

Research on the Ways the Big Data Affecting Youth and Its Impact on Society

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Abstract: With the popularization of digital products, their functions improve all the time, not only just the performance of these products but also improved function via getting knowing more about users. This realization of acquiring familiarization with users belongs to the technique of analyzing big data. Naturally, teenagers serving as one of the main parts of various ages users must have been affected by the growth of the developing digital market in both positive and negative ways. When enjoying the convenience brought by it, teenagers also face the problems of leak privacy, being addicted to the Internet, and changed to be shallow. The essay discusses big data penetrates contemporary youth through fragmented time under “Thumb culture” by the data and characteristics of teenagers and interviewing high school students in Wuhan San new school. In the short run, teenagers keep enjoying the convenience brought by digital products and being addicted to them at the same time, while the long-term effects to them are related to their values, life goals, and economic development.

Keywords: big data, internet, youth, impacts

1. Introduction

Nowadays, big data analysis is a popular term among the public, which means collecting a large amount of data to analyze results. Anticipating that there would be a bright market for online services, enterprises have contributed a lot of money and energy to online services and used big data to explore consumers' potential consumption rules and modify products, such as the applications designed. With the rapid development of technology, today's Internet penetration rate has reached 70.4%. As young Internet users, teenagers have been affected as never before. Many applications that use big data can easily make teenagers addicted to mobile phones because the analysis of big data will produce overly personalized information. This paper discusses the causes of teenagers' mobile phone addiction and the impact of big data on teenagers' and students' attitudes from micro and macro perspectives. This way, this paper provides considerations for developing applications and online services and reminds the market to protect consumers' privacy and rights.

2. Analysis of the Status Quo of Big Data Invading Human Life

There are many big data analysis systems on the market today that can gain insight into people's habits. After screening, cleaning and analyzing massive data, many unclear but objective existed laws can be found. For example, in the analysis of consumer' purchase behavior in supermarkets, merchants accidentally found that selling beer and diapers on the adjacent shelves could greatly increase diaper sales. Oddly enough, beer and diapers are not one commodity, and there is no logic on the surface. But how are these two illogical things connected? In fact, the more real potential reason is that the ones who buy beer are often men, sometimes be the new dadies. When they walk

close to the beer, they naturally would see diapers, which would simultaneously generate a guilty feeling if they don't buy diapers. Because buying diapers provide them with the sense of responsibility of raising child, customers would finally decide to pay for the sense. Gradually, placing diapers close to beer can increase sales. A rule that neither merchants nor consumers have discovered exists. However, without the influence of any emotion and interference, objective big data can dig out this potential law. This is where big data is powerful. Now all aspects of life will use such big data analysis to find similar patterns of people's living habits. It can not only achieve the purpose of providing convenience for consumers, but also bring more benefits to enterprises. It is no exaggeration to say that behind every big company, there is a group of people analyzing such data to help discover such potential profit patterns. This pattern is also found in teens. In recent years, big data will discover what every teenager likes and push them what they like. Because of the fast-paced life now, many profit-seeking businesses will use big data to push things that are not nutritious to young people, which will have a negative impact on young people and society.

3. Analysis of the Direct Impact of Big Data on Teenagers' Entertainment and Learning

In terms of learning, according to the 47th "Statistical Report on China's Internet Development" released by the China Internet Network Information Center (CNNIC), on September 29, 2020, affected by the epidemic, the number of mobile online education users reached 377 million, accounting for 40% of mobile Internet users, as of December 2020, the scale of online education in China was 342 million. Due to the epidemic, a large number of students have been exposed to the online teaching model, and compared with the scale of online education as of June 2019, the population of online education has increased by 110 million. [3]. The role of big data online education is to push teaching videos suitable for teenagers to those who need it. For example, searching for "calculus" in Zhihu APP will pop up a lot of teaching content about "calculus", and usually a notification about "calculus" content will pop up. However, there are certain risks in online education, because big data will keep entertainment in the students' field of vision. Regarding the attitude survey of some teachers during the epidemic, 41.59% of teachers believe that the effect of online teaching is not as good as offline, and only about 14% support online teaching [4]. Big data gave birth to the rise of "pan-entertainment". Today, new terms such as "bow-headed people" and "fast food culture" have emerged, representing the phenomenon of teenagers being addicted to the Internet. "Bow-headed people" refer to young people who use mobile phones with their heads down for a long time. They use their fragmented time to play with their phones, especially short videos. The Douyin app is a social software owned by Toutiao. It uses algorithm push technology to continuously welcome young people for a long time by judging how much they like a certain video and analyzing the content that young people are interested in. Algorithmic push means that the app collects the user's personal information, processes and analyzes the data, determines the content that the user is interested in, and pushes it to them. The app then reincarnates the types of videos watched by mobile phone users and other data, laying a solid foundation for the next step to push more accurate content recommendations. This continuous cycle process will gradually increase user loyalty [5]. In this way, users can receive music videos that suit their hobbies and enjoy watching and enjoying them. But the disadvantage is that because users watch videos that match their own interests, this will greatly extend the time users stay on the Douyin platform. At the same time, a lot of content is not healthy for teens. For example, it is popular that some beautiful girls introduce products that are not cheap but attractive to teenagers and sell them to teenagers through short video app.

4. Analysis of the Reasons for Teenagers' Addiction to the Internet: A Big Data Perspective

In addition to the drive of children's own instincts, the establishment of students and the Internet is also the result of the development of data science Feishu. Adolescence is a period of human development. Physiological development and changes dominate the psychological development and changes, so that the needs of adolescents are dominated by instinct, lack of reason and spontaneity. [6] When teenagers themselves have not established enough knowledge of the world, their spontaneity will make them curious about the world, and the Internet is a tool they use to explore the unknown and a means to help them answer their doubts.

At the same time, the rapid development of data science provides the necessary foundation for big data analysis. Big data can be explained by 4 Vs, Volume, Variety, Value and Velocity. [7] Because of these 4 Vs, programmers can utilize statistical models, certain algorithms and methods to provide predictive analysis of future trends and find patterns. The app can collect and analyze teenagers' online habits in order to push certain things, such as something with a high browsing volume, a high search rate, and a high click through rate. For example, NetEase Cloud Music's FM mode, QQ Music's daily push, Taobao's product push, and Tiktok's hot word analysis. These apps are just the tip of the iceberg. It is undeniable that most top enterprises have a process of data analysis. Accurate recommendation of big data also makes young users more sticky and loyal, which has a negative impact on the development of young people.

In 2020, the number of young-age netizens in China had reached 183 million. Under this fact, the phenomenon that teenagers are addicted to digital products is not rare. *Amusing Ourselves to Death*, composed by Neil Postman, an American media, Enhua, researcher, and critic in 1985, exposes that all public discourses in real society are increasingly appearing in the form of entertainment and become a cultural spirit. By this book, people's logical thinking ability may become fragmented, and out of context, and only enjoy entertainment until the time of die. Such a description is very similar to the current situation of many Chinese teenagers. Many of them are obsessed with apps on their mobile phones, favoring online video games, idols, and short videos while reducing their acceptance of external information, ranging from caring for a family to political news. By working with Big data, these entertainments attract these teenagers' interests and stimulate them to do more in those fields. Keeping this for a long time, they would lose the positive impulse to improve themselves. However, with less knowledge of the real world, such as science journalism, literature, and art, students are easily disconnected from reality. A place where lots of people are is where a good place to seek benefits. As more businesses come to the Internet and confining more services, the services online will become more comprehensive and capable to attract more teenagers consistently. Gradually, it will increase users to provide data for analysis and help the result analyzed by Bid data more concise, help businesses know about user habits more. Forming a cycle to attract more business coming in, the Internet has a more thorough understanding of young people and leaves more young people in the virtual world.

Big data lead to intensified peer effects, and teenagers will be easily immersed in entertainment. Fromme found that playing video games was mainly related to peers by studying the daily time spent on various electronic media among 6-16-year-olds in Germany from 1997-1998. In the process of playing games online, peers are the main consultants and mediators and are often the introducers of new games. The peers complement each other and penetrate the game experience through two-way communication. [8] Dong Casting and Chen Yuanyuan designed a peer effect model and a questionnaire and found that The proportion of classmates playing games (watching TV) online increased by 1%, and the probability of individuals playing games (watching TV) online increased by 0.212% (0.286%). For every additional hour of classmates playing games (watching TV) online, the time spent playing games online (watching TV) by individuals increased by 0.338 (0.240) hours

[9]. When hot topics, games, etc. on the Internet can be collected by big data and pushed to a group of people with a better relationship, this group of people will rely more on the application of this app, which will increase the usage time.

5. Analysis of the Impact of the Entertainment Industry under Big Data

The negative impact of the entertainment industry chain under big data on young people should not be underestimated. Games, chasing stars, chasing dramas, and novels are all names of young people in the contemporary context. One of the most important things that cannot be underestimated is the power of short videos. In this era of traffic-oriented self-media industry, big data has limited and vulgarized the thinking of young people, and may even lead to the phenomenon of entertainment to death. Fast food culture is the result of an accelerated pace of life. In a macro sense, big data can lead to three negative outcomes.

(1) Losing serious discourses

Weibo is full of news about celebrities, while everyone's knowledge of their country is gradually dwindling. [10] Due to the low-quality and fragmented characteristics of short videos, teenagers are more likely to feel fun and reduce their understanding of traditional culture. Teenagers wasted my curiosity about strangers in my teenage years, but I learned a lot of jokes that are easy to pass up and have no nutrition.

(2) Long-term benefits disappear

A large number of profit-seeking people adhere to the idea of traffic and money first, add low-quality things to the Internet, and seek benefits from it, so there will be vulgar information and infringe on the minds of young people. It reduces the thinking time of teenagers. As long as it is free time, they will take out their mobile phones to kill time, and a large amount of fragmented information is like flowing water. People's reading only leaves footprints on social media with likes and comments, but they don't remember the content and don't think about the things they touch.

(3) Capital dominates the cultural field

Entertainment culture has gradually become a part of people's enjoyment of life. At the same time, entertainment culture is also popular in the market as a unique commodity. This commodity also has a close-relationship audience. [11] With the interaction brought by the capital, this commodification gradually expanded, causing the masses to be dragged forward by consumerism. For example, the current behaviors of "voting for idols" and "rewarding female anchors with krypton gold" are both manifestations of consumerism.

6. The Attitudes from the Teenagers to Big Data

Through the interviews about their attitudes to big data with the students in Wuhan San new School, a national school in China, all the students agree that they know what big data is and accept the advantage of big data every day. For example, the most common app they mentioned is Bilibili, a platform where students can visit their interesting topics and get in touch with the hottest discussions. From a positive standpoint, these apps, including Big data analysis, can quickly display their favorite content and save a lot of time for them after using these apps for a short period. But, a potential risk some of them pointed out is that a large quantity of customers' information leakage generates an anxious feeling because of no promise to their private security. Also, too much attractive information makes them addicted to the virtual world.

7. Conclusion

Because of the widespread implementation of mobile phones, laptops, and other digital products, individuals can recommend personalized designs according to their tastes by being tracked and

analyzed from big data. Especially for the teenage group, their eyesights are not that broad, but they are curious about the world. It is attractive for them to be addicted to the colorful virtual world, thus given some current influence, like interfering with study and the range of making friends, and long-term effect, such as personal privacy leak and the overlying entertained. This study combines teenagers and big data, showing the relationship and correlation between students and big data, and mentions the business-perspective reason for the personalized function. Although it describes the phenomenon of the current state of the influence of big data on students, this still needs much more evidence to discover the potential macro effect. The feasible ways to offset the problem brought by the international age are still a puzzle and need more educators and other experts to answer.

References

- [1] "The 47th "Statistical Report on the Development of China's Internet" released." *China Broadcasting*. 04(2021): 38.
- [2] Xu Xinyi, and Wu Kezhong. "Supervision makes heavy blows, and minors' game addiction must be managed by multiple parties" *China Business News* 2022-03-21, B24, Games.
- [3] "The 47th "Statistical Report on the Development of China's Internet" released." *China Broadcasting*. 04(2021): 38.
- [4] Xiang Cong, Chen Xiaoping, and Lu Kaicong. "An Empirical Study on the Effect and Influencing Factors of Online Teaching in Colleges and Universities." *Chinese University Teaching*. Z1(2021):93-99.
- [5] Li Yanjun. *Research on Douyin APP Use and Satisfaction*. 2019. Xiangtan University, MA thesis.
- [6] Jiang Guifang. *Research on Adolescent Moral Issues Based on Need Theory*. 2013. Zhengzhou University, PhD dissertation.
- [7] Kang Luchen. *The era of big data [M]*. Beijing: Democracy and Construction Press, 2015: 3.
- [8] Fromme J. Computer games as a part of children's culture[J]. *Game Studies*, 2003, 3(1): 49–62.
- [9] Dong Caiting, and Chen Yuanyuan. "Peer Effect of Teenagers Using Electronic Media: Based on the Perspective of Class Social Network." *Financial Research* 47.10(2021):125-139. doi:10.16538/j.cnki.jfe.20210313.302.
- [10] Zhang Kangyan. "Interpretation of Bozeman's media theory in the context of pan-entertainment." *Journal of Kaifeng Vocational College of Culture and Art* 40.05(2020):239-240.
- [11] Hou Shichen. "Influence of "Entertainment to Death" in the Information Age on Contemporary College Students." *Modern Commerce and Industry* 42.33(2021):154-155. doi:10.19311/j.cnki.1672-3198.2021.33.072.