

## Research on influence factors and formation mechanism of immersive experience of short-video apps—taking TikTok as an example (US)

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**Keywords:** Factor; Addiction; SVFs; TikTok.

**Abstract:** Conclusion: There are many types of research focusing on short-form videos, but they actually discuss how these platforms thrive, and studies are seldom talking about the addiction of SVFs, which does matter. This article uses a questionnaire as the first step to explore the reasons and then articulates the reasons by some secondary researches and hypotheses. Specifically, the questionnaire results are collected, and the mentioned reasons people are addicted to TikTok are listed from the most frequently referred to the less. Based on the list, the analysis divides the reasons into three parts: the external, the internal, and the audiences to specify how these reasons gradually contribute to the phenomenon by adding related secondary researches. The reasons roughly are pandemic, the fast pace of life, short-video format, clever algorithm, and young audiences. Next, the study shows some solutions based on these three-part reasons to users, the brand, and the whole industry. We know that social media addiction is not a minor deal right now, and it has become a common social behavior. Solving it effectively needs all of us taking actions rather than just somebody. As users, we should be determined to try our best to manage our usage time properly. Brands and other companies in this category can launch some ads and campaigns to call on people using social media rationally. With the development of social media, the situation will intensify, and it may be late in paying attention to the problem at that time. Therefore, this analysis fathoms the reasons behind this phenomenon and gives solutions and insights to address this problem.

### 1. Introduction

#### 1.1 Research Background

As one of the most famous apps worldwide, TikTok has attracted so many users and has grown so fast that it is already the leading sheep of the short-video category. As of August 2020, the short video app achieved 100 million monthly active users [1]. Therefore, we can see that TikTok has become a trend, especially among the young generation, because the app's creators decided to choose users under 18 as their target audiences from the very beginning. The truth is roughly like they expect that youngsters are the main audiences of TikTok in the US now and specifically people from 10 to 19 take up 32.5 percent and youngsters from 20 to 29 take up 29.5 percent [2]. Another study also shows that youngsters from 10 to 29 take up 62 percent of US TikTok users [3]. No one can deny that its trendy format, smart algorithm. Give users an immersive experience; however, according to my primary research, this immersive experience can also mean addiction.

Studies show that many people are struggling to control the usage time of TikTok, and they cannot help to swipe the videos repeatedly. As a result, people spent so much extra time on TikTok, which occupied their time studying and working. What is worse, it will influence the whole social environment full of phubbers from generation to generation. As estimated by Wallaroomedia, an average person spends 52 minutes on TikTok. They check out the platform roundabout 8 times per day [4]. Those statistics prove that TikTok is highly addictive just like other platforms and we can see that addiction is quiet a serious problem right now which is heatedly discussed in recent years,

therefore, figuring why people are addicted to it and cannot control themselves well out is the key to solve the problem of addiction.

What is more, we audiences can also try to solve the problem and get our time back based on why we are addicted. For enterprises like TikTok can manage to solve the problem by making some adjustments or improvements. However, it may hurt the interest of TikTok in a short period like the diminution of consumers' usage time, for the long term, it will not only protect users' health but also will raise the image of TikTok. Gradually, more and more related companies will realize the problem and try to correct it, and the environment will be healthier for both children and adults to live. Therefore, digging into the reasons behind this phenomenon is urgent and important.

## **1.2 Literature Review**

Based on the synthesis of some o related articles, these studies try to dig out part of the problem and some reasons behind this problem. For example, Davis talked about how AI helps TikTok take over the world, what is more, it specified some drawbacks of AI like delivering some inappropriate content to its' users, and in China, Bytedance, the developer of TikTok, had paid fines for pornographic content and fraudulent ads [5]. Yang's paper "Understanding Young Adults' TikTok Usage" analyzed how young adults make meanings in the popular short-video platform TikTok [6]. Although Zhou and Lee's article is detailed, which mentions the addiction of TikTok, the research results aimed to be applied to more diversified video-centered media services and be expected to be used for new media emerging in the future [7].

## **1.3 Research Gap**

Therefore, it is evident that many articles mainly talk about how TikTok succeeds and how to put this way into a wider sphere. They always mentioned TikTok's format: SFVs, its advanced algorithm and the deficit of media consumption time to illustrate their benefits and contributions to the success of TikTok. Still, they seldom refer to these things that can also lead to addiction, and there is little research. Everything has both sides, so the research behind the addiction is very necessary. Not only should we users know the reasons behind them to avoid addiction, but companies and brands should figure them out and care for the health of their users.

## **1.4 Research Framework**

First, this study uses a simple questionnaire to investigate some of TikTok's users around me which includes how long they spend on TikTok on a single day, do they have problems controlling the usage time of TikTok, what are the reasons behind this addiction in their opinions, then collect these results and list the reasons from the most frequently mentioned to the less, after that, search all of these reasons in the order of the list and analyze why they attract people step by step based on the secondary researches. This study divides the analysis into three parts: the environment, the brand, and audiences which means that the investigation is based on the external, the internal, and audiences. Some of the reasons are my hypotheses, but they are not pure guesses. These hypotheses are given fully reasonable explanations with data supported. After reasoning, a conclusion is given about how TikTok and related brands can mitigate the situation and protect their users' health which will gradually build up their brand profiles.

## **2. Methods**

This addiction analysis's ultimate goal is to fathom the reasons behind this situation and let people know what elements attract them. What is more, this research wants to highlight this phenomenon and let companies notice the seriousness of this problem. Then, this article gives some solutions for companies to cope with this situation and why they should do this.

### **2.1 Primary Questionnaire**

This study is initially delivered by making a simple questionnaire and using the questionnaire's outcomes to clarify some basic information, such as how long they usually spend on TikTok in a single day? Do they have the problem of addiction? Which parts of TikTok contribute to this situation in their views? What is the frequency? After that, the results are collected and listed these causes from the most frequently mentioned to the less, and then profoundly analyze these causes by digging related secondary data and hypotheses to support these causes and find their deep stories in order.

## 2.2 Internet Research

After the questionnaire data is classified, the next thing to search the Internet for information comparable with the causes' list. All the causes are examined one by one by digging for accurate data on the Internet. Then, based on these data, hypotheses of these causes are made to complete how users get addicted and try to make the stories clearer to readers.

## 3. Results

As the article has said, TikTok is one of the hottest apps in the world, and it grows extremely fast [8], but why? Many people will think of the pandemic right away. It is true that Covid-19 indirectly helps TikTok become popular because it brings much fun and a platform that people can share their life and almost everything in this app [1], but at the same time, the pandemic is one of the biggest reasons that people mentioned on the questionnaire. We can imagine that people are used to watching short videos on TikTok every day and make it a habit. Some people watch short videos to entertain, and some people create videos to share their life or draw public attention. Whatever way people use it, they just stick on it, and swiping videos becomes part of life. As we expect, many people are already addicted to it and cannot control themselves very well. As the study shows, an average person spends 52 minutes on TikTok, and they check out the platform roundabout 8 times per day [4], which can prove the seriousness of TikTok's addiction.

What is more, youngsters are the main audiences of TikTok, and we can see that from this data, which shows that people from 10 to 19 take up 32.5 percent and youngsters from 20 to 29 take up 29.5 percent [2]. They are not mature enough to control their usage time well, which is also one of the biggest reasons people have mentioned on the questionnaire. Therefore, the problem is quite apparent, but what elements are responsible for this situation, and how do these elements work. Next, let us look at this situation in three parts. These three parts are always connected, but this analysis tries to make an obvious boundary.

Before digging into the reasons behind this situation in detail, a SWOT analysis would be necessary because it can give us a conclusive structure and help us understand the causes better.

Table 1. SWOT analysis of TikTok.

|          | Strengths   | Weakness  |
|----------|---|---|
| Internal | <ol style="list-style-type: none"> <li>1. Great market share</li> <li>2. Easy to use</li> <li>3. Accurately analyzes customer needs</li> <li>4. Diversified video content</li> <li>5. Leading the current trend</li> </ol>  | <ol style="list-style-type: none"> <li>1. Lack of protection of originality</li> <li>2. Addictive</li> <li>3. Contains misguided values and some unhealthy contents</li> <li>4. video verify is not strict</li> </ol>   |
|          | Opportunities   | Threats   |
| External | <ol style="list-style-type: none"> <li>1. Driven by the fast pace of life, users pay more and more attention to the fragmentation of time</li> <li>2. Improved performance of mobile smart devices</li> <li>3. Diversification of communication channels</li> <li>4. Big data analysis technology is mature</li> <li>5. Mass production of short video</li> </ol> | <ol style="list-style-type: none"> <li>1. Many competitors in the same category</li> <li>2. Rapid change in trends</li> <li>3. Network audit is difficult</li> <li>4. Increased government supervision</li> <li>5. Increased awareness of original copyright</li> </ol> |

### **3.1 The External Reasons- The Environment**

First, we have to say that TikTok is lucky because it meets the pandemic, which gives TikTok an excellent opportunity to grow and expand. Many people are quarantined and have nothing to do but surf the Internet during this time, while TikTok gives them a platform to entertain and kill their time. Gradually they find it is exciting and they spend more and more time on it. Finally, they are addicted to it and cannot control themselves. Therefore, when we talk about TikTok, we cannot avoid the pandemic, which is not only why TikTok booms so fast and successful but also one of the causes of addiction.

What is more, driven by the fast pace of life, people tend to pay more and more attention to fragmented time and are unwilling to spend time on long articles and cliché. However, TikTok's short-video format conforms to this trend, and that is why many people love it and gradually have a mania for it.

The development of mobile devices and big data analysis technology is attributed to this situation as well. Advanced mobile phones can load data faster, and advanced technology can know our preferences better. Both of them contribute to this problem.

### **3.2 The Internal Reasons- The Brand**

TikTok does not have a homepage, and the video is played when people open it, which eliminates the need for users to think and choose. Users sometimes do not rationally choose what they want, and they watch videos casually because TikTok's videos can be easily switched. It automatically matches and provides users with a wide variety of video content based on the types of videos they frequently watch, how long they stay on each video, or whether they like or comment on it. Based on big data, accurate orientation sniper can often make the user more favorable, and in a way, that makes people addicted to it at the same time.

When we mention TikTok, we cannot miss its clever algorithm. Its algorithm is one of the most important elements of the success of TikTok, and even the "one of" can be removed. It can memorize all users' browsing history, searching history, and preferences, so when you like, comment, or even stay a little longer on one video, the algorithm will remember, and you are marked. After that, you will be recommended plenty of similar styles' or contents' videos and goods. You probably will swipe again and again because almost every video is your type or some hot videos. People hard to reject this seduction, especially youngsters.

### **3.3 Reasons behind the Audiences**

TikTok's creators decided to choose users aged under 18 as their target audiences from the very beginning. The truth is roughly like they expect that youngsters are the main audiences of TikTok in US now [2]. As we all know, youngsters are not easy to control themselves like adults, and thus the youngsters, the target audiences of TikTok, are easily addicted to TikTok. They are easy to ignore the usage time and spend too much time on it unconsciously. Considering they are the main audiences at the same time, we can almost make sure that addiction is already a huge problem for TikTok.

## **4. Discussion**

Based on the analysis, we know some significant elements of making users addicted. Then the problem is how we deal with it. We should understand that solving this problem is up to not only us users but also TikTok itself. We as consumers should do what to change the situation, and TikTok as a company should do what to alleviate or uproot this problem. What is more, spread to the category or even the whole software industry, companies can cope with the situation. All this part wants to do is find a way out from different roles and why they should do this.

### **4.1 Strategies for Audiences**

As a consumer, we should throughout think about addiction. If TikTok is only used as a supplement, we will not be dominated by it and will not be affected by bad content, and all we can get from it are

good feelings, then it is the best. The fast-paced life makes our lives lack organization and more fragmented time, so we should not be dominated by TikTok. Still, we should better use the fragmented time together, forming a robust schedule and not occupying other time for study or work. When we need to think quietly, we are better not to choose this kind of entertainment. For example, the best thing to do before going to bed is to read some books, and e-books are also good. If we choose some exciting entertainment, the brain will be difficult to calm down, and sleep quality will decline. Day after day, finally, the state of every day is not good. What is worse, it will make people want to escape from real life and addicted to the illusion, which means the Internet.

Therefore, as users, we should be determined to control ourselves and get our time back from these SFVs. Treat TikTok and similar apps in a reasonable way rather than all of our lives. Gradually, we will find that controlling ourselves is not that hard, and TikTok is not the devil.

## **4.2 Strategies for TikTok**

First, TikTok can launch-related ads to encourage people to put down their phones and not forget friends, families, and nature, letting people realize that they should be determined to change and get their time back. The mission of this is to help its users get out of this situation in the US. We want to use emotional appeal like family, friends, and natural elements to evoke users' sympathy and let them realize that there are many beautiful things outside the Internet. The advertisement's content is about the proper use of mobile phones, freeing up time to do more meaningful things, such as traveling, reading, making friends, and spending time with family. The ad will be delivered on many social media like Instagram, YouTube, TikTok itself, and some billboards in metropolitan cities close to TikTok communities.

Another solution is that TikTok can notice users with a specified period or give users a choice to limit usage time by themselves. In this way, users can freely watch videos without concerning time because it will remind them or just quit when the set time comes.

Although TikTok does, these will cost some money and seems to restrain the usage time of TikTok. Still, when we consider it in a longer duration, it will gain people's respect and loyalty. People will think TikTok is a responsible company that is a platform for creators and audiences and cares the health of users indeed, which will improve the brand image of TikTok.

## **4.3 Strategies for the Category and the Whole Software Industry**

This study takes TikTok as a classic example, but the solutions are not just limited to TikTok. Therefore, other short-video apps, even the whole software industry, can follow these two methods to solve the problem and protect their users, and it is crucial to do this kind of thing. Imagine a country full of Internet-addicted youngsters who pay more attention to the Internet and less attention to their work and study, how terrible the country's future will be. Therefore, doing this kind of thing is about building better brands and creating a great atmosphere and realization for new generations. A strong country cannot live without healthy and positive youngsters. Actually, in China, many apps already limit usage time or contents for those under 18 by requesting real-name registration, like Douyin: the Chinese version of TikTok, Glory of King and so on [9]. This will force children to spend less time on games and social media and spend more time studying and staying with families and friends more. Hence, doing these is quite necessary.

## **5. Conclusion**

Studies show that social media addiction is quite salient, and by 2021, the monthly number of active social media users is expected to reach 3.02 billion. [10]. the results and discussion parts address this problem by pointing out the reasons and giving solutions from different angles. This study analyzes this problem from the whole industry, the brand itself, and the audiences separately, and grasps some big and powerful reasons behind this phenomenon: pandemic, the fast pace of life, format, algorithm, young audiences, and so on. All these reasons contribute to this situation more or less, and then the article deals with the problem of what we can do to mitigate this phenomenon. This discussion is still

divided into three parts: the category, the brand, and the audience. We users ought to take the initiative to manage our time on social media, so the most effective way to uproot this problem, no matter for youngsters or the older, is to be determined. Be determined to manage the time on it and get our time back. What is more, big brands and companies surely can do something to alleviate this problem, like persuasive ads or campaigns to arouse people's empathy to arrange their usage time properly.

With the development of social media, more and more attractions will appear, intensifying this phenomenon. Therefore, a detailed analysis of the problem in advance is critical. We can know why people are attracted to SFVs, and from the analysis, we still can find the way out of the problem. This is up to not only humans to control but also companies and governments. It is a big deal, and we cannot ignore it.

This study manages to dig the reasons behind this phenomenon by using the questionnaire and secondary data hitherto and try making the stories beneath this phenomenon intact and understandable. However, the respondents are limited, which means the analysis maybe not be thorough or even slightly biased.

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