# Research on the Function of Social Media Public Opinion in Government Governance: Focusing on the Absorption of Public Sentiment

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**Abstract:** Social media has become the main channel for public opinion expression and public discussion, reshaping the interaction between the government and the people. It brings opportunities for governance transformation while also challenging the traditional closed system. This paper focuses on how social media public opinion functions in government governance through the "public opinion absorption" mechanism, using literature and comparative research. The conclusion shows that it has a dual nature in public opinion absorption: it broadens channels and enhances the scientific and democratic nature of decision-making, but also poses risks of absorption disorder due to emotionalization and fragmentation. It is suggested to improve institutionalized absorption, enhance data governance and public opinion discrimination, strengthen governance accuracy and response, and build a benign interactive network governance pattern.

**Keywords:** Social media; Online public opinion; Government governance; Public opinion absorption; Public decision-making

## 1. Introduction

### 1.1. Background of the research and the objectives and significance of the study

#### 1.1.1. Background of the research

With the rapid development of modern information technology, social media has deeply integrated into social life and has become the core carrier for information dissemination and social interaction. According to the 46th "Statistical Report on the Development of China's Internet" released by the China Internet Network Information Center (CNNIC), as of June 2020, the number of Chinese internet users reached 940 million, an increase of 36.25 million compared to March 2020. The internet penetration rate reached 67.0%. As shown in **Figure 1**, the average weekly online time of Chinese internet users reached 28.5 hours, an increase of 2.3 hours compared to March 2020. The scale of internet users has grown exponentially, and the functional boundaries have continuously

expanded. It not only reshaped the communication methods of the public but also had a disruptive impact on the public opinion ecology, social governance, and business landscape [1]. Against this backdrop, many scholars have conducted research on the functions of public opinion on social media.
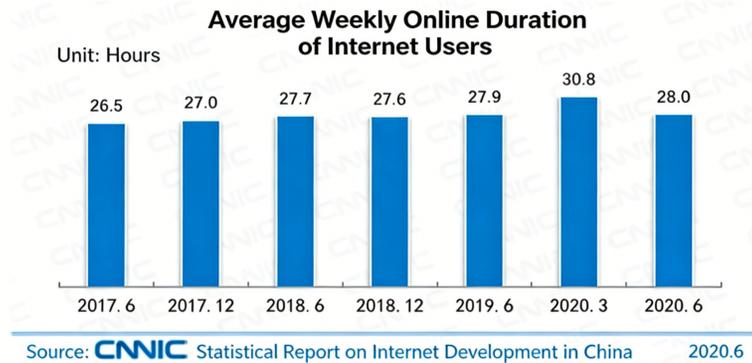


**Figure 1.** Average weekly online time per internet user

### 1.1.2. The objectives and significance of the research

One is to focus more on the "monitoring — early warning" function of social media public opinion. Gong Hong analyzed and studied the dynamic changes of public opinion [2]; government staff members took daily tracking and collection measures for online public opinion, combining manual and technological methods to ensure continuous information updates. Zhong Chengpu explored new paths for the government's early warning, monitoring, and governance of online public opinion, thereby enhancing the government's handling and response capabilities when dealing with related online public opinion hotspots. However, there was insufficient exploration of the "governance empowerment" mechanism centered on public opinion absorption, and especially a lack of systematic analysis of the entire chain of public opinion from "expression — screening — transformation" [3].

Secondly, the existing achievements mostly remain at the level of macro functional description, lacking research on the differentiated mechanisms between public opinion related to social livelihood demands and those related to sudden public events in terms of the efficiency of public opinion response and the information dissemination paths. This has led to limitations in the guidance of theory for practice.

Focus on the public opinion expression of diverse entities on social media, and based on the requirements of modern governance, conduct research on the public opinion function centered on public opinion absorption. The research on "expression — intelligent screening — precise transformation — feedback" full-process framework is carried out to analyze the differences in absorption efficiency and paths of different types of public opinions, providing data and practical support for the government to efficiently utilize public opinions and enhance governance capabilities.

### 1.2. Current research status at home and abroad

Domestic research has focused on the "public opinion — public sentiment — system" transformation path, and has formed two main lines: The first is technology-oriented, relying on text mining, SNA, user profiling, etc. Gao et al. achieved key node identification and emotion noise reduction [4–5]. The second is system-oriented. Li Shi proposed to add a "public opinion analysis and dialogue" committee to the People's Congress system and incorporate online screening results into the legislative and supervision agendas [6].

The concept of "public opinion" does not exist in foreign countries. The corresponding research focuses on "e-petition" and "online deliberation", emphasizing the triggering effect of platform design (such as We the People) and algorithm push on policy windows. However, it mostly remains at the level of case descriptions and lacks a stable channel connecting to representative institutions.

In conclusion, both China and foreign countries lack an integrated empirical framework of "technical identification — institutional absorption." Building upon the previous research that separately advanced "technical identification" and "institutional absorption", this paper incorporates social media public opinion under the concept of "public opinion", first systematically reviewing domestic and foreign platform cases and institutional channels, then integrating three technologies: text mining, emotion noise reduction, and key node identification, corresponding to the government's "collection — screening — response" process, and summarizing a set of "technology — institution" integrated flowchart. This is to empirically test its triggering effect on the solicitation of people's opinions by the people's congress and public decision-making, thereby answering "how can social media public opinion be effectively absorbed as institutional public opinion in government governance."

## 1.3. Research approach and methods

### 1.3.1. Research approach

Following the chain of "public opinion data — public opinion screening — institutional absorption — policy feedback", answer the core question of "How does social media public opinion be transformed into executable policies through the People's Congress system?"

### 1.3.2. Method

Literature analysis method: Systematically review the research achievements at home and abroad on core topics such as "social media public opinion", "public opinion absorption", and "network governance", clarify the evolution and functional differentiation of the concepts of "public opinion — public discourse — public sentiment", and establish the theoretical dialogue foundation for this research.

Comparative research method: Conduct a horizontal comparison of the institutional channels of representative platforms at home and abroad (such as "Our People" and online opinion collection systems of various people's congresses), identify the "break point" of the "technical identification — institutional absorption" gap, and provide empirical evidence for proposing an integrated process diagram.

## 2. The connotation of online public opinion and the challenges of government governance

### 2.1. Clarification of concepts: The essence of online public opinion

The prerequisite for effective governance is the clear definition of concepts. The academic discussions in China on "public opinion", "public discourse", and "public sentiment" have gone through a process from ambiguous and mixed usage to gradual clarification. Early studies, such as Wang Laihua's foundational work, clarified that public sentiment refers to "the social and political attitudes of the public", highlighting the interest relationship between the public and the state administrators [7].

Based on this, Han Yunrong and Zhang Huan's research conducted a more detailed functional analysis of these three concepts [8]. They are related but have different functions: Public opinion serves as the basis for the legitimacy of decision-making, aiming at majority consensus; Publicity is the diverse communication and feedback

in the public space; Public sentiment has Chinese characteristics, focusing on social stability, and conducting macro monitoring and early warning of online public opinion to serve crisis management.

Public opinion on the internet and public sentiment are similar concepts, both involving public opinions and psychology. Public opinion refers only to the process of public expression and dissemination. Public opinion/ sentiment focuses on psychological structure and social-political influence; public opinion emphasizes the characteristics of dissemination and does not include psychological factors. Thus, the relationship among the three can be depicted in a diagram (**Figure 2**).
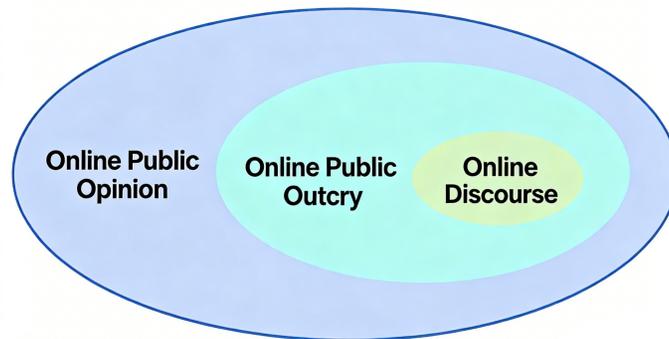


**Figure 2.** Relationship diagram of online public opinion, online public sentiment, and online public opinion trends

Online public opinion refers to the way in which the public expresses its views on public policies and the viewpoints of policymakers through the Internet in the information age. It stems from real conflicts and demands, spreads through the virtual space, and fundamentally still points to real governance. It is similar to traditional public opinion, with the difference lying in the medium and form.

Online public opinion has multiple attributes: rationality and irrationality coexist, anonymity and openness coexist, democratic participation and narrow-mindedness and bias intertwine, and freedom of expression and necessary control coexist. Jiexuyan, from the perspective of the system structure, can summarize its characteristics into four aspects [9]. The first is the originality and political nature of the public opinion information. The second is the sensitivity and complexity of the communication subjects. The third is the diversity and modernity of the communication means. The fourth is the openness and inclusiveness of the public field. It provides the public opinion basis for democratic politics. Some scholars believe: "The online public domain is a new form of public domain constructed by network technology. It is the reconstruction form of the public domain under the conditions where communication technology has developed from paper media, radio and television media to the Internet media" [10].

The essence of online public opinion determines that it is both a mirror of social reality, reflecting the underlying interests, power structures, and conflicts, and a channel for public opinion expression. Accurately grasping its connotation and evolution patterns is an important prerequisite for scientifically guiding public opinion and promoting democratic decision-making.

## 2.2. Governance challenges: The challenges of absorbing public opinion in the social media environment

Firstly, there are technical challenges. Zhou Wei pointed out that in the era of self-media, the rapid and diverse dissemination of information has led to the government facing the predicament of insufficient early warning

technology and passive and delayed responses, and there are institutional obstacles [11]. Li Fang and Han Zhiming analyzed the "tension" existing in the government's responses, which is manifested as the fragmented management system resulting in difficulties in coordinated responses, as well as the conflict between the traditional "rule by man" mindset and the demands of online democracy [12].

Furthermore, there is the complexity of the public opinion itself. Yang Rundong pointed out that judicial public opinion is not equivalent to public opinion; it contains distortions and irrationality, spreads negatively and continuously, and when improperly guided, it undermines judicial credibility and social stability [13]. These studies collectively indicate that the traditional, closed, and top-down control model is no longer suitable for the new media environment. The government must explore new governance models in order to penetrate the fog of public opinion and achieve effective public opinion absorption.

Furthermore, some scholars believe that the technology for monitoring online public opinion is still relatively lagging behind [14]. The internet information is vast and complex, with the lack of openness and supervision compounded, resulting in both rational and irrational behaviors during emergencies, as well as the spread of false and negative public opinions. Although there has been progress in real-life public opinion monitoring in China, the technology and personnel for online monitoring are still insufficient, making it difficult to adapt to the complex online environment.

Overall, the management of online public opinion during sudden public events faces multiple challenges, such as complex participants, insufficient ethical norms, and weak technical monitoring. It is urgently necessary to systematically advance in areas such as rational guidance, ethical construction, and technological upgrading.

## 3. Analysis of the functions of social media public opinion in government governance

### 3.1. Empowering efficiency: Expanding channels and enhancing decision-making scientificity

Social media has expanded public opinion absorption in a wide and timely manner, building a two-way expressway between the government and the public, breaking through the barriers of time and space and capacity, and enabling the scattered "micro voices" to converge into a sound that can be heard. The expansion of channels is just the beginning. The empowerment by big data makes it possible to conduct in-depth exploration and precise analysis of massive and unstructured public opinions.

The government is no longer merely able to sense the heat of public opinion, but can also, through the public opinion monitoring system, understand the underlying emotional tendencies, key issues, and evolution patterns. This undoubtedly promotes the historical leap of public decision-making from relying on local experience and intuitive judgment to "precise insight" based on global data and rational analysis, significantly enhancing the scientificity and forward-looking nature of modern government governance [15].

### 3.2. Risks and challenges: Misrepresentation of public opinion and an inadequate governance system

The prosperous public opinion field also has the risk of distortion: Social media amplifies extreme emotions, and the information becomes emotional and fragmented. Under the "spiral of silence", rational neutrality is submerged, and the social mentality is easily distorted by the few who are noisy. What is even more alarming is that the digital divide causes a systematic imbalance in the structure of the online public opinion subjects.

When the elders remain silent due to their unfamiliarity with intelligent devices, it implies that the

demands of disadvantaged groups may be systematically overlooked in the seemingly chaotic online space [16]. The instantaneous nature of public opinion outbreaks constitutes a continuous pressure test on the traditional hierarchical system's "reporting through levels, holding meetings for research" rhythm. If the government's response is hesitant or clumsy, minor issues can rapidly escalate into major crises, highlighting the inherent tension and structural inadaptability between traditional governance and the new media environment.

Therefore, people must adopt a dialectical perspective: Social media public opinion not only injects unprecedented vitality and possibilities into government governance, like a flowing stream, but also, due to its inherent flaws, poses a significant interference and challenge to the effective and fair absorption of public opinions.

## 4. Practical approaches for incorporating public sentiment and opinions from social media

### 4.1. Strengthening top-level design and institutional construction: A thinking revolution from "control" to "governance"

In the face of a complex, diverse, and dynamically evolving public opinion ecosystem, the government needs a profound transformation of its governance thinking. It should shift from the top-down "control" mindset to a more collaborative "governance" mindset. This means that we should not view the internet as a strictly controlled "highland", but rather as a carefully cultivated "ecosystem." The core objective is to build a governance framework that can maintain a dynamic balance between controlling social risks and stimulating the vitality of the network.

Therefore, it is necessary to be courageous in simplifying the cumbersome governance network hierarchy, clearly defining the roles and responsibilities of various entities such as the government, platform enterprises, social organizations, and netizens, and promoting the synergy and complementarity of all forces to provide a solid and flexible institutional guarantee for the absorption of positive public opinions [17]. This is not only a technological upgrade, but also a profound elevation of governance philosophy. In government governance, public opinions should be appropriately integrated, and social media public opinion is a better path for the government to reach out to the public.

### 4.2. Optimize specific strategies and operational methods: Ensure that public opinions can be effectively implemented and achieved

Under the guidance of the overall planning, people should maintain the unity of rigid systems and flexible strategies: Improve the performance assessment and accountability mechanism of the online governance platform, with rigid constraints to ensure that reasonable demands are responded to promptly, earnestly and substantively, and to avoid "insane responses" and "empty websites"; at the same time, comprehensively enhance the ability to handle emergencies in public opinion, achieving rapid, accurate and empathetic responses, and achieving closed-loop processing and verifiable results. Government practices should release authoritative information immediately within the "golden 4 hours", seize the right to explain and discourse dominance, actively set positive agendas, intelligently guide public opinion, break departmental barriers to strengthen horizontal and vertical collaboration to form synergy, effectively resolve crises, and rebuild and consolidate social trust [18].

By innovating through paths to penetrate the fog and noise of public opinion, accurately grasping the pulse of the times and the will of the people, a new network governance pattern that is responsive, scientifically

decision-making, and has harmonious interaction can be established. This will enable technology to empower the modernization of the national governance system and governance capabilities, and promote the implementation of public opinions and support government governance.

## 5. Validity argumentation of the practical approach

### 5.1. Technology empowerment

Big data has provided unprecedented possibilities for achieving precise absorption. The path proposed, its primary effective foundation lies in the in-depth application of big data technology. The effectiveness of big data technology precisely lies in its ability to transform chaotic public opinion manifestations into clear decision-making bases. From a macro perspective, accurately grasping the focus, flow and emotional intensity of public opinion, identifying which are the "true demands" representing the general interests and which are the "false public opinions" or extreme emotions that need to be vigilant against, thereby providing solid data support for the precise allocation of governance resources and the targeted optimization of public policies [19]. Technology plays a key role as a "radar" and "filter", enabling the government to "see" the people more clearly and comprehensively.

### 5.2. Mechanism optimization

A sound system is the key to overcoming the shortcomings of public opinion and eliminating obstacles to absorption. Advanced technology must operate within a healthy mechanism. The path proposed for improving the institutional channels of public opinion absorption directly targets the core deficiencies of the current online public opinion, such as the imbalance in the subject structure, irrationality, and a poor mechanism. When the government establishes performance assessment and accountability mechanisms to place the operation of online governance platforms under the rigidity of the system, it can effectively dispel the shadows of "image projects" and "shrewd politics", ensuring that every reasonable demand of the people can receive timely and responsible responses [16]. This is not only an improvement in efficiency, but also a substantive respect for the right to express public opinion. At the same time, by promoting online consultative democracy and guiding rational expression, it helps to build a more representative "public domain" in the online space, improving the quality of the absorbed public opinion from the source and overcoming its inherent structural and irrational deficiencies.

### 5.3. System reengineering

The transformation of governance thinking is the fundamental guarantee for achieving long-term and effective governance. Beyond the tools and mechanisms, the deeper effectiveness stems from the systematic reconfiguration of governance thinking. The transformation we advocate from "control" to "governance" is effective because it can fundamentally solve the governance dilemma of "one control leads to failure, one relaxation leads to chaos." By simplifying the hierarchical structure of governance and redefining the roles of the government and other diverse entities, a more resilient and inclusive governance framework can be constructed. The core advantage of this framework lies in that it no longer attempts to suppress vitality through rigid control, but instead strives to establish a dynamic and sustainable balance between "controlling social risks" and "stimulating network vitality", thereby providing fundamental systemic guarantees for the smooth absorption of public opinions and the positive interaction of society [17].

## 5.4. Strategy enhancement

Precise emergency strategies are the direct means to resolve sudden crises and need to be tested in the practice of dealing with specific crises. Therefore, optimizing the specific response strategies in emergencies is a direct manifestation of ensuring that the entire absorption path does not fail or break down at critical moments. Its effectiveness has been repeatedly proven: when the government follows the "golden 4-hour" rule and promptly releases information through authoritative channels, it can quickly fill the information vacuum, meet the public's right to know, thereby fundamentally reducing the survival space of rumors and grasping the absolute initiative in guiding public opinion [18]. This proactive, transparent, and rapid strategy is the most effective and direct "fire extinguisher" and "stabilizer" for resolving public opinion crises and maintaining the government's credibility.

The effectiveness of the path we have constructed stems from a sequential and interlinked logical progression from "technology" to "mechanism", then from "system" to "strategy." It not only equips our "eyes and ears" with cutting-edge technology, but also unclogs the "blood vessels" for absorption through sound systems, reshapes the "brain" of governance with advanced concepts, and finally forges the "hands and feet" for responding to crises with precise strategies.

## 6. Conclusion and outlook

The core of social media public opinion in government governance lies in public opinion absorption, shifting from passive crisis response to proactive identification and institutional incorporation. It serves as both a "barometer" of social conflicts and a crucial input port for public opinions. Through the "perception — extraction — transformation" chain, fragmented demands are transformed into policy improvements, enhancing governance efficiency and democratic values.

There are still several issues that need to be addressed: the process-oriented integration of online and offline operations and the departmental barriers; the systematic application of precise analysis techniques; and the shift of the assessment system from efficiency to a comprehensive model that encompasses responsiveness, satisfaction, and governance effectiveness. In the direction of modernizing digital governance, a "resilient public opinion absorption system" should be constructed to enhance precision, responsiveness, and sustainability.

## Disclosure statement

The authors declare no conflict of interest.

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