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Three Cities on YouTube:
E-Government's Evolution Through Content Creation

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ABSTRACT

Local governments are enhancing their governance through various information communication technologies (ICTs). This article presents an exploratory case study of three municipalities within the United States, examining how each applies YouTube for communication. Using content analysis and selected statistical tests of mean difference, the authors analyzed the videos uploaded between January 2020 to August 2020. The three municipalities used YouTube to document policymaking, publicize programs and services, update critical information during times of crises, and, in some cases, create unique brand images. The average number of views per video were similar across the three YouTube channels. However, one of the municipalities received a statistically significant number of average likes per video, which spotlights its positive brand image. In conclusion, the authors suggest directions for future research and recommend practices for social media adaptation in government.

KEYWORDS

City Brand Management, digital governance, E-Government, Public Communication, Public Relations, Social Media

INTRODUCTION

Information technology has become a key instrument for government officials to disseminate relevant, timely information, particularly during a crisis (Lin et al., 2020; Wang et al., 2020). At the local level, advances in digital technologies offer new or improved ways for municipal managers to promulgate information. Conventionally, the official city website is still one of the most prominent and commonly adopted digital tools for municipal communication. Websites also provide a platform for a city to create a visualized identity, document its actions and praxis, and communicate its images to targeted audiences (Boisen et al., 2018; Florek et al., 2006; Sadler et al., 2016). Despite the fundamental role a website plays in city-to-public communications, the use of social media is gaining popularity among municipalities in the United States.

Social media channels are becoming an important and popular means for municipal managers to broadcast information and engage the public (Bennett & Manoharan, 2017). Official social media portals, such as Twitter and Facebook, allow constituents and visitors to communicate with government officials through multiple channels. In addition to enhancing city-public interactions, better management and utilization of these online communication tools enhances a city's brand. The application of targeted communication through digital media contributes to creating a city's brand values as a tourism destination by cultivating awareness and credibility (Stojanovic et al., 2018).

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Increasingly, as cities adopt branding techniques to position themselves nationally and internationally (Lucarelli & Berg, 2011; Zavattaro, 2010), digital media is seen as instrumental to the improvement of public relations (Manoharan & Wu, 2021). By branding itself through different media, a city can emphasize the distinct features of its location, making it more attractive and competitive. Effective image promotion through an official online platform could even increase the perceived trust and satisfaction of the citizenry toward local government (Schmidthuber et al., 2019). These phenomena point to the crucial role of digital interactions between the government and the public.

Websites remain essential for digital interaction; however, social media platforms enlarge a user base. YouTube is one of the fastest growing platforms (Ortiz-Ospina, 2019; Pew Research Center, 2019). Although some platforms, such as Snapchat and Instagram, are more popular among younger audiences, YouTube is accessed by diverse age groups (Perrin & Anderson, 2019). It is critical to examine the current state of YouTube's application among local governments due to its appeal among multiple audiences. This article will investigate the YouTube channels of Tampa, Minneapolis, and Tulsa to analyze communication tactics and use of the platform. The following research question framed the investigation in this exploratory case study: How have Tampa, Minneapolis, and Tulsa adapted YouTube for public communications and public engagement?

We selected these cities as part of a separate study into municipal website digital branding, as conducted by Manoharan et al. (2023). The cities scored high marks according to the City Branding Index that Manoharan et al. (2023) advanced from the framework of Florek et al. (2006). The Manoharan et al. (2023) study scored each city's brand identity, brand communication, brand engagement, and brand operations on its website. In the current study, we focus our analysis on each city's official YouTube channels to delineate similarities or differences in their videos as they were updated from January 2020 to August 2020. In particular, we were interested in communication and audience engagement, two aspects related to public relations in public administration. We also investigated the possible variance of how audiences perceived these official YouTube channels.

Several studies provide an overview of the phenomena of social media and public administration with quantitative methods (Bonsón & Bednárová, 2018; Bonsón et al., 2019; DePaula et al., 2018; Wukich, 2021). Our intentional use of a case study design is distinct from previous examples (Yin, 2014). The in-depth investigation of the three municipalities provides contextual information that allows for a detailed comparison of the cases. The period of study aligns with the onset of the COVID-19 pandemic. This timing is unique because digital technologies were becoming indispensable for society and public administration (Eom & Lee, 2022; Hantrais et al., 2021). The study's results contribute to the theory and application of information communication technology (ICT) in governance, offering recommendations for future research and practice.

The remainder of the article is structured as follows. First, the literature review describes relevant past research. Then, the methods section details the current case selection rationales, data collection, and analysis procedures. The findings section accentuates the case study methodology through a general overview of YouTube usage by the municipalities. It also provides detailed descriptions of the YouTube video and contextual information about each city. The article concludes with a discussion of the study's contributions and limitations.

LITERATURE REVIEW

The article's review is organized around three themes. The first theme identifies the role of information technology in governmental communication from the perspective of governance. The second theme highlights social media usage and its impact in public communication. The third theme centers on the emergent function of social media during the pandemic. This content provides a perspective from which to view the increasing use of social media in public communication.

Role of Information Technology in Government Communication

Research has offered valuable insights into how government employs ICT and how these technologies gave rise to the concept of e-government. Broadly defined, e-government is the utilization of "the internet and the world-wide-web for delivering government information and services to citizens" (United Nations, 2001) and it improves the government performance and quality of public service, collaboration, and local responsiveness (Manoharan & Ingrams, 2018). Under this umbrella term, e-governance emerged as an extension of e-government, with an emphasis on civic engagement and citizen participation (Manoharan & Holzer, 2012). The adoption of e-government and digital government has the potential to promote inclusive, sustainable growth, and create public value (Manoharan, et al., 2022). Furthermore, from a theoretical perspective, e-governance refers to:

The use of ICT in government in ways that lead to genuinely different structures or processes a consequence of which may be the greater effectuation of or changes in norms and public values. (Bannister & Connolly, 2012, p. 21)

The way in which a government communicates determines how information is transmitted, how service quality could be affected, how the public perceives the governing body, and how citizens participate in civic life (Milakovich, 2022). In other words, communications are functions of cities and local governments to ensure better governance and an improved quality of life for residents.

An informed citizenry is essential for a democratic society. Effective governmental communication tactics help to inform the public about its actions. People outside the government could peel back the curtain of governmental decision making by obtaining detailed information through access to official data. The advancement of ICTs has broadened access to government data. Wirtz et al. (2019) found that among 210 German citizens surveyed, four characteristics contributed to the willingness of the citizens to use open government data: (1) perceived ease of use; (2) usefulness of the information; (3) perceived access to information; and (4) perceived availability of communication and participation channels. Access to governmental information is instrumental in better governance. Creating an informed citizenry requires the strategic use of public communication tools. As e-government evolves with the advancement of technologies, local governments can employ a variety of channels to communicate both face-to-face and online.

Governmental websites are an effective tool for one-way communication (Hong, 2013; Lee-Geillera & Lee, 2019). Enhanced features like embedded forums, online petitions, polls, surveys, and accessible contact information allow websites to offer limited levels of interactivity (Hong, 2013). Lee-Geillera and Lee (2019) proposed a model of democratic e-governance concerning the future evaluation of official websites and their efficacy through the incorporation of functions for public engagement. In their view, open access to information offers transparency, which serves as the foundation for improving service quality and credibility. Lee-Geillera and Lee (2019) noted that improved service could facilitate citizen engagement through collaboration, deliberation, and political efficacy.

Alternatives to websites also exist. Other technologies offer a solution to address the limited efficacy of websites in providing engaging and interactive communication. For example, alternative media like blogs and podcasts create direct-to-the-public pathways for governments, bypassing the media and newspaper editors who have traditionally been the gatekeepers of information (Graham & Avery, 2013). Wirtz et al. (2019) referred to social media as a simplified participation opportunity that "ally and empower citizens in political decision-making and better incorporate their collective knowledge, ideas and competencies" (p. 571). In fact, social media tools promote transparency and accountability in the public sector. According to Graham and Avery (2013):

Governmental transparency allows the public to develop a more accurate picture of what is happening in government, which allows citizens to hold governments accountable and evaluate performances of government agencies. (p. 5)

The use of social media technology represents a shift toward citizen participation and engagement. This then leads to greater transparency, accountability, and collaboration with the public (Haro-de-Rosario et al., 2018). Social media also helps public agencies reach smaller populations, particularly those ignored by traditional broadcast media.

There is some level of integration with social media into the daily operations of most U.S. municipalities. However, effective social media policies are not prevalent (Bennett & Manoharan, 2017). The use of social media may be limited when it comes to genuine improvement of governance. Marpaung and Santoso (2020) found that local governments tend to use YouTube for information dissemination and marketing purposes. It fails to promote transparency. Despite these stated limitations, public managers are eager to adopt this communication technology. Hence, it is important to understand its impact and common usage.

Social Media in the Public Sector

This section addresses the application of social media on governance and messaging strategies. The article will discuss social media and governance in terms of positive and negative impacts. It will also explore the types of messaging used by the public sector.

Social Media and Governance

"We-government" is a phenomenon that social media helped conceptualize. This levels the top-down framework of e-government by redefining citizens as partners and collaborators in public service delivery (Linders, 2012). In practice, as noted by Graham and Avery (2013), the use of social media platforms allows governments to report their policies and performance, open channels for citizen responses on public initiatives, and obtain real-time feedback on policy decisions via opinion polls and short surveys. An official social media account can have multiple effects on governance in areas like transparency, public trust, and responsiveness to residents' concerns. For example, Arshad and Khurram (2020) surveyed Facebook and Twitter followers to study the use of social media by a Pakistani governmental agency. Their study found that the quality of information provided by the agency was positively related to perceived transparency, perceived trust, and perceived responsiveness of that agency. It also served as an opportunity for online political participation. In other words, if a government offers quality information via social media, citizens may choose to engage in direct or indirect digital civic activities. Thus, by integrating social media into the daily work of public organizations and administrators, governments may restore the trust and confidence of their citizens.

In addition to governance, the adoption of existing and innovative ICT, especially social media, may enhance a city's brand and, therefore, encourage participatory governance. These technologies help improve a government's image by demonstrating its commitment to being more communicative in its decision-making efforts. By emphasizing democratic processes, municipalities are employing a democratic branding strategy (Wæraas et al., 2014). The building of a clear municipal brand may improve governance because it encourages better management and communication of governmental images (Eshuis & Klijn, 2012). In addition, a survey of local government officials found a positive relationship between the extent of social media usage and the perceived capacity of the government for crisis control (Graham et al., 2015).

These examples illustrate how the use of social media may impact the image of cities and local governments. This effect on government image is critical for improving public relations. From a public relations perspective, Kent and Li (202) proposed that, when using social media, professionals and practitioners must consider the interests of all stakeholders and the public by conducting genuine dialogic engagement. Social media allows for more dynamic, interactive, and inclusive processes for stakeholder

engagement. This increases the integrity of and the public's response to government entities (Sevin, 2016). Seen in this light, social media can be a powerful tool for image presentation and the building of relationship.

The way in which social media helps citizens participate may be explained by the impression of social media as an independent platform. Citizens may feel they can post their opinions and feedback without fear of these platforms being controlled or influenced by money or politics (Benkler, 2006). However, evidence points to the ill-advised use of social media to suppress political dissent (Curato & Fossati, 2020; Hintz, 2016). In other words, the convenience and promise of these technologies does not mask their challenges. If left unchecked, social media can have a negative impact on democratic governance. As some critics have observed, the misuse of social media contributes to increased polarization, which further divides and destabilizes democratic societies (Margetts, 2018). Fake news and misinformation are rampant across online and social media platforms (Allcott et al., 2019; Meel & Vishwakarma, 2020). In the worst circumstances, the permeance of social media in daily life could create a pathway for political manipulation by authoritarian regimes within and beyond their national borders to undermine democracy (Bossetta, 2018; Curato & Fossati, 2020).

The misappropriation of social media in public communication has severe consequences on policy decision making:

This shift from the traditional news paradigm profoundly impacts the construction of social perceptions and the framing of narratives; it influences policymaking, political communication, as well as the evolution of public debate, especially when issues are controversial. Users online tend to acquire information adhering to their worldviews, to ignore dissenting information_and to form polarized groups around shared narratives. (Cinelli et al., 2020, p. 1)

Stated another way, fake news spreads faster and wider than truth. Social media outlets are making efforts to counter such misinformation; however, the effects are limited (Margetts, 2018). Both the positive and negative attributes of social media are consequential in governance. Ideally, public managers should consider these impacts when applying social media as a communication tool to ensure the public interest is served.

Strategic Messaging Through Social Media

The sheer variety of social media tools enables governments to prioritize platforms based on target audience preferences. Governments can connect with their constituents and tailor their messaging to different groups of stakeholders. It is suggested that social media preferences vary by demographics (Auxier & Anderson, 2021; Correa et al., 2010; Kircaburun et al., 2020). For instance, Zavattaro and Brainard (2019) built a framework of public value creation through governmental social media applications by analyzing millennial social media use preferences. Demographic preferences in social media usage can enable targeted messaging and encourage creative messaging. Municipalities could adopt various types of messaging strategies depending on the situation.

Some government agencies have made extensive use of social media platforms in their interactions with citizens. For example, police departments tried various social media platforms to obtain citizen input for crisis communications, investigations, policy making, and image improvement (Meijer & Thaens, 2013). The choice of social media channel was found to depend on the content and purpose of an agency's message. YouTube messages for police investigations and public promotion are designed in a similar fashion; however, recruiting posts look different. More importantly, social media enabled police departments to establish their own media units, allowing them to showcase successes and strengthen police-citizen relations and community policing initiatives. In another example, through a quantitative analysis of Facebook posts from 52 U.S. municipalities, DePaula et al. (2018) suggested that local governments use four types of communication messages on social media: (1) information provision; (2) input seeking from stakeholders/the public; (3) online dialogic engagement or offline interaction; and (4) symbolic and presentational messages. The last style includes examples of self-

favorable presentation, political positioning, and branding/marketing. Their study found that 62% of the sampled posts were informational and 45% were symbolic and presentational.

Moreover, adjustments in governmental messaging may be contingent on how public managers view their relationships with residents. Wukich (2021) analyzed the Facebook posts of 62 cities to determine the way in which city officials address and engage residents during a crisis like a natural emergency (for example, Hurricane Florence in 2018). The study found that public managers approached residents as customers, partners, or citizens in their messaging. When the city managers addressed the public as customers, the message contained details about city operations, positive coverage, event disruption, or service disruption. When viewed as partners, residents were sent official posts with information about advisories, hazardous impacts, information gathering, preparedness, available resources, warnings, and situational information. Partner-oriented messages were common during a disaster period because customer-oriented content was more typical outside of the emergency duration. Citizen-oriented messaging, a less frequent kind of message, focuses on efforts to involve residents. This shows that a government's messaging approach on social media can be evidence of its administrative style.

Characteristics of a city will influence its social media presence, as well as how its messaging style is received by the public. Bonsón and Bednárová (2018) investigated the social media use of the five largest cities in 15 western European countries. Slightly more than one-third of the 75 cities sampled had established their own official YouTube channel. Among those cities that used YouTube to communicate, the larger cities were more active. A regional difference was also observed. As compared to municipalities in the Anglo-Saxon and Nordic regions, those in southern European countries had a higher average number of video uploads and viewer ratings. Those in the Germanic regions amassed the highest mean of video views and subscribers. Observations about the current varieties of messaging from municipal governments offer a basis for the current examination. As may be expected, the cities selected for this case study exhibited similar YouTube usage patterns (each with their own unique traits).

Government Communication With Social Media During the COVID-19 Pandemic

During the COVID-19 pandemic, government communications to the public became critical as cities and local governments began disseminating vital information through several mediums. Technology innovations made e-filing tools, online streaming of city council meetings, and other videoconferencing options available for some time. However, the pandemic has further diffused these innovations. In the U.S., video conferencing of judicial hearings became more adopted by the court systems (Baldwin et al., 2020). Existing features, such as e-filing and e-scheduling, were made customary in the courts (Puddister & Small, 2020). For years, cities were adopting updated digital technologies to conduct administrative tasks. The pandemic only accelerated these changes. For instance, public organizations adapted to the remote work trend, which gained popularity due to the pandemic and despite its required expansion of their digital technologies for internal and external communications (Fischer et al., 2022).

The fluid nature of the pandemic has driven citizens, health professionals, and governments to social media for sharing and learning about the emergency. It also impacted how people communicate, interact, and network. Many suggest that this "hyperconnected online state" has ushered in a new age of global knowledge in which information can be rapidly shared (Saenger et al., 2018). The nonstop use of platforms like YouTube, WhatsApp, Facebook, Telegram, and Twitter have created global communication networks to disseminate vital information to the public. It has also given users instant access to clinical trials, research study findings, and the perspectives of healthcare practitioners and researchers (Chan et al. 2020; Mulrennan & Colt, 2020).

The pandemic highlighted the role of YouTube in the dissemination of information and public communications. International organizations like the World Health Organization (WHO), European Commission, and national health ministries began to cooperate with digital service providers and social media companies like Facebook, Twitter, and Google to reduce the spread of misinformation and establish fact-checking measures (Lovari et al., 2020).

During public health crises (both previous and current), online platforms have contributed to a significant amount of misinformation. Li et al. (2020) found that more than a quarter of the most frequently viewed videos contain misinformation. Much of the vital, government-provided information was largely static (in the form of guidelines and statistical reports) and less appealing to the public. Videos that contain critical information from health professionals and government agencies were under-represented. They had less viewership despite high accuracy, usability, and quality. Equally important, Li et al. (2020) advocated for more research on the impacts of YouTube content and the publishing of videos onto other social media platforms. Moon and Lee (2020) analyzed Korean-language COVID-related YouTube videos that show how government-created content is reliable and credible. However, many individual user-generated clips were misleading. Moreover, credible videos were less popular among viewers. Given this problem, there is an urgent need to examine the use of YouTube among local governments due to the platform's broad viewership and evidence of misuse for spreading misinformation.

The misuse of social media by private individuals or groups is a matter of concern for governments. The posts may contribute to ineffective service delivery. They may even become detrimental to democratic governing. Thus, public administrators must understand the strategic use of social media channels for communication. Regarding the public sector, government agencies need to become active content creators. As observed by Chatfield and Brajawidagda (2013), YouTube possesses a promise to improve governance. The combination of this platform and the political will for reform are influential factors in the use of social media for promoting government transparency and citizen trust. Seen through this perspective, municipalities would benefit from producing and disseminating accurate and educational material via social media platforms. In addition, they should continuously monitor their accounts to ensure efficacious service for the public. Along with the technical aspects of government communications, public administrators must become cognizant of the day-to-day legal aspects of social media use. With these considerations, this article focuses on the YouTube channels of three cities to examine the strategic use of communication technology.

METHODS

This study compares YouTube communication strategies used by the U.S. cities of Tampa, Minneapolis, and Tulsa. The study's main objective is to understand each city's websites, unique communication characteristics, and supplementary media platforms. In addition, the study examines how each city's YouTube uploads were received by the public. This information may hold an implication for each city's digital brand.

Tampa, Minneapolis, and Tulsa were chosen based on population size, geographic location, and the ranking of their website's digital branding as reported in a study by Manoharan et al. (2023). In the study, Manoharan et al. (2023) examined the branding practices of 200 U.S. cities on their official websites. These three cities (Tampa, Minneapolis, and Tulsa) scored high marks according to the City Branding Index (Manoharan et al., 2023). The index was developed and modified from the framework proposed by Florek et al. (2006), in which ranked each city's brand identity, brand communication, brand engagement, and brand operations on its website (see Table 7 in the Appendix). Top scorers on the list were recognized for the consistent and effective use of their official website.

The current study examines the population size of these 200 cities to purposefully choose case cities with similar population sizes. We took geographic location into consideration when narrowing the regional selections. Research suggests that population size and regional differences in public administration could correlate with the metrics of YouTube channels of local governments in terms of video views, ratings, and number of subscribers (Bonsón & Bednárová, 2018). The current in-depth case study selects three cases from the list of high-performing cities based on the website branding index. We aim to make selections that demonstrate similarities (as indicated by population size) and diverge in the YouTube presentations due to their different region. Tampa, Minneapolis, and Tulsa have similar population sizes. They are also in different regions of the United States. The cities, therefore, match

the study's selection criteria. According to the U.S. Census Bureau, Tulsa is in the west southcentral region, Tampa is in the south Atlantic, and Minneapolis in the Midwest (U.S. Census Bureau, n.d.).

After identifying the cities, we used information on these official websites to analyze the content of their available communication methods. This preliminary investigation aimed to understand the range of communication tools adopted by these cities. In the next step, we examined each city's YouTube channel to identify differences or similarities in their adaptations of technology. we used a third-party add-on application for Google Sheets, YT Tracker, to automatically download data regarding YouTube video names, links, length, and number of views, likes, dislikes, and comments. The Google Sheets data was downloaded to Excel for statistical analyses. Each video's content was manually coded; the results were documented on the Excel sheets.

We limited the analyses to videos from January 2020 to August 2020. To add context, information about each city's publicity during the year was included in the case descriptions, per the recommendation of the case study methodology (Yin, 2014). This included understanding the contextual conditions pertinent to the selected cases. We collected data in this specific time and context because the early stages of the pandemic accelerated digital adaptation in society. Due to the exploratory nature of the study, we framed our analysis on Bonsón and Bednárová (2018), whose study provides a general quantitative overview of YouTube usage by western European municipalities in terms of content and selected measures of citizen responsiveness. The current study's aim, however, is distinct from that Bonsón and Bednárová (2018) because we chose a case study design to create an in-depth description and examination of associated contextual information of contemporary phenomena (Yin, 2014).

FINDINGS

The findings are organized into four subsections. The first subsection compares the socioeconomic characteristics of the three cities. It also assesses their overall media usage. The second subsection presents a qualitative examination of similarities in YouTube usage among the three cities. The third subsection focuses on differences in their applications. The fourth subsection provides the results of the statistical analysis regarding public responses to the three YouTube channels.

We first examined selected characteristics of Tampa, Minneapolis, and Tulsa. Table 1 lists basic information. In addition to their socioeconomic characteristics, we assessed their official websites to analyze communication tools. We used several items to score each city, including the types of media adopted and the availability of designated social media officers and policies (see Table 2). Among them, Minneapolis employed more communication tactics. All three cities had YouTube channels.

We based our analyses on data from the three cities' official YouTube channels. We examined descriptive information about each channel, including history, number of videos uploaded, channel views, subscribers, the city's connections, if any, to other associated channels, and links to alternative media (see Table 3). This shows the extent to which YouTube was used by the three municipal governments. It also illustrates how the official channel was connected to other known city brands, such as official websites and other social media channels.

We noted that the Tampa and Minneapolis channels were connected to other governmental and nongovernmental partners. Tampa's YouTube channel was connected to internal departments and to external local economic development partners and higher education institutions within the city. The Minneapolis YouTube channel was connected to nearby cities, including the state's capital, St. Paul, and other populous cities.

Similarities in YouTube Usage Among the Three Cities

We categorized each YouTube video based on purpose and content. We then used this information to analyze the similarity and divergence of YouTube usage among the three cities, including its use for communications. The results are shown in Figures 1, 2, and 3. At least two, if not all three, cities had videos related to the following: city administration; public service announcements; culture; diversity,

Table 1. Characteristics of the three cities

Municipal Fact	Tampa (% of population)	Minneapolis (% of population)	Tulsa (% of population)
Population Size			
2019 Population Estimates	399,700	429,606	401,190
Population Change (% change compared to 2010)	18.90%	12.30%	2.30%
Demographics			
Persons 65 years and over	12.30%	9.50%	13.70%
White	64.90%	63.80%	64.00%
Black or African American	24.20%	19.40%	15.30%
American Indian and Alaska Native	0.30%	1.40%	4.40%
Asian alone	4.20%	6.10%	3.30%
Others (two or more races)	3.80%	4.60%	7.60%
Hispanic or Latino	25.70%	9.60%	16.30%
White alone, not Hispanic or Latino	44.60%	59.80%	54.20%
Foreign Born	16.50%	15.70%	11.10%
Speak Language other than English at Home (% of persons age 5+ years)	27.40%	22.30%	18.10%
Education Levels			
High school graduate or higher (% of persons age 25+ years)	87.30%	89.70%	87.00%
Bachelor's degree or higher (% of persons age 25+ years)	37.30%	49.40%	30.80%
Income Level			
Median household income	$50,909	$58,993	$46,113
Land Area			
Population per Square Mile (2010)	2,960.20	7,088.30	1,991.90
Land Area in Square Miles (2010)	113.41	53.97	196.75
Municipal Budget Level	*FY2019-2020*	*FY2020*	*FY2019-2020*
Total Operating Budget	$1,041,578,000	$1,536,200,000	$854,532,000

Note: the fiscal year of Minneapolis starts on January 1, Tampa on October 1, and Tulsa on July 1.
(Source: QuickFacts of the U.S. Census Bureau, 2019; City of Minneapolis, n.d.; City of Tampa, 2020b; City of Tulsa, n.d.)

equity, and inclusion; public safety; city's history; webinars or presentations; and other city media (TV, radio, and news). All three cities posted videos in languages other than English.

Unsurprisingly, the topic of novel coronavirus was a focus in many of the cities' videos. We used "COVID" to code videos with updates on the disease. This could appear in the form of a press conference, public service announcement about safety advice, temporary policy mandates to curb the spread of the virus or ensure housing rights during the pandemic, and details about local economic recovery plans for businesses.

During this time, social justice movements in the U.S. were spurred on by the case of George Floyd, an unarmed Black man who was killed in police custody (Hill et al., 2020). Therefore, we

Table 2. Municipal communications score

	Tampa	Minneapolis	Tulsa
Does the city have a communications department? (Yes = 1/No = 0)	1	1	1
Does the communications department have in-house graphic design services?	1	1	1
Does the communications department have in-house publication services?	1	1	1
Does the city have a "government TV"?	1	1	1
Does the city have its own radio station(s)?	0	1	0
Does the city have a social media officer?	0	1	0
Does the city have social media policies?	0	1	0
Facebook	1	1	1
Twitter	1	1	1
YouTube	1	1	1
Instagram	1	0	1
LinkedIn	0	1	0
Nextdoor	1	0	0
Flickr	1	0	0
TikTok	1	1	0
Multimedia Communications Score	11	12	8

Table 3. Municipal YouTube channel description

	Tampa	Minneapolis	Tulsa
Channel History (Established Date)	September 14, 2010	April 16, 2008	March 27, 2008
Total Number of Video Uploaded	2,693	3,126	330
Channel Views	6,166,483 views	957,236 views	234,596 views
Channel Subscribers	12,700 subscribers	3,100 subscribers	1,060 subscribers
Official Channel Description	Yes	Yes	N/A
Links to City's Other Media	• Official municipal website • Facebook • Twitter • Instagram	• Official municipal website • Email address	• Official municipal website • Facebook • Twitter • Flickr
Links to Related YouTube Channels	*Municipal Departments:* • City of Tampa Meetings • Police Department • Fire Rescue Department *Non-Govt Partners:* • Local Chamber of Commerce • Local Economic Development Council • Tampa International Airport *Higher Education Institutions:* • University of Tampa • University of Southern Florida • Hillsborough Community College	*Nearby Major Municipalities:* • City of Saint Paul • City of Burnsville • City of Rochester (MN) • City of Bloomington (MN) *Govt. Partner:* • Hennepin County Library (41 libraries)	N/A

Note: Channels were accessed September 25, 2020.

Figure 1. Tampa YouTube video categories

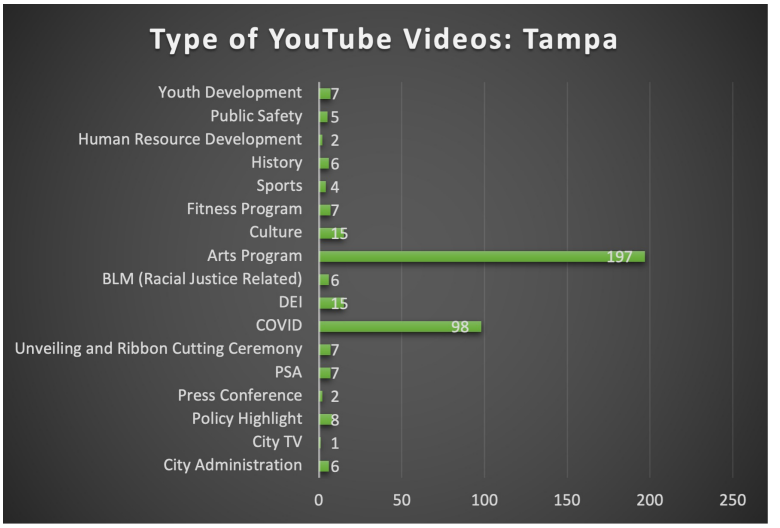


Figure 2. Minneapolis YouTube video categories

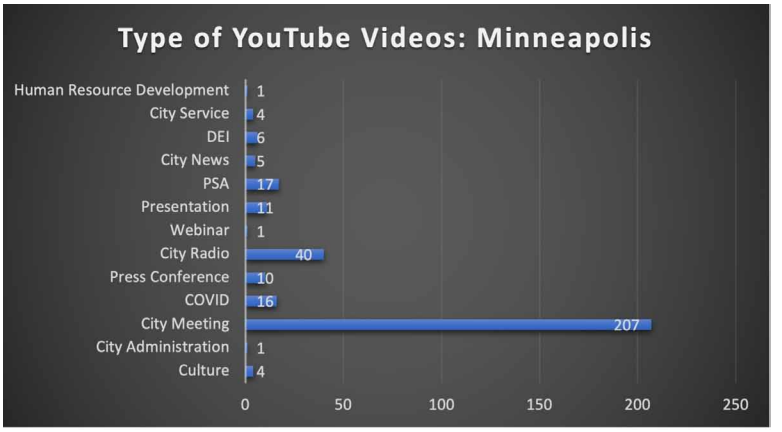
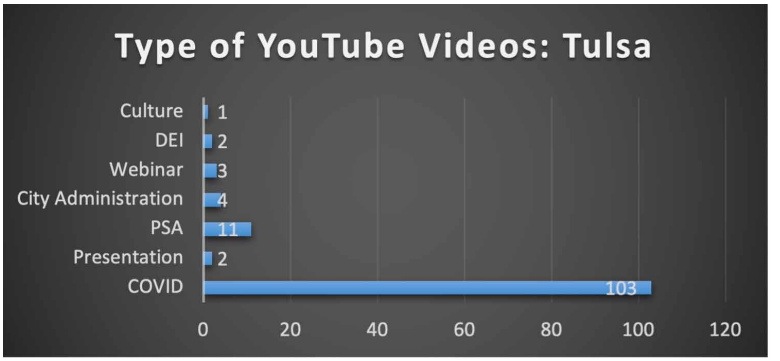


Figure 3. Tulsa YouTube video categories



wanted to learn if any of the videos addressed racial justice. We categorized some of Tampa's videos as such. Examples include the city's response to the movement inspired by the death of Floyd or policy initiatives from the police department and the city. We found that Tampa was the only city with this type of video. In fact, the city even had a video titled "In Memory of George Floyd." There were, however, no videos on the Minneapolis or Tulsa channels to classify under this theme. Minneapolis posted two press conference videos about the protest-related violence. Still, the Minneapolis videos were not expressed in the same tone as Tampa's content. Instead, Minneapolis highlighted the need to prevent violence in the city.

Divergence in YouTube Usage Among the Three Cities

The following profiles study three YouTube channels, providing distinct elements and observed differences. Case descriptions include contextual information that may be relevant to understanding each city's YouTube usage.

Tampa

Tampa was spared the earlier COVID-19 outbreak that ravaged the country's northeast region. However, as of July 2020, Florida experienced a growing number of daily cases. As many states slowly and cautiously re-adjusted and lifted restrictions, Florida reopened without a statewide mask mandate (Wood, 2020). As of this writing, Florida restaurants were open at full capacity. Cities were unable to impose fines on violations of local ordinances regarding face covering requirements (Calvin, 2020). However, Tampa remained one of the few cities that required indoor face coverings. In addition, its international airport announced that all passengers would be offered COVID-19 testing (City of Tampa, 2020a; Tampa International Airport, 2020).

Tampa's municipal government's primary channel, "City of Tampa," uploaded 393 videos between January 2020 and August 2020. Tampa used a separate, dedicated channel, "City of Tampa Meetings," to archive meetings related to city administration and policy. Based on the information found on the main page of the "City of Tampa Meetings" channel, the city decided to create this separate channel on June 4, 2020, to document city meetings. On this separate (but related) channel, we observed 251 videos of city meetings, dating to January 2019. A note on the front page of the "City of Tampa Meetings" channel provides users with instructions to obtain electronic copies of older city meetings. The current study's analysis was based on the primary channel, "City of Tampa."

Tampa's YouTube channel and programs used storytelling initiatives. It also integrated the arts, culture, history, and sports. Next, the article highlights elements not seen in the other two cities.

Among Tampa's videos was a series titled "Mayor's Youth Corps," which showcased a special in-house municipal youth development program. Through the program, Tampa high school students could participate in community service and leadership opportunities.

Tampa's channel also included approximately 200 videos related to arts education, theater performance, and storytelling by artists. Many of these videos were produced by the city's parks and recreation department. Each segment taught a homemade arts and crafts project. The arts program videos included a sub-series on creative arts theatre. These videos included improv, comedy skits, and storytelling. They were produced by a professional performing theatre group of five artists who were residents of the city (City of Tampa, n.d.).

In the case of Tampa, we also used COVID to code "Facebook live videos" in which the mayor addressed information related to the novel coronavirus. These included updates on daily cases, details about small business relief funds, and other relevant information. Many of these live updates featured guest speakers like experts in selected fields, healthcare professionals, and members of city council, other levels of government, the state legislature, nonprofit organizations, chambers of commerce, local universities, faith groups, and credit unions. We categorized these videos as COVID-related because the mayor started each session with a brief public health update with case numbers, steps the city was taking to address the spread of the virus, etc. After the update, the mayor and guest

would discuss the socio-economic consequences of the pandemic. These Facebook Live videos could cover issues beyond public health, such as challenges facing the nonprofit and private sectors, changes implemented after the reopening of businesses and public venues, and the guest speaker's response to difficulties in the community. Despite their breadth of subject, we coded these videos as COVID-related to provide a comparison with the other two cities. Therefore, the study did not create a separate category to denote the nature of the videos recorded live on Facebook.

Minneapolis

In 2020, the COVID-19 pandemic was one of several challenges for Minneapolis. In May, due to the killing of Floyd, the city experienced multiple demonstrations against police brutality. This pushed Black Lives Matters, the antiracism movement, into calling for nationwide and global protests. For months, (mostly) peaceful protests within the city experienced incidents of civil strife like violence instigated by white supremacist groups (Treisman, 2020). With news of other suspected cases of police brutality associated with racial bias, Minneapolis continued experiencing organized demonstrations against systemic racism. In August, hundreds marched in downtown Minneapolis in response to the shooting of Jacob Blake (Schuman, 2020). This background provides some context for our analysis of the city's videos.

Minneapolis uploaded 323 videos between January 2020 and August 2020. As compared with Tampa, it used YouTube to document its public meetings. Specifically, Minneapolis archived its city meetings on the platform. In the current analysis, the "city meeting" code was applied to videos of the many public meetings of the city council conducted by, for example, council committees and city boards. We counted 207 "city meeting" videos.

Videos of the 311 Center were also posted to introduce viewers to city services. A unique feature of the Minneapolis channel was the posting of recordings of the city's radio shows. These shows were also posted in languages other than English, including Spanish and Hmong. As Table 2 shows, among the three cities, Minneapolis was the only with official radio stations. Only one station broadcasts in English.

Minneapolis also had several videos categorized as "City News." These videos were compilations of video segments with city-produced clips. Another type of video, "Presentation," featured slide presentations on specific information. For example, one presentation demonstrated how small business vendors could apply for municipal contracts for outsourced projects.

As mentioned, we did not find videos dedicated to racial justice issues among those uploaded by Minneapolis within the sample timeframe. The city used some of its press conference videos to address police policies and its response to civil unrest. However, these videos seemed to serve documentation purposes. The city also had fewer videos dedicated to COVID-related topics compared with the other two cities.

Overall, this study found that the Minneapolis YouTube channel served as a repository of its city meetings and city radio recordings. In other words, it used YouTube to document its policymaking processes and administration.

Tulsa

Tulsa's unique history includes racial violence. The 1921 Race Massacre, when its prosperous Black neighborhood of Greenwood was attacked and burned down, left nearly 300 dead, hundreds injured, and thousands homeless (Astor, 2020). During the study period, Tulsa was embroiled in a fresh controversy after President Donald Trump chose to hold a large indoor campaign rally in its city. This was the first such event after the COVID lockdown. The event was held in defiance of public health guidance. In addition, it was scheduled for the day after Juneteenth, the annual commemoration marking the end of slavery. The controversy occurred as President Trump planned to hold the rally on June 19, 2020. After facing criticism, the rally was rescheduled to June 20, 2020 (Nuyen, 2020).

Our analysis shows that Tulsa uploaded 126 videos between January 2020 to August 2020. Interestingly, most of its videos were related to the novel coronavirus, including public health advice or safety measures. In total, we found 103 COVID-related videos. Many of these updates include presentations in three ethnic languages: Spanish, Burmese, and Zomi.

In addition, we found that several of Tulsa's public service announcement videos used animation. For example, in some videos, characters, such as talking animals, addressed environmental issues around the proper disposal of household items to prevent pollution. This method of communication was distinct from those of the other two cities.

Public Reaction to the YouTube Channels of the Three Cities

To further determine how the use of YouTube effected the way in which the public perceived a municipality, we examined selective measures of the channels, including average views, likes, dislikes, and comments per video (see Table 4). However, Tulsa disabled its channel's counters for the function of likes, dislikes, and comments.

Table 4. Descriptive statistics of the three municipal YouTube channels

	n (video count)	**Variable**	**Mean (S.D.)**	**Range**	**95% C.I.**
Tampa	393	Video Length (hh:mm:ss)	0:13:31 (0:38:15)	0:00:26 - 11:55:01	0:09:43 - 0:17:19
		Number of Views	275.079 (1612.057)	3 - 28117	115.206 - 434.952
		Number of Likes	4.789 (22.180)	0 - 336	2.589 - 6.988
		Number of Dislikes	0.405 (2.380)	0 - 40	0.169 - 0.641
		Number of Comments	0.664 (2.648)	0 - 26	0.402 - 0.927
	n (video count)	Variable	Mean (S.D.)	Range	95% C.I.
Minneapolis	323	Video Length (hh:mm:ss)	1:06:06 (1:14:43)	0:00:28 - 6:11:27	0:57:56 - 1:14:17
		Number of Views	222.019 (710.742)	5 - 11110	144.216 - 299.821
		Number of Likes	1.409 (4.444)	0 - 63	0.922 - 1.895
		Number of Dislikes	1.000 (3.324)	0 - 39	0.636 - 1.364
		Number of Comments	1.266 (5.565)	0 - 65	0.657 - 1.875
	n (video count)	Variable	Mean (S.D.)	Range	95% C.I.
Tulsa	126	Video Length (hh:mm:ss)	0:17:48 (0:26:13)	0:00:29 - 2:25:42	0:13:11 - 0:22:26
		Number of Views	78.063 (141.885)	3 - 1010	53.047 - 103.080
		Number of Likes	.	.	.
		Number of Dislikes	.	.	.
		Number of Comments	.	.	.

In addition to the descriptive statistics, we conducted an analysis of variance (ANOVA) and t-test to evaluate if there were any differences in these measures. The results are presented, respectively, in Tables 5 and 6. The findings show that, regardless of their differences in the number of videos uploaded between January 2020 and August 2020, the average number of views per video is not statistically significant among the three channels. A further examination of the t-test between Tampa and Minneapolis in terms of the average number of likes, dislikes, and comments reveals intriguing results. Tampa's YouTube videos earned more likes than Minneapolis. The difference is statistically significant ($p < .01$). Videos by Minneapolis were more disliked than Tampa ($p < .01$). However, there was no difference in the average number of comments per video between the two cities.

Table 5. Analysis of video views (ANOVA)

	n = video count	Number of Views Per Video		
		Sum of Views	Mean	S.D.
Tampa	393	108106	275.079	1612.057
Minneapolis	323	9836	222.019	710.742
Tulsa	126	71712	78.063	141.885
Analysis of Variance				
Source of Variation	Sum of Squares	d.f.	Mean Square	F	P-value
Between Groups	3708806.64	2	1854403.32	1.314	0.269
Within Groups	1183877064	839	1411057.29		
Total	1187585871	841			

Table 6. T-test of audience engagement

T-test	Tampa		Minneapolis		d.f.	t	p-value
	N = 393		N = 323				
	Mean	S.D.	Mean	S.D.			
Number of Likes	4.789	22.180	1.409	4.444	430	2.950	0.003
Number of Dislikes	0.405	2.380	1.000	3.324	568	-2.700	0.007
Number of Comments	0.664	2.648	1.266	5.565	440	-1.786	0.075

DISCUSSION

Beyond the effect on governance, digital channels like social media provide an effective tool for public managers to present and manage the images of a location to project its uniqueness. These efforts can make a location more competitive in attracting business and retaining or growing its population (Björner, 2013). Tampa, Minneapolis, and Tulsa were selected in this study due to their robust website engagement, as indicated by Manoharan et al. (2023). These cities have comparable population sizes and different regional locations. In addition, their exposure to media publicity during the study's timeframe made them appropriate cases for the in-depth case study. Therefore, these cities provide a unique opportunity to explore the use of YouTube in public communication by local governments during the early onset of the pandemic.

Tampa's media savvy stands out in the current case study. The municipality created a persona through its YouTube channel, incorporating storytelling, humor, and the arts to communicate and engage with the public. Dissimilarly, the Minneapolis YouTube channel documented the city's policymaking processes and administration. It employed YouTube as a tool for citizen services and municipal transparency. For example, the city operated FM and AM radio stations produced in English and two other languages. These recordings were regularly uploaded to the YouTube channel. Tulsa, by contrast, had a modest number of videos available. However, they focused on COVID-related clips, many of which catered to the city's ethnic communities who speak languages other than English.

Through additional analyses, we found differences in the number of videos uploaded, viewership, and channel subscriptions. Similarly, across several matrices, we found variations in videos uploaded, average video length, and average number of views, likes, dislikes, and comments per video. Furthermore, among the three cities, statistical analysis shows that, despite the number of videos uploaded, there is no difference in the average viewership per video. In other words, a city with a small YouTube repository might obtain the same level of viewership per video as a city with a larger number of videos.

Information provision and quality, usefulness, and accessibility via the reliable communication platform support governance and public participation (Arshad & Khurram, 2020; Wirtz et al., 2019). The usability and accessibility of governmental data help build a city brand based on transparency (Wæraas et al., 2014). Social media is a unique tool for brand identity due to its interactive and dynamic nature (Linders, 2012; Sevin, 2016). The findings suggest that local governments with a certain official presence on social media (with adequate and accurate content) can improve transparency and promote public engagement.

A city's official website operates as its online face. This study found that a city's YouTube channel also impacts the public's perception of the municipality. This, in turn, can have implications for the city's digital brand. All three cities' YouTube channels provided links to their individual websites. Two also linked to selected social media pages. This suggests a degree of social media integration in their overall communication toolkit.

A city can assess its brand image by comparing the average number of likes and dislikes for its videos. From January 2020 to August 2020, Tampa received a statistically significant number of likes greater than Minneapolis, which, in turn, received a statistically significant number of dislikes greater than Tampa.

The literature shows that municipalities choose different messaging styles based on purpose (DePaula et al., 2018; Meijer & Thaens, 2013). Messaging may also vary depending on the city's view of the public as customers, partners, or citizens (Wukich, 2021). It is possible that Tampa's storytelling style on YouTube contributes to a more positive response from its viewers. This consideration might add dimensions to the future examination of the relationship between public perceptions of a city and its social media presentation styles.

The current research results show that the three cities used YouTube to communicate with the public, albeit in different ways. As the dominant topic of the year during the study period, COVD-19 was a prominent feature of each YouTube channel. we found that the cities used these videos to update the public on pandemic safety measures. Surprisingly, racial justice-related videos were only found on one city's channel. It is beyond the scope of our study; therefore, we can only speculate that, despite the importance of racial justice, it remains a divisive issue.

Recommendations for Practices and Research

Overall, YouTube allows governments to accurately inform the public and provide a limited channel for public engagement. When used appropriately, social media can increase administrative and policy transparency, improving trust in government. Based on the current study's findings and reflections on previous research, we have the following recommendations for enhancing governance through public communications.

First, we recommend that municipal governments develop YouTube policies to outline purposes and goals. With defined purposes, an administrator is better equipped to develop appropriate messaging when seeking to provide information, seek input from stakeholders/the public, engage in

online dialogue or offline interactions, or broadcast a symbolic and presentational image. Second, when establishing a designated YouTube channel, a city administrator should consider making it accessible to both the public and marginalized, vulnerable communities. This can be achieved by providing captions in different languages. Third, to reinforce the city's core brand message and broaden its viewership, the city's YouTube channel could be integrated into the city's other traditional and social media productions, such as TV, radio, Twitter, Facebook, Instagram, and TikTok. YouTube's live function, as well as those of other social media channels, could be used to telecast city council meetings, press conferences, and other events (even post-pandemic). Finally, as a city continues to build its social media presence, it would be optimal to use related performance metrics to track and improve viewership. Besides tracking these basic metrics, it would be prudent for public managers to systematically solicit public feedback via YouTube channels and respond when appropriate to strengthen good governance practices.

This study also provides several directions for future research. This case study shows the existing gap in understanding the motives of public managers in using YouTube and the extent of citizen engagement on the platform. Future studies could apply qualitative interviews or surveys of municipal managers in a larger pool of cities to discern how its usage impacts local management and how citizen responses (e.g., feedback, comments, and questions) are addressed. Similarly, a large-scale citizen survey could help capture the public's perceptions. While the current study focused on a period related to COVID-19, this study's aim was not to analyze the effects of YouTube usage on health policy implementation at the local level. Therefore, this could be a topic for exploration in later studies. Future investigations could also focus on testing the relationship between different styles of communication strategies on social media and a city's perceived democratic brands as measured by its social media reception. Similarly, future studies could consider the correlations between YouTube usage and other demographic measures like transparency, accountability, diversity, equity, and inclusion in cities.

Study Limitations

The study's data on the public's response to the three cities' YouTube channels is limited. First, during the study period, Minneapolis was at the center of a major civil rights controversy (not witnessed in the U.S. for decades). This, in turn, could have affected the measurements. In addition, the analysis of the mean difference in the average number of likes and dislikes per video was limited to the comparison of two cities because there was no data for Tulsa. Second, the case study was designed to explore three cities. This may not be generalizable across other cases.

CONCLUSION

Information technologies have revolutionized government communication with the public. The global pandemic has accelerated the need to use innovative methods to guide the public as it navigates critical information. Its use ensures the continuous operation of governing, administration, and service delivery. Social media, in coordination with official government websites, can provide informational communication and engagement.

At the local level, cities are making their presence known on social media. Beyond providing information, YouTube holds immense promise for relationship building, city brand presentation, and citizen participation. Cities can utilize this video-based platform to effectively communicate with the public, improving accessibility to accurate and timely information. In other words, a city's strategic use of YouTube could be instrumental in increasing transparency and helping craft a forward-looking image that may lead to improved trust in the government.

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REFERENCES

Allcott, H., Gentzkow, M., & Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research and Politics*, *6*(2), 1–8. doi:10.1177/2053168019848554

Arshad, S., & Khurram, S. (2020). Can government's presence on social media stimulate citizens' online political participation? Investigating the influence of transparency, trust, and responsiveness. *Government Information Quarterly*, *37*(3), 101486. Advance online publication. doi:10.1016/j.giq.2020.101486

Astor, M. (2020, June 20). What to know about the Tulsa Greenwood massacre. *New York Times*. https://www.nytimes.com/2020/06/20/us/tulsa-greenwood-massacre.html

Auxier, B., & Anderson, M. (2021, April 7). *Social media use in 2021.* Pew Research Center. https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/

Baldwin, J. M., Eassey, J. M., & Brooke, E. J. (2020, July 12). Court operations during the COVID-19 pandemic. *American Journal of Criminal Justice*, *45*(4), 743–758. doi:10.1007/s12103-020-09553-1 PMID:32837170

Bannister, F., & Connolly, R. (2012). Defining e-governance. *e-Service Journal*, *8*(2), 3–25. doi:10.2979/eservicej.8.2.3

Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. Yale University Press. doi:10.1177/1084713807301373

Bennett, L. V., & Manoharan, A. P. (2017). The use of social media policies by US municipalities. *International Journal of Public Administration*, *40*(4), 317–328. doi:10.1080/01900692.2015.1113182

Björner, E. (2013). International positioning through online city branding: The case of Chengdu. *Journal of Place Management and Development*, *6*(3), 203–226. doi:10.1108/JPMD-03-2013-0006

Boisen, M., Groote, P., Terlouw, K., & Couwenberg, O. (2018). Patterns of place promotion, place marketing and/or place branding in Dutch municipalities. *Place Branding and Public Diplomacy*, *14*(2), 78–88. doi:10.1057/s41254-017-0083-5

Bonsón, E., & Bednárová, M. (2018). The use of YouTube in western European municipalities. *Government Information Quarterly*, *35*(2), 223–232. doi:10.1016/j.giq.2018.04.001

Bonsón, E., Pereab, D., & Bednárovác, M. (2019). Twitter as a tool for citizen engagement: An empirical study of the Andalusian municipalities. *Government Information Quarterly*, *36*(3), 480–489. doi:10.1016/j.giq.2019.03.001

Bossetta, M. (2018). The weaponization of social media: Spear phishing and cyberattacks on democracy. *Journal of International Affairs, 71*(1.5), 97–106.

Calvin, B. C. (2020, September 25). Florida reopens state's economy despite ongoing pandemic. *AP News.* https://apnews.com/article/virus-outbreak-florida-business-ron-desantis-donald-trump-e64376aba8306681b53d52956d15bcd7

Chan, A. K. M., Nickson, C. P., Rudolph, J. W., Lee, A., & Joynt, G. M. (2020). Social media for rapid knowledge dissemination: Early experience from the COVID-19 pandemic. *Anaesthesia*, *75*(12), 1579–1582. Advance online publication. doi:10.1111/anae.15057 PMID:32227594

Chatfield, A. T., & Brajawidagda, U. (2013). Political will and strategic use of YouTube to advancing government transparency: An analysis of Jakarta government-generated YouTube videos. In M. A. Wimmer, M. Janssen, & H. J. Scholl (Eds.), *Electronic government* (pp. 26–37). doi:10.1007/978-3-642-40358-3_3

Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C. M., Brugnoli, E., Schmidt, A. L., Zola, P., Zollo, F., & Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*, *10*(1), 16598. doi:10.1038/s41598-020-73510-5 PMID:33024152

City of Minneapolis. (n.d.). *2020 Council Adopted Budget*. https://www2.minneapolismn.gov/budget/2020-budget

City of Tampa. (2020a). *FY2020 Budget*. Tampa.gov. https://www.tampa.gov/budget/fy2020

City of Tampa. (2020b). *Executive Order 2020-30: Face coverings required*. https://www.tampagov.net/emergency-management/covid-19/face-covering

City of Tampa. (n.d.). *Creative Arts Theatre Company*. https://www.tampa.gov/parks-and-recreation/activities-recreation/arts-and-theatre/creative-arts-theatre

City of Tulsa. (n.d.). *City Budget*. https://www.cityoftulsa.org/government/departments/finance/financial-reports/city-budget/

Correa, T., Willard, A., Homero, H., & Zúñiga, G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, *26*(2), 247–253. doi:10.1016/j.chb.2009.09.003

Curato, N., & Fossati, D. (2020). Authoritarian innovations. *Democratization*, *27*(6), 1006–1020. doi:10.1080/13510347.2020.1777985

DePaula, N., Dincelli, E., & Harrison, T. M. (2018). Toward a typology of government social media communication: Democratic goals, symbolic acts and self-presentation. *Government Information Quarterly*, *35*(1), 98–108. doi:10.1016/j.giq.2017.10.003

Eom, S.-J., & Lee, J. (2022). Digital government transformation in turbulent times: Responses, challenges, and future direction. *Government Information Quarterly*, *39*(2), 101690. Advance online publication. doi:10.1016/j.giq.2022.101690 PMID:35291492

Eshuis, J., & Klijn, E. H. (2012). *Branding in governance and public management*. Routledge. doi:10.4324/9780203145159

Fischer, C., Siegel, J., Proeller, I., & Drathschmidt, N. (2022). Resilience through digitalisation: How individual and organisational resources affect public employees working from home during the COVID-19 pandemic. *Public Management Review*, 1–28. Advance online publication. doi:10.1080/14719037.2022.2037014

Florek, M., Insch, A., & Gnoth, J. (2006). City council websites as a means of place brand identity communication. *Place Branding*, *2*(4), 276–296. doi:10.1057/palgrave.pb.6000036

Graham, M., & Avery, E. J. (2013). Government public relations and social media: An analysis of the perceptions and trends of social media use at the local government level. *The Public Relations Journal*, *7*(4).

Graham, M. W., Avery, E. J., & Park, S. (2015). The role of social media in local government crisis communications. *Public Relations Review*, *41*(3), 386–394. doi:10.1016/j.pubrev.2015.02.001

Hantrais, L., Allin, P., Kritikos, M., Sogomonjan, M., Anand, P. B., Livingstone, S., Williams, M., & Innes, M. (2021). Covid-19 and the digital revolution. *Contemporary Social Science: Journal of the Academy of Social Sciences*, *16*(2), 256–270. doi:10.1080/21582041.2020.1833234

Haro-de-Rosario, A., Sáez-Martín, A., & del Carmen Caba-Pérez, M. (2018). Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media & Society*, *20*(1), 29–49. doi:10.1177/1461444816645652

Hill, E., Tiefenthäler, A., Triebert, C., Jordan, D., Willis, H., & Stein, R. (2020, May 31). How George Floyd was killed in police custody. *New York Times*. https://www.nytimes.com/2020/05/31/us/george-floyd-investigation.html

Hintz, A. (2016). Restricting digital sites of dissent: Commercial social media and free expression. *Critical Discourse Studies*, *13*(3), 325–340. doi:10.1080/17405904.2016.1141695

Hong, H. (2013). Government websites and social media's influence on government-public relationships. *Public Relations Review*, *39*(4), 346–356. doi:10.1016/j.pubrev.2013.07.007

Kent, M. L., & Li, C. (2020). Toward a normative social media theory for public relations. *Public Relations Review*, *46*(1), 101857. Advance online publication. doi:10.1016/j.pubrev.2019.101857

Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2020). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the big five of personality traits, social media platforms, and social media use motives. *International Journal of Mental Health and Addiction*, *18*(3), 525–547. doi:10.1007/s11469-018-9940-6

Lee-Geillera, S., & Lee, T. (2019). Using government websites to enhance democratic e-governance: A conceptual model for evaluation. *Government Information Quarterly*, *36*(2), 208–225. doi:10.1016/j.giq.2019.01.003

Li, H. O. Y., Bailey, A., Huynh, D., & Chan, J. (2020). YouTube as a source of information on COVID-19: A pandemic of misinformation? *BMJ Global Health*, *5*(5), e002604. doi:10.1136/bmjgh-2020-002604 PMID:32409327

Lin, C., Braund, W. E., Auerbach, J., Chou, J.-H., Teng, J.-H., Tu, P., & Mullen, J. (2020). Policy decisions and use of information technology to fight Covid-19, Taiwan. *Emerging Infectious Diseases*, *26*(7), 1506–1512. doi:10.3201/eid2607.200574 PMID:32228808

Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly*, *29*(4), 446–454. doi:10.1016/j.giq.2012.06.003

Lovari, A., D'Ambrosi, L., & Bowen, S. (2020). Re-connecting voices. The (new) strategic role of public sector communication after Covid-19 crisis. *Partecipazione E Conflitto*, *13*(2), 970–989. doi:10.1285/i20356609v13i2p970

Lucarelli, A., & Berg, P. (2011). City branding: A state-of-the-art review of the research domain. *Journal of Place Management and Development*, *4*(1), 9–27. doi:10.1108/17538331111117133

Manoharan, A., & Holzer, M. (2012). *E-governance and civic engagement: Factors and determinants of e-democracy*. IGI Global. doi:10.4018/978-1-61350-083-5

Manoharan, A. P., & Ingrams, A. (2018). Conceptualizing e-government from local government perspectives. *State & Local Government Review*, *50*(1), 56–66. doi:10.1177/0160323X18763964

Manoharan, A. P., Melitski, J., & Holzer, M. (2022). Digital governance: An assessment of performance and best practices. *Public Organization Review*, 1–19. doi:10.1007/s11115-021-00584-8

Manoharan, A. P, Schmidthuber, L., & Wu, H.-C. (2023). *The evolution of public branding in the digital age: An empirical investigation of us cities* [Unpublished manuscript].

Manoharan, A. P., & Wu, H.-C. (2021). Digital branding for government public relations. In M. Lee, G. Neeley, & K. Stewart (Eds.), *The practice of government public relations* (2nd ed.). Routledge. doi:10.4324/9781003177654-9

Margetts, H. (2018). Rethinking democracy with social media. *The Political Quarterly*, *90*(1), 107–123. doi:10.1111/1467-923X.12574

Marpaung, Z. S., & Santoso, A. D. (2020). YouTube adoption: Promoting local government transparency? *Advances in Economics. Business and Management Research*, *122*, 1–20. doi:10.2991/aebmr.k.200301.001

Meel, P., & Vishwakarma, D. K. (2020). Fake news, rumor, information pollution in social media and web: A contemporary survey of state-of-the-arts, challenges and opportunities. *Expert Systems with Applications*, *153*(1), 112986. Advance online publication. doi:10.1016/j.eswa.2019.112986

Meijer, A., & Thaens, M. (2013). Social media strategies: Understanding the differences between North American police departments. *Government Information Quarterly*, *30*(4), 343–350. doi:10.1016/j.giq.2013.05.023

Milakovich, M. E. (2022). *Digital governance: Applying advanced technologies to improve public service* (2nd ed.). Routledge.

Moon, H., & Lee, G. H. (2020). Evaluation of Korean-language COVID-19-related medical information on YouTube: Cross-sectional infodemiology study. *Journal of Medical Internet Research*, *22*(8), e20775. doi:10.2196/20775 PMID:32730221

Mulrennan, S., & Colt, H. (2020). Medical information and social media in the time of COVID-19. *Respirology (Carlton, Vic.)*, *25*(6), 578–579. doi:10.1111/resp.13832 PMID:32391603

Nuyen, S. (2020, June 13). *Trump reschedules Tulsa campaign rally "out of respect" for Juneteenth.* NPR. https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/06/13/876505244/trump-reschedules-tulsa-campaign-rally-out-of-respect-for-juneteenth

Ortiz-Ospina, E. (2019, September 18). *The rise of social media*. https://ourworldindata.org/rise-of-social-media

Perrin, A., & Anderson, M. (2019, April 10). *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018.* Pew Research Center. https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/

Pew Research Center. (2019, June 12). *Social media fact sheet*. https://www.pewresearch.org/internet/fact-sheet/social-media/

Puddister, K., & Small, T. A. (2020). Trial by Zoom? The response to COVID19 by Canada's courts. *Canadian Journal of Political Science*, *1–5*(2), 373–377. Advance online publication. doi:10.1017/S0008423920000505

Sadler, R., Cleave, E., Arku, G., & Gilliland, J. (2016). A comparative analysis of place branding in Michigan and Ontario. *Urban Research & Practice*, *9*(1), 16–36. doi:10.1080/17535069.2015.1037341

Saenger, A. K., Berkwits, M., Carley, S., Haymond, S., Ennis-O'Connor, M., Sherbino, J., & Smith, S. W. (2018). The power of social media in medicine and medical education: Opportunities, risks, and rewards. *Clinical Chemistry*, *64*(9), 1284–1290. doi:10.1373/clinchem.2018.288225 PMID:29789353

Schmidthuber, L., Stütz, S., & Hilgers, D. (2019). Outcomes of open government: Does an online platform improve citizens' perception of local government? *International Journal of Public Sector Management*, *32*(5), 489–507. doi:10.1108/IJPSM-02-2018-0056

Schuman, D. (2020, August 30). Hundreds march through downtown Minneapolis protesting Jacob Blake's shooting. *CBS Minnesota*. https://minnesota.cbslocal.com/2020/08/30/hundreds-march-through-downtown-minneapolis-protesting-jacob-blakes-shooting/

Sevin, E. (2016). Branding cities in the age of social media: A comparative assessment of local government performance. In M. Sobaci (Ed.), *Social media and local governments. Public administration and information technology* (Vol. 15, pp. 301–320). Springer. doi:10.1007/978-3-319-17722-9_16

Stojanovic, I., Andreu, L., & Curras-Perez, R. (2018). Effects of the intensity of use of social media on brand equity: An empirical study in a tourist destination. *European Journal of Management and Business Economics*, *27*(1), 83–100. doi:10.1108/EJMBE-11-2017-0049

Tampa International Airport. (2020, September 29). *TPA launches first in the nation COVID-19 testing for all departing and arriving passengers*. https://news.tampaairport.com/tpa-launches-first-in-the-nation-covid-19-testing-for-all-departing-and-arriving-passengers/

Treisman, R. (2020, July 28). *Minneapolis police reportedly identify viral "umbrella man" as white supremacist.* NPR. https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/07/28/896515022/minneapolis-police-reportedly-identify-viral-umbrella-man-as-white-supremacist

United Nations. (2001). *Benchmarking e-government: A global perspective*. https://publicadministration.un.org/en/Research/UN-e-Government-Surveys#blog

U.S. Census Bureau. (2019). *Quick Facts*. https://www.census.gov/quickfacts/

U.S. Census Bureau. (n.d.). *Census regions and divisions of the United States*. https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

Wæraas, A., Bjørnå, H., & Moldenæs, T. (2014). Place, organization, democracy: Three strategies for municipal branding. *Public Management Review*, *17*(9), 1282–1304. doi:10.1080/14719037.2014.906965

Wang, C. J., Ng, C. Y., & Brook, R. H. (2020). Response to COVID-19 in Taiwan: Big data analytics, new technology, and proactive testing. *Journal of the American Medical Association*, *323*(14), 1341–1342. doi:10.1001/jama.2020.3151 PMID:32125371

Wirtz, B. W., Weyerer, J. C., & Rosch, M. (2019). Open government and citizen participation: An empirical analysis of citizen expectancy towards open government data. *International Review of Administrative Sciences*, *85*(3), 566–586. doi:10.1177/0020852317719996

Wood, D. S. (2020, June 24). *What's behind the surge of Covid-19 cases in Florida.* CNN. https://www.cnn.com/2020/06/24/us/florida-coronavirus-cases-surge/index.html

Wukich, C. (2021). Government social media engagement strategies and public roles. *Public Performance & Management Review*, *44*(1), 187–215. doi:10.1080/15309576.2020.1851266

APPENDIX

Table 7. City branding index (Manoharan et al., 2023)

Categories	Items
Brand identity	Slogan Logo Video Webcam/Picture Gallery Maps Sister cities
Brand communication	News/Events Calendar Community Board Members Contact Information (phone, email, addresses) General Information/Overview of City Target Audiences (Vision/Mission/Purpose) (Search Engine) Newsletter/ e-Notifications Mobile Application
Brand engagement	Online Feedback Form Opinion Survey Real-Time Chat Social Networking (e.g., Facebook)
Brand operations	Public Notices Plans/Policies Bylaws/Charter Reports and Publications Open Data

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