THE COMPARATIVE ANALYSIS OF SOCIAL MEDIA PLATFORMS TO IDENTIFY A COMPETITIVE ADVANTAGE OF TIKTOK

Monika Stanková

University of Economics in Bratislava, Dolnozemská cesta No. 1, ZIP Code 85 235
Bratislava, Slovakia
Email: monika.stankova@euba.sk

Abstract
Well established social media platforms are nowadays being frequently used on a daily basis and cover almost every consumer desire. However, in constantly changing consumers preferences, there is still space to develop a feature which might create a new successful social media platform. The main aim of the article is to identify the competitive advantage of TikTok as a platform which significantly lures attention of consumers. A case study was utilized as a primary research method. The author developed the table with objective and subjective parameters. Every parameter had its specific weight. The weights were reflected in final evaluation of the analysis. Six most used social media platforms were identified and involved in the research. The findings of the paper indicate that competitive advantage of new social media platforms reside in adaptation to constantly evolving consumers' media consumption.

Key words: digital marketing, marketing, social media, TikTok, user interface.

1   Literature review

1.1   Social media in general

Social media have become a new division of the internet and created an inherent part of a consumer behavior. Millions of people access social media daily and with the popularity of smartphones, they are able to utilize them almost anytime and anywhere (Müller, Wegmann, Stolze, & Brand, 2020). The main activities conducted on social media are entertainment, education, and communication and right these activities can even have a significant effect on thinking style of users (Xu, Gong, Zhang, & Xie, 2019). A frequent use of social media allows to analyze consumer behavior and preferences via text analyzes and social media content consumption patterns (Liu et al., 2020) and to review created thinking styles.

The profitability of any company depends on its customer and client base. An effective communication is essential for companies to persuade their customers to buy a new product. Social media is transforming traditional models of consumer behavior (Pokul, Voronina, & Malkova, 2018). Therefore, many brands use marketing strategies based on advertisement on social media, which are effective in improving value of a product perceived by customer and encouraging them to engage (Zhang & Du, 2020).

Nowadays, there are many well-established social media. According to statistical portal Statista (2020), the 15 most popular social media platforms worldwide, ranked by number of monthly active users, are Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat, Instagram, TikTok, QQ, QZone, Sina Weibo, Reddit, Kuaishou, Snapchat, Twitter, and Pinterest (Graph 1).

Graph 1 Most popular social networks ranked by number of monthly active users
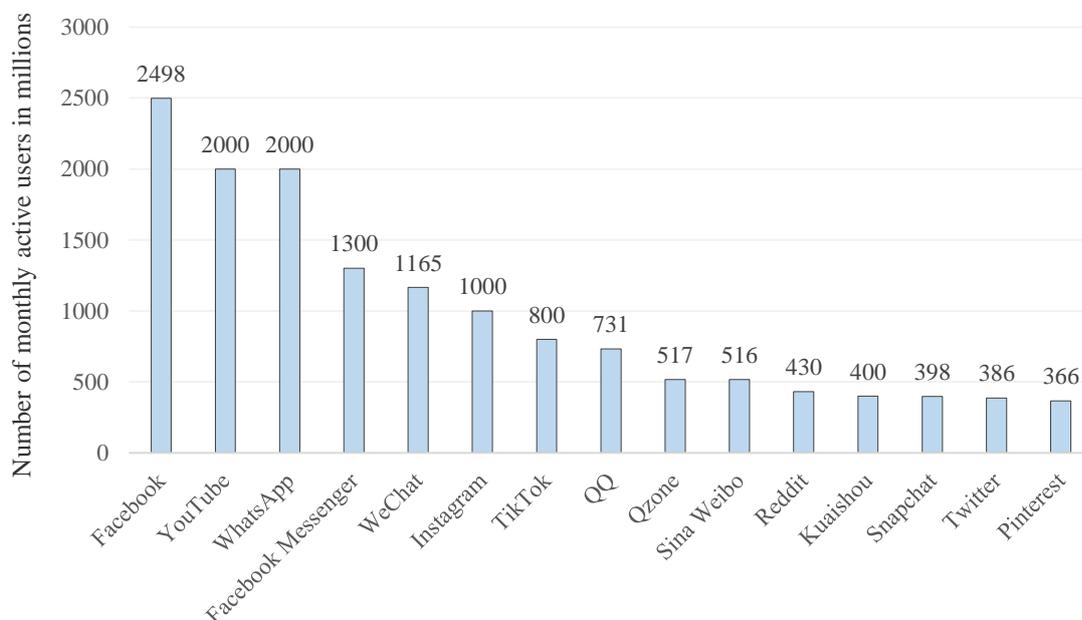
Source: Statista 2020

Social media, which have more than 1 billion active monthly users are Instagram, WeChat, Facebook Messenger, WhatsApp, and Facebook. Three of five stated are owned by Facebook company. Thus, the company dispose with significant amount of data, which are utilized also across platforms and offer advertiser wide targeting possibilities.

1.2   Social media from a user point of view

Over the last decade social media have gained huge popularity and usage of social media platforms has increased leaps and bounds (Jaywant, Shetty, & Musale, 2016). Many people tend to spend their leisure time by communicating, sharing their ideas, learning new information and interacting with their friends on these platforms. To become a member of any online social media, users have to create their profile defining their personal characteristics such as gender, age, username, profile photo, contact info etc. By doing so, they are immediately starting to create their digital identity. *"Digital identity created by any person on social media can be targeted by any company for promoting their services as well as to target some new customers, providing them new business opportunities"* (Jaywant et al., 2016). Utilization of social media creates advantageous situation for both – user and company. Users get customized content adjusted right for their preferences and company rapidly increases chances to develop a new business cases. Diversity of current social media possibilities forces people to use several social media at the same time (Alam, Wang, & Rafique, 2018) which makes them create several social media identities. The purpose of each social network is different, thus the users' behavior on each social media is different as well. Wide social media options caused that in 2019 people had 8,6 social media accounts in average (Kemp, 2020).

1.3   User interface and user experience

Mobile-based social media applications have begun to gain their trend (Indriana, Kom, & Adzani, 2017).

"The fact that internet technologies have become an indispensable part of everyday life has brought attention to the needs of different users' interface design requirements" (Baranseli, Kaya, & Sen, 2018). User interface is an important element of software system since it provides the means for utilizing applications' functionalities (Krótkiewicz, Wojtkiewicz, & Martins, 2018). A significant role of good user interface design is to enhance user experience. Keywords and icons are heavily used in social media mobile applications because of the limited screen size and small keypad interface. In creating a mobile based social media application, utilization of keywords and icons should be simple, intuitive, and have high recall (Estuar, de Leon, Santos, Ilagan, & May, 2014). A good interface should as well cover the unique characteristics and, ultimately, lead to satisfaction of diverse users (Kureerung & Ramingwong, 2019).

According to portal Usabilitypost (2019) there are 7 key factors determining a good user interface:

1. *clarity* – stands for an ease of use of social media, which means that the social media's functions should be clear for users to understand,
2. *conciseness* – stands for a simplicity of the social network, which means that the social media's features should be concised,
3. *familiarity* – stands for how familiar people are with the social media based on the similar social media they have encountered before,
4. *responsiveness* – stands for how fast social media works, how quickly it loads,
5. *attractiveness* – stands for how enjoyable, visually attractive, or pleasant to use social media is,
6. *efficiency* – stands for how functional for a user the social media is,
7. *forgiveness* – stands for the ability of social media to undo the unwanted actions.

Selected factors are often overlapping and sometimes it is difficult for a regular user to exactly differentiate between them. It is not possible to quantify defined factors; thus they have to be a subject of subjective opinions.

2   Methodology

The main aim of the article is to identify the competitive advantage of TikTok as a relatively new social media platform which, in the past couple of years, has been significantly luring the attention of consumers.

A case study was utilized as a primary research method. The author of the paper developed the table with objective and subjective parameters. Every parameter has its specific weight as presented in the following tables (Table 1, Table 2). The first table (Table 1) consists of objective parameters, which were identified from objective information contained in mobile applications' store, where social media application can be bought. The percentual summary of all objective parameters is 50%. The same amount counts for subjective parameters. Together they represent 100%. The following eight parameters were identified as objective (Table 1).

Table 1 Objective parameters definition

Parameter	Shortcut	Description	Weight
Operating system	OS	Operating system means an operating system on which the social media application is available: • both Android and iOS – mark 5, • Android only – mark 4, • iOS only – mark 3.	10%
Device	DVC	Device means a device, on which the social media application is available: • both mobile device and desktop FULL – mark 5, • both mobile device and desktop LIMITED – mark 4, • mobile device only – mark 3.	5%
Size	MB	Size of the social media application in MB: • 0 – 75MB – mark 5, • 76 – 150MB – mark 4, • 151 – 225MB – mark 3, • 226 – 300MB – mark 2, • more than 300MB – mark 1.	5%

Price	€	Price means how much the social media application costs: • 0€ - mark 5, • 0,01€ - 2€ - mark 4, • 2,01€ - 5€ - mark 3, • 5,01€ - 10€ - mark 2, • more than 10€ - mark 1.	5%
Languages	L	Languages mean the number of languages the social media application is available in: • more than 50 – mark 5, • 40 – 50 – mark 4, • 30 – 39 – mark 3, • 20 – 29 – mark 2, • less than 20 – mark 1.	5%
Application rating	AR	Users' rating of the social media application in the app marketplace - users can rate the application from 1 – 5, where 5 is the best mark.	10%
Number of ratings	NR	Number of ratings given to social media applications by users: • more than 80 mil. – mark 5, • 60 – 80 mil. – mark 4, • 40 – 59 mil. – mark 3, • 20 – 39 mil. – mark 2, • less than 20 mil. – mark 1.	5%
Number of users	NU	Number of the individual social media applications users: • more than 3 040 million users – mark 5, • 2280 – 3 040 million users – mark 4, • 1520 – 2 279 million users – mark 3, • 760 – 1 519 million users – mark 2, • less than 760 million users – mark 1.	5%

Source: Author's definition

As mentioned above, subjective parameters together, as well as the objective ones, count for 50%. The following 7 parameters were identified as subjective (Table 2). The parameters represent a so-called user interface (UI). Defined parameters were identified on the base of literature review.

Table 2 Subjective parameters definition

Parameter		Shortcut	Description	Weight
UI	Clarity	CL	Clarity stands for an ease of use of the social media application.	10%
	Conciseness	CN	Conciseness stands for a simplicity of the social media application.	10%
UI	Familiarity	FM	Familiarity stands for how familiar people are with the application based on the similar applications they have encountered before.	5%
UI	Responsiveness	R	Responsiveness stands for how fast the application works, how quickly it loads etc.	8%
	Attractiveness	A	Attractiveness stands for how enjoyable, visually attractive, or pleasant to use the application is.	4%
	Efficiency	E	Efficiency stands for how functional for a user the application is.	8%
	Forgiveness	F	Forgiveness stands for the ability of the application to undo unwanted actions.	5%

Source: Author's definition

The weights are reflected in the final evaluation of the analysis in the Results and discussion section of the paper. The objective parameters were evaluated on the base of information in the mobile applications' store and the last objective parameter on the base of the statistical platform Statista.com. The subjective parameters were evaluated by several respondents from academic field, who were asked to evaluate the criteria from regular smartphone user point of view. Their responses where then averaged and subsequently evaluated.

3   Results and discussion

Six of the most used (based on the monthly active users) social media platforms (Facebook, Instagram, YouTube, Snapchat, Twitter, TikTok) were analyzed in the research. Selected social media platforms were identified on a base of relevancy for European and American market and the author selected social media with similar functionalities (for example purely messaging social media were excluded). The objective and the subjective parameters were examined for each social network. A weight was assigned to each parameter. It is necessary to mention that the objective parameters represent 50% in summary, as well as the subjective ones. The results of the evaluation are presented in Table 3.

As presented from the table (Table 3), the green color stands for the highest weighted score and is fading into the red color which represents the lowest weighted score. In total, 15 objective and subjective parameters were analyzed for each social network. TikTok, compared to other 5 analyzed social media, was given the lowest score in only three parameters, more specifically in *language* (0,15), *number of ratings* (0,05), which are the objective parameters, and the third parameter with the lowest rating was the subjective one, *familiarity* (0,15). TikTok was given the second lowest score in two parameters, from which one of them was the objective one – *device* (0,20), and the second one was the subjective one – *forgiveness* (0,15). Two objective parameters

were given the medium score. Those were the *size* (0,15) and *number of users* (0,10). TikTok didn't get any second highest rating but it got the highest score in 8 parameters, from which 3 of them were the objective ones – *operating system* (0,50), *price* (0,50), *application rating* (0,25), and the rest 5 of them were the subjective parameters – *clarity* (0,50), *conciseness* (0,50), *responsiveness* (0,40), *attractiveness* (0,20), and *efficiency* (0,40).

Table 3 The most used social media platforms weighted score evaluation

	Parameter	Weight	Facebook		Instagram		YouTube		Snapchat		Twitter		TikTok	
			M	W	M	W	M	W	M	W	M	W	M	W
Objective	OS	10%	5	0,50	5	0,50	5	0,50	5	0,50	5	0,50	5	0,50
	DVC	5%	5	0,25	4	0,20	5	0,25	3	0,15	5	0,25	4	0,20
	MB	5%	2	0,10	4	0,20	3	0,15	3	0,15	4	0,20	3	0,15
	€	10%	5	0,50	5	0,50	5	0,50	5	0,50	5	0,50	5	0,50
	L	5%	3	0,15	3	0,15	5	0,25	3	0,15	3	0,15	3	0,15
	AR	5%	3	0,15	5	0,25	4	0,20	4	0,20	5	0,25	5	0,25
	NR	5%	5	0,25	5	0,25	4	0,20	2	0,10	1	0,05	1	0,05
	NU	5%	4	0,20	2	0,10	3	0,15	1	0,05	1	0,05	2	0,10
Subjective	CL	10%	3	0,30	4	0,40	4	0,40	2	0,20	2	0,20	5	0,50
	CN	10%	4	0,40	5	0,50	4	0,40	4	0,40	2	0,20	5	0,50
	FM	5%	5	0,25	4	0,20	4	0,20	3	0,15	5	0,25	3	0,15
	R	8%	3	0,24	5	0,40	5	0,40	5	0,40	4	0,32	5	0,40
	A	4%	3	0,12	4	0,16	3	0,12	5	0,20	1	0,04	5	0,20
	E	8%	3	0,24	4	0,32	3	0,24	2	0,16	2	0,16	5	0,40
	F	5%	4	0,20	5	0,25	5	0,25	1	0,05	4	0,20	3	0,15
	Summary		*3,85*		*4,38*		*4,21*		*3,36*		*3,32*		*4,20*	

Source: Author's research

Even though TikTok received the highest score in up to eight parameters, it does not necessarily mean these are the source of the competitive advantage. The parameters with the highest score were then compared to the rest of the analyzed social media platforms. 5 of the eight above-mentioned parameters were given the highest score for other social networks as well. This means, TikTok was given the highest score in only 2 parameters – *clarity* and *efficiency*, which, in the terms of this article, represent its competitive advantage (Table 5). For a better visualization, the results of the TikTok's weighted score are presented in the following two tables (Table 4, Table 5), with Table 4 representing TikTok's weighted score of objective parameters and, vice versa, Table 5 represents the application's weighted score of subjective parameters.

Table 4 The TikTok's objective parameters weighted score evaluation

Objective parameters	Weight	Rating compared to the traditional social networks					Weighted score
		1	2	3	4	5	
OS	10%					●	0,50
DVC	5%				●		0,20
MB	5%			●			0,15
€	10%					●	0,50
L	5%			●			0,15
AR	5%					●	0,25
NR	5%	●					0,05
NU	5%		●				0,10

Source: Author's research

Table 5 The TikTok's subjective parameters weighted score evaluation

Subjective parameters	Weight	Rating compared to the traditional social media					Weighted score
		1	2	3	4	5	
CL	10%					●	0,50
CN	10%					●	0,50
FM	5%			●			0,15
R	8%					●	0,40
A	4%					●	0,20
E	8%					●	0,40
F	5%			●			0,15

Source: Author's research

As can be seen from the tables above (Table 3 – Table 5), the competitive advantage of TikTok lies in the *clarity* and *efficiency*, which are the factors representing subjective parameters.

4   Conclusion

When it comes to social media mobile applications, they, as everything else, need to keep up with the trends. People nowadays require the social media applications to be easy to use, intuitive, familiar. A perfect user interface is a key to success.

The main aim of the article was to identify the competitive advantage of TikTok as a relatively new social media platform, which, in the past couple of years, has been significantly luring the attention of consumers. The author of the paper utilized a case study as a primary research method.

Within the research, 2 groups of factors were identified, on basis of which the evaluation of individual social media mobile applications, including TikTok, took place. These two groups of factors represented objective and subjective parameters.

The results of the research show that the competitive advantage of TikTok lies in the subjective factors representing the user interface. More specifically, the competitive advantage of TikTok depends on its *clarity* and *efficiency*. In addition to clarity being the first and the most important element in the entire user interface, this factor also means that the application is very easy for users to control and use. This means that social media mobile applications should be easy

to use, users must quickly figure out how the application works, or which button to press to perform the function they want, in that particular moment. At the same time, the research showed that efficiency is the second source of TikTok's competitive advantage. The efficiency stands for how the application is functional. Users consider TikTok as very functional, smooth, and very well executing actions conducted in the application.

Despite the fact that TikTok was in the objective parameters evaluated by mark 5 in up to 3 of them (out of the total number of 8 objective parameters), none of these parameters constitutes its competitive advantage. This is mainly due to the fact that the developers of similar social media applications nowadays care about objective factors, as each of them is very well aware that the application should be available for both the Android operating system as well as the iOS one; that it should be as small as possible so that it does not take up too much space for users on their mobile devices; that it should be free of charge as a matter of priority, as all competing social media applications are also free; or the fact that it should be available in as many official languages as possible. Just like TikTok, other researched applications received similar high ratings in their objective parameters.

Future research could utilize the same methodology, however, it could use a wider scale of respondents, for example via online survey form. Future research could also focus on user experience factors instead of user interface factors.

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