

Big Data Ethics in Social Media-- A Case Study of Evaluating Websites

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ABSTRACT

This article combines qualitative and quantitative analysis to study the ethical issues of Big Data in social media, especially in evaluating websites. First, this article discusses the Big Data ethics of evaluation websites, and finds that there are some problems in the evaluation websites, such as false information, hidden information, and lack of user information protection. Second, this article uses questionnaires to investigate the awareness of users of different genders and ages on the evaluation website and their personal information protection consciousness.

KEYWORDS

Big Data, Ethics, Evaluating Websites, False Information, Hidden Information, Information Protection Consciousness, Privacy, Social Media

1. INTRODUCTION

1.1 Background

With the development of the Internet, more and more people begin to use social media. As a medium, social media provides users with many conveniences, but at the same time, it also records and discloses users' personal information. Data stored in social media is of great value and many different disciplines are focusing on the analysis of social media data (Stieglitz et al. 2018). Marti, Serrano and Nolasco (2018) said that location-based social network analysis has become a promising research method and attracted wide attention. Big data analysis is being carried out in many disciplines, and the ethical issues related to big data analysis have also attracted much attention.

1.2 Research Aim

With the popularization of big data analysis, more and more people begin to focus on the ethical issues of business analysis. This paper focuses on the ethical issues of big data in social media. In particular, we will focus on evaluation websites and do the following two parts on the basis of previous studies.

Firstly, this article explores the ethical issues of social media, especially the big data of evaluating websites. We clarify the problems existing in evaluating websites, the causes of the problems and possible solutions.

Secondly, by using the survey data collected by the questionnaire to evaluate the accuracy of website information, this paper analyses whether consumers are aware of the ethical issues of evaluating website data and the importance consumers attach to the protection of personal information. In particular, this paper will also classify the respondents according to different gender and age stages, in order to make more accurate recommendations. The content of the questionnaire includes the

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way users get information, the basic knowledge of evaluating the website and the attention to users' privacy. By classifying and analyzing the respondents, we can understand the attitudes of different gender and age groups towards false and hidden evaluation of evaluation websites and protection of users' personal information.

Through the research, this paper hopes to help the management and stakeholders of review products understand the needs of users and help them better manage products and formulate strategies. On the other hand, this paper also provides references for enterprises or organizations that are related to this study.

2. LITERATURE REVIEW AND RELATED WORK

2.1 Social Media Analytics

Holsapple, Hsiao, and Pakath (2018) believed that social media is an important part of the Internet. In addition to personal use, the analysis of the vast amount of information stored in social media helps companies maintain their competitive edge. At the same time, they define social media analysis in business as collecting relevant media data and analyzing data to support business activities.

He et al. (2015) suggested that enterprises can use social media analysis to improve user experience by analyzing user sentiment on social media to determine which sectors they lead or lag behind in the same industry. Ghanian et al (2018) believed that with the popularity of the Internet, big data analysis has become a hot research field. They divide emotional analysis into three levels: aspects, documents and sentences.

Holsapple, Hsiao, and Pakath (2014) redefined social media analysis in business. They add external environment and internal organizational structure to the traditional definition (focusing solely on user perception). At the same time, this article claimed the benefits of social media analysis, such as improving corporate decision-making, enhancing user experience, reputation management, and so on.

Fuchs (2017) argued that in the analysis of social media data, we should pay attention to the standardization of data. The cooperation between computer scientists and social scientists can well combine empirical big data analysis and critical theory.

Ersoy (2018) explored whether consumers' perception of social media ethics will affect consumers' preferences. The results show that ethical policies and reputation of enterprises are positively correlated with consumer preferences, that is, the more ethical enterprises are, the better their performance is.

Lee (2017) discussed four ways of social media analysis including real-time customer analytics, non-real time customer analytics, real time competitive analytics and non-real-time competitive analytics. At the same time, he indicated that there exist several issues in social media analytics such as bias in social media data, selection of good metrics and unstructured social media data.

Chang (2017, 2018) introduced a method of social network analysis, called Internet of People. He illustrated a visualization technology for data analysis and used six functions of the technology to analyze the data. This paper also demonstrated that better social networks can help building up better communities and ethics. Yao and Chang (2015) studied the trust building of cloud games by collected data from Beijing and Shanghai, the two most populous cities in China. The results show that there are competitions about cloud games in Beijing and Shanghai, and doing large scale surveys is important to know the feedback and thoughts from active community members, such as virtual reality/games.

2.2 Ethical Issues on Social Media

Chang et al. (2016) introduce a new enterprise cloud computing system, which proves that the research based on big data makes the enterprise more flexible, efficient and competitive. His survey shows that the importance of privacy protection is increasing. Enterprises should invest more money to make them follow better security protection schemes while doing data analysis.

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