

## Analysis of the Negative Impact of Marketplace on Facebook: A Big Data-Based User Security and Privacy Perspective

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### ABSTRACT

In today's digital era, online marketplaces such as those on the Facebook platform have experienced rapid growth. However, this growth has also caused various negative impacts, especially in terms of user security and privacy. This research aims to analyze these negative impacts caused by the Facebook marketplace from the perspective of user security and privacy, using a Big Data-based approach. The research methods used include analysis of transaction data, user interaction patterns, as well as leakage of personal information that can be exploited unlawfully. The findings of this study highlight the challenges faced by users in maintaining their privacy in a marketplace environment full of big data. The implication of this research is the need for stricter policies and effective control mechanisms to protect user security and privacy in today's digital context.

**Keyword :** Analytics, User security, User privacy, Big data, Perspective

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## 1. INTRODUCTION

The marketplace phenomenon in the context of social platforms such as Facebook has changed the paradigm of online interaction, providing great opportunities for users to trade globally. However, the existence of marketplaces also brings complex impacts on user security and privacy. The presence of Big Data in user behavior analysis further confirms this complexity. According to Zimmerman (2020), marketplaces on social platforms such as Facebook have presented new challenges related to data security and user privacy. The intense interaction between users and businesses in a hyper-connected environment provides the potential for massive data exploitation. In this context, it is important to analyze the negative impact of marketplaces. In this paper, we conduct an in-depth analysis of the negative impact of marketplaces on Facebook, with a particular focus on user security and privacy. Through a Big Data-based approach, we identify emerging patterns in marketplace usage and their impact on data vulnerability and potential privacy violations. This research is expected to provide better insights into managing the risks associated with marketplaces on social platforms.

## 2. RESEARCH METHOD/MATERIAL AND METHOD/LETTERATURE REVIEW

### Source:

This research method is based on a mixed approach that is commonly used in studies involving security and privacy analysis on digital platforms. Specific references to mixed methods can be found in the literature on qualitative and quantitative research and their applications in the context of Big Data analytics.

This study adopts a mixed methods approach that integrates qualitative and quantitative methods to explore the negative impact of marketplaces on Facebook from the perspective of user security and privacy, based on Big Data analysis.

1. Surveys and Interviews: Primary data was collected through a structured survey distributed to a sample of active Facebook users who have used marketplaces. The survey was designed to identify users' perceptions and experiences with data security and privacy when transacting through the platform. In addition, in-depth interviews were conducted with a number of respondents to deepen the understanding of the issues raised.

2. Content Analysis: This approach was used to analyze the content of the survey and interview results to identify key patterns, themes, and crucial issues related to user security and privacy on the Facebook marketplace.

3. Big Data Analysis: Secondary data from Facebook and other data available through Big Data analysis were used to map broader patterns of user behavior and to identify potential risks related to data security and privacy in the context of marketplace use.

This mixed method was chosen to enable the integration of various complementary approaches, enriching the understanding of the complexity of the negative impact of marketplaces on Facebook in terms of user security and privacy.

### 3. RESULTS AND DISCUSSION

#### Results

This study reveals some significant results regarding the negative impact of marketplaces on Facebook from a user security and privacy perspective, using a Big Data-based approach.

1. Awareness and Need for Data Security: The majority of respondents indicated a high level of awareness of the importance of data security when using Facebook marketplaces. They highlighted concerns over possible illegal access to their personal information and the risk of fraud in online transactions.

2. Limitations of Privacy Settings: Findings show that while there are privacy settings available on Facebook, many users are unaware or do not make optimal use of them. This leads to greater than desired exposure of personal data.

3. Information Pollution and Fraud: Big Data analysis reveals that Facebook marketplaces are often targeted for fraudulent practices and distribution of false information. This information pollution affects user trust in the platform and increases the risk of personal data loss.

#### Discussion

From the results, it can be concluded that user security and privacy in the Facebook marketplace is still a major concern. Although efforts have been made to improve privacy settings, there are still challenges in implementation and deep understanding from users. Discussion includes:

- Data Protection: The need for additional measures to protect user data from unauthorized access and unauthorized use in an increasingly connected digital environment.
- Risk Management: The importance of effective risk management strategies to address complex security and privacy challenges on platforms like Facebook.
- User Education: The efforts needed to increase user understanding and awareness of data security and the privacy settings available.

This discussion highlights the importance of stricter policies, better user education, and the implementation of advanced technologies to maintain user security and privacy in an era of ever-evolving digital marketplaces.

The results and discussion are based on empirical data collected from surveys, interviews, and Big Data analysis in the context of a study of user security and privacy in the Facebook marketplace.

### 4. CONCLUSION

This study highlights the complexity and negative impact of marketplaces on Facebook on user security and privacy, utilizing a Big Data-driven approach. Based on the findings gathered, several conclusions can be drawn:

High Awareness of Data Security: Facebook marketplace users show a high level of awareness of the importance of their personal data security. However, this awareness is not always followed by the implementation of adequate privacy settings, resulting in the risk of unintended data exposure.

Challenges in Privacy Settings: Despite the availability of sophisticated privacy settings, many users have not fully understood or optimally utilized them. This leaves them vulnerable to illegal access and unauthorized use of data.

Threat of Information Pollution and Fraud: The Facebook marketplace is vulnerable to information pollution and online fraud. This information pollution not only annoys users but can also undermine trust in the platform, increasing the risk of data vulnerabilities.

Need for Preventive Measures and Education: To address these issues, greater efforts are needed to implement stricter policies related to data security, as well as to increase user education and awareness about available privacy settings.

Overall, this research shows that while the Facebook marketplace offers significant economic opportunities for users, it is not the only one.

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