



Dreaming of Stardom and Money: Micro-celebrities and Influencers on Live Streaming Services

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Abstract. Social live streaming services (SLSSs) are social media, which combine Live-TV with elements of Social Networking Services (SNSs). In social media and thus also in SLSSs, the so-called influencer and micro-celebrities play an important role, but to what extent are SLSSs' streamers motivated by fame or financial gain? We conducted a content analysis in order to investigate SLSSs' streamers (n = 7,667) on Periscope, Ustream and YouNow in respect to their general characteristics and streaming motivation being fame and financial gain. We have developed a research model referring to the platform used by the streamers, their gender, origin, age and streamed content (general characteristics), as well as the motivational aspects. Streamers of Ustream are mostly motivated by financial gain, whereas YouNow broadcasters seek to be famous. Considering the streamers age, older generations (Gen X, Silver Surfers) aspire after financial gain. With progressing age the motivation to become a star decreases. Mostly streamed content by streamers motivated by money is entertainment media. For streamers wanting to become a star chatting and making music are the preferred content categories.

Keywords: Social live streaming services · Micro-celebrities
Social media influencers

1 Introduction

Since the turn of the Millennium and increasing usage of the Internet and its applications, research on people becoming “celebrities” or “micro-celebrities” thanks to the new technology is gaining on popularity and importance [e.g., 17, 18, 30, 42]. Now, ordinary social media users can become important players of the so-called attention economy [31, 48] with the help of self-branding and presentation strategies [e.g., 23, 30, 37, 43]. We can find micro-celebrities and so-called social media influencers on YouTube, Instagram, or Snapchat. However, do users of a new kind of platforms like the social live streaming services also aspire “stardom and money”? This is an explorative study addressing this particular topic. First, we will shed light on the new form of social media – the social live streaming services as well as on the concepts of

“micro-celebrity” and “influencer”. Afterwards, we will elaborate on our applied methods and present results of our investigation based on observations of streamers on three different platforms. Finally, we will answer the question whether social live streaming users are indeed interested in fame and money.

1.1 Social Live Streaming Services

In recent years a new form of social media has established itself, the so-called Social Live Streaming Services (SLSSs). They combine Live-TV with elements of Social Networking Services (SNSs) as they include a backchannel between the viewers and the streamers as well as among the viewers. We can find such SLSSs as Periscope, Ustream, YouNow, YouTube Live, Facebook Live, Instagram Live, Snapchat Live Stories, niconico (in Japan), YiZhiBo, Xiandanjia, Yingke (all in China) or – for broadcasting e-sports or drawing – Twitch and Picarto, respectively. Such services allow their users to broadcast live anything they want and to everyone who is interested to watch.

The scientific research on SLSSs is gaining in importance as well as spectrum. In computer science, one can find studies on bandwidth [3], video quality [45] and the delay of comments’ displays [39]. SLSSs find application in private contexts [41], but also in more serious environments, e.g. in teaching neurosurgery [35] or economics [6]. They can also be applied in marketing [22]. Furthermore, SLSSs are applied for live broadcasting sports events, however, this is also connected to some legal problems [1]. Despite broadcasting sports events, also other general legal and ethical implications may arise [2, 7, 15, 52]. There are studies on topic-specific SLSSs, e.g. in e-sports context on Twitch [e.g., 4, 12], and on general SLSSs (without any thematic limitation) [9–11, 41, 44, 46]. Studies found that general live streaming was appreciated for its authentic, uncurated, and interactive attributes [47] as well as for its role for sharing breaking news [46]. However, we miss studies, which systematically investigate the motivation of streamers to become micro-celebrities or influencers on the general SLSSs. We aim to close this research gap with the following investigation.

1.2 Micro-celebrities and Influencers on Social Media

Media like television have been instrumental in generating new “celebrities” parallel to the “film-celebrities”, who enjoy slightly more popularity [21]. With time and creation of new TV genres, a new kind of celebrity like “reality TV stars” attracted attention of the crowds [21]. With increasing popularity of social media further types of celebrities emerged, for example, YouTube stars [49] or bloggers, usually reporting on both channels [21, 30]. This trending interest in uncensored (private) life of others and “Big Brother”-like shows is not unproblematic and became topic for many critical discourses, an example being the American movie “The Truman Show” [9].

Still, media change together with the concept of celebrity—from celebrity focused solely on mass and broadcast media, to the one active on a diversified media landscape, and then further to participatory media [20, 32]. More interestingly, this development enables not only famous people (from TV or films), but also non-famous people “to generate vast quantities of personal media, manipulate and distribute this content

widely, and reach out to (real or imagined) audiences” [32]. Hence, increasingly “ordinary people” are being transformed into celebrities [20], or rather, thanks to social media and self-branding, they transform themselves into ones.

Marwick [32] points out two major changes in celebrity culture due to the shift towards participatory media. First, the “traditional” celebrities are using “social media to create direct, unmediated relationship with fans, or at least the illusion of such” [32]. This illusion of a real face-to-face friendships with celebrities created through watching TV shows or listening to music is the so-called “para-social interaction” [16, 32, 33], however, with use of social media this interaction can become more “social” and “increase the emotional ties between celebrity and fan” [32, 34, 36]. The second change is related to the phenomenon of “micro-celebrity”, a form of celebrity that may have a small audience, but is still “able to inhabit the celebrity subject position through the use of technologies” [32]. As opposed to the “broadcast era” where “celebrity was something a person was; in the Internet era, micro-celebrity is something people do” [32]. The phenomenon of micro-celebrity is strongly linked to the notions of self-branding and strategic self-presentation, and requires “viewing oneself as a consumer product”, and “image” that needs to be sold to the right target group [13, 27, 32]. Micro-celebrities view friends and followers on social media channels as their fanbase that needs to be managed by various affiliative techniques [34]. These trends have empowered many participants in the newly emerging “online reputation economy, where the reputation generated by social media platforms functions as a new form of currency, and more generally, value” [14, p. 203].

The emergence of online reputation economy has led to establishment of a new concept of the “micro-celebrity”, namely the social media influencer (SMI). Such influencer “works to generate a form of ‘celebrity’ capital by cultivating as much attention as possible and crafting an authentic ‘personal brand’ via social networks, which can subsequently be used by companies and advertisers for consumer outreach” [14]. Businesses increasingly rely on social media influencers, on one hand “due to the sheer volume of advertising online, which drives down actual click-through rates and individual engagement levels”, on the other hand, due to higher authenticity of claims made by “personal acquaintance” rather than by a rich celebrity [14, 29, 40]. Marketing strategists are looking for social media users with an extensive social network that is frequently used, as well as with “relevant or ‘sticky’ content about the product category, and whose personality ‘resonates’ with the tone and feel of the brand” [14]. This way ordinary social media users become social media influencers making money and their living by posting pictures, videos and blog posts—all the activities that other (non-influential) social media users do, but apparently not as good as the influencers.

Micro-celebrities and influencers will make money by advertising products or services. This also applies to social live streaming services. In addition to being paid by third parties, some of the services offer possibilities to make money by using the SLSS (of course, provided that the streamer attracts a considerable amount of viewers). Services like Facebook Live or Periscope allow pre-roll and mid-roll advertising as well as displaying overlay ads. Some of the gaming channels on YouTube also have access to sponsorships that are financed by the viewers who can purchase digital goods like badges and emojis and have access to “special perks” [51]. Very popular are also fan donations, for example, YouTube’s Super Chat (viewers can get their chat message

pinned to the top of the comments section by paying a small fee), or Bits on Twitch (viewers pay for affiliated streamers to receive a certain number of “Bits”). SLSSs as Twitch or Picarto offer monthly subscriptions [19]. On YouNow, streamers can earn money from tips and gifts. For this purpose, viewers can buy bars, with these they can buy gifts that they can give to a streamer who is a YouNow Partner (who in turn receives real money) [50].

To sum up, with new forms of media, new forms of celebrities and “influential” people emerged—the micro-celebrities and social media influencers. They earn money doing advertising for products and services (with product placement or reviews), or on some of the platforms, especially on social live streaming services, by subscriptions, donations and gifts from the viewers. They also gain recognition and approval of their fan-base, which for some of them is as attractive and important as financial gain for others. In this study we are going to investigate whether general SLSSs users indeed aspire to become micro-celebrities and/or to earn money with the help of these service. This is an explorative study that is supposed to shed light on the general characteristics of streamers dreaming of “stardom and money”.

1.3 Research Questions and Research Model

In order to explore the general characteristics of SLSSs users (in particular, streamers or producers) motivated by fame or financial gain we formulated the following research questions:

- RQ1: Which channels (Periscope, Ustream, YouNow) are preferred by users motivated by fame or financial gain?
- RQ2: Are there gender-dependent differences regarding the streaming motivation being fame or financial gain?
- RQ3: Are there origin-dependent differences (Germany, Japan, USA) regarding the streaming motivation being fame or financial gain?
- RQ4: Are there age-dependent differences regarding the streaming motivation being fame or financial gain?
- RQ5: What are the contents streamed by streamers whose motivation is fame or financial gain?

According to our research model (Fig. 1), we focus on streamers that are either interested in financial gain or in becoming famous. These streamers will use a certain social live streaming platform. They will either stream by themselves (male or female streamer) or not (group of streamers). Furthermore, the streamers will have different origins (Germany, Japan or the USA). Moreover, there can be age-dependent differences between the streamers’ motivations. And finally, they can stream different content types.

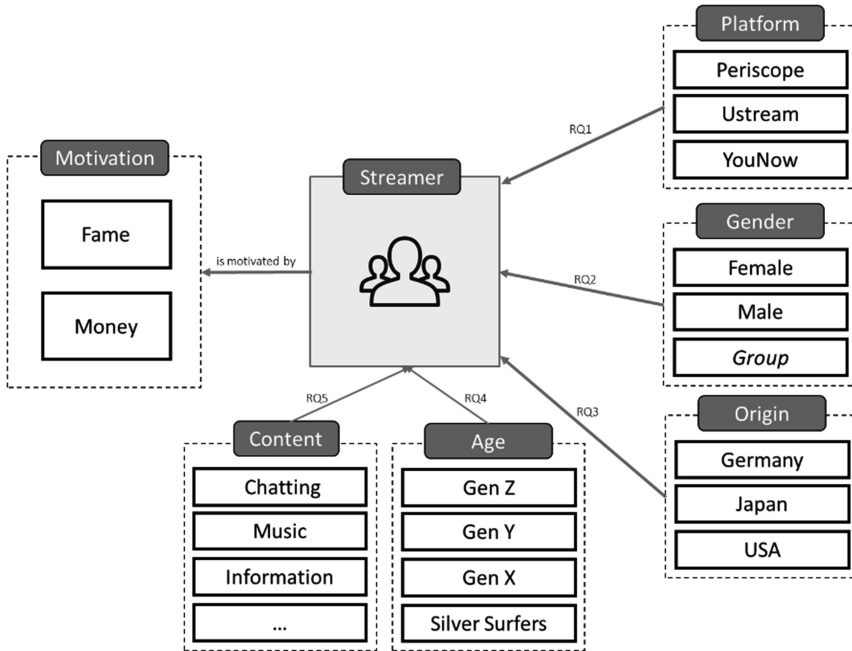


Fig. 1. Our research model.

2 Methods

2.1 Systematic Observation of Live Streams

In order to answer our research questions, we have conducted observations of the streams. We evaluated and compared SLSSs’ users’ streaming behavior as well as the content of a stream and motives of a streamer to produce a live stream [10, 52]. The empirical procedure of the content analysis included development of a codebook and a two-phased approach ensuring high reliability [24, 26, 38]. First, the directed approach was implemented with help of literature on social media, in order to get guidance for the research categories. Second, the conventional approach via observation of live streams was used to get a general idea of what people stream about. This way we were able to define the categories of content of a stream and motivation of the steamer.

The content categories include: to chat; to make music; to share information; news; fitness; sport event; gaming; animals; entertainment media; spirituality; draw/paint a picture; 24/7; science, technology, and medicine (STM); comedy; advertisement; nothing; slice of life; politics; nature; food; and business information. The motivation categories include: entertainment (boredom, fun, hobby); information (to reach a specific group, exchange of views), social interaction (socializing, loneliness, relationship management, need to communicate, need to belong), and self-presentation (self-improvement, self-expression, sense of mission, to become a celebrity, to make money, trolling). “No comment” was marked if the streamer did not state a motivation

or no person could be reached via chat, for example if an animal was shown or a 24/7 stream (e.g. from a webcam) was broadcasted. However, for this investigation we focus on two subcategories of the self-presentation category, namely “to become a celebrity” and “to make money”. Hence, for the investigation only observations were selected, where streamer confirmed to be motivated by one of these two factors.

Norm entries were used for the socio-demographic data like gender (male, female, group) and age of the streamer. The data about the streams from three general SLSSs (YouNow, Periscope, and Ustream) were collected from three different countries, namely Germany, Japan, and the USA. To ensure that the streams originated from those countries the declaration of the country for a broadcast on each platform was checked for every stream. Additionally, the data collectors had the required language skills for those countries. Twelve research teams (each consisting of two people) were evenly distributed between the three countries. Every coder received a spread sheet to code the observed data. Each stream was observed simultaneously but independently by two people for two to a maximum of ten minutes. Usually the streams were observed in two phases. First, the stream was watched and the data were collected. In phase two, if some aspects were not clear, for example the motivation of the streamer, the streamer was asked via the chat system of the service. In the end, a data set of 7,667 different streams in a time span of four weeks, from April 26 to May 24, 2016, was collected.

2.2 Data Preparation and Analysis

Our dataset consisted of mostly nominal data. There were three categories of the variable *platform* (YouNow, Periscope, Ustream) as well as three categories of the variable *origin* (Germany, Japan, USA). The variable *gender* was not binary-coded, but included categories male, female, group (for streams with more than one streamer, where specification of one gender was not possible), and n/a (not available, for streams where no streamer could be seen; these cases were subsequently defined as missing values). Finally, the *age* of the streamers was coded on a metric scale.

In order to investigate the possible influence of the age of the streamers on their motivation, we have aggregated the data into generational groups. For this purpose, we have followed the categorization applied in studies on generational cohorts of social media users [8, 28]. According to these studies, there is the Silent Generation (born between 1925 and 1945), the Baby Boomers (1946–1960), Generation X (1961–1980), Generation Y (1981–1998) and Generation Z (born after 1998). Due to low observation numbers of older streamers, we have merged the “Baby Boomers” and “Silent Generation” into one group called Silver Surfers ($N = 33$).

For the investigation we have applied descriptive statistics including frequencies and Pearson Chi-Square test for association, since almost all of our variables were nominal with more than 2 categories. The chi-square test determines whether there is an association between two nominal variables (in our case, association between the general characteristics and the motivation for using SLSSs being “fame” or “money”). Furthermore, we have measured the effect size using Cramer’s V to investigate the strength of the respective association. The magnitude of effect size can be interpreted as small (0.1), medium or moderate (0.3) and large (0.5) [5, 25].

3 Results

In our study (observation of streams; N = 4,548 streams with single broadcasters; N = 1,082 of “groups”), we identified 61.2% male broadcasters and 38.8% females from Germany, Japan and the USA (Table 1). The results from Tang, Venial and Inkpen [47, p. 4774] confirm this gender distribution: about three fifths of SLSSs’ users are male. The observed streams were almost evenly distributed among the three platforms, with the highest number of observations for Periscope (38.5%) and the lowest one for YouNow (26.4%). As for the distribution by the country of origin, the most streams were from the USA (41%) and the fewest from Japan (25%). Finally, we have aggregated the age of the streamers into generational cohorts. The most represented generation is the youngest one—Gen Z with 37.2% followed by Gen Y with 33.5%. The older generational groups, Generation X and Silver Surfers, are much smaller as they represent only 6.4% and 0.4% of the observed streamers, respectively. Since we could not estimate the age of all observed streamers or the ones streaming in groups, the number of observations within the *Generation* category is accordingly lower.

Table 1. Demographic data of observed streamers.

		Frequency	Valid percent
Platform [N = 7,667]	Periscope	2,960	38.6%
	Ustream	2,686	35.0%
	YouNow	2,021	26.4%
Gender [N = 5,630]	Female	1,766	31.4%
	Male	2,782	49.4%
	Group	1,082	19.2%
Origin [N = 7,667]	Germany	2,604	34.0%
	Japan	1,920	25.0%
	USA	3,134	41.0%
Generation [N = 4,937]	Gen Z	1,839	37.2%
	Gen Y	2,572	33.5%
	Gen X	493	6.4%
	Silver Surfers	33	0.4%

3.1 Platform-Dependent Differences

Platform-dependent differences regarding the motivational factor “making money” and “becoming a star” can be obtained from Table 2. With about 13%, the motivational factor money is highest for Ustream streamers, whereas becoming a star is of minor interest. Streamers of YouNow are mostly motivated by fame (9.65%). For Periscope streamers, neither factor plays a major role. A chi-square test for association was conducted for the platforms and the motivational factors. All expected cell frequencies were greater than five. There is a statistically significant association between the platforms and the motivational factors, however, the association is rather small (Cramer’s V = 0.209 for money, and 0.179 for fame).

Table 2. Platform-dependent differences in motivation to *make money* and *become a star*.

Platform	Making money	Becoming a star
Periscope (N = 2.960)	1.32%	2.53%
Ustream (N = 2.686)	12.92%	1.15%
YouNow (N = 2.021)	4.60%	9.65%
Pearson Chi ²	p < 0.001	p < 0.001

3.2 Gender-Dependent Differences

Regarding the gender-dependent differences, males are slightly more motivated by financial gain than women (Table 3). Nevertheless, both motivational factors are highest for the group-streams. With regard to the factor fame, there are no major gender-specific differences ($p > 0.05$). The conducted chi-square test of independence between gender and the motivational factor money results in a very small (0.083) statistically significant association.

Table 3. Gender-dependent differences in motivation to *make money* and *become a star*.

Gender	Making money	Becoming a star
Female (N = 1,766)	2.49%	4.76%
Male (N = 2,782)	4.82%	5.14%
Group (N = 1,082)	7.49%	5.82%
Pearson Chi ²	p < 0.001	p = 0.458

3.3 Origin-Dependent Differences

Considering the streamers' origin and its influence on the motivations money and fame (Table 4), streamers located in USA are the ones most motivated by financial gain (7.45%), followed by Germans (5.91%) and Japanese (4.74%). In turn, fame is mostly aspired by German streamers (5.11%), followed by American (3.91%) and Japanese ones (2.34%). Even though there is a statistically significant association between origin and the motivational factors, the association is (similar to the gender-dependent differences) only small.

Table 4. Origin-dependent differences in motivation to *make money* and *become a star*.

Origin	Making money	Becoming a star
Germany (N = 2.604)	5.91%	5.11%
Japan (N = 1.920)	4.74%	2.34%
USA (N = 3.143)	7.45%	3.91%
Pearson Chi ²	p < 0.001	p < 0.001

3.4 Age-Dependent Differences

Differences in the streamers’ motivation dependent on their age can be identified in Table 5. Unfortunately, we did not meet the assumption that all cells should have expected counts greater than five for one cell (12.5%), therefore, these result have to be interpreted with some caution. Apparently, with increasing age the intention to earn money rises, but simultaneously the goal to become a star decreases. 21.21% of the Silver Surfers seek financial gain, however, none of them wants to become a star. In contrast, 8.21% of the generation Z aim to become a star, whereas making money (2.39%) is a minor motivational factor. The chi-square test results in a statistically significant but small association (0.125 for money, and 0.092 for fame).

Table 5. Age-dependent differences in motivation to *make money* and *become a star*.

Generation	Making money	Becoming a star
Gen Z (N = 1.839)	2.39%	8.21%
Gen Y (N = 2.572)	4.12%	4.35%
Gen X (N = 493)	9.74%	2.64%
Silver Surfers (N = 33)	21.21%	0.00%
Pearson Chi ²	p < 0.001	p < 0.001

Table 6. Content of streamers motivated by *making money* (N = 479).

Content category	Pearson Chi ²
Entertainment media	40.29% p < 0.001
Chatting	21.50% p < 0.001
Share information	20.88% p < 0.05
24/7	19.00% p < 0.05
Make music	12.94% p < 0.05
Advertising	11.90% p < 0.001
News	11.27% p < 0.001
Sport event	8.77% p < 0.001
Slice of life	6.05% p < 0.001
Business information	5.64% p < 0.001
Comedy	4.18% p < 0.001
Nothing	3.55% p < 0.001
Food	3.55% p = 0.062
Animals	3.34% p < 0.01
Gaming	3.13% p < 0.05
Politics	2.71% p < 0.05
Nature	2.30% p < 0.01
Draw/Paint picture	1.67% p < 0.05
STM	1.46% p = 0.221
Fitness	1.46% p = 0.96
Spirituality	0.21% p < 0.001

3.5 Differences in Streamed Content

Finally, we take a look at the potential differences in content streamed by broadcasters motivated by different aspirations. Streamers motivated by money (Table 6) provide mostly content evolving around entertainment media (40.29%), chatting (21.50%), sharing information (20.88%) and 24/7 (19.00%). Especially entertainment media is important for them. Likewise, such content is also in the Top 5 content categories for streamers motivated by fame (Table 7), but with only 13.29%. Even if chatting is the second most streamed content for streamers motivated by making money, it is more important for streamers motivated by becoming a star. Altogether, 67.77% of those fame-oriented streamers cover such content. This is followed by making music (42.86%), which is more popular among fame-oriented streamers than the ones motivated by money (12.94%). To share information is chosen equally often by both groups. Further noticeable differences, above 10%, exist for the categories 24/7 and news. Both were more frequently found in streams aiming for financial gain. Finally, there also exist statistically significant association between the motivational factor and most of the content categories ($p < 0.05$) as shown in Tables 6 and 7, however, all significant associations were only of small effect (<0.3).

Table 7. Content of streamers motivated by *becoming a star* (N = 301).

Content category		Pearson Chi ²
Chatting	67.77%	$p < 0.001$
Make music	42.86%	$p < 0.001$
Share information	19.93%	$p = 0.196$
Entertainment media	13.29%	$p = 0.394$
Slice of life	7.31%	$p < 0.001$
Advertising	6.31%	$p < 0.001$
Comedy	5.65%	$p < 0.001$
Nothing	4.98%	$p < 0.001$
Sport event	2.99%	$p = 0.394$
Fitness	2.33%	$p = 0.185$
Food	1.99%	$p = 0.710$
24/7	1.33%	$p < 0.001$
Business information	1.33%	$p = 0.935$
Gaming	1.33%	$p < 0.01$
Draw/Paint picture	1.00%	$p = 0.689$
Nature	0.66%	$p < 0.001$
Animals	0.66%	$p < 0.001$
News	0.33%	$p < 0.01$
Politics	0.33%	$p = 0.111$
STM	0.00%	$p = 0.085$
Spirituality	0.00%	$p < 0.01$

4 Discussion

This study investigated general characteristics of SLSSs streamers (on Periscope, Ustream and YouNow) motivated by fame or financial gain. For this purpose, we developed a research model and explored platform-specific characteristics (RQ1), gender-dependent differences (RQ2), origin-dependent differences (RQ3), age-dependent differences (RQ4) and contents streamed by broadcasters (RQ5) whose motivation is financial gain or fame.

From total 7,667 observed streams, 4,548 showed individual broadcasters (61.2% male and 38.8% females). The results indicate that Ustream is mostly applied by streamers motivated by financial gain, whereas YouNow by streamers aiming at becoming famous. This could also be related to generational aspects, since YouNow is a platform mostly applied by the younger generations [11]. Interestingly, the older generations (Gen X, Silver Surfers) are motivated by monetary aspects, whereas the younger ones (Gen Z) by fame. One reason for this could be the fact that nowadays the Social Media landscape and the associated attention economy is increasingly ruled by so-called micro-celebrities and influencers. These “career-paths” might often be associated with quick success, fame, appreciation, interesting offers (such as product samples, gifts), travel opportunities, the freedom to do what one likes or is interested in and also financial gain. Furthermore, such influencers and micro-celebrities often belong to the younger generations. These reasons may make it attractive for younger streamers to follow a similar path. More mature streamers may be more settled, grounded and mainly interested in the financial aspects.

According to our results, no strong association between gender and the motivation being fame or money exists. Females and males are equally interested in these aspects. There are, however, differences in content streamed by the broadcasters whose motivation is either money or fame. For streamers wanting to make money, “entertainment media” is the preferred content. We defined “entertainment media” as every action involving some form of media, e.g. displaying digital pictures, streaming a TV show or playing music. For the streamers seeking fame, the most important content categories are chatting and making music.

Since this study explores and is limited to general characteristics of SLSSs streamers and their motivation regarding fame and financial gain, further research could include qualitative interviews in order to explain our results in more depth. Besides, it would be interesting to conduct a long-term study to analyze if the streamed content (depending on the motivation) really leads the streamers to becoming a star or making money. Finally, investigation of established micro-celebrities and influencers is the next important step for our research. This study focused only on users aiming at becoming a star or influencer, however, this dream will come true only for the chosen ones.

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