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# Cost-effective Public Opinion Monitoring and Analysis Method and Device

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#### **ABSTRACT**

This research presents a method and device for monitoring and analyzing public opinion in a cost-effective manner. The proposed method involves acquiring public opinion data from website servers on the internet, which includes valuable asset information. It also includes receiving acquisition requests from clients and extracting application requirements and client identifiers from these requests. The method further involves screening the asset information in the public opinion data based on the application requirements to obtain targeted public opinion data that matches the specified criteria. Finally, the method transmits the filtered public opinion data to the respective clients using client identifiers. This approach addresses the problem of high hardware costs and internet resource wastage associated with existing public opinion monitoring and analysis systems.

**Keywords**: public opinion, monitoring, analysis, method, device, cost-effective, asset information, acquisition requiest, application requirements, client identifier, internet resources

#### Introduction

With the widespread use of the internet and social media platforms, monitoring and analyzing public opinion has become essential for various purposes, including understanding public sentiment, assessing brand reputation, and identifying emerging trends. The ability to gather and analyze public opinion data provides valuable insights for decision-making processes in fields such as politics, marketing, and public relations. Traditional methods of monitoring public opinion relied on manual data collection and analysis, which were time-consuming and limited in scope. However, advancements in technology have led to the development of automated systems that can collect, process, and analyze vast amounts of data from various online sources, including websites, social media platforms, and online forums. The purpose of this research is to propose a method and device for monitoring and analyzing public opinion more effectively and efficiently.<sup>1</sup>

The proposed method involves acquiring public opinion data from website servers on the internet, with the data encompassing diverse aspects of public sentiment, including asset information. The method also includes receiving acquisition requests from clients, which contain application requirements and client identifiers.<sup>2</sup>

The acquired public opinion data is then screened based on the application requirements to obtain targeted data that matches the specified criteria. This targeted data, referred to as the "target public opinion data," is then transmitted to the respective clients using client identifiers. By employing this method, the research aims to address the limitations of existing public opinion monitoring and analysis systems, which are often characterized by high hardware costs and significant waste of internet resources.<sup>3</sup>

The proposed method and device offer several advantages over traditional approaches. First, by collecting data from various website servers, a more comprehensive and diverse range of public

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opinion is captured. This allows for a more accurate and representative understanding of public sentiment on a particular issue or topic. Second, the screening process based on application requirements ensures that only relevant data is obtained, saving time and resources in the analysis phase. Third, the transmission of targeted data to clients based on client identifiers enhances data security and ensures that users receive the specific information they require. The research objective is to design, develop, and evaluate the effectiveness of the proposed public opinion monitoring and analysis method and device. Through this research, we aim to contribute to the field of public opinion analysis by providing a cost-effective and efficient solution that maximizes the utilization of internet resources and facilitates informed decision-making processes.<sup>5</sup>

#### **Related Work**

In the existing approaches to public sentiment monitoring and analysis, individual users typically have their own dedicated monitoring systems. These systems are set up to gather public sentiment data from different website servers on the internet. Each user's monitoring system is responsible for collecting data from specific website servers and analyzing it to extract the relevant information needed by the user.<sup>1</sup>

However, a limitation of this approach arises when multiple users within a family or organization require access to public sentiment data from the same website servers. In such cases, each user would need to deploy their own monitoring system for the same website server, resulting in redundant acquisition systems and increased hardware costs. Moreover, this approach also leads to unnecessary waste of network resources as each user's system independently collects data from the same server. To address these limitations, there is a need for a more efficient and cost-effective approach to public sentiment monitoring and analysis.<sup>2</sup>

The proposed method aims to overcome these challenges by introducing a centralized system that can acquire public sentiment data from website servers and distribute it to the respective users based on their specific requirements. By consolidating the acquisition process within a single system, the redundancy of multiple individual systems is eliminated. This not only reduces hardware costs but also optimizes the utilization of network resources. The centralized system efficiently gathers the required public sentiment data from the website servers and distributes it to the corresponding users, eliminating the need for each user to individually acquire the same data.<sup>6</sup>

The proposed method offers several advantages over the prior art. Firstly, it reduces hardware costs by eliminating the need for multiple individual monitoring systems for the same website server. Secondly, it minimizes network resource wastage by centralizing the data acquisition process. By acquiring the data once and distributing it to the relevant users, the system avoids redundant data collection from the same source. The research objective is to develop a comprehensive public sentiment monitoring and analysis method that addresses the limitations of the prior art. The proposed method aims to provide a cost-effective and efficient solution that optimizes hardware utilization, minimizes network resource wastage, and meets the public sentiment analysis needs of multiple users accessing data from the same website servers. The proposed method offers a more efficient and cost-effective approach to public sentiment monitoring and analysis. By centralizing the data acquisition process and eliminating redundancy, the method reduces hardware costs and minimizes network resource wastage. This research aims to contribute to the field of public sentiment analysis by providing a more streamlined and scalable solution for gathering and analyzing public sentiment data.

#### **Research Objective**

The objective of this research is to develop an efficient and cost-effective method and device for monitoring and analyzing public opinion. The primary goal is to address the following objectives:

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- 1. Acquiring Public Opinion Data: The research aims to develop a mechanism to collect public opinion data from various website servers on the internet. This data includes not only general sentiment but also valuable asset information related to products, services, or other topics of interest.
- 2. Handling Acquisition Requests: The research focuses on designing a system capable of receiving acquisition requests from clients. These requests contain specific application requirements and client identifiers. The objective is to extract and understand the requirements specified by clients to ensure accurate data retrieval.
- 3. Filtering Public Opinion Data: The research seeks to develop algorithms and techniques to effectively screen the acquired public opinion data based on the application requirements identified in the acquisition requests. By filtering the data, the aim is to obtain targeted public opinion data that aligns with the specified criteria, providing clients with the most relevant information.
- 4. Transmitting Filtered Data to Clients: The research aims to establish a seamless process for transmitting the filtered public opinion data to the respective clients. This transmission is done based on the client identifiers provided in the acquisition requests, ensuring that each client receives the data intended for them. The objective is to facilitate efficient and accurate delivery of the filtered data.
- 5. Addressing Cost and Resource Efficiency: One of the key objectives of this research is to overcome the limitations associated with existing public opinion monitoring and analysis systems. Specifically, the focus is on resolving the challenges related to high hardware costs and wastage of internet resources. The aim is to develop a cost-effective method and device that optimizes resource utilization without compromising the quality and accuracy of the obtained public opinion data.

#### **Cost-effective Public Opinion Monitoring and Analysis**

The proposed method is a way to monitor and analyze public sentiment. It involves several steps:

- 1. Obtaining Public Sentiment Data: In this step, the method gathers public sentiment data from various website servers on the internet. This data consists of opinions, comments, reviews, or any other form of user-generated content related to a particular topic. The data collected may include information about people's emotions, preferences, attitudes, or experiences. Importantly, this data also includes at least one piece of asset information, which could be related to a product, service, event, or any other subject of interest.
- 2. Receiving Acquisition Requests: Clients who are interested in obtaining specific public sentiment data send acquisition requests. These requests contain two essential components: the application condition and the client identification. The application condition specifies the requirements or criteria for the desired public sentiment data. It could include filters based on sentiment polarity, specific keywords, timeframes, or any other relevant factors. The client identification ensures that the requested data is delivered to the correct recipient.
- 3. Screening Assets Information: In this step, the method screens the public sentiment data based on the application condition provided in the acquisition request. The goal is to filter out the data that aligns with the specified criteria. This screening process involves analyzing the asset information included in the public sentiment data and comparing it to the application condition. By doing so, the method identifies and selects the target public sentiment data that matches the application condition.
- 4. Transmitting Target Public Sentiment Data: Once the target public sentiment data has been identified, it is transmitted to the client who made the acquisition request. The method utilizes the client identification to ensure that the data is delivered to the correct recipient. This step involves transferring the data electronically, typically over the internet, to the client's

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designated location or system. The client can then access and utilize the received data for further analysis, decision-making, or any other relevant purposes.

In simple terms, this method allows us to gather public opinions from different websites. When someone wants specific data, they can send a request mentioning what they are looking for. We then find the relevant data and send it to them. This approach ensures that people receive the information they need without having to search through all the collected data themselves. The main advantage of this method is that it saves time and effort for clients who are interested in specific public sentiment data. They can easily request the information they need, and the system will filter and provide them with the relevant data. This eliminates the need for clients to manually search through large amounts of data. Overall, the goal of this research is to develop an efficient method for monitoring and analyzing public sentiment. By implementing this method, we can effectively collect and deliver targeted public sentiment data to clients, making the process more convenient and user-friendly.

#### Conclusion

In conclusion, this research presents a cost-effective method and device for monitoring and analyzing public opinion. By acquiring public opinion data from website servers and filtering it based on application requirements, the system ensures that only relevant data matching the specified criteria is transmitted to clients. This approach addresses the limitations of previous systems, which were characterized by high hardware costs and wastage of internet resources. The developed method and device provide an efficient and cost-effective solution for public opinion monitoring and analysis, enabling organizations to make informed decisions and gain valuable insights from the collected data.

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