



# How Socially Sustainable Is Social Media Gamification? A Look into Snapchat, Facebook, Twitter and Instagram

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## I INTRODUCTION

The corporations behind social networking services (SNS) are the current principal stewards of communities and suppliers of mechanisms that allow for communication and exchange of ideas among friends and strangers alike. Companies like Facebook and Twitter inc. offer ways to connect and grow communities, while at the same time, the SNS sphere has become involved in disinformation and political polarization as well as questionable business practices said to displace non-digital activities important to

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Switzerland AG 2021

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A. Spanellis, J. T. Harviainen (eds.), *Transforming Society and Organizations through Gamification*,  
[https://doi.org/10.1007/978-3-030-68207-1\\_12](https://doi.org/10.1007/978-3-030-68207-1_12)

human thriving and belonging. While even the term *social networking sites* suggests that companies aim at offering social value to their consumers, it is debatable to what extent they actually focus on social sustainability and how they work toward this goal. Hence, ongoing critical appraisals are needed to understand social sustainability implications of SNS designs, in terms of their core loops—main behaviors they enable like chatting, exchanging pictures and sharing content (Elias, Garfield, & Gutschera, 2012), versus added design elements intended to change behavior, among which gamification is a central exemplar.

The ubiquitous use of gamification in social media including elements like Point counters, Badges and Rewards (Hristova, Göbl, Jovicic, & Sluneco, 2021) has been framing interactions among users around the globe. In this paper, we thus analyze a series of prominent gamification elements implemented on four of the main platforms currently shaping the face of social media: Facebook (FB), Instagram (owned by Facebook) (IG), Snapchat (SC) and Twitter (TW). For this purpose, we (1) discuss a definition of social sustainability and (2) introduce gamification as a now ubiquitous part of the social media experience. We then (3) present and analyze the social sustainability impact of gamification on social media sites and apps.

## 2 DEFINING SOCIAL SUSTAINABILITY

The term “sustainability” gained prominence in the 1960s within the context of environmental preservation and has been more recently supplemented by economic and social sustainability (McKenzie, 2004; Bostroem, 2012). Conceivably, because of the original natural sciences anchoring of sustainability, its “social pillar” (Murphy, 2012) has remained more elusive to definition and measurement (Boyer, Peterson, Arora, & Caldwell, 2016; McKenzie, 2004; Bostroem, 2012).

In this chapter, we adopt McKenzie’s definition of social sustainability as “a life-enhancing condition within communities, and a process within communities that can achieve that condition” (ibid., p. 12). While “life-enhancing conditions” may be a fluid formulation, meaning a broad range of factors that make life better for people in the social arena in question, the definition has the conceptual advantages of capturing the *goal state*, thus accentuating the process-oriented (Boyer et al., 2016) and future-focused nature of the term (Mehan & Soflaei, 2017). Since social sustainability cannot be defined without a reference to the context, it is embedded

in Dempsey, Bramley, Power, and Brown (2011), the potential for “life-enhancing”, or indeed detrimental conditions arising from the infrastructures of social media must be understood with reference to how they and their gamification elements are structuring individual experiences and joint sociality—both on the platforms themselves and in the broader context of users’ day-to-day life.

### 3 GAMIFICATION OF SOCIAL MEDIA

Though gamified social media features like Likes, Streaks or Badges do not look like a “proper game” (Lieberoth, 2015), their use shares psychological and phenomenological properties with gaming (e.g. Deterding, Dixon, Khaled, & Nacke, 2011) and can, hence, be defined as gamification (Hristova et al., 2021). Previous research finds a wide variety of game-like elements in social media context (Pellikka, 2014; Hristova et al., 2021) acting as “microsuasion” elements (Fogg, 2003) persuading users to spend more time on an SNS (Lampe, 2014; Hristova et al., 2021) or otherwise adapt human behaviors to the needs of company business models (Zuboff, 2019).

Following the definition that social sustainability involves not merely maintenance but also growth of value within a community (McKenzie, 2004), SNS social spaces also continually evolve, for example, when providers change aspects of an app while preserving its “core loop” (Elias et al., 2012). As the gamified elements of an SNS, or more rarely the core loop itself, change, the conditions and prerequisites for the social sustainability of the space and its more or less “life-enhancing” qualities shift too.

In order to understand the social sustainability of SNS gamification, this chapter describes specific gamification elements found on the aforementioned platforms: Streaks (SC), Likes (FB, IG), Best Friends (SC), Top Fan Badge (FB), Blue “Verified” Badge (TW), Trophies (SC) and Charms (SC) and Fundraising (FB). In each section, we consider the design function of an element, its reception, and in what ways the element may be said to hinder or enhance social sustainability.

Our analysis especially calls attention to the following social and psychological mechanisms, which will be treated in depth in the discussion:

- **relatedness** as the need for connecting with others (Ryan & Deci, 2000) and **reciprocity** (Mauss, 1954) as symbolic social exchange;
- **status signaling** (Wang & Wallendorf, 2006);

**Table 1** Social sustainability aspects of gamification elements

<i>Soc. sustainability aspects</i>	<i>Likes</i>	<i>Streaks</i>	<i>Best friends</i>	<i>Top fan</i>	<i>Blue badge</i>	<i>Trophies</i>	<i>Charms</i>	<i>Fundraising</i>
Relatedness and reciprocity	+	+	+	+			+	+
Status signaling	+	+	+	+	+	+	+	+
Community responsibility	+	+		+	+			+
Future focus		+			+			+

- **community responsibility** (McKenzie, 2004) as an umbrella term for practices such as supporting communities or carrying out shared projects;
- **future focus** (Mehan & Soflaei, 2017).

In Table 1, we plot these mechanisms against the analyzed gamification elements.

### 3.1 Likes and Scores

The ubiquitous Like button shaped in the form of a white hand giving “thumbs up” was first introduced by Facebook in 2009 (later extended by five and then six emoticons) and can now be found in various guises across innumerable social technologies. It is a “one-click feedback” element through which users may give or receive what Facebook scientists (Scissors, Burke, & Wengrovitz, 2016) themselves term “lightweight affirmation”. As revealed by a Facebook spokesperson in 2017, choices of reactions are also used to adapt what the user will see in their feed (Bell, 2017). As such, they also hold informational value to the business of generating behavioral predictions (Zuboff, 2019). In gamification terms, Likes are one of many types of Points, which serve as social or personal signals, in addition to being a hard number representing the relative engagements generated by each post. Variations of this quantified scoring mechanic are found on a host of applications, including Reddit’s *Karma points* (Pellikka, 2014), Instagram’s *Likes*, *Followers* and *Following* scores (Hristova et al., 2021) and even YouTube’s number of *Views* for a video.

Likes are wielded by users as an expression of interest and relatedness through signaling appreciation for the shared content (Ellison, Gray,

Lampe, & Fiore, 2014; Rosenthal-von der Pütten et al., 2019). One study by Facebook indicates that “people care more about who likes their posts than how many Likes they receive, desiring feedback most from close friends, romantic partners, and family members” (Scissors et al., 2016). In contrast, according to a survey by Burrow and Rainone (2016), quantification preoccupies some users to an extent that the amount of Likes is more important to them than the content shared. This is also seen in practices such as posting content at a certain strategic time to maximize likes and beat one’s personal high scores (Hristova et al., 2021) or a preset goal. For example, one of Weinstein’s (2017) adolescent informants shares “when I post a picture, sometimes I’m like, I hope this breaks 200 likes [...] and I’m like dangit, I didn’t hit my mark”. This competitive approach to Likes has also been linked to “anxiety about social feedback or judgment” (ibid.). Adolescents are found to be particularly susceptible to peer feedback as signaled by friends’ likes, whether they are exerting problematic or prosocial influence (Crone & Konijn, 2018). Quantification of user reactions holds the potential to enable “healthy” signaling of identity and belonging or could foster insecurities, envy or unattainable aspirations, such as the ones documented in terms of body image (Hogue & Mills, 2019; Crone & Konijn, 2018).

Competition per se need not be negative, though. For instance, communities may be formed around attempts to maximize Likes, as exemplified by barterers, such as *follow-4-follow* and *like-4-like* initiatives when two users promise to exchange likes as an act of reciprocity. Hence, in addition to fostering a sense of relatedness and signaling social status, likes can be used as vehicles for reciprocity and generate a sense of shared engagement within formal groups or informal circles of friends.

Facebook’s introduction of the *Care* reaction in April 2020, during the COVID-19 pandemic, is an example of a gamified design evolving beyond its inception as numeric points, to meet social needs. Facebook stated that now users could give their communities “extra support while many of us are apart. We hope this helps you, your family and your friends feel more connected” (Brandon, 2020). The statement hints at efforts to improve social sustainability through modifying existing features. In a similar vein, Instagram (owned by Facebook) has experimented with removing Likes in several countries including Australia (Meisenzahl, 2019). At the time of writing, the exact extent and outcomes of these experiments have, however, not been shared publicly. The official rationale behind this effort was to combat cyber bullying and reduce the sense of competition among

users (Rodriguez, 2019). However, according to the head of Instagram, Adam Mosseri, the platform tested the hypothesis that making the number of likes invisible would increase the amount of posts since users would feel less insecure about the amount of likes their posts get (*ibid.*).

To sum up, the impact of likes, as an element quantifying appreciation and enabling comparison, appears to be ambiguous, spanning benign or maladaptive practices. Social media provider Facebook Inc. reportedly introduced the *care* reaction and made likes invisible for others in an effort to alter the effect of Point-like gamification on social sustainability (i.e. cyberbullying and social comparison) outcomes.

### 3.2 *Streaks*

A Streak is maintained by repeating the same behavior at set intervals or iteratively succeeding at a series of challenges. On Snapchat, Streaks are a *relational* score that signifies *how many days* in a row *two* users have been sending each other *snaps*—pictures or videos that vanish after viewing (Hristova, Dumit, Lieberoth, & Slunecko, 2020). Snapchat Streaks thus quantify and provide a reward for the daily interaction of two users (Meshi, Turel, & Henley, 2020), even when content has disappeared (Hristova et al., 2021).

Adolescents report that Streaks are especially beneficial for keeping in touch with friends (both the ones they see daily and the ones who are away) and finding out about their routines and everyday life (Hristova et al., 2020). Keeping a Streak requires the reciprocal effort of both partners since missing even one day of content exchange resets the accumulated score and ends the Streak. The wish to avoid loss has given rise to strategies such as sharing one's password with a friend, so they can uphold active Streaks if a user momentarily does not have access to Snapchat (Déage, 2019). The future orientation of the intention to keep a Streak going, as well as the attention and time committed daily to the shared endeavor, can in turn create a sense of solidarity between Streak partners (Hristova et al., 2020; Pelapat & Brown, 2012). However, the dyad is transcended by user practices such as *mass snaps*—impersonal pictures sent to multiple others to uphold Streaks (Hristova et al., 2020), who themselves may have Streaks among each other. The Streak count, although not public on the app, acts as a status signal signifying shared effort and social relation when shared with others within these networked communities of practice. Therefore, Streaks can be boon for social sustainability through

their future focus—encouraging longer periods of daily reciprocity between user-dyads embedded in communities of practice shaping Snapchat’s social space.

However, psychological research has hinted that through their daily iterative reward structure, Streaks reinforce repeated and “potentially problematic use” of the platform (Meshi et al., 2020). Indeed, research among Viennese adolescents reveals that keeping a Streak alive may be perceived as stressful by users as they need to remember to snap daily with their Streak partners (Hristova et al., 2020; Salomon & Hristova, 2020). In turn, the goal of keeping the Streak often triggers a less personal interaction—for example, sending black pictures—rather than conversations motivated by content (Hristova et al., 2020). When gamification overrides conversations as a primary value of the interaction, users commonly report perceiving the impersonal snaps sent by their Streak partner as a sign of uncaring, and hence the exchange as meaningless, which may move them to abandon it.

To sum up, Snapchat Streaks positively impact social sustainability by fostering daily reciprocity, building up to social relatedness that is signaled through a quantified score; however, the time constraint on reciprocity may make users feel smothered by the shared responsibility. Further, if gamification appears more important than conversations, this may lead users to abandon the Streak. Finally, while individual Streaks are a nudge for the daily reciprocity of dyadic relationships, this gamification-enhanced connectedness expands beyond the individual score, to networked communities of practice and to the platform itself.

### 3.3 *Best Friends*

Like Streaks, Best Friends are markers of relationships between users. Snapchat’s Best Friends feature made contacts, with whom one communicated most often, visible (Vaterlaus, Barnett, Roche, & Young, 2016) on the user’s profile. The feature functioned as a signal of relatedness and reciprocity visible to one’s contacts and as a leaderboard of social status (Hristova et al., 2021). As most social media utilize sorting algorithms to prioritize the posts, most likely to draw attention and engender engagement, this merely makes a metric already existing “under the hood” visible—a now classic easy tool in the gamification playbook (Reeves & Read, 2009).

In practice, the Snapchat Best Friends feature became controversial as it was deemed to induce envy and jealousy (Peterson, 2016; Vaterlaus et al., 2016). Research indicates that even Snapchat's core loop—exchanging ephemeral and thus secret messages—may already evoke negative emotions of jealousy among romantic partners (Utz, Nicole, & Cameran, 2015; Dunn & Ward, 2020). Hence, the gamified feature was amplifying an essential social sustainability problem with the platform's core offering of sending and receiving ephemeral messages.

As a response, Snapchat Best Friends was made visible only to the user (Lupo, 2017), as a panel of the eight people that one currently snaps with the most. Snapchat's support page emphasized that “No one else can see your Best Friends list. This feature is just for you” (Snapchat Support, 2019a). In addition, Friend emojis—icons signifying the intensity of reciprocal exchange between two users—are also private. Making this feature more private disabled one mechanism for monitoring others' social activity, thereby alleviating the potential for negative social comparison and jealousy. This hints at efforts on Snapchat's part to monitor the impact of their gamification in creating favorable or difficult conditions with regard to social sustainability.

#### *“Top Fans” Badge and Blue “Verified” Badge*

Facebook introduced the “Top Fan” Badge gradually from 2018, which awards the most active followers of a Facebook page (e.g. of a business, an artist or an NGO) a badge (Facebook Help Centre, 2020), thereby signaling status and relatedness. The feature aimed to make “fans' more active and thus helps in producing ‘organic’ viral content” (Maly, 2020), while granting admins more data “and thus more explicit insight into what drives engagement among their audience”, which can be used for directing paid posts (ibid.). Thus, while the badge signals status and relatedness to communities of page followers, it also illustrates surveillance capitalist business models at work (Zuboff, 2019) where intensifying user involvement for the purpose of extending data rendition to be sold to, for example, advertisers is a guiding principle.

A different form of badge was introduced to Twitter in the intended service of SNS responsibility toward the community: a blue “verified” badge to signal the authenticity of “accounts of public interest” (Twitter Support, 2017). Since Twitter is a platform where public figures like politicians, celebrities or academics make statements, the need arose to verify accounts in order to avoid misrepresentation as well as misconduct of



profiles reaching wide audiences. While the verification badge attracted much public attention, research indicates that users do not take it into consideration when judging the reliability of information on Twitter (Edgerly & Vraga, 2019).

Although the badge was a future-focused attempt to support social sustainability, by preventing fraud and promoting accountability through verification, it came to be viewed as an SNS-endorsed social status signal. For this reason, users of some small notoriety coveted the badge, quickly putting it at risk of losing its authenticity, thus becoming a socially *unsustainable* feature. According to the official Twitter Support account “Verification was meant to authenticate identity & voice but it is interpreted as an endorsement or an indicator of importance. We recognize that we have created this confusion and need to resolve it” (2017). Despite the legitimate intent behind opening up for blue badge-nominations from users, the nomination feature was suspended as it proved disruptive to social sustainability by creating a biased recognition landscape. Users who were attracted to the status function were, in a word, gaming this opportunity and thus weakening the function of the badge as a general concept.

To sum up, the social sustainability of the two badge elements was undermined in different ways: by the contextualization of the Top Fan badge in SNS business practices and by user reception and practices toward the Blue “Verified” badge.

### *Trophies and Charms*

Snapchat had a *Trophies* feature composed of 52 individual achievements (Patkar, 2018) that could be unlocked using the app up until 2019. Trophies represented challenges bound to engaging with Snapchat functionalities, such as sending content of a certain type (e.g. sending 50 videos or 10 zoomed photos) or in certain conditions (snapping between 4 am and 5 am or at a temperature below zero, etc.). This gamified feature provided a quantified score of user behavior that can signal status and expertise in the use of the platform.

In 2019, Trophies was replaced by *Charms* (Snapchat Support, 2019b). While the two features do not mirror each other fully, in 2019 the Snapchat support website announced “Trophies are no longer available. It’s tough news, but check out Charms—a new way to celebrate your friendships!” (ibid.), thereby confirming the “replacement” that took place on the platform. While Trophies focus on the quantification of individual

achievements, which may incite competition, Charms emphasize commonalities between two users to enhance a sense of relatedness and reciprocity. For example, some Charms focus on the temporal dimension of reciprocity: for example, from “in touch” (users have been in touch recently) to “it’s been forever” (Nace, 2019). Furthermore, although Charms take on the role of Trophies in quantifying relationships, Charms are displayed only as a relational set of scores, visible to the two interacting users. This shift to a more private tool emphasizing bonding, rather than social status display, can be read as Snapchat’s attempt to improve the social sustainability of its gamification.

### 3.4 *Fundraising*

Finally, we may consider Facebook’s Fundraising—a feature that calls for community responsibility and support for various causes (pressing issues at the present moment or future-focused goals). The feature uses several gamification mechanics: challenge (the announced financial goal of the campaign), progress bar (indicating the amount of money already raised with regard to set goal) and a reward (e.g. post displaying to others that a person has donated to the campaign). By raising funds and awareness, this gamified feature aims to make a difference outside of the SNS arena—in the “real” world.

Helping behaviors have traditionally been found to relate to expectations of strengthening social bonds and positive feelings (Schaller & Cialdini, 1988). As such, a donate feature is likely to interact well with the uses and gratifications (Katz, Blumler, & Gurevitch, 1973) commonly associated with social media as a way of fostering reciprocity, relatedness and community responsibility. However, research on helping behavior has found that negative moods arise through guilt and exposure to high-responsibility scenarios, which could create negative reactions to both the cause and the platform (Erlandsson, Jungstrand, & Västfjäll, 2016). For instance, a high degree of social policing was needed during the 2020 Coronavirus epidemic, when people formed impromptu role-playing communities as ants or office workers but wanted those groups to be safe spaces free of allusions to health and politics (Imam, 2020). As such, in communities where uses and gratification are mainly hedonic, real-world connections like those represented by fundraising may be antithetical to the sustainability of the social space.

Further, the payments from collections also run through Facebook, which automatically saves the payment details for future transactions (Campbell, 2019). Hence Facebook gets access to sensitive data as well as metrics for the conversion rates of user's involvement with a cause that can be used for a more extensive profiling and targeting. Because data rendering business models by Facebook Inc. has become the source of significant mistrust (Zuboff, 2019), such practices coming to light represents a serious challenge to the sustainability of Facebook as a whole.

Facebook's Fundraising represents an extensive list of social sustainability aspects: responsibility to supporting communities, relatedness and future focus, while at the same time being contextualized in for-profit business models.

## 4 DISCUSSION

We first focus on each social sustainability aspect encountered across the different gamification elements, after which, we turn to a more general discussion.

While **relatedness and reciprocity** are fundamental to social media as a whole, they also underlie Likes, Streaks, Best Friends, Top Fan, Charms and Fundraising. These elements quantify (Likes, Streaks, Fundraising), rank (Best Friends, Charms, Top Fan) or time (Streak, Best Friends, Charms) reciprocity. For example, Best Friends and some Charms compare the intensity of reciprocal exchange among users—whom the user interacts with the most and since when. In addition, Charms also categorize the temporal dimension of relatedness, for example, “it's been forever” (since the two users communicated). Streaks are also based on timing reciprocity: users are required to exchange at least one snap per 24 hours. While fostering reciprocity can generally be seen as positive, when timely constraints are posed on the interaction, as in the case of Streaks, it can lead users to feel smothered and to break the exchange (Hristova et al., 2020; Salomon & Hristova, 2020). In addition, iterative circles of behaviorist reward, like Streaks, building up to habit formation, can foster a “potentially problematic use” of the platform (Meshi et al., 2020). Further, reciprocity is used to encourage or, in the case of Streaks, nudge users to engage more with the platform and to generate more content (Lampe, 2014).

All of the analyzed gamification features enable some semblance of **status accumulation or signaling**. It has been found that reputation

signaling (e.g. Likes, Followers) can be conducive to collaboration (Wu, Balliet, & Van Lange, 2016), and intertwined in social comparison or expressing admiration (Rosenthal-von der Pütten et al., 2019). Competition triggered by social comparison could work in favor of sustainability, by using the self-serving behaviors of participants holding what has been labeled as “pro-self” attitudes with less egoistic sustainability goals through extrinsic goal setting (van Horen, van der Wal, & Grinstein, 2018). However, competition has commonly been associated with negative effects. Controlled experiments have discovered that competition can lead to faster but more shallow cognitive processing of content (DiMenichi & Tricomi, 2015) and can especially work against the motivation and performance of users with lower abilities (ter Vrugte et al., 2015). Research indicates that such mechanisms are enhanced by various psychological traits such as lower levels of self-esteem (Weinstein, 2017) and higher levels of self-monitoring (Scissors et al., 2016) and decreased by others—for example, a sense of purpose in life (Burrow & Rainone, 2016). In practice, negative social comparison seems to be one factor that has motivated platform owners to alter or remove gamification features.

As **community responsibility** is close to the very definition of social sustainability as “a life-enhancing condition within communities, and a process within communities that can achieve that condition” (McKenzie, 2004, p. 12), its applications among the analyzed gamification elements have been manifold: the introduction of a Care reaction during COVID-19 outbreak as well as follow-4-follow user initiatives; shared responsibility for keeping a Streak thereby forming joint projects online; the Top Fan Badge as a way to advertise and thereby support a community; the attempt to verify accounts on Twitter through the Blue Badge as means to forge community-enhancing trust and the act of donating to support communities through Facebook’s Fundraising. Developing active communities of online users has been a main goal of SNS (Lampe, 2014); however, it is crucial to understand gamification’s impact on “real-life” communities. For example, an overemphasis on gamified behaviors can undermine the quality of communication, as seen with Snapchat Streaks (Hristova et al., 2020), and interpreting follower counts or likes as a signal status can lead to issues of body image and unrealistic social expectations (Hogue & Mills, 2019).

**Future focus**—a main aspect of social sustainability (Mehan & Soflaei, 2017)—has found different expressions in the introduction of Snapchat Streaks, Twitter’s Blue Badge and Facebook’s Fundraising. Similar to

Community responsibility, it is a crucial point whether platforms focus on maintaining future on-platform involvement or invest in future goals that reach beyond the SNS itself. While Streaks are primarily focused on upholding daily (often for years) on-platform interaction (Hristova et al., 2020), Fundraising is oriented toward investing in improved conditions for communities in “real life”. Twitter’s future focus is expressed in its efforts to verify accounts of public figures on the platform in order to make its online communication more reliable. However, the involvement in “real-life” politics can also be problematic as exemplified by the public uproar about the case of the verification of white supremacists’ accounts on Twitter (Heim & Tsukayama, 2017).

#### 4.1 *Does Gamification De-emphasize Communication?*

Though gamification mechanisms vary and often rely on the intentions of users, it becomes evident that when gamification focus becomes more important than communication, social sustainability is threatened (Hristova et al., 2020). For example, Instagram states that it is problematic when users are focusing more on the likes a picture gets than on its actual content (Meisenzahl, 2019). If gameful behavior gains prevalence over the quality of communication, a further challenge surfaces: users, and especially those with a vested interest in garnering followings, attempt to “game” social media status signaling systems in a plethora of ways such as the reciprocity-based like-4-like or follow-back campaigns or buying fake followers or likes (UpVotes, 2020).

A further example is provided by Snap Streaks—the time constraint that they impose on communication can foster more intimate daily sharing *or* lead users to obsess over the score instead of the content of their exchange. Adolescents keeping Snapchat Streaks who feel that their peers overemphasize their gamified behavior (Hristova et al., 2020) dropped either a particular Streak or the Streaks altogether. This response demonstrates how gamification can harm reciprocity and the sense of relatedness if it hijacks the platform’s core values.

We suggest that there should be more reflection of the empirical implementation of gamification elements in order to avoid conditioning users with behaviorist rewards to perform certain prosocial behaviors. Indeed, motivation research has consistently found that extrinsic motivators may lead to greater quantity of behavior in the short term, but less variability in their qualities (Cerasoli, Nicklin, & Ford, 2014). Furthermore,

overemphasis on extrinsic markers can crowd out intrinsic motives, for example, to share meaningful experiences and information on social media, while the gamified behaviors in themselves are prone to extinction if the extrinsic markers of value cropping them up lose their salience (Frey & Oberholzer-Gee, 1997). As such, we surmise that gamification focused on short-term gratification and extrinsic markers might be antithetical to self-sustaining arenas for authentic social exchange.

#### 4.2 *Gamification Elements Are Continuously Monitored and Adapted*

The elements analyzed so far might suggest that social media companies are monitoring the impact of their gamification elements in order to exclude ones that pose a serious threat to social sustainability. We have seen examples of negative social comparison being one factor that might motivate platform owners to alter or remove gamification features: Snapchat replacing Trophies with the less competitive *Charms* feature; Snapchat making the Best Friends feature visible solely to the user (Friend List Emojis); Twitter discontinuing user nominations for their Blue Verification Badge and Instagram experimenting with hiding numbers of likes.

Adaptations have also been made in response to real-life social sustainability issues: Twitter introduced a Blue Badge to verify accounts, while Facebook added a *Care* reaction as a response to social isolation during the COVID-19 pandemic. SNS platforms have thus been displaying effort to improve aspects related to social sustainability using gamification to flexibly adapt and evolve while preserving their “core loops”. For example, Facebook CEO Mark Zuckerberg has “made it clear that finding ways to let people use Facebook for social good is important to him” (D’Onfro, 2015). Facebook’s *Social Good* page describes their initiatives as: “In addition to our Social Good work, we have a number of initiatives that also help people come together in meaningful ways to support their communities” (Facebook Social Impact, 2020).

We must, however, also consider that many such efforts are responses to bad publicity and ultimately serve the underlying for-profit business models. If stock prices are at odds with the world sustainability goals, what measure of success will win out in the minds of SNS CEOs?

## 5 CONCLUSION

This chapter examined SNS's efforts in the direction of altering, removing or adding features in order to deal with complex social sustainability issues such as negative social comparison; gamification overriding communication; real-world embedding and impact of gamification.

Gamification may enhance user experiences in ways that can be understood as “life enhancing” insofar as they create a more useful, interesting and enjoyable space for user consumption and participation (Lieberoth, 2015). However, it can also create obligations and hedonic treadmills (Hristova et al., 2021) put in place by providers in order to elicit certain behaviors that may or may not run counter to the best interest of users. It is important to note that services that seem to be for free are, in reality, made available by the social media conglomerates in exchange for detailed data rendition on the users, ownership of materials shared by the users, and exposure to advertisements often enhanced by the data collected. These business practices are rooted in big data rendition and mining and termed surveillance capitalism (Zuboff, 2019).

Since the interests of user communities and of social media companies do not necessarily align, it is important to pose the question “sustainable for whom?”. On the one hand, social media companies use gamification to encourage users to spend more time, have more interactions and generate more content and data (Lampe, 2014; Hristova et al., 2021) on the platforms. On the other hand, user communities are moved by countless motivations varying from finding followers for one's cooking page to mobilizing supporters for extremist rallies. Issues of politics and content, as in the cases of Twitter giving a verification badge to a person viewed as a white supremacist (Heim & Tsukayama, 2017), show that platforms, as well as how their gamification mechanisms enable endorsement and visibility, can quickly be experienced as socially unsustainable.

Our analysis revealed that while SNS display efforts to foster social sustainability, their gamification design is mostly focused on enhancing user involvement with their online products and not on “real-world” social sustainability. Notably, fundraising is an exception of a gamified SNS intervention with the explicit aim to mobilize resources and support for communities and causes outside of the SNS arena. While particular gamification mechanics may cease, longitudinal studies of social media as a gamified ecology evolving are needed to assess its development with regard to long-term social sustainability.

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