**PBAE2 Introduction**

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## 1. Introduction

In the era of big data, consumers' fragmented behavior trajectories such as browsing, clicking, leaving messages and comments on the Internet are collected and stored. These behavior trajectories directly or indirectly reflect consumers' personalities, habits, attitudes and other information and can be used to provide decision-making basis for enterprises to implement marketing. These fragmented, collated data stored in the database can be used by enterprises to completely reconstruct consumer needs. These all-dimensional and three-dimensional data recording consumers are called "user profiles".

Nowadays, many Internet companies collect data about their users on the Internet. These companies want to use user information to understand user needs and provide accurate services to users[1]. As an effective user analysis tool, user profiling techniques are used by Internet companies to analyze user information to understand users' preferences, behavioral habits, and other characteristics[2].

However, the utilization of user profiling technology may result in the leakage of user privacy. Most users do not trust Internet service providers[3], much less allow them to collect private data, because the leakage of user privacy often poses the risk of violating user rights. How to ensure the privacy and security of users while their data serves the enterprise is an important issue nowadays.

The research of this paper will be divided into three parts. The first part is the investigation of user profile technology. This paper will research the current state of development of the theory, the application of user profiling technology, and its potential threat to internet users' privacy. The second part is the analysis, in which this paper will elaborate on the impact of user profile technology on the privacy of Internet users. This paper takes a closer look at the Internet privacy leakages of the last few years and explore whether they are related to the large-scale use of user profiling technology. The third part gives countermeasures for the technological threats of user profiling technology from three perspectives: individuals, enterprises, and governments.

The study is divided into three main purposes. At the individual level, firstly, the research can enhance users' awareness of privacy protection in their daily lives. More importantly, our research can improve their ability to protect themselves against the risk of privacy leakage. In addition, the research can better provide users with personalized and accurate information services. At the enterprise level, on the one hand, the research can facilitate research on security technologies for privacy protection. On the other hand, research hopes that enterprises will pay more attention to the privacy protection of their users. At the social level, the research hopes to explore the establishment of a perfect privacy protection mechanism in the system.

Finally, all of us hope that our research can explore how to find a balance between the orderly development of enterprises and the protection of consumers’ rights.

## Reference

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