

Analysis of Facebook Related to COVID-19

Zihuang Shu^{1,*}, Zhuoying Liu²

¹Fuzhou No.8 High School, Fuzhou, China

²China-Hong Kong English School, Hong Kong, China

*Corresponding author: zihuang.shu@fz.lyndoninstitute.org.cn

Abstract. Digital advertising, including display advertising and search advertising, is a very important part of Internet social media companies. The global outbreak of Covid-19 hit this space, causing digital advertising to grow exponentially. Advertisers are spending more on social media with the average price of Facebook ad spots up 30% from the previous year. As a result, in the long run, Facebook has more than 9 million advertising partners, and small and medium-sized advertisers are its main source of revenue. Meta's core business appears to be experiencing declining user adoption and struggling revenue, as well as inflation and supply bottlenecks disrupting advertisers' budgets. Apple became the first Internet technology company to change course on protecting user privacy, and Facebook's monthly active users, at 2.91 billion in the fourth quarter, did not grow, dropping to below 5% year-over-year growth, according to its fourth-quarter 2021 earnings report. The new privacy policy has become a negative influence for all Internet technology companies and advertisers.

Keywords: Facebook; Financial analysis; Internet advertising; Strategy analysis; COVID-19.

1. Introduction

The COVID-19 pandemic has not only had serious political, economic and social impacts, but also affected the media and social life in an unprecedented way, prompting billions of Internet users to obtain a large amount of information, opinions, predictions and suggestions.

Although traditional news media attempt to adapt to the rapidly developing situation, the emerging news media on the Internet have an outstanding performance during the epidemic with their earlier positioning and operational advantages. Digital advertising, including display advertising and search advertising, is a very important part of Internet social media companies. In this regard, Google and Facebook have high market power in searching and displaying advertising respectively.

In the past three years, the global outbreak of the Covid-19 has impact this field, causing digital advertising to grow exponentially. After creative production is completed, advertisers aim to reach their target in an efficient and effective way via different outlets. These advertisers must comprehend the features and drawbacks of each channel and manage their marketing budget in the most efficient manner to encourage development and save expenses. In this instance, technology and data-driven digital advertising will provide several advantages for marketers, including exact positioning and measurable outcomes, automation, and real-time optimization. At the same time, advertisers will confront significant obstacles posed by the media ecosystem.

To understand the positive and negative effects of digital advertising campaigns, some studies have investigated the link between these campaigns and the results.

Taking Facebook, a Internet platform in the spotlight, as an example, this article studies the fiscal quarters of 2020 and 2021.

The COVID-19 pandemic and its impact are still spreading nowadays, and it has also promoted the digitization and transformation of various Internet advertising industries. According to the latest report of e Marketer, expenditure of global digital advertising increased by 12.7% in 2020. From the perspective of placement on media, the growth rate of Internet advertising business has achieved a breakthrough growth after a short slowdown in Q2 2020 in recent years. Internet advertising in the United States, including Facebook, leading digital growth and business innovation to form a multi-dimensional business model of social, service and operation, which is of great reference significance for future business media transformation.

2. The impact of COVID-19 on Facebook

2.1 Analysis of Existing Circumstance

In 2022, on February 2nd, Meta released their annual report. The research states that in 2021, Meta earned US\$117.929 billion, which is a 37% increase over 2020's US\$85.965 billion. The recovery of the global economy following the pandemic has contributed to the dramatic year-over-year increase in revenue growth. Advertisements continue to be the main source of income for Meta. Which accounted for \$114.934 billion (up 36.6% year-over-year from 2020), or 97.5% of total revenue [1]. Meta shares fell 23% to a one-year low of \$75 after the report, making it the second tech giant after Nifty to see its share price plummet after the results were released. The lack of market acceptance of Meta's top-performing advertising revenue growth points to important risks and pitfalls for Meta's business model.

Both advertising and other sources contribute to Meta's total revenue (including developer fees and consumer hardware revenue). Facebook's revenue model is a dominating paradigm for the company's leading Internet advertising business and an implied source of accountability for its revenue model and privacy ethics from the authorities and society at large because of the company's reliance on advertising donations [2]. In March 2020, Barron's analyzed more than 20 publicly traded companies, including digital media sites, advertising agencies, publishers, radio stations, television companies and cable operators, and nearly one-third of them lost more than 50 percent of their share prices. Stocks in the Internet media space that are not heavily weighted toward advertising, such as Netflix, were not significantly affected.

The epidemic did have an impact on Facebook's advertising revenue, which was forecast to decline by 3% in mid-2020 by most experts and institutions in the U.S., but Facebook still managed to grow its advertising revenue by 12% for the year [1]. The reasons for the slowdown point to the impact of the epidemic and the boycott. Unlike Google Travel, Facebook's e-commerce and online gaming businesses were not disrupted during the quarantine period, unlike the tourism and offline leisure industries, which were hit hard by the epidemic. Facebook's exposure is to brand advertising, with entertainment, retail and essential consumer goods being the main contributors to its advertising revenue overall, making Facebook less affected during the outbreak. In 2020, nonprofits launched a "Stop Hate For Profit" campaign to boycott Facebook in protest of the platform's inaction on hate speech, and the breadth of the campaign led to significant consumer pressure on brand owners to allocate their advertising budgets, prompting companies such as Coca-Cola, Microsoft, Starbucks, Unilever, and others to take action. Microsoft, Starbucks, Unilever, and more than 500 brands have stopped or will stop spending millions of dollars on Facebook ads [1]. In response to user sentiment, many major brands have indicated that they are withdrawing from their Facebook advertising programs in the near term.

2.2 Strategy Analysis

However, the alleged withdrawal from Facebook has had a minimal impact on their advertising revenue [3]. Much of the traditional advertising research has focused on attribution, which aims to show how some advertising behaviors lead to some outcomes. Experimental designs, SEM and econometric models are applicable to this situation. Big data is creating very different situations in which non-theoretical predictions are needed. For example, suppose an advertiser must decide whether to purchase a banner impression [4]. This requires estimating whether the exposed customer will buy and, if so, how much they will spend in order for the advertiser to make financial calculations. Advertisers may have thousands of predictor variables available, but there is no robust theory to guide the choice of models. In addition, advertisers may be building hundreds of these models every day. There are three reasons why Facebook's advertising business has not been significantly affected in the long term. According to Debra Aho Williamson, principal analyst at eMarketer, "many marketers simply want to find the best value for their ad revenue, and Facebook's targeting and broad reach are a necessary part of their ad purchases. As a result, brands may not exit the platform permanently in

the long run, and ad budgets will only fluctuate in the short term due to the epidemic and user sentiment.

Second, advertisers are spending more on social media, with the average price of a Facebook spot up 30 percent from the previous year and the number of ads placed up 12 percent. As a result of the combined effect of the two, Facebook ad revenue increased 46% to \$25.44 billion in Q1 2021 compared to the same period last year.

Third, in terms of media trends, the epidemic has accelerated the flow of advertising from traditional media to the web, and without much choice, e-commerce and online services have facilitated the growth of platforms despite the boycott [5]. In terms of advertiser mix, Facebook has more than 9 million advertising partners, and small and medium-sized advertisers are its main source of revenue. Since March of last year, Facebook has launched a \$100 million support program and other activities to help SMBs reduce the pressure on rent and operating costs during the epidemic, and this program has gone some way to stabilizing the image of SMBs and Facebook itself. As the number of small and medium-sized advertisers grows, Facebook's reliance on headline advertisers will diminish. In the current digital marketing environment in the U.S., especially in light of the epidemic, it is difficult for small and medium-sized advertisers to abandon this advertising platform [6].

Before the pandemic, Facebook's advertising income was barely \$69.65 billion (2019 profits), but it has now nearly quadrupled. This demonstrates that the digital revolution during the pandemic increased the economic value of the advertising Internet platform, which cannot be only attributable to the recuperative recovery of the economy following the epidemic. In addition to double-digit increase in primary revenue and net income, the statistics also reveal growth constraints for Facebook. User growth has returned to single digits, the company's market share has peaked at 2.91 billion monthly active users, and it faces new traffic competitors in the U.S. and overseas.

Facebook has announced 1.93 billion daily active users in the fourth quarter, which was flat compared to the previous quarter and up 5% year-over-year, but less than the 1.95 billion daily active users predicted by the market due to a reduction in ad revenue growth and bad key user metrics. The monthly active user base of 2.91 billion, which was similarly unchanged from the previous quarter, was up 4% year-over-year and was anticipated to reach 2.95 billion, both of which were worse than market forecasts [7]. More pessimistically, first-quarter 2022 revenue metrics are predicted to remain sluggish and rise by only 3%, compared to Facebook's first-quarter 2021 revenue growth of 48% [1]. This indicates that Facebook may be facing larger difficulties and problems. Meta's main company looks to be facing diminishing user uptake and declining income, as well as inflation and supply constraints that are disturbing advertisers' budgets, and its ad pricing power continues to be badly impacted by Apple's privacy policy revisions. Since Zuckerberg's congressional testimony in 2018, Facebook's crisis of confidence in data security has had a substantial impact on the corporation, including its advertising business, consumer usage trust, and merchant usage dependence [8].

3. The Privacy Battle between Internet Advertising Companies and Technology Companies

Driven by the post-epidemic economic recovery, Apple, Microsoft, Amazon, Google and Walmart have grown toward a \$2 trillion market cap (Walmart's digital advertising business has surged to tens of billions of dollars in revenue growth), and Facebook has surpassed \$1 trillion. In the second half of digital marketing and the trend toward greater regulation of digital legislation, digital advertising has become the economic backbone of all Internet technology companies leading global market capitalization. Compared to the energy, real estate and banking sectors, technology companies are the undisputed kings of business in the pandemic era.

That's why, in April 2021, Apple, over the objections of Facebook and many advertising associations in the United States, voluntarily adjusted its privacy policy to implement ATT (App Tracking Transparency Framework), a new policy that all apps on the AppStore must comply with

[2]. This includes the IDFA (Identifier for Advertising) that requires app developers to seek permission from users to track them or access their devices. In short, apps must ask for consent in order to access and process Apple users' data. In one fell swoop, Apple became the first Internet technology company to change course on protecting user privacy and remove IDFAs (mobile device identifiers for advertising) since the 2018 EU GDPR General Data Protection Regulation [9]. Despite heated discussions about the potential drag on Facebook's advertising revenue from ATT, Facebook reported a strong second quarter, with revenue jumping 56 percent, the largest year-over-year increase since 2016. At the same time, Facebook warned that its advertising business would face increasing negative headwinds from iOS privacy policy changes and regulation [10]. By the third quarter, Facebook's revenue growth had fallen to 35 percent amid successive warnings from management and as the economy continued to recover from the worst of the epidemic. According to mobile app analytics provider Flurry, only 16 percent of users agreed to be tracked after Apple adjusted its privacy policy. Facebook is in the news in 2021. On the one hand, it's being hamstrung by Apple's new privacy policy and repeatedly rubbed by the U.S. Congress and various administrations over various data and youth protection issues, while on the other hand, it's looking to make a shift itself [11]. Google has also begun trying to get Chrome to block third-party cookies, eliminating 20 years of Internet cookie technology from the desktop Internet. This attempt to protect the personal information of individual users further reinforces the global trend of privacy protection and enhanced user data security [8]. The new privacy policy has become a stress test for all Internet technology companies and advertising platforms.

4. Conclusion

Facebook is in a user growth stagnation. According to the Q4 2021 earnings report, Facebook's monthly active users (MAU) stood at 2.91 billion in the fourth quarter, with no quarter-over-quarter growth and year-over-year growth falling to less than 5%. Facebook has struggled with stagnant user growth for a while now. Following the release of its earnings, the company's stock price fell more than 26%, and its market value dropped by \$240 billion in a single day, setting a record for the biggest one-day market value decline of a public company in American history. In the third quarter of 2020, the issue of stagnating user growth initially became apparent. Due to the new epidemic's effects on online social networks at the time, Facebook was able to increase its user base, with daily and monthly users expanding at a pace of 12%. Facebook's user growth slowed in Q3 2020 and eventually fell to below 5% in Q4 2021, the lowest growth rate in three years, as the disease spread and new privacy regulations followed. In fact, since Q2 2021, Facebook just keeps setting new lows in user growth. Informativeness, entertainment, excitement, and trustworthiness had moderate to strong effects on consumer attitudes toward online touchpoints, with informativeness and entertainment having the greatest impact. This result is in line with earlier studies that hypothesized that consumers utilize mass media, including the Internet, primarily to gratify their informational and recreational demands. Although the impact of credibility on sentiments is a little less strong, it is still enough to imply that consumers anticipate truthful, objective information from online touchpoints. Although this influence is less than that of other drivers in absolute terms, irritation has a detrimental impact on views. In a variety of research and study situations, our empirical generalization to the advertising value model thus offers broad support from a theoretical standpoint. The substantive moderator, time, has a significant effect. Particularly, the influence of stimuli on consumer sentiments is temporally variable and loses significance over time. Theoretically, this discovery relates to the idea of Internet knowledge, such as knowing how to carry out specific Internet-related tasks. Consumers get more habituated to obtrusive or annoying aspects like pop-up advertising or broken links on search engine results pages as they gain more Internet experience. Our findings support this line of inquiry theoretically by illuminating the fact that consumers no longer need to consider discomfort when evaluating products online. A crucial target market for advertisers who contribute 97% of Meta's income, Facebook is losing its younger user base under the age of 25, who are under 25. Young

people now have more social tool options, according to some analysts, and Facebook is starting to lose its "cool" factor. This is also why there are less young people using Facebook. In addition to attempting to regain its lost market share among Gen Z consumers, Meta had to figure out how to alter its posture and image.

References

- [1] Gu Mingyi, Luan Lina. US Internet Advertising Report after the epidemic -- Interpretation of Facebook's financial report revenue and digital advertising operation in 2020. *China Advertising*, 2021, (06): 40-45.
- [2] Gu Mingyi, Yao Yuanxiao. Renamed Meta, Facebook faced the challenge of the new privacy policy - to interpret Facebook's revenue and digital advertising operations in 2021. *China Advertising*, 2022, (06): 40-45.
- [3] Alzaidi M S, Agag G. The role of trust and privacy concerns in using social media for e-retail services: The moderating role of COVID-19. *Journal of Retailing and Consumer Services*, 2022, 68: 103042.
- [4] Wang J, Zhang W, Yuan S. Display advertising with real-time bidding (RTB) and behavioural targeting. *Foundations and Trends in Information Retrieval*, 2017, July 23.
- [5] Nastiin L'udovít, Fedorko R. Meta-Analysis of Research into the Issue of Brand Building on Social Media as a Subset of e-Business During the COVID-19 Pandemic, 2022.
- [6] Begović B, Ilić N. FTC V. Facebook or breaking up dominant digital platforms in the time of COVID-19: Motives, rationale, and possible alternatives from a competition law perspective 1[Paper presentation]. Conference: The recovery of the EU and strengthening the ability to respond to new challenges – legal and economic aspects, Osijek, 2021.
- [7] Malthouse E C, Li H. Opportunities for and Pitfalls of Using Big Data in Advertising Research. 2017, April 24. <https://Www.Tandfonline.Com/Doi/Abs/10.1080/00913367.2017.1299653?JournalCode=ujoa20>.
- [8] Gu Mingyi, Zheng Zihan. Google in the post epidemic era: the first Internet company with advertising revenue exceeding 200 billion dollars. *China Advertising*, 2022, (05): 42-48.
- [9] Boberg S, Quandt T, Schatto-Eckrodt T, Frischlich L. Pandemic populism: Facebook pages of alternative news media and the corona crisis--A computational content analysis. 2020, arXiv preprint, arXiv: 2004.02566.
- [10] Cohen G, Bessin M, Gaymard S. Social representations, media, and iconography: A semiodiscursive analysis of Facebook posts related to the COVID-19 pandemic. *European Journal of Communication*, 2022, Article 02673231221096332: 1–12.
- [11] Mejova Y, Kalimeri K. Advertisers jump on coronavirus bandwagon: Politics, news, and business. 2020, arXiv preprint, arXiv: 2003.00923.