEO-optimized headlines enhance discoverability and operational efficiency, they risk thematic homogenization and reduced editorial independence. The findings underscore the need for platforms like Habertürk to implement explainable AI (XAI) tools and develop editorial policies that prioritize thematic diversity and narrative depth. These measures can help mitigate the ethical risks associated with AI-driven journalism, including filter bubbles and content standardization. Moving forward, a balanced integration of AI with human oversight is essential to preserve journalistic values while leveraging technological advancements. Ethical frameworks, algorithmic transparency, and deliberate editorial strategies are vital to fostering inclusivity and protecting democratic discourse. This study emphasizes the importance of blending automation with human editorial practices to ensure that digital journalism remains diverse, independent, and aligned with its broader societal responsibilities.

The findings provide actionable insights for platforms like Habertürk to leverage AI-driven tools in enhancing content diversity. By implementing thematic diversity metrics and establishing editorial guidelines, platforms can safeguard narrative richness while benefiting from the operational efficiency of AI systems. This approach ensures a balanced integration of AI with human editorial practices, protecting both journalistic values and audience inclusivity. While this study provides valuable insights into AI-driven content strategies and editorial practices at Habertürk, certain limitations should be acknowledged. First, the analysis is based on data collected on a single day, December 21, 2024. While this snapshot effectively captures AI's immediate impact, it may not represent broader trends or variations across different periods or during major events. Future studies could employ a longitudinal approach to address this limitation.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

## References

- AI Contentfy (2023, November 6). *The Impact of AI on Content Diversity and Representation*.  
<https://aicontentfy.com/en/blog/impact-of-ai-on-content-diversity-and-representation>
- Arguedas, A. R., Robertson, C. T., Fletcher, R., & Nielsen, R. K. (2022). *Echo Chambers, Filter Bubbles, and Polarisation: A Literature Review*. Reuters Institute for the Study of Journalism.  
<https://reutersinstitute.politics.ox.ac.uk/echo-chambers-filter-bubbles-and-polarisation-literature-review>
- Broussard, M. (2018). *Artificial Unintelligence: How Computers Misunderstand the World*. MIT Press.
- Clarkson-Bennett, H. (2024, July 18). *SEO for News Publishers: The Ultimate Guide*.

- <https://www.lumar.io/blog/best-practice/seo-for-news-publisher-websites/>
- Cools, H., & Koliska, M. (2024). News Automation and Algorithmic Transparency in the Newsroom: The Case of *the Washington Post*. *Journalism Studies*, 25, 662-680. <https://doi.org/10.1080/1461670x.2024.2326636>
- Couldry, N., & Hepp, A. (2017). *The Mediated Construction of Reality*. Polity Press.
- Diakopoulos, N. (2019). *Automating the News: How Algorithms Are Rewriting the Media*. Harvard University Press.
- Evans, R., Jackson, D., & Murphy, J. (2022). Google News and Machine Gatekeepers: Algorithmic Personalisation and News Diversity in Online News Search. *Digital Journalism*, 11, 1682-1700. <https://doi.org/10.1080/21670811.2022.2055596>
- Fatima, N., Daudpota, S. M., Kastrati, Z., Imran, A. S., Hassan, S., & Elmitwally, N. S. (2023). Improving News Headline Text Generation Quality through Frequent Pos-Tag Patterns Analysis. *Engineering Applications of Artificial Intelligence*, 125, Article ID: 106718. <https://doi.org/10.1016/j.engappai.2023.106718>
- Gillespie, T. (2020). *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. Yale University Press.
- Institute for Information Law (IViR) (2019, March). *Implications of AI-Driven Tools in the Media for Freedom of Expression*. Council of Europe. <https://rm.coe.int/background-paper-ai/168098f559>
- Mann, H. (2024, March 5). AI Homogenization Is Shaping the World. *Forbes*. <https://www.forbes.com/sites/hamiltonmann/2024/03/05/the-ai-homogenization-is-shaping-the-world/>
- Mittelstadt, B. D. (2016). Auditing for Transparency in Content Personalization Systems. *International Journal of Communication*, 10, 4991-5002. <https://ijoc.org/index.php/ijoc/article/viewFile/6267/1808>
- Montal, T., & Reich, Z. (2017). I, Robot. You, Journalist. Who Is the Author? *Digital Journalism*, 5, 829-849. <https://doi.org/10.1080/21670811.2016.1209083>
- Napoli, P. M. (2019). *Social Media and the Public Interest: Media Regulation in the Disinformation Age*. Columbia University Press.
- Rajalakshmy, K. R., & Remya, P. C. (2016). Automatic Headline Generation for News Article. In H. Behera, & D. Mohapatra (Eds.), *Computational Intelligence in Data Mining* (pp. 357-366). Springer India. [https://doi.org/10.1007/978-81-322-2734-2\\_36](https://doi.org/10.1007/978-81-322-2734-2_36)
- Skyes, J. (2024, April 23). *The Algorithmic Life: How Personalized Recommendations Are Shaping Your World*. <https://humansofglobe.com/algorithmic-personalization-shaping-your-world/>
- Süddeutsche Zeitung Digitale Medien (2022). *Automated Generation of News Titles for Search Engine Optimization*. Medium. <https://medium.com/s%C3%BCddeutsche-zeitung-digitale-medien/automated-generation-of-news-titles-for-search-engine-optimization-9079776f8990>
- Thurman, N., Lewis, S. C., & Kunert, J. (2019). Algorithms, Automation, and News. *Digital Journalism*, 7, 980-992. <https://doi.org/10.1080/21670811.2019.1685395>