From Likes to Change: Assessing the Impact of Citizen Engagement on the

European Commission's Social Media Platforms

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Abstract 17

One or two sentences providing a basic introduction to the field, comprehensible to a

scientist in any discipline.

Two to three sentences of more detailed background, comprehensible to 20

scientists in related disciplines. 21

One sentence clearly stating the **general problem** being addressed by this

particular study. 23

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One sentence summarizing the main result (with the words "here we show" or

their equivalent).

Two or three sentences explaining what the main result reveals in direct 26

comparison to what was thought to be the case previously, or how the main result adds to 27

previous knowledge. 28

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible

to a scientist in any discipline.

Keywords: keywords 32

Word count: X 33

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36 Introduction

- In recent years, the rise of social media platforms has led to significant changes in the way
- institutions, including public organizations, communicate with their audiences. As a result,
- $_{39}$ the importance of citizen engagement in the process of communication through social media
- 40 has become increasingly recognized. This engagement involves not only a one-way flow of
- 41 information from public institutions to citizens, but also an interactive dialogue between the
- two parties.
- The concept of engagement in social media has been studied extensively in recent years,
- 44 with researchers exploring various aspects of this phenomenon. One such study, conducted
- by Dolan et al. (2016), approached social media engagement behavior from a uses and
- 46 gratifications perspective, focusing on the motivations and benefits that users derive from
- engaging with social media. Meanwhile, the study by Dragseth (2020) explored how social
- 48 media can be used to build engagement among students in the context of political science
- 49 education.
- 50 Another important aspect of engagement in social media is the role it plays in activation
- campaigns aimed at consumers. Mirbagheri and Najmi (2019) conceptualized and developed
- 52 a scale to measure consumers' engagement with social media activation campaigns. Addi-
- tionally, Smith and Gallicano (2015) analyzed public engagement with organizations through
- social media, highlighting the importance of two-way communication between public insti-
- 55 tutions and citizens.
- The differentiating role of platform type in engagement with social media and social media
- ⁵⁷ advertising was explored by Voorveld et al. (2018), who found that the level of engagement
- varies across different social media platforms.
- 59 In addition to understanding the various aspects of engagement in social media, it is also

- 60 important to recognize the significance of citizen engagement in the context of public insti-
- tutions. Citizen engagement plays a critical role in ensuring transparency and accountability
- 62 in public decision-making processes. Furthermore, engagement with citizens can lead to the
- development of more effective policies and programs that better serve the needs of the com-
- 64 munity.
- Moreover, the importance of citizen engagement in the process of communication through
- 66 social media cannot be overstated. Through social media, public institutions can engage
- 67 in an interactive dialogue with citizens, build trust, and develop more effective policies and
- 68 programs. As such, further research, and exploration of the concept of engagement in social
- 69 media is critical for ensuring that public institutions continue to effectively communicate
- with and serve the needs of their communities.
- 71 Citizen engagement through social media can also contribute to the empowerment of individ-
- ⁷² uals and groups, giving them a voice in public decision-making processes and enabling them
- to hold public institutions accountable for their actions. This can help to build stronger,
- more resilient communities that are better equipped to respond to challenges and opportu-
- 75 nities.
- ⁷⁶ It is also important to note that while social media has the potential to be a powerful tool for
- 77 citizen engagement, there are also challenges and risks associated with its use. These include
- 78 issues related to privacy, security, and the spread of misinformation and disinformation. As
- ⁷⁹ such, public institutions must be mindful of these risks and take steps to mitigate them,
- while also leveraging the power of social media to engage with citizens in a meaningful way.
- Overall, the rise of social media has transformed the way public institutions communicate
- with citizens, placing a greater emphasis on engagement and two-way communication. Un-
- 83 derstanding the various aspects of engagement in social media is critical for public institutions
- 84 to effectively communicate with and serve the needs of their communities. By leveraging the
- power of social media to engage with citizens, public institutions can build trust, empower

individuals and groups, and develop more effective policies and programs that better serve the needs of the community.

88 Literature review

In the past few years, social media has risen to become a significant means of communication between public institutions and citizens. This has paved the way for increased citizen
engagement in the decision-making process, which is considered essential for fostering trust
and enhancing accountability. This literature review delves into the significance of citizen
involvement in the communication process of public institutions via social media. It does so
by amalgamating and synthesizing the findings of diverse studies, each focusing on various
facets of social media and citizen engagement within the European Union.

Bene et al. (2022) conducted a study exploring the impacts of self-centered social media communication styles on user engagement across 12 European nations. Their findings 97 revealed that social media communication emphasizing user participation and fostering feedback effectively boosts user engagement. Social media users who feel they have a say in the decision-making process are more inclined to engage and participate in conversations. De 100 Wilde et al. (2022) examined citizen engagement with European politics on social media 101 platforms and discovered that social media holds the potential to increase citizen involve-102 ment and participation in the political sphere. They found that social media offers citizens 103 a platform to express their opinions, partake in discussions, and influence policy-making decisions. In a similar vein, Bankston (2021) investigated the role of social media in migration and smuggling across the European Union's virtual borders. This study concluded that social media platforms offer citizens opportunities to engage in dialogues and share their 107 perspectives on immigration policies. 108

Cinelli et al. (2022), on the other hand, delved into promoting engagement with quality communication in social media. Their findings indicated that employing persuasive language, evoking emotions, and utilizing framing can enhance user engagement. The study recom-

mends that public institutions implement quality communication techniques to boost citizen
engagement and participation in policy-making. Müller (2022) analyzed the social media
attention garnered by European Union agencies and found a positive correlation between
increased attention and higher levels of citizen engagement. This study implies that public
institutions can augment citizen engagement by effectively utilizing social media to showcase
their activities and interact with citizens.

Additionally, Rus et al. (2021) carried out a case study investigating the representation of 118 the European Commission in Romania via social media communication. The study estab-119 lished that social media communication by public institutions can bolster transparency and 120 accountability, consequently leading to heightened citizen engagement. Hancu-Budui et al. 121 (2020) examined the communication strategies employed by audit institutions in the Euro-122 pean Union during the Covid-19 crisis. Their findings suggested that social media can serve 123 as a potent tool for promoting public services and encouraging environmental engagement. 124 The study advocates for public institutions to harness social media to showcase their activ-125 ities and connect with citizens during times of crisis. Kanol and Nat (2021) scrutinized the 126 social media engagement tactics of British interest groups on Facebook. They found that group type influences social media engagement strategies, with non-profit groups being more inclined to utilize user-generated content and participatory approaches. The study implies 129 that public institutions can adopt lessons from non-profit groups and employ participatory 130 strategies to elevate citizen engagement. 131

Finally, Wei et al. (2021) executed a case study analyzing public opinions on climate change policy in the European Union using Twitter data. The study concluded that social media offers a platform for citizens to discuss climate change policies, suggesting that public institutions should leverage social media to engage with citizens on critical issues like climate change.

Case study

38 Research objectives

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The overall objective of this research is to analyze and compare the online engagement of
the public on various official social media platforms (Facebook, Instagram, Twitter, and
YouTube) of the European Commission.

142 Research tool

The research instrument used in this study involved the extraction and analysis of data from 143 the official Facebook, Twitter, Instagram, and Youtube pages of the European Commission. 144 To collect this data, the Fanpagekarma platform was used, which is a popular tool for social 145 media analytics and monitoring. The data extracted from the platform included the post 146 ID, message content, post type, post date, number of likes, comments, shares, and rounded 147 number of followers for each post made by the European Commission between 24 March 2023 148 and 20 April 2023. To calculate the engagement rate, the total number of reactions (likes, 149 comments, and shares) was divided by the number of followers. This metric is often used to 150 measure the level of audience interaction with a brand or organization on social media. 151

Overview of data analysis

The data collected from this research instrument was analyzed using various statistical techniques, including descriptive statistics and Descriptive statistics were used to summarize the data and identify trends and patterns in the engagement rates, likes, comments,
and shares for each post type and platform. In this analysis, we will examine the social media performance of the European Commission's Facebook, Instagram, Twitter, and Youtube
accounts during the period from 24 March 2023 to 20 April 2023. We will focus on the
engagement rate (ER) of each platform, which measures the percentage of followers who
engage with a post by liking, commenting, sharing, or otherwise interacting with it.

161 Data analysis

We used R (Version 4.2.3; R Core Team, 2023) and the R-packages papaja (Version 0.1.1;

Aust & Barth, 2022), and tinylabels (Version 0.2.3; Barth, 2022) for all our analyses.

164 Results

Discussion

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