

Algorithmic Gatekeeping and Personalized Media: The Shift of Information Power from Editors to Algorithms

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ABSTRACT

The development of digital platforms has changed the mechanism of information distribution from an editor-controlled mass media system to an algorithm-controlled communication system. This study aims to analyze the transformation of gatekeeping practices from mass media to algorithmic gatekeeping in a personalized media environment. The study used a constructivist paradigm with a qualitative approach through content analysis, during the May-June 2026 period, of 80 contents recommended by algorithms on TikTok, Instagram, YouTube, and Facebook. Data was collected through digital observation and documentation, then analyzed using thematic analysis. The results show that the algorithm has taken over the role of the editor in determining the visibility of information through indicators such as watch time, user interaction, comments, and engagement level. The logic of communication shifts from the public interest to the logic of user engagement. News value has been transformed from editorial news value to algorithmic news value, which emphasizes virality, emotional intensity, and potential for spreading content. Personalized media not only results in the fragmentation of public spaces through bubble filters and echo chambers, but is also able to create temporary collective attention, through algorithmic amplification mechanisms. The concept of temporary algorithmic public explains how algorithms can unite public attention on certain issues, even if users are in different information environments and are temporary. It can be concluded that algorithms have become a new form of media power in the platform society.

KEYWORDS - Algorithmic Gatekeeping, Algorithmic News Value, Digital Communication, Personalized Media, Temporary Collective Attention

1. INTRODUCTION

Digital transformation has fundamentally changed the structure of public communication. In the era of mass media, the information distribution process is controlled by media institutions through editorial mechanisms. Editors and journalists act as gatekeepers who determine which information is worthy of public knowledge [1]. Through the selection process, the media can shape the public agenda and determine issues that are considered important by the public. The development of social media such as TikTok, Instagram, YouTube, and Facebook changed this mechanism. The information that appears on a user's timeline is no longer determined by the editor, but rather by an algorithm that works through the analysis of user behavior data. Gillespie (2014) calls algorithms public relevance algorithms, because they are able to determine the relevance of information in the digital space [2]. Bucher (2018) explained that algorithms work through the logic of visibility, which is the logic that determines what content is visible and invisible to the user [3].

This phenomenon shows a shift from editorial gatekeeping to algorithmic gatekeeping. If previously the editor determined the priority of information based on journalistic value and public interest, then the algorithm determined the distribution of information based on user engagement, attention retention, and prediction of digital behavior. As a result, everyone receives a different information experience according to his or her digital profile. Previous research has mostly discussed algorithms from the perspective of technology and recommendation systems. However, there is still limited communication research that examines how algorithms change gatekeeping practices and information power structures in digital society. Therefore, this study aims to explain the transformation from editorial gatekeeping to algorithmic gatekeeping and its implications for public communication in the era of personalized media.

The main theory in this study is Gatekeeping Theory. Lewin (1947) explained that information must pass through various "gates" before it reaches the public [4]. White (1950) then showed that editors have an important role in determining the news published [5]. In the context of mass media, gatekeeping is carried out by media institutions through a news selection process. The development of digital platforms gave birth to the concept of algorithmic gatekeeping. Gillespie (2014) argues that algorithms are not neutral because they determine the information that gains visibility [2]. Bucher (2018) added that algorithms shape social reality through the mechanism of recommendation and content ranking [3].

This research also uses the concept of personalized media and calculated publics [6]. Digital audiences are no longer understood as mass audiences, but as a public that is calculated and predicted based on user behavior data [7], [8]. Every digital activity, such as liking, sharing, or watching content, becomes the basis for algorithms to compile information recommendations [9]. The consequence of this personalization is the emergence of filter bubbles and echo chambers, which are conditions when users are more often exposed to information that suits their own preferences [10], [11], [12]. However, Papacharissi (2015) explained that digital media can also create affective publics, namely collective attention formed through the circulation of emotions on social media [13].

2. METHODS

This research uses a constructivist paradigm with a qualitative approach [14]. The method used is qualitative content analysis because the research focuses on the content recommended by the digital platform's algorithm [15]. Data was collected through digital observation and documentation of content that appeared on TikTok FYP, Instagram Explore, YouTube Recommendation, and Facebook Feed. A total of 80 content was observed during the May-June 2026 period, observations including political content, trending news, social issues, entertainment, and personal advertising. Data analysis uses the thematic analysis of Braun and Clarke (2006) which includes the process of data familiarization, coding, theme search, theme review, theme naming, and interpretation [16]. The analysis focused on algorithmic recommendation patterns, information visibility, content personalization, and algorithmic gatekeeping practices.

3. RESULTS AND DISCUSSION

a. Algorithms as the New Gatekeeper.

The findings show that algorithms have taken over the role of editors in determining the visibility of information. In mass media, editors determine news based on journalistic value. In contrast, on social media, algorithms determine the distribution of content based on watch time, user interaction, comments, and engagement levels. Content that can generate high engagement consistently gains greater visibility than content with low interaction. These findings reinforce Gillespie's (2014) argument that algorithms have become a new mechanism in determining public relevance [2].

b. The Shift from Editorial Logic to Algorithmic Logic.

Research has found that gatekeeping transformation has also changed the logic of information distribution. In mass media, information is prioritized based on the public interest. In personalized media, priority is given to content that can retain the user's attention [17], [18]. This change shows that digital communication is increasingly driven by engagement logic [19]. Algorithms prioritize virality, audience retention, and emotional response over the social significance of an issue. Thus, the logic of public communication shifted from editorial considerations to algorithmic calculations.

c. Transformation of News Value into Algorithmic News Value.

Subsequent findings show that the value of news is not lost but is changing shape. In mass media, the value of news is determined by factors such as social impact, proximity, conflict, and public interest [20]. In personalized media, the value of news is increasingly determined by the ability of content to generate clicks, comments, shares, and virality. Content that triggers users' emotions tends to gain wider distribution than content that is only informative. This shows the emergence of algorithmic news value, which is the value of news formed by algorithmic logic and attention economy.

d. From Fragmented Public to Temporary Algorithmic Public.

Algorithmic personalization results in the fragmentation of public space as each user receives different information. These findings support the concept of filter bubbles and echo chambers which explain how algorithms narrow down the diversity of information. However, research has also found that algorithms can create collective attention on certain issues. When an issue gains a high level of engagement, the algorithm expands its distribution to different groups of users. As a result, the issue appears simultaneously on multiple timelines even though users have different preferences. This phenomenon gave birth to the concept of temporary

algorithmic public, which is a condition when algorithms that fragment public space daily can temporarily unite public attention through amplification and virality mechanisms.

4. CONCLUSION

This research shows that the development of digital platforms has changed the structure of public communication from an editorial-based system to an algorithm-based system. The algorithm now performs the gatekeeping function previously performed by mass media editors by determining the visibility and relevance of information based on user engagement. This transformation also changed the logic of public communication. Public interest is no longer the only basis for information distribution but rather competes with the logic of engagement that prioritizes virality, attention retention, and user emotional response. As a result, news value has been transformed from editorial news value to algorithmic news value.

The study also found that personalized media produces two consequences that go hand in hand. On the one hand, algorithms create fragmentation of public spaces through the personalization of information. On the other hand, algorithms can consolidate public attention on a particular issue through amplification and virality. Based on these findings, this study offers the concept of temporary algorithmic public as a theoretical contribution to explain the dynamics of public space in a platform society. Overall, this study confirms that algorithms are no longer just technical infrastructure, but a new form of media power that plays an important role in determining what people know, pay attention to, and debate in the digital age.

5. LIMITATIONS OF THE RESEARCH

There are several limitations in this study. First, it only analyzes content recommended by algorithms on TikTok, Instagram, YouTube, and Facebook, so it cannot explain the internal mechanisms of the algorithm which is closed (black box algorithm). Second, using digital observation and documentation, so that it focuses more on patterns of visibility and content distribution. The data was collected in the May-June 2026 period and covers only four social media platforms, so the research findings are not fully representative of the entire digital media ecosystem. Thus, it is hoped that the next research can expand the object of study, as well as combine content analysis with other methods to obtain a comprehensive understanding of the practice of algorithmic gatekeeping.

AUTHOR CONTRIBUTIONS STATEMENT

The authors have made significant contributions to this research, and all relevant contributors have been included as authors.

LIST OF CONTRIBUTIONS

Raden Laskarko Patria: Conceptualization, Data Collection, Writing Original Draft, Analysis, Writing-Review & Editing, Validation, Funding Acquisition.

DATA AVAILABILITY

The authors support the principles of open science; however, the qualitative interview data used in this study cannot be fully shared publicly due to participant confidentiality and ethical restrictions. De-identified excerpts relevant to the findings are included in the article.

DECLARATION OF AI-ASSISTED IN THE WRITING PROCESS

During manuscript preparation, the authors used Grammarly and ChatGPT (OpenAI) to improve English and ensure grammatical accuracy. After using these tools, the authors thoroughly reviewed and edited the text and took full responsibility for the publication's content.

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