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A comparative analysis of social media usage: the case of social media use by USA and Brazilian capital cities

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Abstract: Social media has completely transformed the way people communicate in every sphere of life. A comparative analysis is conducted in the paper, covering the capitals of the USA and Brazil. The aim of the research was to find out if the USA and Brazil capitals have accounts on social networks, which social networks they are using, whether links to those social networks are at the top or bottom of the official website home pages of the cities involved, and whether they use social networks for promotion and/or communication with citizens. The analysis includes 78 capital cities, 51 in the USA and 27 in Brazil. The research results showed that bodies competent for social systems in the states covered by the analysis recognise the importance of social networks in the modern world of communication.

Keywords: social networks; comparative analysis; USA; Brazil.

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1 Introduction

At the end of the 20th and the beginning of the 21st century, digital transformation led to the information society – a new socio-cultural environment affecting all spheres of society and radically changing technology, people and society as a whole (Aleksandrovna et al., 2017; Bauer et al., 2015; Ershova and Hohlov, 2018). “Globally, about 3.77 billion people are using the internet through modern gadgets such as smartphones and computers with coverage of 81% of the population in the developed world and 41% of the population in the developing world. Nearly, 71% of the world internet users are constituted by young people aged 15–24” (Ramesh Masthi et al., 2018).

The emergence of internet and then social media has completely transformed people’s lives and ways of communication. Today, social media is an integral part of the everyday lives of most people all over the world. Communication is increasingly taking place in a virtual environment and, therefore, the social system factors need to adapt to the new changes. The new society should aim for openness and interactivity, and therefore ‘Social media are must-have tools for Government 2.0’ (Yi et al., 2013).

New technologies provide new dimensions within the interaction between governments and citizens. Traditional channels of communication are losing their monopoly (Bayaskalanova, 2018). In an effort to improve communication between the state and citizens (through greater awareness and greater interaction based on exchange of views) (Medaglia and Zhu, 2017) and make the public administration more responsive, the authorities must rely on social networks, in terms of strengthening the government-individual relationship (Oliveira and Welch, 2013; Mossberger et al., 2013; Barbosa, 2017). As new generations increasingly use social networks as a form of social communication, it is logical to expect that these generations will use social media in the future as their primary method of interaction with the authorities (Bertot et al., 2012; Gruzd et al., 2018; Guo et al., 2021), and since the capitals are a kind of administrative authority, they are truly important in popularising this form of communication. In this context, we can say that today social media have become a common organisational resource of governments and public administrations. Good practices of governance make influence on citizens attitudes and behaviour toward government (Mansoor, 2021), while trust in institutions significantly influences on citizens use of social media to interact with government (Homburg and Moody, 2021).

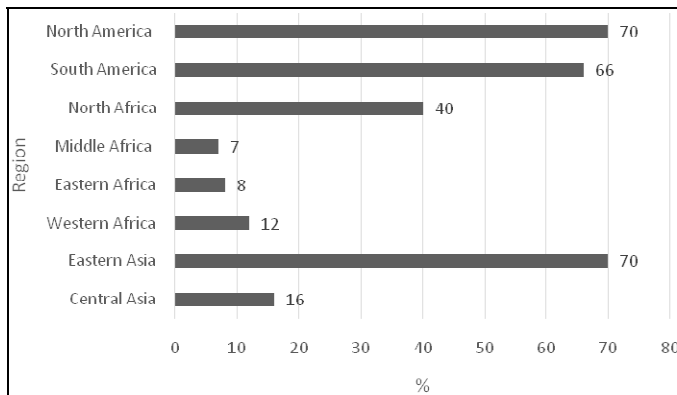
The COVID-19 pandemic (Beljić and Glavaški, 2021; Figus, 2021) has accelerated the digitisation of government services and informing through social media. As social networks are often used to misinform citizens of government, government are increasingly using this medium to combat it (Chen et al., 2021; Pang et al., 2021),

although some research shows that online media have less impact on the satisfaction with trust in government in relation to other offline media (Lee, 2021). According to Lee (2021), local governments are increasingly relying on new media of communication within the framework of communication with their citizens, and therefore it is necessary to assess in some way the effectiveness of communication efforts of local governments.

2 Related research

The emergence of social media introduced completely new possibilities for interaction between people, and therefore other actors in society. According to the Global Digital Yearbook for 2019, 45% of the world's population are active social media users, while 42% of the total population are mobile social media users (Hootsuite, 2019). According to the same report, social media penetration by region based on monthly active users of the most active platforms in each country compared to total population is as follows (see Figure 1).

Figure 1 Social media penetration by region based on monthly active users of the most active platforms in each country compared to total population



Source: Authors according to Digital 2019: Global Digital Yearbook (Hootsuite, 2019)

Figure 1 shows significant differences between the regions.

Business organisations are increasingly aware of the importance of social media when interacting with their stake holders. In the same manner, authorities are turning to the use of social media, and Mergel (2013) states the following as the main reasons for using social media:

- Transparency – Providing information through as many channels as possible.
- Participation – Engaging citizens through two-way communication and active networking.
- Collaboration – Involving citizens directly in government activities and creating innovations.

Achieving transparency, participation and collaboration through social networks is determined by four factors (Bayaskalanova, 2018):

- Fast feedback – Faster, almost instantaneous communication between government and citizens.
- Open discussion of public administration issues.
- Open access – Easier access to information increases the level of confidence of citizens in government.
- Fast data distribution.

The primary goal of the authorities, and therefore of the capitals, is to be of service to the citizens, to which social media can greatly contribute. The potential of social media as a channel for establishing an interaction with citizens should be fully exploited. Social media is used to improve both the transparency of information and data and the transparency of the process (Guillamón et al., 2016; Yi et al., 2013). However, Megel (2013) points out that the authorities mainly use social media to recycle information from other channels of information, indicating that they use it for the mere provision of information without taking citizens' views and their feedback into account, even though social media is not a mass one-way media (Yi et al., 2013). A similar study was confirmed by a study conducted by Yavetz and Aharony (2021), which points out that ministries, even if they have social media accounts, usually have modest content that mostly points to their official websites (research done in Israel). Municipal government agencies in Indonesia use social media primarily to inform citizens and to a lesser extent to gather information from citizens (Cho and Melisa, 2021). Megel (2013) states that this kind of use of social media can only harm reputation of governments, i.e., in this case, reputation of the capitals.

The research conducted by Snead (2013) showed that 84% of executive agencies use social networks. Oliveira and Welch (2013) analysed the use of social media across local governments in the USA and found that 88% of local governments use social media. Most of them use Facebook 92%, then Twitter 78%, YouTube 56% and LinkedIn 50%. Facebook is also most commonly used in the Czech regions, in 92% of cases, while only 38% of regional authorities use other social networks (Špaček, 2018). Twitter is the most widely used social network in the UK by social media active councils, used by 89% of councils, while Facebook is used by just under 70% of all social media active authorities (Ellison and Hardey, 2014).

2.1 Research design

Internet-mediated research (IMR) (Hewson, 2017) was used for research design. The research was conducted in February 2019 and covered 78 state capitals (51 states in the USA and 27 states in Brazil). First, a spreadsheet was created with the names of capitals in the USA and Brazil and their web addresses. New worksheets were then created for the following social networks: Facebook, YouTube, Twitter, Instagram and LinkedIn. The websites of these cities were analysed in search of links to social networks. Quantitative indicators across individual social networks were collected using social network analysis tools. Due to limited space, only a fraction of the indicators collected from individual social networks will be presented in the paper.

2.2 *Research questions*

Given the inevitable use of social networks by people, organisations and authorities, the primary aim of the paper is to examine the use of social networks by the capitals, as public institutions, through the answers to the four research questions given below.

RQ1 To analyse which social networks are used by capital cities in the USA and Brazil.

Snead (2013) states that the placement of social media links may limit visitors' access to social network accounts. In 62% of public institutions using social networks, a link to social networks is on the visible part of the homepage (top to middle level of the home page). Since the position of a link to social networks is an important factor for citizens' access to these networks, the second research question is as follows:

RQ2 To analyse whether links to active social media accounts are on the capitals' website homepages and, if so, whether at the top or bottom of the homepage.

Based on the research, Alam (2016) concluded that pages with more posts have more followers, and thus photos and videos will attract more interaction. Similar to the previous conclusion, the social network profiles of state institutions, where posts are less frequently added, visual content is used to a lesser extent and bureaucratic vocabulary is used in posts, will have a smaller number of followers. The same author states that social network pages, by which the authorities want to achieve a greater level of interaction, should minimise the use of links, while pages that focus on providing information should contain more links. Alam (2016) also points out that content on social networks should be written in an understandable (non-bureaucratic) language and designed to encourage interaction. Since the mere existence of social network accounts of the capitals is not a sufficient indicator of interactivity, it is necessary to examine other indicators related to activities on social networks. Therefore, the third research question is as follows:

RQ3 To analyse the major quantitative indicators of the particular social networks used by the capitals in the USA and Brazil.

The Korean Government [Korea is ranked no. 1 in the Online Service Index and E-Participation Index in terms of e-government development by the 2010 UN Global E-Government Survey (Yi et al., 2013)] classifies social networks into two categories:

- Information centred social media tools (Twitter and YouTube) – Social networks in this category are used for publishing information.
- Relation centred social media tools (Facebook and LinkedIn) – Social networks in this category are used for building relationships between citizens and government.

Based on the previous classification and use of certain social media, it is possible to find out if the capitals are more information or relation centred or whether information and maintaining a relationship with citizens are of equal importance. Given the above, the fourth research question was defined:

RQ4 To analyse the focus of Brazil and the USA capitals when it comes to using social media – whether sharing information or connecting with citizens and strengthening citizens-government relations.

Table 1 Basic features of the most widely used social networks

<i>Social media</i>	<i>Best for</i>	<i>Suitable for</i>	<i>Users</i>	<i>Risks</i>	<i>Monitoring</i>
Facebook	Referring users to content; link visibility, it simply directs users to other pages.	Sharing Instagram photos. Useful for communicating according to a predetermined plan.	The largest audience.	Negative comments are very visible, and deleting them is considered censorship.	Difficult due to privacy settings, but there are technical options to monitor this communication.
Twitter	Promoting content and reaching audiences quickly, pre-reporting from events.	Engaging users, answering ad hoc questions, as well as pre-prepared ones.	Potentially the most numerous audience, but effort is needed to find stakeholders.	Ease of use can lead to incidental errors that are easily spread online.	Great monitoring options.
Instagram	Publishing photos. It gathers audiences from all over the world.	The fastest for obtaining new audiences. Content is most quickly shared on other networks.	The social network with the fastest growing audience.	It will look like you are trying to make an impression.	Not enough data on how to use this network.
YouTube	The largest video player on the planet. Good quality, reliable, easy to search.	Concentrating video content by topic.	Huge, but it is not easy to wade through lot of content.	Lot of distractions for users, so you may not reach the target group. The comments below the video are often unrelated to the content.	A lot of data reveals who the target users are, which is very useful.

Source: Authors according to the guidelines for the use of social networks in government bodies, autonomous regions and local self-government units. E-Government Directorate, Ministry of State Administration and Local Self-Government, Belgrade (2015)

2.3 *Comparative analysis of the USA and Brazil social network usage in 2019 (summarised data)*

Effectively selecting on which social network to open an account is one of the key factors for successful online communication. There is a great number of social networks that exist on the internet and the daily rise of new ones. Since the most widely used social networks are Facebook, Twitter, Instagram and YouTube, Table 1 shows their basic features.

Table 2 Overall indicator for 2019

<i>Indicator/country</i>	<i>USA</i>	<i>Brazil</i>
Total population (million)	327.9	211.6
Annual change in population size (%)	0.7	0.7
Female population (% of total population)	50.5	50.9
Male population (% of total population)	49.5	49.1
Urbanisation (%)	82	87
Median age	38.3	33.5
GDP per capita (PPP) current international dollars	59,532	15,484
Overall literacy (adult age 15+) in %	99	92
Female literacy (adult age 15+) in %	99	92
Male literacy (adult age 15+) in %	99	92
Mobile subscriptions (million)	347.4	215.2
Annual digital growth January 2018–2019 (%)	1.8	–2.9
Mobile subscriptions vs. population (%)	106	102
Internet users (million)	312.3	149.1
Annual digital growth January 2018–2019 (%)	8.8	7.2
Penetration (%)	95	70
Active social media users (million)	230	140
Annual digital growth January 2018–2019 (%)	0	7.7
Penetration (%)	70	66
Mobile social media users (million)	200	130
Annual digital growth January 2018–2019 (%)	0	8.3
Penetration (%)	61	61
<i>Percentage of the adult population that use each kind of device</i>		
Mobile phone (any kind)	90	89
Smart phone	78	67
Laptop or desktop computer	77	38
Tablet device	46	15
Television (any kind)	89	95
Device for streaming internet content to TV	28	7
E-reader device	10	2
Wearable tech device	14	2
<i>Average daily time spent consuming and interacting with media</i>		
Average daily time spent using internet via any device	6 h 31 m	9 h 29 m
Average daily time spent using social media via any device	2 h 4 m	3 h 34 m
Total number of active internet users (million)	312.3	149.1
Internet users as a percentage of total population	95	70
Total number of active mobile internet users (million)	268	139.4
Mobile internet users as a percentage of total population	82	66

Source: Authors according to Digital 2019: Global Digital Yearbook (Hootsuite, 2019); ¹<https://www.statista.com/statistics/278341/number-of-social-network-users-in-selected-countries/>

Table 2 Overall indicator for 2019 (continued)

<i>Indicator/country</i>	<i>USA</i>	<i>Brazil</i>
<i>How often internet users access internet for personal reasons (%)</i>		
Every day	86	85
At least once per week	8	9
At least once per month	5	5
Less than once per month	1	1
Total number of mobile connections (million)	347.4	215.2
Mobile connections as a percentage of total population	106	102
Predicted number of social network users in 2023 (millions) ¹	257.4	114.5

Source: Authors according to Digital 2019: Global Digital Yearbook (Hootsuite, 2019); ¹<https://www.statista.com/statistics/278341/number-of-social-network-users-in-selected-countries/>

Table 3 Social media indicators for 2019

<i>Social media indicators</i>	<i>USA</i>	<i>Brazil</i>
Total number of active social media users (million)	230	140
Active social media users as a percentage of total population	70	66
Total number of active social users via mobile devices (million)	200	130
Active mobile social users as a percentage of total population	61	61
Visited or used social network or messaging service in the past month (%)	97	100
Actively engaged with or contributed to social media in the past month (%)	77	81
Average amount of time per day spent using social media	2 h 4 m	3 h 34 m
Average number of social media accounts per internet user	7.1	9.4
Percentage of internet users who use social media for work purposes	14	29
<i>Percentage of internet users who report using each platform</i>		
Facebook	80	90
YouTube	82	95
Instagram	51	71
Twitter	42	43
Pinterest	36	35
LinkedIn	28	36
Tumblr	16	18

Source: Authors according to Digital 2019: Global Digital Yearbook (Hootsuite, 2019)

Table 2 provides an overview of basic indicators relevant for analysing the use of social networks for selected countries.

The USA ranks third in the list of 20 countries with the highest number of internet users (31 May 2019, Internet World Stats, <http://www.internetworldstats.com>), while Brazil ranks fourth. According to the same source, the growth of internet users in the USA in the period 2000 to 2019 was 207% (from 95,354,000 at the end of 2000, to 292,892,868 in May 2019), and an impressive 2,881% in Brazil (from 5,000,000 in 2000, to 149,057,635 in May 2019).

As we can see in Table 3, the USA social network penetration rate was 70%, while the global average penetration rate is 45% in 2019. North America shares first place regarding the social network penetration rate in the world. Although North America is the ‘birthplace’ of most social media channels were according to Global Digital Report (Hootsuite, 2019), the USA ranks only 24th in the world regarding average time spent on social media. The average number of social media accounts per internet user is slightly higher in Brazil than in the USA.

The most popular social network in the USA is Facebook, followed by Pinterest, Twitter and YouTube (the source). In Brazil, the situation is the same with regard to Facebook, which takes first place, but is followed by YouTube, Twitter, Tumblr and Pinterest (the source).

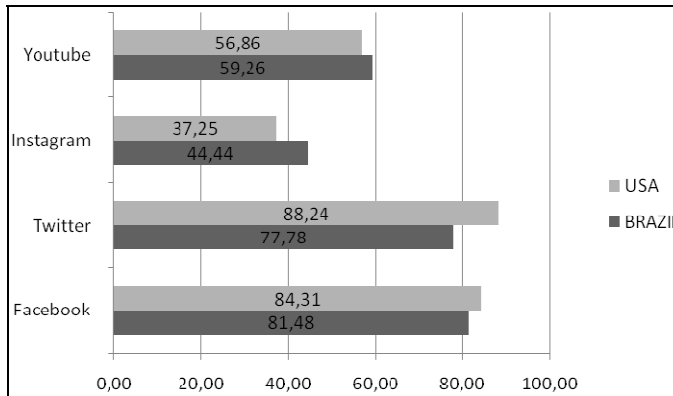
2.4 Research results

To achieve transparency of the analysis, the research results obtained by analysing the use of social networks by the USA and Brazil capitals in 2019 will be presented through the answers to research questions.

RQ1 To analyse if the USA and Brazilian capitals have social network accounts, and if so, on which social networks.

Most sampled capitals have their accounts on social networks (84.3% of capitals in the USA and 85.1 % of capitals in Brazil). A significant percentage of the capitals surveyed in the sample (Figure 1) have their accounts on social network such as Facebook (USA – 84.31% of capitals; Brazil – 81.48% of capitals) and Twitter (USA – 88.24% of capitals; Brazil – 77.78% of capitals). YouTube accounts are created by more than half of the capital cities in the USA (56.86%) and Brazil (59.26%), while 37.25% of the capital cities in the USA and 44.44% of Brazil capitals have YouTube accounts (see Figure 2).

Figure 2 % of total capitals (51 USA capitals, 27 Brazil capitals) having social media accounts



The analysis originally covered all social networks used by the capitals, but excluded social networks LinkedIn, Pinterest and Flickr, since a small percentage of the sampled capitals had active accounts on these networks.

RQ2 To analyse whether links to active social media accounts are on the capitals' website homepages and, if so, whether at the top or bottom of the homepage.

Half of the capitals in Brazil (51.85%) have links to social networks at the top of their homepage. When it comes to the US capitals, this percentage was reduced to 33.33% (Figure 3). Just over half of the capitals in Brazil (51.85%) have links to social networks at the bottom of their homepage (homepages that also have a link at the top are included). In the USA, 49.02% of the capitals have a link to the social networks at the bottom of their homepage (Figure 4). Few US capitals have links to social networks on a page other than homepage (19.61%), unlike Brazilian capitals. In Brazil, 80.39% of the capitals have a link to social networks on another page other than the homepage (Figure 5).

Figure 3 Links to social networks at the top of the page

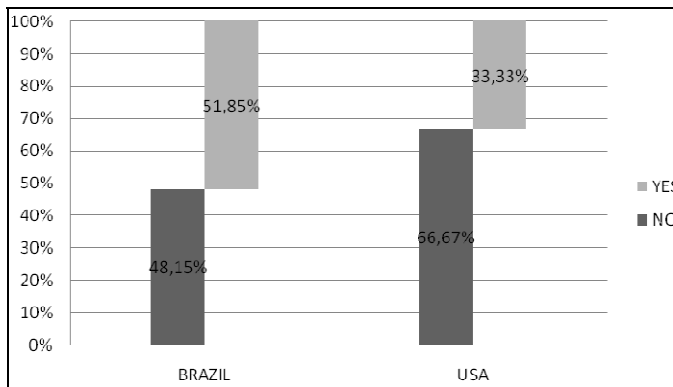
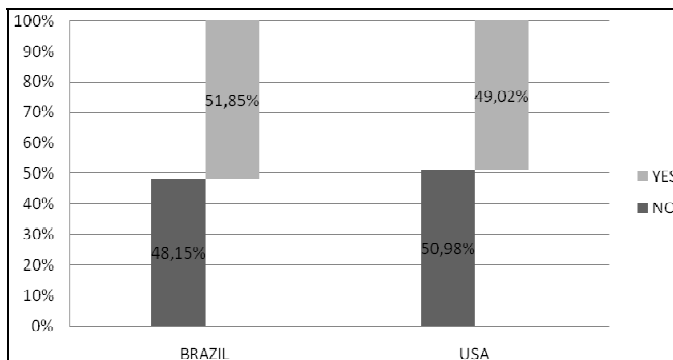


Figure 4 Links to social networks at the bottom of the page



Notes: % of the total capitals in Brazil and % of the total capitals in the sample in the USA, not % of the total number of states considered.

Table 4 Quantitative indicators for individual social networks in 2019

State	Facebook			YouTube			Twitter		
	Number of fans	Posts per day	Number of reactions	Total number of subscribers	Total number of channel views	Total number of videos	Tweets	Tweets/day	Follower
Alabama	17,213	1.75	862	134	21,917	329	51	1.82	8,066
Alaska	3,224	3.03	1,540				82	2.92	444
Arizona	24,684	2.75	1,834	2,827	1,000,887	2,428	100	3.57	30,021
Arkansas	7,793	0.35	308	254	41,970	503	22	0.78	15,386
California	9,257	0.75	1,331	526	139,756	63	67	2.39	55,129
Colorado	13,012	2.28	1,476	836	212,144	456	201	7.17	7,519
Delaware	6,991	0.78	210						
Florida	14,784	2.39	958	2,739	1,651,413	945	260	9.28	37,228
Georgia	625	0.28	14	1,626	1,269,463	117	12	0.42	25,352
Hawaii	5,060	0.53	720				29	1.03	44,743
Idaho							17	0.61	6,762
Illinois	4,273	0.96	566	199	60,202	509			
Indiana							107	3.82	2,220
Iowa	7,202	1.07	1,813	259	94,616	747	49	1.75	8,578
Kansas	7,546	1.35	376						
Kentucky [E]	3,131	0.25	166	33	8,534	205	10	0.35	18,589
Louisiana	11,764	0.25	87				23	0.82	10,556
Maine	1,874	0.14	425				64	2.28	13,538
Maryland	9,913	1.96	2,507	159	95,549	615	145	5.17	306,089

Source: Authors

Table 4 Quantitative indicators for individual social networks in 2019 (continued)

State	Facebook			YouTube			Twitter		
	Number of fans	Posts per day	Number of reactions	Total number of subscribers	Total number of channel views	Total number of videos	Tweets	Tweets/day	Follower
Massachusetts [E]	232,012	1.39	3,643				74	2.64	12,797
Michigan	8,766	1.21	2,293				27	0.96	68,665
Minnesota	26,677	0.67	528	2,890	1,937,665	1,490			
Mississippi	5,541	1.5	1,707	87	39,144	14			
Missouri	2,396	1.28	154	60	8,834	193			
Nebraska							12	0.42	2,909
Nevada	2,550	0.35	161	176	72,171	305	117	4.17	728
New Hampshire				36	5,136	37			
New Jersey	643	0.32	180				18	0.64	7,713
New Mexico	8,463	1.89	2,108				34	1.21	6,776
New York	4,867	0.89	649				129	4.61	101,003
North Carolina	11,672	1.57	667	2,347	860,121	473	35	1.25	4,789
North Dakota	5,702	2.71	1,192	9	4,217	4	187	6.67	13,823
Ohio	8,534	0.85	925	1,571	414,433	2,242	92	3.28	92,914
Oklahoma	31,705	0.25	308	1,359	428,134	834	49	1.75	6,723
Oregon	18,128	1.39	1,970	334	58,702	313	75	2.67	4,808
Pennsylvania [E]	4,844	2.03	980				96	3.42	12,429
Rhode Island [F]	12,016	0.67	766				198	7.07	42,282
South Carolina	12,924	3.61	93						
South Dakota	1,629	0.85	664	427	88,340	1,463	18	0.64	7,508

Source: Authors

Table 4 Quantitative indicators for individual social networks in 2019 (continued)

State	Facebook			YouTube			Twitter		
	Number of fans	Posts per day	Number of reactions	Total number of subscribers	Total number of channel views	Total number of videos	Tweets	Tweets/day	Follower
Tennessee	8,900	0.35	233	2,032	640,985	4,090	106	3.78	151,814
Texas	19,720	0.64	70	8,186	3,307,202	1,505	304	10.85	2,430
Utah	2,377	0.61	236	1,071	331,831	1,180	48	1.71	1,186
Vermont	3,395	1.85	977				42	1.5	57,991
Virginia [E]				435	89,507	496	14	0.5	6,071
Washington	9,270	0.46	688	147	60,963	43	0	0	4,361
West Virginia	10,173	2.03	5,433				139	4.96	38,091
Wisconsin	6,945	2.42	1,400	422	177,257	312	58	2.07	2,143
Wyoming	9,495	2.53	2,137	37	5,382	129			
Acre				20	1,724	8	11	0.39	6,571
Alagoas	228,843	3.39	4,896	0	1,140,685	2,731	96	3.42	21,094
Amazonas	280,861	8.28	12,589	2,063	716,127	1,527	263	9.39	2,010
Bahia	251,794	3.32	20,998	9,210	2,025,317	459	115	4.11	196,587
Ceará	238,073	2.25	6,379	6,271	1,230,845	1,073	53	1.893	5,833
Distrito Federal	244,609	2.28	5,530	1,147	346,655	685	562	20.07	310,442
Espirito Santo	97,263	2.39	6,480				281	10.03	26,590
Goias	80,802	3.82	13,796						
Maramhão	199,561	3.67	7,932	0	210,721	1,289	380	13.57	48,041
Mato Grosso	76,301	2.39	4,196				13	0.46	4,530

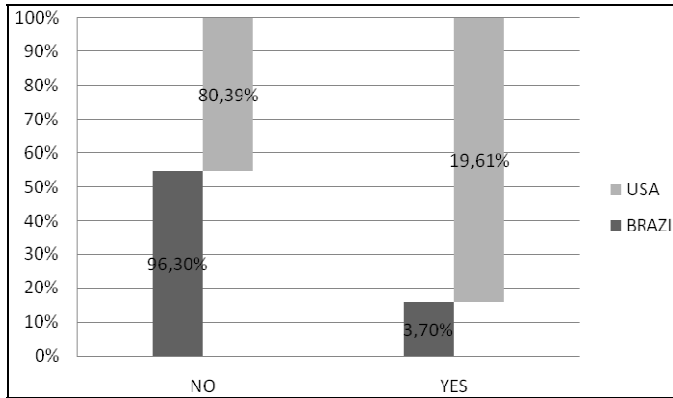
Source: Authors

Table 4 Quantitative indicators for individual social networks in 2019 (continued)

State	Facebook			YouTube			Twitter		
	Number of fans	Posts per day	Number of reactions	Total number of subscribers	Total number of channel views	Total number of videos	Tweets	Tweets/day	Follower
Mato Grosso do Sul	26,313	2.71	1,522						
Minas Gerais	231,537	1.03	2,704	11,903	1,383,195	1,115	196	7	193,593
Pará	101,862	2.35	8,401	398	61,460	24	19	0.67	34,882
Paraiíba	100,991	3.28	15,710				837	29.89	109,900
Piauí	113,020	3.92	3,526	59	9,580	3	281	10.03	1,765
Rio de Janeiro	573,811	3.78	28,893	422	9,776	30	845	30.17	220,151
Rio Grande do Sul	108,753	3.89	7,078				1,260	45	252,193
Roraima	43,840	0.89	1,871	809	83,654	223	99	3.53	10,668
Santa Catarina	195,594	2.32	167,598	179	25,612	248	69	2.46	30,136
São Paulo	405,558	2.92	70,267	24,071	53,332,932	752	408	14.57	213,181
Sergipe	36,647	5.39	3,501	1,276	187,639	1,073	453	16.178	15,327
Tocantins	41,917	10.61	4,301	1,346	182,037	224	529	18.89	39,380

Source: Authors

Figure 5 Links to social networks on another page



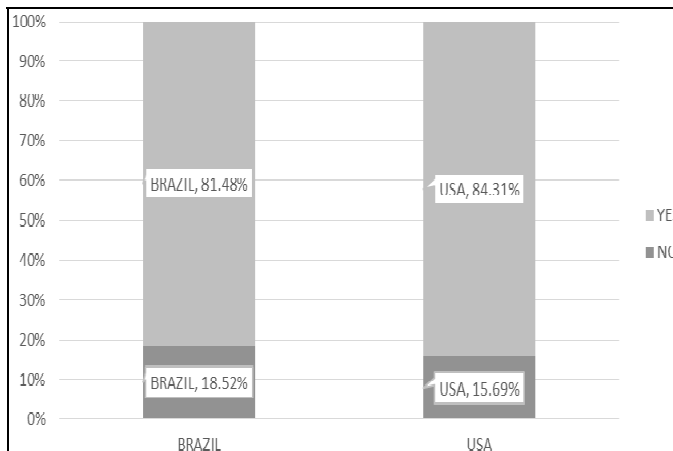
RQ3 To analyse traffic flow and interaction frequency indicators on social networks used by the capitals covered by the analysis.

Table 4 presents specific (depending on the social network) indicators for the use of social networks Facebook, YouTube and Twitter by individual capitals in the USA and Brazil. When it comes to two most popular social networks, Facebook and Twitter, in addition to the number of fans or tweets, it would be useful to compare the number of posts per day and the number of tweets per day. The average number of posts per day for capitals in the USA is 1.28 and for capitals in Brazil is 3.57. The average number of tweets per day is 2.84 for the US capitals and 12.08 for capitals in Brazil.

RQ4 To analyse the focus of Brazil and the USA capitals when it comes to using social media – whether sharing information or connecting with citizens and strengthening citizens-government relations.

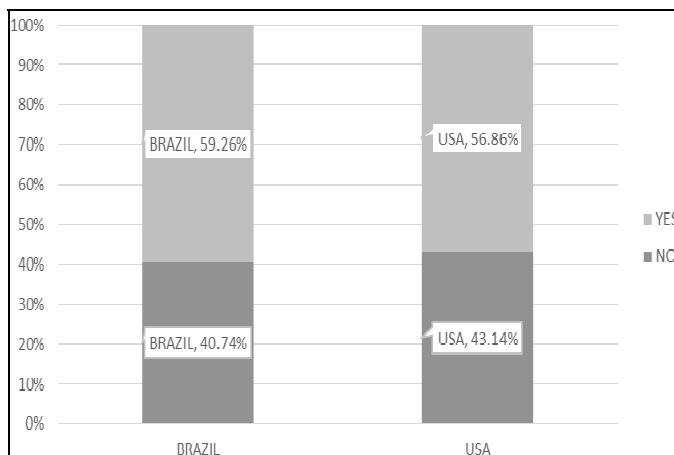
Most capital cities have both a Facebook and a Twitter account. In Brazil, Facebook is used by 81.48% of the capitals, while in the USA it is slightly more 84.31% (see Figure 6).

Figure 6 Percentage of capital cities using Facebook in 2019



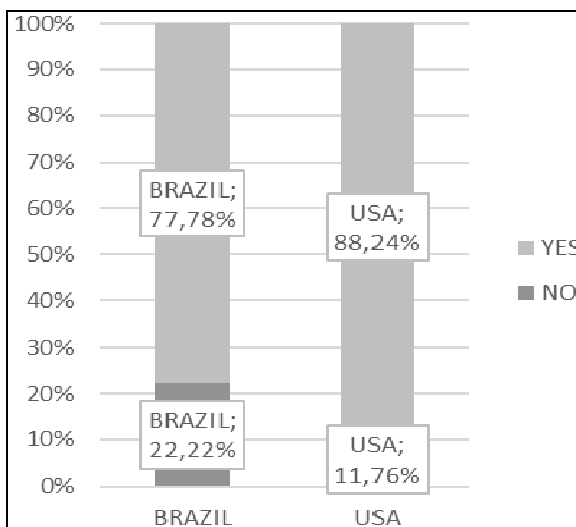
Fewer capital cities use YouTube than Facebook, where Brazilian capitals are slightly in the lead (59.25% vs. 56.86%) – see Figure 7.

Figure 7 Percentage of capital cities using YouTube in 2019



When it comes to Twitter, 88.24% of capital cities in the USA use this network, compared to 77.78 in Brazil (Figure 8).

Figure 8 Percentage of capital cities using Twitter in 2019



As it can be seen, the capitals in Brazil and the USA extensively use both Twitter and Facebook, so the conclusion is that the capitals covered by the analysis consider it equally important to publish certain information (Twitter) and promote themselves, as well as to build communication with citizens in a certain way (Facebook), which is the answer to Research Question 4.

3 Conclusions

Capital cities most commonly use Facebook and Twitter. These networks, used by more than two-thirds of capital cities to communicate with their citizens, are followed by YouTube and then Instagram, which is used by slightly more than one-third of capitals in the USA and Brazil. Other social networks are less frequently used.

Although they use social networks, it is worrying that just over half of Brazilian capital cities and a third of the USA capitals have links to social networks at the top of their homepages, regarded by Snead (2013) as a limiting factor for the access to social networks because their presence will not be noticed by people.

Social networks are present in all spheres of society. However, their use is not only associated with positive impact. The main concern regarding the use of social media by the authorities and therefore the capitals is the lack of control over social media, i.e., the social media portals themselves. Bertot et al. (2012) state the main issues that need to be addressed are the security and safety of information on social media, primarily because the authorities are tacitly accepting the security policies of companies providing social media services. Furthermore, Guillamón et al. (2016) believe that the legislation should regulate the use of social media by the authorities, in the same way as it regulates other authorities' activities.

The use of social media has the potential to increase public participation in government (Snead, 2013) through proactive citizens' participation in creating government social media content, sharing that content (Mergel, 2013), all the way to the ultimate goal of e-government, which is 'Do it yourself government' changing the government's traditional responsibilities (Linders, 2012).

The research leads to the conclusion that capitals are aware of the importance of social networks, but individual capitals should make their social networks more visible, by placing links on their homepages. The next step in the research would be to examine the managers of the public relations sectors in specific capitals regarding the existence of a social network management strategy.

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