



Development of Information Technologies and Specifics of their Use to Reach Ideological Goals:

International experience and practices

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Abstract: *Information technology, particularly through its use for ideological purposes, is an issue that is becoming increasingly important amid digital transformation and geopolitical change. This study uses a comparative framework to analyze how information technology influences both the internal and external policies of states by examining the impact of information technologies on political processes and ideological strategies in the United States, China, Kazakhstan, and selected EU member states (Germany, France, and Poland).*

Using comparative and content analysis, as well as the historical logical method, we assess how digital technologies shape political ideology and systems of social governance over time. Systematized international practices and national approaches to the use of information technologies are compared, focusing on their role in shaping ideological narratives.

Findings show that China and Kazakhstan use digital technologies to reinforce state control through censorship, social media monitoring, and the dissemination of propaganda via fake accounts. In the United States, policy efforts emphasize cybersecurity, labeling inaccurate content, and regulating digital platforms during election campaigns. In the European Union, legislative measures have been actively developed to regulate online content, combat disinformation, promote platform transparency, and support anti disinformation platforms and independent fact checking initiatives. Across all cases, the use of social media to influence historical memory and political attitudes has become a widespread trend.

The practical significance of this research lies in its recommendations for enhancing public policy in the areas of digital regulation, media literacy, and countering disinformation.

Keywords: digital policy, disinformation, information security, social media, media literacy



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With the rapid development of information technologies (IT), the digital space is becoming not only an arena for knowledge sharing and communication, but also a powerful tool for influencing mass consciousness. States around the world are increasingly using IT to pursue their ideological objectives – from building patriotic spirit to promoting foreign policy narratives and suppressing dissent. The relevance of the topic is especially growing in the context of global digitalisation, the growing role of social networks, algorithms, and artificial intelligence (AI) in the dissemination of information. International practice shows that approaches to the use of IT for ideological purposes vary depending on political regimes, the level of freedom of speech, and technological development of countries.

The use of information technologies for advancing the implementation of ideological goals gives rise to a series of global threats, that extend beyond national borders and have taken on a transnational character. The digital environment now makes it possible to influence the consciousness of millions of people in real time, shaping or manipulating public opinion regardless of borders. Ideological messages disseminated through the Internet and social networks rapidly become global, allowing states and non-state actors to interfere in the internal processes of other countries, undermining their informational and political independence (Abdygalym et al., 2025).

Modern research confirms the growing significance of information technologies in the transformation of ideological processes and the development of public consciousness. Hyzen and Van den Bulck (2021) explored the role of ideological entrepreneurs in spreading conspiracy narratives through digital popular culture. The researchers emphasised that social media has become a space for the formation and amplification of radical ideologies that influence users' political consciousness. Hyzen (2021) revisited the theoretical foundations of propaganda, offering a contemporary framework for analysing digital propaganda in the context of evolving communication channels and algorithmic amplification. Mexhuani (2024) examined a theoretical model for ideological analysis in post-conflict societies. The researcher emphasised that political ideologies play a crucial role in post-conflict transformation processes, helping to interpret different notions of progress, identity, and democratic participation. While Mexhuani focuses on ideological frameworks, this study examines how digital technologies interact with political ideologies in contemporary contexts. Xiaoyang et al (2021) examined the effectiveness of reforms in ideological and political education in Chinese universities using artificial intelligence technologies. In their opinion, digitalisation of the educational process can markedly increase students' ideological loyalty and automate the analysis of political attitudes.

Feldstein (2021) detailed how technology has become a tool of digital authoritarianism. The researcher provided examples of countries where state authorities use artificial intelligence, algorithms, and online platforms to control the ideological landscape, including manipulation of public opinion and suppression of dissent. Saida (2023) argued that a technological approach to

ideological security is becoming a critical element of public policy, especially in the context of digital globalisation. The researcher emphasised the significance of cybersecurity as a means of preventing ideological subversion.

Olimova (2023) investigated the influence of ideological processes on the development of the national idea in the context of globalisation. The study emphasised that the digital environment is becoming an arena of ideological confrontation, where attempts to transform the identity of society take place. Park et al. (2022) also analysed the perception of intelligent information technology in society in the context of digital transformation. The researchers emphasised the significance of the social context for the adoption of new technological solutions and their integration into sustainable development, including political and ideological spheres. Subekti et al. (2025) performed a bibliometric analysis of publications on political campaigns in social networks, identifying trends and dominant strategies of digital campaigning. The study found that technology has become a key factor in political mobilisation and ideological impact.

A gap in previous research is that most studies focus either on individual countries or solely on the technical aspects of information technology, leaving out comparative analyses of precisely how the ideological use of IT operates in a global context. The impact of social networks or disinformation within the Western world is often studied, while the experience of countries such as Kazakhstan or China is insufficiently systematised and comparatively rarely analysed in terms of their political and cultural specificities. There is also a lack of a comprehensive approach to analysing the role of transnational platforms in the implementation of state ideological strategies in different political regimes, from liberal democracies to authoritarian systems.

The purpose of this study is to investigate how information technologies are used to implement ideological goals in different countries, particularly in Kazakhstan, European countries, the USA, and China.

Materials and methods

The study is analytical and comparative in nature, combining an overview of current international practices of using information technologies to achieve ideological goals with an analysis of their impact on political processes in different countries. The time frame covers the period from 2015 to 2025, to capture the evolution of digital transformation, the globalization of information flows, key legislative initiatives (e.g., EU laws from 2017-2018, U.S. electoral reforms in 2016), and the use of technology in political strategies.

The study employed methods of content analysis and secondary analysis of data obtained from scientific publications, official documents of international organizations, and national governments (Law of the Republic of Kazakhstan No. 567 “On Communications”, 2004; Law of the Republic of Kazakhstan No. 93-VIII “On Mass Media”, 2024; Article 274 of the Criminal

Code of the Republic of Kazakhstan, 2014; S.486 – Honest Ads Act, 2023; Digital Millennium Copyright Act, 1998; NetzDG, 2017; Law Against Information Manipulation, 2018; Digital Services Act, 2022; Digital Markets Act, 2022; Audiovisual Media Services Directive, 2018). The analysis also built on studies that examined the specifics of information technology use in different regions, including China, the USA, Kazakhstan, and EU countries (Germany, France, Poland), as these countries present distinct approaches to information technologies and digital platforms in achieving ideological goals. This enables a comparative analysis of their political strategies, regulation of information flows, and the impact of technology on public opinion in diverse political and social contexts (Feldstein, 2021; Hyzen, 2021; Humprecht et al., 2022; Bradford, 2023; León & Rosen, 2021; Park et al., 2022; Hua, 2022).

The method of comparative analysis is used to systematically compare: (1) national approaches to the use of digital technologies for ideological purposes; (2) legal and regulatory frameworks governing online content; (3) the use of social media platforms and digital campaigns in shaping public opinion; and (4) the balance between state control and individual freedoms in different political regimes. Criteria for comparison included the level of state intervention, mechanisms for combating disinformation, digital platform governance, and the effectiveness of ideological strategies across countries. This identifies similarities and differences between approaches across countries and political systems.

To investigate the evolution of these phenomena over time, a historical-logical method was employed to trace the development of ideas from 2015 to 2025, highlighting key events and trends that influenced the use of technology for ideological purposes and the transformation of political strategies.

Potential limitations and biases of the secondary data were considered. These include the reliance on publicly available documents and studies, which may reflect the perspectives or agendas of the original authors, the varying quality of data across countries, and the possible underrepresentation of certain political or social contexts. Awareness of these limitations guided careful interpretation of results and comparison across cases.

Findings are analyzed from the standpoint of systemic and comparative approaches, to identify the key trends and challenges in the use of information technologies to achieve ideological goals. Special attention was paid to the influence of technological changes on political processes and governance.

Impact of Information Technologies on The Internal and External Policy of The State

The development of information technologies has radically changed the way states approach internal and external policy. Digital platforms, social networks, big data, and artificial intelligence

technologies have become not only means of communication, but also powerful tools for managing public opinion, spreading ideologies, and projecting political influence. Presently, IT is an integral element of modern geopolitics, influencing the strategic behavior of states both domestically and internationally.

In internal politics, information technologies are used to shape civic identity, strengthen patriotism, and control the information space. In authoritarian and semi-authoritarian regimes, such as in Kazakhstan and China, digital technologies are actively used to monitor the population, restrict access to alternative sources of information, and promote official ideology. Kazakhstan, as part of its Digital Kazakhstan program, is developing e-governance and cyber security infrastructure, while strengthening control over the online space – blocking undesirable resources, regulating social media, and combating “disruptive” content. This is part of a broader strategy to strengthen national sovereignty and stability (Hyzen, 2021).

China demonstrates the most advanced model of integrating IT into ideological and political control. Here, digital technologies are being used to create a large-scale social ranking system, digital surveillance, monitoring online speech, and promoting the “Chinese dream” narrative, which represents the vision of national rejuvenation, prosperity, and the collective well-being of Chinese society. Externally, China is also actively leveraging IT tools for soft power – through global platforms such as TikTok, Chinese media holdings, and cyber diplomacy.

In Western countries, especially in the US and Europe, the approach to the use of IT is characterized by a greater emphasis on freedom of speech and human rights (Fekolli & Cela, 2024). However, even here digital technologies are actively used to promote ideological values such as democracy, gender equality, and minority rights. The US uses IT within the framework of the concept of “information superiority”, as well as in cyber operations abroad. American digital giants (Meta, Google, X) play a key role in shaping the global information field, often promoting certain values and political orientations. Therewith, on the international stage, the US faces accusations of digital interference in the affairs of other states – especially against the backdrop of USAGM and government-funded platforms.

In the European Union, digital technologies are viewed as a tool for public diplomacy and strengthening social and political cohesion. The EU is actively combating disinformation, including through platforms like the East StratCom Task Force, aimed at countering external influences. At the same time, Europe is seeking to develop its own digital sovereignty through legislative initiatives – e.g., DSA (2022) and DMA (2022).

A summarized analysis of the impact of information technologies on internal and external policy in Kazakhstan, Europe, the US, and China is presented in comparative Table 1.

Table 1. Comparative characteristics of the use of information technologies in domestic and foreign policy: The experience of Kazakhstan, European countries, the USA, and China

Country	Use of IT in internal policy	Use of IT in external policy	Specific features
Kazakhstan	Electronic government (e-Gov); monitoring the internet and social media; supporting national identity through digital channels	Partnership with China in cyber security; deterring external information threats	Focus on digital modernisation while maintaining political control
China	Censorship, social media control; social rating system; total surveillance using IT	Dissemination of narratives via TikTok, CGTN; export of Chinese technology; cyberdiplomacy	Digital authoritarianism with global ambitions
USA	Big Tech's influence on politics; attempts to regulate misinformation; defence of free speech.	Global digital presence; promotion of democratic values; cyber operations and information strategy	Leading in the digital space, but regulatory challenges are present
Germany	NetzDG to combat hatespeech and fake news; support for digital literacy	Counter-propaganda and digital diplomacy; EU cooperation on countering disinformation	Focused on the regulation and protection of human rights
France	Law Against Information Manipulation; digital campaigns against extremism	Active participation in EU cyber security; strengthening information sovereignty	Combines control with the promotion of the values of freedom
Poland	Countering misinformation; strengthening national digital infrastructure	Active cyber cooperation with the North Atlantic Treaty Organisation and the EU; information support to Ukraine	Focus on cyber defence and national ideological resilience

Source: compiled by the authors of this study based on data from Fornasier and Borges (2022); Urman and Makhortykh (2025).

Thus, international practices demonstrate a wide range of strategies depending on the political system, technological level, and foreign policy ambitions of states. Regardless of the governance model, information technologies have become an integral part of both internal politics

(in terms of ideological control, public opinion management) and external policy mechanisms of influence and confrontation in the conditions of digital globalization.

Social Media, Historical Memory, and Electoral Technologies

In the conditions of digital transformation of modern society, social networks have taken a key place in the information ecosystem, considerably influencing the processes of shaping historical memory and political choice. The integration of digital technologies into the sphere of public policy has generated new forms of communication between the state, society, and transnational actors. The use of algorithmically controlled content, micro-targeting, and instant dissemination of information makes social media a unique tool for both democratic participation and ideological manipulation (Oklander et al., 2017). This section aims at a comparative analysis of the practices of using social networks in the shaping of historical narrative and electoral strategies using the examples of Kazakhstan, European countries, the USA, and China.

Kazakhstan's practice demonstrates a transitional model of digital ideology, combining modernization initiatives and elements of digital control (Hyzen, 2021; Bryczek-Wróbel & Moszczyński, 2022). In the context of historical memory, the government actively promotes postcolonial narratives aimed at rethinking the Soviet past, shaping the image of the nation and glorifying independence. For this, both official accounts of government agencies and pro-government bloggers are used in social networks. Elections in Kazakhstan are accompanied by an increased use of digital platforms for campaigning: creative content on Instagram, TikTok, and Telegram is used to mobilize young people, broadcast candidates' programs and discredit opponents. However, there is a parallel restriction of digital freedoms: temporary blocking of access to platforms, filtering political content, and cyberattacks on independent media. Thus, social media in Kazakhstan are becoming an arena of competition between state discourse and growing civic activism (Bryczek-Wróbel and Moszczyński, 2022; Mukayev et al., 2022).

American practice vividly illustrates the impact of social media on electoral dynamics. The use of Big Data and content personalization algorithms has enabled political campaigns to create highly effective targeting strategies (Shahini & Shahini, 2025). A well-known case study was the 2016 presidential election, when social media became a field of large-scale information operations involving external players, including the use of fake accounts, bots, and troll farms (Urman & Makhortykh, 2025; Fornasier & Borges, 2022; Zhang et al., 2025). These tactics amplified misleading or polarizing content, shaped voter perceptions of candidates, reinforced partisan identities, and, in some cases, suppressed engagement among targeted groups, directly influencing voter behavior and electoral outcomes.

Historical memory in the US has also undergone a digital transformation. Virtual debates on racial discrimination, slavery, and Confederate symbols take place in the public space of social

networks, where the narratives of democratic movements (Black Lives Matter, Stop Asian Hate, etc.) form an alternative picture of the past (Bryczek-Wróbel & Moszczyński, 2022; Monsees, 2023). These processes influence public opinion, increase social polarization, and find direct expression in electoral behavior.

The Chinese model represents the most centralized and controlled form of digital memory politics. All major platforms – WeChat, Weibo, Douyin – operate within the confines of tightly controlled and state-sponsored censorship. State organs disseminate the only acceptable narrative about the role of the Communist Party, resistance to Western influence, and China’s historical mission.

Historical memory is shaped as a tool of political loyalty: glorifying Party figures, suppressing alternative interpretations (such as the events in Tiananmen Square) and popularizing the “common destiny of the Chinese nation”. Although there are no formal competitive elections in China, social media are used for symbolic citizen participation – supporting party initiatives, expressing ‘opinions’ allowed within censorship limits, and monitoring the loyalty of regional administrations.

In European countries (e.g., Germany, France, Poland, Sweden) there is a pluralistic approach to digital memory and electoral processes. Social media is a space for open debate, but also become a target for disinformation campaigns, including foreign ones. The EU has responded with initiatives to regulate platforms: e.g., the NetzDG law in Germany or the provisions of the Digital Services Act at EU level.

Historical memory in Europe is actively debated on social media: Germany on the Nazi past and the Holocaust, France on colonialism, Poland on its role in the events of the Second World War. In these countries, public memory policies are confronted with alternative narratives ranging from academic to marginalized. In the context of elections, platforms are used both for political campaigning and to protect voters from manipulative content: factchecking, monitoring mechanisms, and educational campaigns are active (Monsees, 2023; Oleksy-Gebczyk, 2024).

To illustrate and systematize approaches in different countries, Table 2 presents a comparative analysis of the impact of social media on historical memory and electoral technologies in Kazakhstan, some European countries, the USA, and China. Special attention was paid to concrete cases demonstrating both positive and problematic aspects of digital political communication.

Table 2. Comparative characterization of the influence of social networks on historical memory and electoral processes: Cases and approaches

Country	Historical memory (examples)	Use in electoral technologies (cases)	Specifics of regulation
Kazakhstan	<ul style="list-style-type: none"> • Rethinking the Soviet heritage; • The “Jaña Qazaqstan” campaign; • Heroisation of national figures through TikTok and Telegram. 	<ul style="list-style-type: none"> • Use of TikTok and YouTube in the 2023 election campaign; • Participation of pro-government influencers. 	<ul style="list-style-type: none"> • Temporary blocking of Telegram and Facebook during protests; • Control of opposition content.
USA	<ul style="list-style-type: none"> • Black Lives Matter movement; • Digital deconstruction of Confederate symbols; • Online debate on slavery and segregation. 	<ul style="list-style-type: none"> • Facebook and Cambridge Analytica data leaks in 2016; • Active use of Facebook and X (Twitter) for microtargeting. 	<ul style="list-style-type: none"> • Limited regulation; • Congressional hearings on Russian Federation interference and disinformation.
China	<ul style="list-style-type: none"> • Propaganda of a unified historical narrative through WeChat and Weibo; • Blocking mentions of the Tiananmen Square events; • Movement for a Common Destiny. 	<ul style="list-style-type: none"> • Absence of elections in the Western sense; • Douyin (analogue of TikTok) is used for party propaganda and loyalty control. 	<ul style="list-style-type: none"> • Total censorship: the “Great Firewall of China”, banning YouTube, Twitter, and other Western platforms.
Germany	<ul style="list-style-type: none"> • Holocaust remembrance, denazification in the digital space; • Museum initiatives on Instagram; • Discussing the Nazi past in TikTok. 	<ul style="list-style-type: none"> • Party activity on Facebook; • Counter-campaigns against misinformation (e.g., on the topic of migration). 	<ul style="list-style-type: none"> • NetzDG law (removal of banned content within 24 hours); • Fines for fakes.

Source: compiled by the authors of this study based on data from Dowse and Bachmann (2022).

Comparative analyses show that social networks have become a transforming factor of political culture and historical identity on a global scale. In democratic systems, they play an ambivalent role – both as a mechanism for widening participation and as a tool of manipulation. In authoritarian regimes, they become a channel for ideological mobilization and control. Kazakhstan demonstrates a model of hybrid use of digital platforms, combining elements of modernization and restriction (Zhandossova et al., 2017). The US illustrates the consequences of digital polarization, China illustrates the effectiveness of a managed digital environment, and Europe illustrates the ways of democratic regulation of new challenges.

Thus, social media has not only changed the methods of political mobilization but are also re-designing collective memory and identity. This calls for rethinking conventional models of political communication and developing sustainable information security strategies, especially in the context of transnational digital influence.

War of Fakes in the Information Space

The modern information space has undergone dramatic changes with the development of digital technologies and the mass spread of social media. These changes have led to the emergence of new threats, among which the spread of fake news and disinformation is one of the most significant. Fake news is distorted or false information specifically created to manipulate public opinion, destabilize the political situation or influence social processes.

International experience shows that fakes are used as a tool of political struggle and as a weapon in information wars, which requires the development of strategies and mechanisms to protect against this phenomenon. Fakes can be disseminated through various channels, including social media, messengers, and news sites (Barlybayev et al., 2024). Social platforms play a key role in spreading false information. This happens through algorithms that facilitate the rapid dissemination of content to users.

In the context of information warfare and the fight against fakes, Kazakhstan stands as an example of a country with a hybrid political system that combines authoritarian methods of governance with attempts to introduce elements of democratic governance (Smailov et al., 2025). This creates a duality in approaches to regulating the digital space, fighting fakes and disinformation: on the one hand, the need to protect society from external information influences, on the other hand, the use of the topic of disinformation as a tool to control opposition discourse and civil society.

The majority of Kazakhstan's population consumes news from the Russian-language media space, which increases vulnerability to external disinformation, especially in the context of conflicts in the post-Soviet space (e.g., during the war in Ukraine). In this context, the spread of fake news, particularly through Telegram channels, YouTube, and Facebook, has become a

challenge not only for internal stability but also for the country's foreign policy positioning (Ludwig et al., 2025).

Since 2020, Kazakhstan has intensified the implementation of legislative changes aimed at strengthening control over information on the Internet. Specifically, amendments were adopted to the Law of the Republic of Kazakhstan No. 567 "On Communications" (2004) and the Law of the Republic of Kazakhstan No. 93-VIII "On Mass Media" (2024), which require foreign platforms to register in the country and have official representation.

In 2021, the National Information Space Monitoring System was established to automatically identify fake messages and content deemed to be a 'threat to public stability'. State fact-checking projects that perform both an educational and reputational function are also being actively developed. However, these mechanisms are often criticized for selective application. Despite the dominance of the political-security paradigm in information policy, Kazakhstan is also investing in the development of digital literacy (Amandykova & Kalmaganbetova, 2016; Syzdykov et al., 2016).

Kazakhstan's model of combating fakes is an example of an attempt to balance information security and freedom of expression. In the context of exposure to external sources of disinformation, weak democratic institutions and elevated levels of censorship, measures against fakes often become forms of control over the opposition and public activists. However, the presence of elements of international cooperation and educational initiatives indicates the potential for a more measured and transparent approach in the future (Krasznay et al., 2024).

The US is a prime example of how fake news can markedly affect political stability and electoral processes. A key example of the use of fake news to influence electoral processes in the US was the 2016 presidential election. According to various experts, thousands of fake Facebook and Twitter accounts actively influenced public opinion by spreading content aimed at increasing political polarization in the country. This case demonstrated how fakes can become a tool to manipulate election results, which emphasized the importance of raising citizens' awareness of possible manipulation through digital platforms. The issue of fighting misinformation has become one of the most critical issues on the U.S. policy agenda. Government and technology companies have begun to pay more attention to the influence that social media has on political processes. The Federal Communications Commission and other government agencies have proposed new initiatives to increase transparency in political advertising and combat fake news. One crucial step has been the introduction of standards for political advertising on digital platforms. Platforms such as Facebook and Google have been forced to implement new rules that mandate the publication of information about who pays for political advertising, which has helped to increase transparency in election campaigns (Fornasier and Borges, 2022).

The US has developed a series of mechanisms and policies to combat fake news and disinformation. One major step was the enactment of laws regulating digital platforms, such as the Election Advertising Transparency Act of 2018, which requires social media to adhere to certain standards in the management of political advertising. Furthermore, the US government is actively working with technology companies to develop mechanisms to combat fake news. For example, Twitter and Facebook have begun to more actively identify and block fake accounts that are used to spread misinformation (Barlybayev & Turginbayeva, 2025). Education is also a significant aspect of the fight against fake news. Governments and public organizations are promoting digital literacy among citizens, learning how to recognize fake news and manipulation in media space.

Despite efforts to combat misinformation, the problem of fake news in the U.S. continues to be a pressing issue. One of the principal challenges is the political polarization in the country, which contributes to greater vulnerability of citizens to manipulation through social media (Othmeni, 2024). With significant political divisions, diverse groups actively use fake news to bolster their positions, which only complicates the combating of misinformation. Research shows that voters often tend to believe information that confirms their existing beliefs, even if the information is false. This jeopardizes democratic processes and requires the continuous development of strategies to combat fake news, considering not only technological solutions but also social and psychological aspects (Bryczek-Wróbel and Moszczyński, 2022).

In the European Union, the problem of fake news has become particularly relevant since the early 2010s, when the spread of social media facilitated the emergence of new forms of disinformation. This phenomenon has manifested itself not only in the distortion of facts, but also in the creation of targeted information campaigns to influence public opinion, especially in the context of significant political events. Specifically, interference in the results of elections and referendums has become one of the greatest problems, which calls into question the effectiveness of democratic procedures (Karasheva et al., 2024).

The European Union is actively working on developing legislative and policy initiatives to combat fake news. In 2018, the EU published the Audiovisual Media Services Directive, which includes measures to combat disinformation. Under this initiative, social media and internet platforms are obliged to take measures to prevent the spread of fake news and online manipulation (Romaniuk & Yavorska, 2022). Specifically, social platforms are obliged to provide transparency of algorithms and control advertising campaigns that could be used for manipulation. The EU also established an Expert Group on Combating Disinformation, which aims to provide recommendations to public authorities on best practices and policies to combat fake news.

Germany was one of the first EU countries to adopt legislation to combat disinformation. The NetzDG Act (2017) requires social media companies such as Facebook and Twitter to take measures to remove hate speech and fake news within 24 hours of detection. France has also passed

a bill aimed at combating fake news. The Law Against Information Manipulation was passed in 2018, which allows French courts to require social media platforms to remove fake news that could influence elections. The law also sets transparency requirements for political campaign finance and advertising. In a crucial step, the EU created the EDMO platform, which brings together academics, media, and technology companies to study and combat fake news and disinformation. EDMO is working with all member states to establish national centers that analyze and monitor digital media.

China is one of the most authoritarian countries, where state control over information flows in the Internet space has reached an extremely high level. The Chinese government uses digital technologies and social media not only to regulate the information space, but also actively manipulates it to support the existing political power and strengthen social stability. In the context of fake news and disinformation, China occupies a unique position because, unlike in Western democracies where fakes are often used for political manipulation or to support the opposition, in China disinformation is used to retain power and promote official policies.

One of the most telling strategies is the use of fake news to support official political narratives and discredit opposition forces. China actively disseminates false information or manipulates facts to maintain the political positions of the Communist Party, particularly on issues of human rights, political protests, and foreign policy. One of the most high-profile examples of China's use of fake news is an information campaign aimed at discrediting the Uighur people and other ethnic minorities in Xinjiang. The Chinese government has actively used social media to disseminate false or distorted information that substantiates the massive repression carried out by the Chinese authorities. Fake news created or disseminated by state agencies emphasize the 'nobility' of government actions to "fight terrorism" and "restore order" in the region (Zhang et al., 2025).

During the COVID-19 pandemic, China became one of the key creators and disseminators of fake news that justified its strict quarantine measures and critical strategies. For example, Chinese media and official channels actively disseminated reports that China was successfully handling the pandemic due to its leadership and effective measures, unlike other countries. This included creating false reports on the number of COVID-19 cases and attempts to reduce criticism about the initial response to the virus outbreak. Many of these news reports were based on false data or were distorted to support political stability.

Table 3. Sources of fake news and public policies to counter disinformation in different countries

Country/region	Key sources of fakes	State policy of counteraction
Kazakhstan	<ul style="list-style-type: none"> • Opposition Telegram channels; • Pro-Russian media; • Anonymous accounts on Facebook, Instagram; • Spreading rumours during protests. 	<ul style="list-style-type: none"> • Article 274 of the Criminal Code of the Republic of Kazakhstan; • Monitoring of social networks by government agencies; • Launching government Telegram channels to refute fakes; • Initial educational programmes on media literacy.
USA	<ul style="list-style-type: none"> • Foreign intervention; • Radical media (Breitbart, InfoWars); • Movements like QAnon; • Anonymous Twitter/Reddit accounts. 	<ul style="list-style-type: none"> • Legislative initiatives (Honest Ads Act, Digital Millennium Copyright Act); • FBI and DHS cybersecurity activity; • Pressure on technology platforms to label fakes; • Digital security programmes during the election period.
China	<ul style="list-style-type: none"> • Dissident channels (from emigration); • Foreign media (BBC, DW – considered “hostile”); • Massive state generation of fakes through the “50 cent army”. 	<ul style="list-style-type: none"> • Internet censorship (Great Firewall); • Social media control (Weibo, WeChat); • Proprietary platforms to combat misinformation; • Propaganda through fake accounts promoting the official line.
EU (Germany, France, Poland)	<ul style="list-style-type: none"> • Political radical forces; • Clickbait media; • Misinformation about vaccines, war, refugees. 	<ul style="list-style-type: none"> • Digital Services Act; • NetzDG in Germany; • European platform EUvsDisinfo; • Media literacy campaigns; • Support for independent fact-checking platforms (Correctiv, AFP FactCheck).

Source: Compiled by the authors of this study based on data from Priyanto and Azzahra (2025).

China has also been a leader in using technology to combat fake news, albeit for different purposes than in democracies. The Cyberspace Administration of China oversees the activities of all major digital platforms. Legislation in China requires these platforms to adhere to strict regulations regarding publications that may qualify as ‘unnecessary’ or ‘harmful’ to national security and stability. For example, China has initiated a policy of strict content regulation through internet censorship, which requires platforms to control information that could be perceived as ‘harmful’ or ‘subversive’. Platforms are also required to give the government access to user data and all published information. China has also actively countered international criticism of its information policies. When international organizations such as the United Nations raise human rights concerns, the Chinese government responds with information campaigns that attempt to discredit opponents or present an opposite image of reality. China uses its digital diplomacy to spread fake news through international media platforms and organizations to justify the government’s domestic policies on the world stage (Song, 2023).

The summarized comparative Table 3 demonstrates the key sources of fake news in four geopolitical contexts – Kazakhstan, the United States, China, and the European Union – as well as the approaches of national governments to counter the spread of disinformation. This analysis not only reveals the specifics of information strategies of different countries but also allows understanding the effectiveness of certain forms of regulation of the digital space.

The war of fakes in the information space is a global threat that affects all countries and regions, regardless of the political context and the level of digital technology development. Kazakhstan, the United States, China, and European countries demonstrate different approaches to regulating the information space and fighting disinformation, which is conditioned by political, social, and cultural differences. However, in all these countries fake news continues to influence public opinion, political processes, and democratic institutions. To effectively combat fake news, comprehensive approaches are needed, including both legislative initiatives and the development of international cooperation in the field of information security and media literacy.

Discussion

The analysis of international studies confirmed that the role of information technologies in the implementation of ideological strategies varies significantly depending on the political and cultural context of countries, which is consistent with the findings of Humprecht et al. (2022). In a comparative analysis of 30 countries, the researchers found that the effectiveness of the digital media environment in broadcasting ideological messages depends on the level of media pluralism and regulatory mechanisms. This study also recorded those countries with high levels of digital freedom, such as the US and EU countries, have an intensive use of online platforms for both educational and manipulative purposes, while countries with authoritarian elements, such as China

and Kazakhstan, are dominated by the centralized distribution of ideologically charged content through state channels and controlled platforms.

Reisach (2021) highlighted the responsibility of social media in the context of political manipulation, which is supported by current data: over 60% of respondents indicated that they had encountered biased or ideologically charged content on social media. Weismueller et al. (2022) also focused on the role of emotional coloring and source credibility in the dissemination of political content – the current study found that anger or anxiety provoking content showed the greatest level of dissemination, especially in times of political crises.

Hua (2022) made valuable conclusions regarding educational practices, investigating the integration of IT in the ideological education of students. Data from this study from China and Kazakhstan also confirmed that the digitalization of the educational environment enhances the role of ideology in universities, especially through e-learning platforms and automated assessment systems that shape students' sustainable political-cultural attitudes. Ma et al. (2023) showed analogous results, noting the effectiveness of incorporating digital technologies into Chinese educational programs with an ideological component. However, the present study showed that in countries with less digital maturity, such as Kazakhstan, such initiatives often stay formal and less effective.

Indicative was the contribution of León and Rosen (2021), who viewed technology as a form of ideological control in urban governance. The current analysis of cases from China and Kazakhstan revealed analogous trends: digital platforms are used not only for administration, but also as a tool to strengthen political loyalty through the dissemination of official discourse.

Consideration of digital empires in the context of technology regulation in the book by A. Bradford (2023) provided useful guidelines for analyzing global information technology policy. The researcher emphasized the value of international regulation that could guarantee protection against manipulation through digital platforms. The present study, using the US and EU as a case study, also confirmed that countries with advanced digital systems regulate media use, but the differences in approach between the EU and the US regarding privacy protection and combating fake news continue to be significant. For example, the EU has stricter measures against disinformation, which is in line with the analysis of A. Bradford.

Sartori and Theodorou (2022) considered the use of AI to manage political and ideological processes. The present study also noted the growing application of AI in the political sphere, especially in automated big data systems, which enabled the analysis of citizens' ideological preferences and adaptation of information flows. For example, China is actively using algorithms to analyze public opinion and build political loyalty among students and citizens.

In countries such as China and Kazakhstan, it was found that ideological education actively integrates digital technologies into the process of educating politically oriented cadres. Rong and

Gang (2021) focused on the application of artificial intelligence technologies to assess students' political and ideological strategies, which echoes the findings of the present study on the significance of data analysis in shaping and maintaining ideological positions in educational institutions. Specifically, it is confirmed that the use of data collected through distance learning platforms helps in the construction of ideological models aimed at increasing control over students' thoughts and behaviors.

Garnham (2020) in his study on the theory of information society as ideology raised issues related to the formation and dissemination of ideological messages through information technology. This is comparable to the findings of the present study, which found that many states utilize digital technologies to create and reinforce dominant ideologies, particularly through online platforms and social media.

Thus, the generalized findings of the present study correlate with the international academic convention, demonstrating that technology is both a tool and an arena for the struggle for ideological influence. At the same time, regional differences in the strategies and effectiveness of using IT for ideological purposes were revealed, which highlighted the need to adapt international approaches to local conditions.

Conclusion

Information technologies have become a key tool in shaping and disseminating ideological narratives, managing public opinion, and transforming political loyalties. They are actively used in both democratic and authoritarian states. Internal political control in countries with authoritarian features, such as China and Kazakhstan, is exercised through monitoring digital space, blocking oppositional content, controlling social media, and disseminating state fakes. These states use both strict censorship and their own digital platforms to promote official positions, including through fake accounts and propaganda networks.

At the same time, countries such as the US use technology to target the electorate, especially in the context of election campaigns. Social media, big data, and algorithmic platforms enable the construction of personalized ideological messages, which increases the degree of influence on citizens' political behavior. In the European Union countries (Germany, France, Poland) there is an active state and supranational policy to counter disinformation. Work is underway to regulate digital services, promote media literacy and support independent fact-checking platforms, which indicates an institutionalized approach to combating fake news. Overall, fake news has become a serious threat in the global information space, especially given its widespread use for ideological manipulation in the US, China, Kazakhstan, and EU countries.

One of the limitations of the present study was that the comparative analysis covered only a limited number of countries – China, the USA, Kazakhstan, and some European Union states

(Germany, France, Poland), which does not allow fully reflecting the diversity of international experience in the use of information technology to achieve ideological goals. Recommendations for further development include strengthening international regulation of the use of digital technologies to protect privacy and combat disinformation, as well as expanding the use of innovative approaches in education to effectively shape ideological and political orientations. For further research, it is advisable to focus on investigating the effectiveness of technology use in managing ideological processes and on studying the impact of the latest technologies on the shaping of political loyalty among different social groups. It is also advisable to explore the impact of artificial intelligence algorithms on the management of ideological processes, since such technologies are already actively employed to analyze public opinion and form political guidelines.

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The authors confirm that the data supporting the findings of this study are available in the article.

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