

User Perception of Account Verification on Social Media

Madelyne Xiao
Princeton University

Mona Wang
Princeton University

Anunay Kulshrestha
Princeton University

Jonathan Mayer
Princeton University

What does a blue check mean? Soon after acquiring Twitter in late October of 2022, Elon Musk overhauled the site’s user verification process. Chief among the changes Musk implemented was a subscription-based system for assigning blue checks, wherein any user in the United States could pay eight dollars a month for a blue verification check mark to appear on their profile. Predictably, many users took advantage of monetized verification to spoof existing high-profile accounts (in one notable case, a fake Eli Lilly account claimed that “insulin is now free”) [1]. Social media verification has never been more vital, particularly as Musk seems intent on undermining its core tenets.

We propose a study to gauge user perception of verification marks on Twitter and other social media platforms following updates to Twitter’s verification process. The study consists of a survey and quantitative and qualitative analyses of survey results. The survey will address differences in user-perceived and actual requirements for verification marks on popular social media platforms, with a focus on evolving perceptions of verification marks on Twitter.

Since its introduction, verification on social media platforms has served the dual purpose of explicitly confirming account-holder identity and implicitly acknowledging the noteworthiness of high-profile accounts [2]. Twitter was among the first social media sites to introduce verification marks – blue checks, badges, and like signifiers – and, in doing so, set a precedent for the inclusion of such marks on the accounts of celebrities, government agencies, and news outlets [3]. Twitter’s first blue checks appeared in 2009 [4]. Since then, Facebook, Instagram, and TikTok have also adopted verification processes and associated verification marks [5]–[7]. In all cases, verification required confirmation of user identity.

Considerable consternation followed in the wake of Elon Musk’s Twitter takeover, much of it due to the monetization of the verification process (a change that appeared to have been made on the new CEO’s whim) [8]. A misalignment between users’ understanding of verification marks and the implicit assurances provided by Twitter’s new subscription-based blue checks seems plausible, in light of established precedents for (non-monetized) verification on most social media platforms. Such a discrepancy, if indicated by our survey, would call into question verification monetization’s compliance with consumer deception law, such as Section 5 of the FTC Act [9].

Research questions. **RQ1.** What kinds of verification assurances do social media users believe existing verification marks provide? **RQ2.** How do users perceive differences

between verification standards across social media platforms, and over time (in the case of Twitter)? **RQ3.** Is there a mismatch between expected and actual verification assurances provided by verification marks?

Study design. We will recruit a representative sample of U.S.-based adult respondents via an online survey platform. In addition to the survey questions described below, we will include several attention-check questions, and will also record respondent age, location, and device information. Survey respondents will be compensated for their time at a rate of \$15 per hour.

We designed a survey with a blend of multiple-choice, matrix, and free-response questions. (A preliminary survey design appears in Appendix A.) Survey questions address the following topics: user internet and tech literacy; social media account usage; perceived requirements for account verification on different social media platforms; and the evolution of these perceptions over time, in the case of Twitter. Additional details about the surveying approach for each RQ (corresponding to those listed in the previous section) are below:

RQ1. Respondents will select, from a list of at least six options, all criteria that they believe apply to verified accounts on Facebook, Twitter, and TikTok. (We developed these options to fairly capture both current verification policies and common misconceptions associated with verification marks.) Users will also describe their perceptions of Twitter’s elaborate taxonomy of identification marks, which includes different colored check marks for different types of organizations (e.g., gray for government organizations; gold for businesses; blue for both subscription accounts and “legacy verified” accounts [9]).

RQ2. Respondents will provide a written response to RQ2; analysis will include inductive coding of respondent answers in order to bin responses into discrete categories. Respondents will also be asked if they have been verified on a social media platform, and if they feel that the verification procedure served as an apt proxy for verification.

RQ3. We will compare responses to the previous two questions across different social media platforms (and, in certain cases, across different types of verification marks on the same platform), paying particular attention to changes in the significance respondents attach to properties of verified accounts and steps of the verification process.

We will randomize survey questions as necessary to reduce potential biases resulting from question order.

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Appendix A

Thank you for joining this study. Please answer the following questions based on your experiences with social media. Please **do not consult any external sources** when answering the questions.

[Question and response order may be randomized.]

1. During a typical week, how often do you **watch, read, or listen to news** from the following sources?

	None	One day	Two days	Three days	Four days	Five days	Six days	Every day
TV								
Newspaper or print magazines								
Radio								
Online-only news websites								
Social media								
Personal conversations								

2. During a typical week, how often do you **see a post or video** from the following social media platforms?

	None	One day	Two days	Three days	Four days	Five days	Six days	Every day
Facebook								
Instagram								
Snapchat								
TikTok								
Twitter								

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3. During a typical week, how often do you **use a personal account** with the following social media platforms?

	None	One day	Two days	Three days	Four days	Five days	Six days	Every day
Facebook								
Instagram								
Snapchat								
TikTok								
Twitter								

4. In general, what kinds of accounts do you follow on social media? Please select **all** that apply.

- Celebrities and influencers
- Politicians, government officials, and government agencies
- Journalists and news outlets
- Friends and family
- Businesses and other organizations

5. In general, when deciding whether to follow an account on social media, how important are the following factors? Please **rank** the following factors in decreasing order of importance.

- The account belongs to a person you know
- The account belongs to a notable person or organization
- The account has a “verified” badge
- The account has many followers
- The account frequently posts content
- The account posts content that interests you
- The account posts content that you agree with
- The account posts content that your followers agree with
- The account has been active on the platform for a long time
- The account follows you

6. In general, when deciding whether to like, share, retweet, or otherwise interact with a post on social media, how important are the following factors? Please **rank** the following factors in decreasing order of importance, where 1 is the most important factor and 10 is the least important.

- The post is from a person you know

Appendix A

- b. The post is from a notable person or organization
 - c. The post is from an account with a “verified” badge
 - d. The post is from an account with many followers
 - e. The post is from an account that frequently posts content
 - f. The post interests you
 - g. The post expresses views that you agree with
 - h. The post expresses views that your followers agree with
 - i. The post is from an account that has been active on the platform for a long time
 - j. The post is from an account that follows you
7. Some accounts on social media platforms are “verified.” In general, what does a “verified” badge on an account mean to you?
- [Free response.]
8. In general, what requirements **must** an account satisfy to obtain a “verified” badge on a social media platform? Please select **all** that apply.
- a. The platform confirms the identity of the person or organization operating the account
 - b. The platform confirms that the account is not impersonating a notable person or organization
 - c. The account frequently posts content on the platform
 - d. The account belongs to a notable person or organization
 - e. The account has many followers on the platform
 - f. The account has been active on the platform for a long time
9. In general, what is **typically true** of an account with a “verified” badge on a social media platform? Please select **all** that apply.
- a. The platform confirms the identity of the person or organization operating the account
 - b. The platform confirms that the account is not impersonating a notable person or organization
 - c. The account frequently posts content on the platform
 - d. The account belongs to a notable person or organization
 - e. The account has many followers on the platform
 - f. The account has been active on the platform for a long time

Appendix A

Some Twitter accounts, such as the account below, have a “verified” badge:



10. What requirements **must** an account satisfy to obtain a “verified” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

11. What is **typically true** of an account with a “verified” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

[Repeat the above two questions with analogous phrasing and official accounts for Facebook, Instagram, TikTok, and YouTube.]

Appendix A

12. In your experience, are there important differences between the “verified” badges on popular social media platforms?

[Free response.]

Some Twitter accounts have an “official” badge:  Official

13. What requirements **must** an account satisfy to obtain an “official” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

14. What is **typically true** of an account with an “official” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

15. Who is the current President of the United States?

- a. Donald Trump
- b. Barack Obama
- c. George W. Bush
- d. Joe Biden
- e. Bill Clinton

16. Who is the current leader of Twitter? If you do not know, please respond “Do Not Know.”

[Free response.]

17. People often read online news from a variety of sources, including TV channels, newspapers, and online-only outlets. Many of these sources are active on social media. Which of the following news sources do you read most often? Please ignore the prior question and select The Wall Street Journal and Axios.

- a. The New York Times

Appendix A

- b. The Wall Street Journal
- c. MSNBC
- d. Fox News
- e. Axios
- f. Politico

18. Have you ever had a personal or organizational account verified on Twitter, Facebook, TikTok, Snapchat, or Instagram? Please select one response.

Yes
No

18a. If **YES**: What did the verification process for that platform entail?

[Free response.]

18b. If **NO**: In general, what do you think the verification process on any of Twitter, Facebook, TikTok, Snapchat, or Instagram might entail?

[Free response.]

19. Have you ever been asked to verify ownership of a social media account by 1) providing a phone number, then 2) confirming that you were able to receive a text or call at this number?

Yes
No

20. In your opinion, does verification of an associated phone number constitute verification of identity?

[Free response.]

Some Twitter accounts have a gold “verified” badge:



21. Have you seen any accounts with a gold “verified” badge on Twitter?

Yes
No

22. What is the difference between accounts with gold and blue “verified” badges on Twitter? If you’re unsure, please write “I don’t know.”

[Free response.]

Appendix A

23. What requirements **must** an account satisfy to obtain a gold “verified” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

24. What is **typically true** of an account with a gold “verified” badge on Twitter? Please select **all** that apply.

- a. Twitter confirms the identity of the person or organization operating the account
- b. Twitter confirms that the account is not impersonating a notable person or organization
- c. The account frequently posts content on Twitter
- d. The account belongs to a notable person or organization
- e. The account has many followers on Twitter
- f. The account has been active on Twitter for a long time

25. Rate your familiarity with the following terms. Select one option per row:

	No understanding	Little understanding	Some understanding	Good understanding	Full understanding
Hashtag					
Meme					
Advanced search					
Phishing					
RSS					
Two-factor authentication					
Retweet					
Spam					
Domain name					

Appendix A

Broadband					
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26. Which of the following do you interact with **at least once a week**? Check all that apply.

- a. A personal website that you update and manage
- b. A social media account (e.g. on Facebook, Twitter, Snapchat, LinkedIn)
- c. A code repository (e.g. on Github)
- d. A news site
- e. A chatroom / discussion board
- f. An online retailer
- g. A gaming console or web-based game
- h. A meal delivery service
- i. A streaming service (e.g. HBO Max, Hulu, Netflix)
- j. A video-conferencing or messaging service