Dinamika Penelitian
Media Komunikasi Penelitian Sosial Keagamaan

Vol. 25 No. 2 (2025) pp. 102-118
pISSN: 1412-2669 eISSN: 2549-4244
https://doi.org/10.21274/dinamika.2025.25.2.102-118

The Role of AI, Filter Bubbles, and Echo Chambers in Political and Religious Polarization on Social Media

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Received: 2025-10-27 **Revised:** 2026-10-28 **Accepted**: 2025-11-14 **Published:** 2025-11-18

Abstract

This research is motivated by the existence of AI, filter bubbles, and echo chambers, which narrow the scope of interaction and isolate users from diverse perspectives. In Indonesia, politicians often use religion as a political tool, which further exacerbates the situation. This research aims to understand how the interaction between AI, filter bubbles, and echo chambers impacts political and religious polarization on social media. This study employed a qualitative approach, utilizing a literature review method that analyzed relevant journal articles. The results indicate that political and religious polarization occurs when society is divided into groups with increasingly divergent views and values, thereby exacerbating social tensions and widening the gap between these groups. AI makes extreme political content more likely to be shared than moderate information. Filter bubbles limit exposure to differing views and reinforce confirmation bias. The echo chamber exacerbates polarization by encouraging individuals to interact only with those who share their beliefs. Individuals or groups vulnerable to polarization are those who have difficulty accepting new information, only consume content that aligns with their beliefs, perceive other groups as being unobjective or biased, and have low digital awareness and literacy. The principle of Islamic brotherhood can help mitigate political and religious polarization by teaching the importance of mutual respect for differences and maintaining harmony among Muslims.

Keywords: Artificial Intelligence, Filter Bubble, Echo Chamber, Political Polarization, Religion, Social Media

Abtrack

Penelitian ini dilatarbelakangi oleh adanya AI, gelembung filter, dan ruang gema, yang mempersempit cakupan interaksi dan mengisolasi pengguna dari beragam perspektif. Di Indonesia, politisi sering menggunakan agama sebagai alat politik, yang semakin memperburuk situasi. Penelitian ini bertujuan untuk memahami bagaimana interaksi antara AI, gelembung filter, dan ruang gema berdampak pada polarisasi politik dan agama di media sosial. Penelitian ini menggunakan pendekatan kualitatif, memanfaatkan metode tinjauan literatur yang menganalisis artikel jurnal yang relevan. Hasil penelitian menunjukkan bahwa polarisasi politik dan agama terjadi ketika masyarakat terbagi menjadi kelompok-kelompok dengan pandangan dan nilai yang semakin berbeda, sehingga memperburuk ketegangan sosial dan memperlebar kesenjangan antara kelompok-kelompok ini. AI membuat konten politik ekstrem lebih mungkin dibagikan daripada informasi moderat. Gelembung filter membatasi paparan pada pandangan yang berbeda dan memperkuat bias konfirmasi. Ruang gema memperburuk polarisasi dengan mendorong individu untuk berinteraksi hanya dengan mereka yang memiliki keyakinan yang sama. Individu atau kelompok yang rentan terhadap polarisasi adalah mereka yang kesulitan menerima informasi baru, hanya mengonsumsi konten yang selaras dengan keyakinan mereka, menganggap kelompok lain tidak objektif atau bias, serta memiliki kesadaran dan literasi digital yang rendah. Prinsip persaudaraan Islam dapat membantu mengurangi polarisasi politik dan agama dengan mengajarkan pentingnya saling menghormati perbedaan dan menjaga kerukunan antar umat Islam.

Kata kunci: *Kecerdasan Buatan, Gelembung Filter, Ruang Gema, Polarisasi Politik, Agama, Media Sosial*

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I. Introduction

The presence of artificial intelligence (AI) has transformed the way we interact and obtain information in recent years. Using algorithms that personalize information, AI curates content to organize the information we see on social media platforms like Facebook, X, and TikTok. Content personalization algorithms analyze users' digital footprints, including search history, interactions, and emotional preferences, to display relevant content. While this technology can increase the efficiency of information distribution, it can also create closed information spaces through echo chambers and filter bubbles (Amendola et al., 2024; Arruda et al., 2024; Ekström et al., 2022; Iqbal et al., 2025).

AI is used to simplify information choices in a sea of digital data. However, increasingly personalized algorithms are making online interactions increasingly homogenous. People increasingly use various social media platforms to spread extreme opinions, which isolates users within groups that share similar political views.

One study found that a Twitter feature that highlights influential accounts promotes the formation of homogeneous communities (Arruda et al., 2024). Another study discussed how selective interactions between users with similar views on Facebook and YouTube reinforce political divisions and reduce tolerance for differences (Wu et al., 2023). Still other research suggests that recommendation algorithms on TikTok and Facebook more frequently display highly emotional content such as anger and hatred, accelerating the spread of extreme opinions and narrowing the space for public dialogue (Amendola et al., 2024).

Political polarization is defined as the separation of society into two distinct and opposing ideological groups (Cheng & Swee, 2024; Grünwald & Patterson, 2025; Phillips, 2024). Political polarization encompasses social, emotional, moral, and even religious aspects. Meanwhile, AI can limit an individual's exposure to diverse perspectives. This reinforces existing biases and hinders the ability to engage in meaningful dialogue between different perspectives.

Two key terms explain how AI contributes to political and religious polarization: "*filter bubble*" and "*echo chamber.*" AI-driven content personalization algorithms constantly expose individuals to information that reinforces their existing views, creating a filter bubble (Pariser, 2011). Meanwhile, users create echo chambers in closed digital spaces where they repeatedly reinforce the same opinions, reducing their opportunity to understand different perspectives (Amendola et al., 2024). When these two conditions operate simultaneously, social media becomes a tool that reinforces polarization and reduces the quality of public freedom.

On the one hand, AI algorithms automatically create information bubbles for efficiency and profit. On the other hand, should develop AI to promote openness, inclusivity, and rationality in the public sphere. This gap between reality and expectations highlights the paradox of AI development in the field of communications.

Technology intended to connect people can instead divide society into opposing groups.

Research has found that changes in algorithmic policies on social media platform X, namely increasing the visibility of paid or verified accounts, can accelerate the formation of echo chambers (Arruda et al., 2024). These users, called priority users, wield significant influence in social media discussions. When these users hold extreme views, AI algorithms that prioritize their voices accelerate the shift in opinion from consensus to polarization. In other words, when AI algorithms amplify extreme voices through this prioritization system, the space for public discussion narrows, encouraging radical political behavior. This can be exacerbated by religious influencers who are deeply committed to their political views, as it can accelerate the formation of divisions based on religious identity. AI is no longer simply a neutral technology but rather an entity that plays a role in shaping the structure of meaning and political narratives in the digital public sphere (Olsson et al., 2025).

AI algorithms not only create filter bubbles, but they also arise from our user behavior, where we consciously choose information that aligns with our views. This phenomenon is known as a self-imposed filter bubble. Ekström et al., (2022), AI exploits human cognitive biases to exacerbate and deepen political polarization. This results in a necessary conclusion: We are active participants in polarization, and not merely victims of algorithms. Trusting information sources with misplaced confidence also aggravates polarization (Young et al., 2025). Thus, perceptions and interpretations of the same facts can vary greatly, depending on an individual's political stance. Dislike and hatred (Phillips, 2024), directed at political adversaries can also lead to emotionally charged, politically exclusive activities, creating a gap in political participation. This is referred to as emotional polarization.

The polarization of politics, driven by AI, can threaten democracy. With the rise of deeply entrenched social divides, political discourse becomes emotionally charged, driven by factional identities, and devoid of reasoned arguments. Rather than a domain for public discourse, social media increasingly resembles an arena for identity battles. Algorithms promote extreme views to an excessive degree because they are hyper-focused on specific subjects, which are considered more engaging and attention-grabbing than others (Wu et al., 2023).

The intersection of political and religious polarization in Indonesia has led to a differentiation of conflict and competition among political and social actors, from the public sphere to the 2014 general elections, the 2017 Jakarta gubernatorial elections, the Defend Islam Action, as well as the presidential elections of 2019 and 2024. Election periods become the most socially contentious periods, extending the socio-political divisions and intra-societal conflicts from the elections to the subsequent period. Political actors in Indonesia use social media to promote the socially contentious Islamization of elections, which threatens social cohesion and intensifies both inter-

and intra-societal conflicts marked by socio-religious polarization (Widiatmaka et al., 2024).

Political actors seek to exploit Islam while disregarding social cohesion and the risks of societal and inter-societal conflict with the use of social media politically and religiously. The sophisticated discrimination of social media algorithms, combined with socio-political and religious norms, facilitates intra-societal conflicts, shifting societal conflict ideology to a politically volatile nervous system. The relational shifts centered on social-polarizing norms in the politically divisive framing. The social issues of the caliphate, blasphemy, and the 212 movement are the leading issues that shape the echo chamber in Islamic politicization and the system of social polarization within Islamic articulations (Karim, 2021).

Numerous studies have examined the phenomenon of political-religious polarization in Indonesia. These include studies that focus on the challenges of religious polarization caused by echo chambers and filter bubbles (Hidayah & Nur, 2024), the politicization of religion in Indonesian elections (Karim, 2021; Widiatmaka et al., 2024; Yunus et al., 2023; Zahro & Saputri, 2024), and government regulations governing the politicization of religion (Colina, 2020). This study offers a unique exploration of how AI, filter bubbles, and echo chambers contribute to polarization, particularly in the contexts of politics and religion. Therefore, this study aims to investigate the role of the interaction between AI, filter bubbles, and echo chambers in political and religious polarization on social media.

II. Method

This study employed a qualitative approach with a library method (Creswell & Creswell, 2018), collecting data from relevant literature, specifically journal articles discussing polarization, political polarization, filter bubbles, and echo chambers. The analysis was conducted by interpreting various findings to gain a deeper understanding of the role of AI, filter bubbles, and echo chambers in political polarization on social media. This study emphasized interpretive analysis of previous research findings to identify conceptual patterns and relationships between phenomena.

A literature search was conducted using Scopus as the primary database, using the keywords "*Political Polarization,*" "*Social Media Political Polarization,*" "*Filter Bubble,*" and "*Echo Chamber.*" The researchers obtained 15 articles for analysis from Scopus. They also used the keyword "*Political Polarization of Religion in Indonesia*" through a Google search to find journals published in Indonesia.

The literature search was also based on two criteria: inclusion and exclusion. The inclusion criteria included articles from Scopus with a publication period of approximately 10 years to date. One article published in 2011 was used as a source because it was the primary source for the concept. Filter bubble. The final inclusion criterion was that articles focused on the relationship between AI, filter bubbles, echo chambers, and political, social, or religious polarization. Exclusion criteria included

non-peer-reviewed articles such as opinion pieces, editorials, or proceedings without data, and articles outside the research context.

The analysis was conducted by reading and understanding each article, the concepts classified within the articles, and the article's theme. The researchers then compared the research results to examine the similarities, differences, and causal relationships between AI, filter bubbles, and echo chambers in creating polarization. Finally, the researchers interpreted and concluded the interrelationships between the concepts. Data validity was maintained using source triangulation by comparing findings from various disciplines, namely communication and politics. Most literature related to polarization was sourced from peer-reviewed journals, thus maintaining high scientific credibility. The analysis was conducted by noting interpretations, key points, and articles.

The research procedure is shown in the following chart.

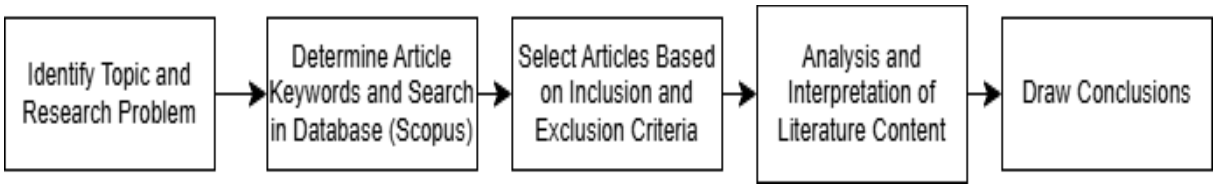

Figure 1. Research procedure chart
Processed by researchers (2025)

III. RESULTS AND DISCUSSION

1. Result

a. Political and Religious Polarization

Polarization is a social phenomenon that occurs when society divides into groups with differing views, values, or ideologies that are difficult to reconcile. Polarization indicates increasing social, emotional, and cognitive distance between individuals or groups. Polarization occurs when opinions are divided into two opposing extremes, with one party or group tending to reinforce its own beliefs while rejecting information from others (Wu et al., 2023).

Polarization arises not only from emotional reactions or hatred toward opposing groups but also through rational processes (Young et al., 2025). Differences in perspectives regarding the independence of information sources can lead two individuals to draw different conclusions from the same data. When individuals perceive their own group as more objective than the opposing group, the belief-renewal process becomes unbalanced, leading to a widening gap in perception. Thus, polarization can arise from distrust of the credibility and authority of the opposing group's information sources.

Polarization is not always two-way. In digital societies, polarization can be multipolar, meaning there are many conflicting groups based on different ideologies or interests (Martin-Gutierrez et al., 2023). This condition creates closed belief networks reinforced by selective interactions on social media and recommendation

algorithms. The fragmentation of the digital public sphere into information bubbles, also known as echo chambers, is contributing to social conflict and hindering the formation of a shared consensus.

Political polarization is a specific form of social polarization that arises when ideological and emotional differences between political groups become increasingly sharp and difficult to bridge. Political polarization is not only related to differences of opinion on policy issues, but also involves identity and affection, which is demonstrated when members of one political group not only disagree with another group, but also reject, denigrate, or even antagonize them. Political polarization can be exacerbated by the practice of political favoritism, namely when power is used to benefit specific groups (Cheng & Swee, 2024). In Taiwan, the Chiang regime's preferential treatment of political immigrants created long-term economic inequality. It deepened the ideological divide between immigrant groups and the native population, which later evolved into a persistent political polarization.

Political polarization can result from ideological and affective differences (Grünwald & Patterson, 2025). Ideological differences stem from dissimilar values and beliefs regarding the organization of a society, whereas affective polarization involves enmity and enduring distrust directed toward a political opponent. Inequalities from discriminatory public policies can push politically and socially marginalized groups to assert new political identities for resistance (Cheng & Swee, 2024) in addition to discriminatory public policies, differences in cultural values, social class, and economic background, which, in turn, can foster political hostility and social class, cultural divides, and economic inequalities (Grünwald & Patterson, 2025).

Political polarization is not limited to the internet, as the in-person interactions that occur in the proverbial "real world" can also engender political divides (Fang et al., 2025). People tend to cluster around those who hold similar convictions, which can lead to belief entrenchment and can also close off the space available for ideological opponents to offer competing views. Common challenges, such as climate change and world unrest, do not always lead to polarization. In fact, such challenges can heighten the internal cohesion of a politically united group, all while maintaining opposing tensions toward an outgroup (Donkers & Ziegler, 2023).

The interpretive processes wherein individuals formulate understandings of and reactions to specific policies can also account for some aspects of political polarization (Grünwald & Patterson, 2025). Policies that are perceived as threatening an individual, group, or community's value or identity structures are likely to evoke resistance or hostility. The implication is that polarization is also a matter of perception, emotion, and the social and political symbolism of a community, rather than merely an ideological divide.

The mutually reinforcing relationship among social perceptions, ideological bias, and economic inequality contributes to the challenge of political polarization. Communication and media frameworks that focus on social and political identity

differences intensify the mutually contradictory belief systems that form the backdrop for this challenge. The triggers of polarization are especially problematic for democracy in the contemporary world, as rational discourse and social agreement are becoming increasingly complex, trust in institutions is eroding, and discord is being amplified (Cheng & Swee, 2024; Donkers & Ziegler, 2023; Fang et al., 2025; Grünwald & Patterson, 2025).

Political polarization is also closely linked to religion, particularly in the current situation in Indonesia. Political and religious polarization in Indonesia is clearly visible during general elections. The consequences of this phenomenon impact political behavior, social relations, and interfaith relations within a given society. From the *Orde Lama* era until the 2024 elections, politicians have used Islam as a means to gain support. However, this has had negative consequences, such as social divisions and increased intergroup tensions (Widiatmaka et al., 2024). Religious sentiments become a political tool to mobilize support, and it is political actors who are responsible for the increase in social polarization (Karim, 2021). The use of religion in political mobilization has deepened the traditionalist-moderate and revivalist Islam schism within society and has escalated social tensions exponentially.

This exacerbates the already fractured political landscape. Zooming in on the political utilization of religion, particularly Islam within *pesantren*, political polarization could worsen. This relationship is particularly effective in cases of political sponsorship deficit. When a political elite subsidizes an actor in the polity, for example, a *Kyai* of the *pesantren*, societal internal friction could deepen (Zahro & Saputri, 2024). Finally, the cumulative disgruntlement due to election-related friction could erode the democratic values in the polity, especially during the 2024 election period (Colina, 2020).

b. AI, Filter Bubble, and Echo Chamber

When social media algorithms filter and display only content that aligns with a user's views or preferences, this phenomenon is known as a filter bubble. Algorithmic recommendations lead to social redundancy, where users continually interact with the same people and messages, resulting in a limited and repetitive information space (Donkers & Ziegler, 2023). Personalization feeds cause users to be rarely exposed to differing views, strengthening confirmation bias while reducing the diversity of opinion. Filter bubbles operate automatically through an algorithmic curation process that tailors content to a user's previous behavior and interactions.

An echo chamber is a social space where information that aligns with a group's beliefs is amplified through interactions among members, while divergent views are ignored or rejected. An echo chamber is defined as a situation in which a society's opinion system is structurally fragmented, and individuals tend to interact only with those who share similar views (Arruda et al., 2024). The existence of an echo chamber is a social space where information that aligns with a group's beliefs is amplified

through interactions between members. At the same time, divergent views are ignored or rejected. Priority users, such as verified accounts or influencers, reinforce this phenomenon. Being highlighted by algorithms makes it easier for extreme opinions to spread and reinforces information segregation on the network.

A filter bubble and an echo chamber are interconnected. A filter bubble is the result of automatic curation that narrows the scope of information, while an echo chamber is the result of repeated social interactions within the filtered space. Both produce circular feedback, also known as a feedback loop (Donkers & Ziegler, 2023). In this case, when algorithms reinforce the preferences of social media users, the resulting homogeneous interactions reinforce the group bias.

c. The role of AI, Filter Bubble, And Echo Chambers in Polarization on Social Media

AI algorithms predict individual preferences and present the most engaging content by collecting data on our user behavior, such as search history, clicks, and viewing time. This process plays a crucial role in shaping the dynamics of political communication on social media. While the initial goal of these systems is to increase user engagement and tailor content to the user's experience, the long-term impact will result in a homogenized information environment. AI creates a feedback loop, where users continually receive information that reinforces their own views, thereby narrowing their exposure to alternative perspectives.

AI mechanisms lead to the emergence of algorithmic partisanship, a situation where AI recommendation systems unintentionally reinforce users' ideological biases. This occurs because algorithms promote content that evokes high emotional reactions, such as anger and fear, thus attracting more attention. This leads to the dissemination of extreme and provocative political content over moderate or neutral information. A significant source of the growing ideological conflict in the digital world is the use of algorithms designed to increase participation (Wu et al., 2023). All of this is driven by profit, and as a result, it is clear that AI technology is not neutral.

Self-selection bias, which results from algorithmic curation and social media users' tendency to select and interact with content that aligns with their own views, is another component of the filter bubble (Ekström et al., 2022). Social media algorithms help users consume information based on their preferences and beliefs, and these algorithms reinforce this by recommending content that aligns with their existing views. A combination of machine recommendations and human choices creates this closed information space.

Filter bubbles may lead to confirmation bias, where individuals selectively attend to information that reinforces their existing beliefs (Ekström et al., 2022). This results in shallow, distorted, and contradictory narratives in users' consumption, which prevents users from capturing the nuances of the political spectrum. This narrows discourse and fosters the impression that the group's opinions are the only

valid, absolute truth. The filter bubble reinforces the polarization of the 'us vs them' mentality, in which opposing political actors are dehumanized to mere enemies of the group's identity and ideology (Wu et al., 2023).

A temporary filter bubble, operating at the algorithmic level, functions as an echo chamber at the social and psychological levels. An echo chamber occurs when a person only interacts with individuals or communities who share similar political views, resulting in the same opinions being consistently repeated and reinforced. Prioritized users, such as influencers, celebrities, or verified accounts, accelerate this process (Arruda et al., 2024). They function as opinion leaders who widely disseminate certain political stories, resulting in a very similar information network structure.

This phenomenon suggests that the echo chamber is a result of social dynamics that encourage conformity, and not simply an effect of algorithms. The echo chamber effect occurs when people repeatedly encounter the same kinds of ideas. Consent to the illusionist, meaning they believe their group's opinions truly represent the opinions of society as a whole. It helps explain why social media polarization sometimes appears to be more severe than it actually is. The echo chamber is challenging to escape from because people seek to avoid discussing others' views in order to maintain their social identity (Donkers & Ziegler, 2023). As a result, political disagreements are perceived as clashes of identities rather than debates of ideas.

A closed cycle, or feedback loop, is created by AI, filter bubbles, and echo chambers. AI focuses on tailoring content through user engagement and recommendation algorithms, while filter bubbles restrict the types of information that can be received. Conversely, echo chambers reinforce already filtered information by ensuring that social interactions occur only among like-minded individuals. This cycle perpetuates reinforcement bias (Wu et al., 2023), which means that every time someone interacts on the platform, the system learns to narrow its scope further.

This combination of algorithms and social structures produces an acculturation bubble, which means forming a group's political values and norms internally without external contact (Yen & Dey, 2019). Artificial intelligence is not only a technology but also a culture that constructs the political understanding of people. This process gives rise to epistemic isolation, namely, cognitive alienation that allows people to live within their own interpretations of truth. Political democracy, in the end, is eroded to the point where disdainful and identity-centered squabbles replace rational political discourse.

The synthesis of artificial intelligence, filter bubbles, and echo chambers not only filters and frames political content but also shapes and influences it. It also structures our emotional reactions to politically relevant issues. Since algorithms tend to prioritize and propagate emotionally loaded content, the engagement is more pronounced (Wu et al., 2023). Consequently, news that elicits anger, hatred, and fear receives more currency and visibility among users than neutral and investigative content. This leads to 'emotional amplification,' which in turn heightens feelings of

animosity towards identified outgroups. Algorithms can exhibit ideological bias, for example, more frequently displaying results that align with certain political views. This fosters public perceptions on sensitive issues like immigration, gender, or the environment in a particularly biased manner (Iqbal et al., 2025).

Users tend to stay in closed filter bubbles, where emotional impact is amplified and balance is restricted. Echo chambers certainly amplify anger and hatred towards 'the opposition' while soothing any reflections or conciliatory viewpoints. This imbalance of attention (and concern) is likely to increase social distance and diminish political empathy (Ekström et al., 2022). Political discussions on the internet are often more radical than in real life due to the algorithms and emotional amplification ripple effects.

There is a deterioration of public reasoning and public debate within democracies, which the peculiar combination of artificial intelligence, filter bubbles, and echo chambers has exacerbated. Social media has ceased to serve as a forum for deliberation and the exchange of ideas. It has instead become a site of increasing polarization, sharpening the boundaries of groups. Social media users, if confined to particular information silos, lose the capacity for objective appraisal of issues and most of the time judge the worth of arguments by the reputation of the claimant rather than the merit of the reasoning (Yen & Dey, 2019). This leads to epistemic fragmentation, where individuals no longer share a common understanding of social and political realities (Wu et al., 2023). In such situations, emotion-driven political interventions, such as campaigns designed to evoke anger and fear, tend to be less effective than those grounded in factual information (Arruda et al., 2024).

The following is a flow diagram of the relationship between AI, filter bubbles, echo chambers, and polarization.

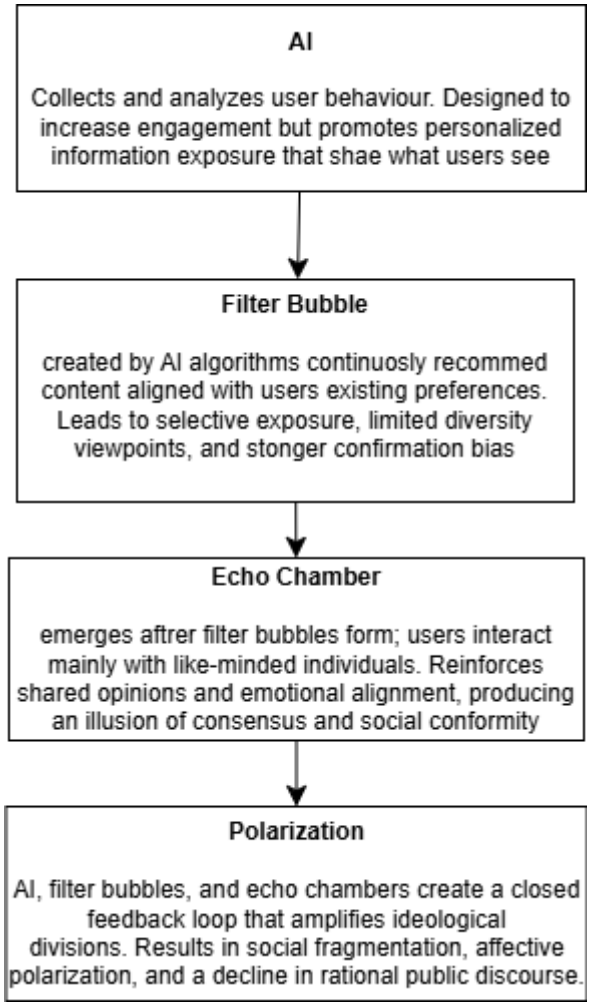

Figure 2. Relationship diagram of AI, filter bubble, echo chamber, and polarization Processed by researchers (2025)

2. Discussion

The study results show that merging politics and religion on social media cannot be solely understood in ontological terms; instead, it arises from a complex interplay between system algorithms and user interactions. The social media polarization hinges on two premises: artificial intelligence that governs the flow of data and the human mind that seeks to validate its position (confirmation bias). These two premises work seamlessly to form the social media echo chamber.

As users, AI plays a role in determining what information is presented to us and retains our digital behavior to inform our information selection. Besides offering information and running its content personalisation tools, AI also assigns social meaning. These technologies create filter bubbles and echo chambers, resulting in emotionally charged interactions with a limited range of users. This outcome emphasizes that algorithms do not operate in isolation; sociocultural factors influence them. Every action, including clicking, commenting, or watching a video for an extended period, is viewed by the system as support for the content. As a result, the system is likely to present more similar content in the future.. Thus, users are not only

victims of algorithms but also actors who reinforce their biases. This is known as algorithmic reciprocity, where technology and user behavior mirror and reinforce each other's polarization (Wu et al., 2023).

Algorithmic reciprocity provides an excellent case study on how AI manages conflicts of value and identity. These sensitive religious issues, particularly regarding the caliphate or blasphemy, are often highly promoted by algorithms because they drive up levels of engagement. This phenomenon has a feedback loop of polarization that repeats itself without us ever being aware of it.

Algorithmic partisanship also has an effect whereby AI systems are inclined to favor certain ideologies due to the bias existing within the training data (Olsson et al., 2025). This demonstrates a lack of neutrality within AI technology, whereby such systems are said to reproduce the layers of power and social preferences embedded within the data, doing little to change the dominance of certain narratives within public digital discourse. AI serves the interests of those in power by maximizing the potential profits derivable from the data collected and user engagements on social media. AI has shifted the flow of information from media opinion leaders to unfiltered raw data. Even within a given context, certain aspects are more frequently discussed, rather than opinion leaders being the primary architects of change. AI exerts a significant influence on shaping how society approaches specific political and religious issues. In deepening these schisms, it sows discord between religious and political formations of various ideological orientations.

This phenomenon demonstrates how AI is transforming individuals' lives into an information reality constructed by algorithms. Under these conditions, public discussion loses its deliberative nature and becomes an arena for identity confirmation. People no longer debate for understanding, but rather to defend their own beliefs. This situation weakens the quality of digital democracy by closing off space for negotiation of meaning and social compromise.

Digital polarization stems not only from technology but also from the human behavior that reinforces it. AI, filter bubbles, and echo chambers form closed communication systems that accelerate social fragmentation. We must recognize that these polarizing effects do not affect all individuals equally. Polarization can have different impacts depending on an individual's capacity to recognize information bias, manage emotions, and understand how algorithms work.

Individuals or groups susceptible to polarization on social media generally possess specific psychological characteristics and digital behaviors that reinforce their engagement in closed information spaces. Social media users with strong convictions about their personal opinions tend to reject dissenting views (Wu et al., 2023). They are referred to as closed agents, namely, individuals who tend to judge their own opinions as more correct and have difficulty accepting new information. Individuals who tend to exhibit selective attention are also susceptible to polarization (Ekström et al., 2022). They only notice, click on, and share content that supports their beliefs,

whether consciously or not. With this pattern, social media narrows its information reach to only perspectives that support its group's beliefs. The longer this behavior persists, the stronger the cognitive bias becomes, and the poorer a person's ability to understand accurate information becomes.

The low level of trust in information sources from opposing groups is the primary trigger of belief polarization (Young et al., 2025). Two individuals receiving the same data can draw very different conclusions simply because their perceptions of the source's credibility differ. This makes communication between ideologies complex because each group perceives the other as biased or lacking objectivity.

Low awareness of algorithms, especially among young users with limited digital literacy, can also increase vulnerability to polarization (Iqbal et al., 2025). When users fail to realize that algorithms curate the information they consume, they tend to believe that the views they encounter represent the dominant opinions in society.

One way to ease this tension is through the principle of *Ukhuwah Islamiyah*. It teaches not only solidarity among Muslims but also the importance of respecting differences and striving to maintain harmony. This concept encourages Muslims to get to know, understand, and help one another, regardless of ethnic backgrounds, cultures, or political views (Tanjung & Abdullah, 2025). To maintain good brotherhood, Muslims must avoid actions that can damage relationships, such as cursing, gossiping, and suspicion, all of which have the potential to exacerbate polarization.

The Islamic Brotherhood can serve as a bridge to unite Muslims divided by differing political and religious views. Islamic brotherhood can be implemented through its four principles (Shohib et al., 2024), namely by strengthening *taaruf*, or mutual understanding, between religious communities and between political groups. This reduces prejudice and fosters mutual respect between individuals with diverse political perspectives. Furthermore, *ta'awun*, or mutual assistance, is a term that can be used to describe cross-group cooperation aimed at addressing issues such as intolerance and religious-based violence. To ensure that all parties understand each other's strengths and weaknesses in religion and politics, *tafahum*, or mutual understanding, must also be incorporated into public discourse. This approach allows debates to evolve into constructive discussions focused on problem-solving rather than conflict.

Social media, often a primary site for conflict, can be used to facilitate healthy conversations through Islamic brotherhood. However, the challenge is managing social media to avoid filter bubbles and echo chambers that exacerbate polarization. The tendency of social media algorithms to narrow users' views to content that aligns with their beliefs can exacerbate this (Ekström et al., 2022; Iqbal et al., 2025). Therefore, awareness of the impact of these algorithms and education of users to be more open to diverse views are needed, in keeping with the spirit of Islamic brotherhood, which prioritizes harmony and openness.

IV. CONCLUSION

This research confirms that ideological factors do not solely drive political and religious polarization on social media but rather are the result of the simultaneous interaction between Artificial Intelligence (AI), filter bubbles, and echo chambers, which collectively form a closed communication system in the digital space. This interaction amplifies the spread of extreme opinions and reduces exposure diversity, thus further isolating society into groups with unified views. In Indonesia, politicians frequently utilize religion as a political tool, thereby deepening social fragmentation.

This study verifies that the phenomenon of political and religious polarization on social media is not solely the result of ideology, but rather the triadic interaction of Artificial Intelligence (AI), filter bubbles, and echo chambers, which collectively create a closed communicative circulation in cyberspace. This interaction supercharges the spread of radical views, narrows the diversity of exposure, and, in turn, segregates society into increasingly homogeneous opinion clusters. In the case of Indonesia, the situation is even more complicated by the tendency to use religion as a political tool, which aggravates social disunity.

This study contributes to the literature on digital polarization by integrating social, psychological, and algorithmic dimensions within a single conceptual framework. This construction highlights the complexity of modern polarization, as it is not only a social phenomenon but also a byproduct of the purposeful design of algorithmic systems that respond to user engagement. Such a contribution enriches the digital political communication and Artificial Intelligence (AI) ethics corpus by offering a socio-technological lens on communication mediation and public opinion formation in the digital space.

The results of this study could form the foundations of policies and interventions to address the social gap of AI technologies on a cross-national scale. As such, state and transnational entities, digital social media platforms, and global governance institutions need to enhance policies regarding the transparency of algorithms, the governance of AI and its ethical use, and the implementation of algorithmic public communication in conjunction with education policies. This aims to demonstrate that AI can foster sociocultural interconnectedness, rather than exacerbating digital societal divisions.

This research is relevant to the field of AI ethics and algorithm warfare. In a democracy, this research opens doors to comparative cross-national research on the interdependence of AI and 'filter bubble' and 'echo chamber' effects, and social polarization in algorithmically biased conditions and context. This research is descriptive in nature and does not test the phenomenon. It employs sociological research methods, including social computing and network analysis, to measure patterns of interaction and polarization.

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