

## **WhatsApp Usage in Brazil**

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Whether because of the possibility of communicating with different groups, ordering a pizza, scheduling a doctor visit, or being able to have a secure, private talk, people in Brazil can't live without WhatsApp (nicknamed "Zap Zap", or "Zap", for short) anymore (Fenelon & Torresan, 2020). It wouldn't be an exaggeration to say that WhatsApp changed the way people talk to each other in Brazil. It even influenced elections (Chargas et al., 2019).

Between 2013 and 2018 Brazil went through a period of democracy destabilization, leading to the presidency a man who supports an autocratic regime and torture. Social media was frequently pointed out as the main vector of the massive reach of propaganda that culminated with the election of Jair Bolsonaro. Political polarization had been growing since the days before the former president Dilma Rousseff was impeached in 2016, but social media, especially WhatsApp, elevated it to another level. WhatsApp was the last and decisive factor that undermined democracy, proceeded and reinforced by adversarial journalism, digital domination, power of platforms, fragmentation of the hybrid media system, and the excesses of Operation Car Wash (an ongoing investigation that began in March 2014, and was originally about money laundry but later revealed systemic corruption between the government and some private companies) (Alves, 2019).

ESPM [Escola Superior de Propaganda e Marketing] (2020), a respected school of advertising and marketing in Sao Paulo and Rio de Janeiro, conducted a survey which revealed WhatsApp is the mobile tool Brazilians have used the most since the outbreak of COVID-19, cited by 97% of those polled reported as an essential tool to go about their daily activities since the new coronavirus outbreak became known (Mari, 2020).

Undoubtedly, WhatsApp is the most popular messaging app in Brazil.

## Background Analysis

### History

WhatsApp is a messaging app for smartphones created in 2009 by two former Yahoo employees, Brian Acton and Jan Koum. The app leveraged Apple's new push notification feature to update users' networks with status updates, such as "Can't talk, I'm at the gym." Fishman's Russian friends started using it to ping each other with jokey custom statuses like, "I woke up late," or "I'm on my way" (Iqbal, 2020).

Users quickly came to use the app as an instant messaging service, planting the seed for what the app would become. WhatsApp 2.0 was an instant success, quickly reaching 250,000 active users. This was enough for Acton to convince a circle of fellow ex-Yahoo employees to part with \$250,000 in seed funding (Olson, 2014).

WhatsApp incorporated multimedia messaging in 2010 and was released on Android the following year. From that point, the app marched to its ubiquitous status, ranking in the top three most-downloaded apps on both iOS and Android. By October 2011, one billion messages were being sent per day; by early 2013, WhatsApp could boast 200 million active users, and by the end of 2017, it was up to 1.5 billion active monthly users (Parmy, 2014).

Facebook clearly saw in WhatsApp a potential threat, and in February 2014 acquired it for \$19 billion— which remains its largest acquisition to date (and one of the largest tech acquisitions in history). This has caused some degree of controversy with data being shared with the parent company, despite promises of increasing levels of encryption (reportedly 'end-to-end' by 2016). Both founders have left the company based on these concerns (Iqbal, 2020).

WhatsApp, however, remains the market leader in its sector. Since its beginning, it has

added features such as voice calling, video calling, group calls (video and voice), and in early 2018 launched WhatsApp Business.

### **WhatsApp Usage in the World**

WhatsApp is practically unknown in the U.S, however, it represents “the default” for messaging elsewhere in the world. The causes for this disparity are a complicated cocktail of worldwide telecommunication development mixed with American travel habits (Shwayder, 2019).

A Pew survey (2019) conducted at the end of 2018 with adult social media users in 11 different emerging economies found that Facebook and WhatsApp were by far the most popular messaging apps, above Instagram, Twitter, Snapchat, Tinder, and Viber. This data was corroborated by Hootsuite (2019).

American telecommunications developed differently than other telecommunication companies anywhere else in the world. When texting began to become popular, it was prohibitively expensive for most people in the world. Before WhatsApp came along in India and Brazil, for example, users had to buy what were called SMS packs: a certain amount of money to send a certain number of text messages. WhatsApp offered free messaging and had no competitors, which created a favorable atmosphere for its oblique adoption.

Today, WhatsApp is the most popular messaging app in the world, with 0.2 billion users more than Facebook Messenger and one billion active users. India is its biggest market in the world with more than 200 million users, while Brazil ranks second with 120 million users (Statista, 2020).

### **Penetration in Brazil**

Most people in Brazil use the internet through smartphones. Out of roughly 127 million Brazilians who accessed the web in 2019, more than 123 million did so using a mobile phone (Statista, 2020). As families often share one device, one smartphone may offer access to the internet for more than one individual (Lopez, 2019).

Research conducted by IBGE [Instituto Brasileiro de Geografia e Estatística], the Brazilian Institute of Geography and Statistics, between 2016 and 2017 revealed that the percentage of individuals aged 10 or older who accessed the Internet through mobile phones increased from 94.6% (2016) to 97.0% (2017). On the other hand, the percentage of people using a personal computer for Internet access fell from 63.7% to 56.6%, a behavior similar to that of tablet users (tablet rates of use fell from 16.4% to 14.3% in the period). This tendency continued to grow in the recent years (IBGE, 2018).

In January 2020, approximately 93 percent of mobile internet users who had WhatsApp installed and were surveyed in Brazil said they had used the app every day. None of the respondents stated that they had never or almost never used WhatsApp. Whether because of the possibility of communicating with distinct groups or being able to have a secure, private talk, people in Brazil can't live without “Zap” anymore (Fenelon & Torresan, 2020).

WhatsApp changed the way people talk to each other in Brazil. Because of its popularity and strength in the country, WhatsApp chose the country to launch its first major ad campaign (Handley, 2020).

**The 2018 Brazilian Elections** – During Brazil's 2018 presidential election, political campaigners scraped Facebook users' phone numbers and added them to WhatsApp groups, sending them memes and videos in the hope of gaining votes (Handley, 2020).

The vast majority of false information shared on WhatsApp in Brazil during the presidential election favored the far-right winner, Jair Bolsonaro (Chagas, 2019). Right-wing users were more effective in using the social media tool to spread news, disinformation and opinions. More specifically, right-wing groups in Brazil were much more numerous and shared substantially more multimedia content and YouTube videos than left-wing groups (The Guardian, 2019).

In a sample of 11,957 viral messages shared across 296 group chats on the instant-messaging platform in the campaign period, approximately 42% of rightwing items contained information found to be false by factcheckers. Less than 3% of the leftwing messages analyzed in the study contained externally verified falsehoods (Navarro, 2020).

Chagas (2019) studied one particular meme circulated in WhatsApp in 2018 that said “Brazil will become a Venezuela.” Results indicated the message presented emotional frames that associate the crisis in Venezuela with worker’s parties governments (PT [Partido dos Trabalhadores], the worker’s party in Brazil, was Bolsonaro’s opponent). The meme was disseminated strategically in order to implement a negative campaign device based on a rhetoric of fear. The public shared the meme with comments like “Prepare to become a Venezuelan,” “In the next 3 years we will be Cuba, in the next 4, Venezuela,” “The most recent example of the left party in government is just next to us: Venezuela.”

The first most shared disinformation image on WhatsApp was a photomontage that inserted a photo of the young ex-president of Brazil, Dilma Rousseff, beside the ex-president of Cuba, Fidel Castro (Figure 4). At the time the original photo of Fidel Castro was taken by John Duprey for the “NY Daily News” in 1959, president Dilma Rousseff was only 11 years old. Therefore, it was clearly a tampered image that intended to associate PT with communism and

Castroism. Such association was recurrent among Bolsonaro supporters during his campaign (Evangelista, 2019).

The number of fake and distorted news favorable to president Jair Bolsonaro has been high since before the elections (Statista, 2020).

**Obstacles and Opportunities** – WhatsApp was temporarily banned in Brazil in 2015, and in 2016, a judge in Lagarto, a small town in the southeast of the country, ordered cell phone carriers to block the app for three days after it refused to hand over messages as part of a drug investigation. WhatsApp encrypted all messages in April 2016 to protect communications (Handley, 2020). In 2019, Facebook reported a 51% rise in expenses compared with 2018, related to the company's privacy and security improvement costs, and shares closed down 6.1% on January 30, erasing more than \$30 billion from its market cap. Facebook was issued with a \$5 billion fine from the Federal Trade Commission issued in July 2019 over its privacy policies.

In July 2020, WhatsApp released the mobile payment service feature in Brazil (WhatsApp, 2020). The feature allowed users to make payments without leaving a chat. However, Brazil's Central Bank [Banco Central do Brasil] suspended it just over a week after the messaging service announced its launch. In a statement, the Brazilian Central Bank said that it had taken the decision to ensure competition in the payment system market. Bloomberg notes that the bank will use the suspension to evaluate potential risks to the country's payment infrastructure, and to work out whether WhatsApp is compliant with regulation. WhatsApp was surprised by the Brazilian Central Bank's decision, since the company had been in regular contact with the authority. WhatsApp had started a small test of the service in the country around a month prior to its launch (The Verge, 2020).

WhatsApp had hoped that its payments system could be used by people to pay businesses as well as transfer money to individuals. The service would be free for individuals but would charge businesses a 3.99 percent processing fee (The Verge, 2020).

The Brazilian Central Bank's move comes as the regulator prepared to launch its own instant payments system in November, called Pix, joining more than 980 participants (Reuters, 2020).

WhatsApp Business is feature inside WhatsApp that allows business owners to connect app users with a landline and / or contact them by message. It would have benefited from the pay function, but business owners still use it for marketing and contact.

**Content and Recent User Interface Changes.** In January 2020, WhatsApp limited how often messages can be forwarded - to only five groups instead of 20 - in an attempt to slow down the spread of disinformation (they had previously limited it to 20 from 256.) One study suggests that the change is working, but more can still be done (MIT Technology Review, 2020).

Measuring disinformation on WhatsApp can be tricky. Unlike Facebook and Twitter, WhatsApp is a private, encrypted chat tool, which means a lot of content is out of reach. It can be hard to figure out whether new changes, like the forwarding limit, are really working.

Researchers can't access private chats. But there are enormous public groups that people can join, and political candidates are increasingly using these groups to contact voters. Melo et al. (2020) joined thousands of these public groups in Brazil, India, and Indonesia. By scraping the data and analyzing nearly six million public messages across three countries, they were able to rebuild a network and run simulations to test how different forwarding limits affected how quickly information with different levels of virality could spread.

Melo et al. (2019) defend that despite the welcomed effort to counter the problem, there is no evidence so far on the real effectiveness of such restrictions. The group developed an epidemiological model and gathered real data gathered from WhatsApp in Brazil, India and Indonesia to assess the impact of limiting virality features in this kind of network. The study results suggest that the current efforts deployed by WhatsApp offer significant delays on the information spread, but they are ineffective in blocking the propagation of misinformation campaigns through public groups when the content has a high viral nature.

**COVID-19.** With the spread of the COVID-19, there was a surge in WhatsApp use related to the pandemic, and the app has come under the spotlight for the way it can be used to spread misinformation.

A study carried out by the marketing and consumer insights unit of Brazilian business school ESPM sought to understand the impact of app usage in consumer habits under the restrictions introduced by the social distancing measures. WhatsApp is the mobile tool Brazilians have used the most in 2020, cited by 97% of those polled reported as an essential tool to go about their daily activities since the new coronavirus outbreak became known. The second most popular app is Instagram, cited by 88% of survey participants, followed by YouTube, mentioned by 75% of respondents (Mari, 2020).

In March, the Brazilian Ministry of Health announced a partnership with WhatsApp seeking to answer questions about coronavirus. The channel focused on guidance on the disease, treatment and a service protocol for health center professionals through a bot that received these questions. The bot's programming included recommendations on how to behave in case of suspicious cases, forms of contamination, prevention, ministry actions and demystification of

rumors regarding the virus (LABS, 2020). The channel was created by the former ministry of health Luiz Henrique Mandetta.

Because of the pandemic and the ongoing conflict between the current government and scientists, Brazil's current minister of health is Eduardo Pazuello, an army general, and the fifth minister of health in Jair Bolsonaro's presidency (Saravese and Biller, 2020). The WhatsApp channel created by Mandetta has not been fed recently.

The Fundação Oswaldo Cruz [Oswaldo Cruz Foundation], a scientific institution for research and development in biological sciences located in Rio de Janeiro (considered one of the world's main public health research institutions), had its name used in fake posts disseminated in WhatsApp. A research conducted by the foundation in April concluded 73,7% of the false information about the new corona virus were circulated by WhatsApp. The other 10.5% cases were disseminated via Instagram, and 15.8% on Facebook.

A study conducted by CNN showed that the app was being used to share a variety of false information about "cures" for COVID-19, along with hoaxes about military activity related to the disease (Gold & O'Sullivan, 2020).

Statista (2020) pointed out more than in the very early stages of the pandemic (March), half of people surveyed in Brazil in March 2020 stated that print newspapers, as well as news programs on TV and radio were the most trustworthy sources of news about the COVID-19 outbreak. Approximately 12 percent of respondents mentioned WhatsApp and Facebook.

With more limitations from the app, artificial intelligence and machine learning (deep learning) are sure to be used to spread information in the future, and not only in WhatsApp, but in social media in general (Klint Marketing, 2000).

## References

Agência Brasil [Brazil Agency] (2020 April 16). *WhatsApp é principal rede de disseminação de fake news sobre covid-19* [WhatsApp is the main tool of dissemination of COVID-19-related fake news]. Retrieved from <https://agenciabrasil.ebc.com.br/geral/noticia/2020-04/whatsapp-e-principal-rede-de-disseminacao-de-fake-news-sobre-covid-19>

Agência do Instituto Brasileiro de Geografia e Estatística, IBGE [Brazilian Institute of Geography and Statistics Agency] (2020). *Continuous PNAD - ICT 2017: Internet reaches three of every four households in the country*. Retrieved from <https://agenciadenoticias.ibge.gov.br/en/agencia-press-room/2185-news-agency/releases-en/23453-continuous-pnad-ict-2017-internet-reaches-three-in-every-four-households-in-the-country>

Alves dos Santos, M. (2019). *Desarranjo da Visibilidade, Desordem Informacional e Polarização no Brasil entre 2013 e 2018* [Disruption of Visibility, Informational Disorder and Polarization in Brazil between 2013 and 2018]. [Doctoral Dissertation, Universidade Federal Fluminense]. Retrieved from [https://www.academia.edu/41690755/Desarranjo\\_da\\_visibilidade\\_desordem\\_informacional\\_e\\_polariza%C3%A7%C3%A3o\\_no\\_Brasil\\_entre\\_2013\\_e\\_2018](https://www.academia.edu/41690755/Desarranjo_da_visibilidade_desordem_informacional_e_polariza%C3%A7%C3%A3o_no_Brasil_entre_2013_e_2018)

Avelar, D. (2019, October 30). *WhatsApp fake news during Brazil election 'favoured Bolsonaro.'* The Guardian. <https://www.theguardian.com/world/2019/oct/30/whatsapp-fake-news-brazil-election-favoured-jair-bolsonaro-analysis-suggests>

Chagas, V. (2019).

Evangelista, R. (2019). WhatsApp and political instability in Brazil: targeted messages and political radicalization. *Internet Policy Review* 8(4). doi:10.14763/2019.4.1434

Fenelon, P., & Torresan, V. (2020). *The rise of WhatsApp from messaging app to purchasing*

*tool in Brazil*. LABS. [https://labs.ebanx.com/en/articles/ecommerce/whatsapp-in-](https://labs.ebanx.com/en/articles/ecommerce/whatsapp-in-brazil/#:~:text=This%20boom%20can%20be%20explained,will%20certainly%20have%20a%20smartphone)

[brazil/#:~:text=This%20boom%20can%20be%20explained,will%20certainly%20have%20a%20smartphone](https://labs.ebanx.com/en/articles/ecommerce/whatsapp-in-brazil/#:~:text=This%20boom%20can%20be%20explained,will%20certainly%20have%20a%20smartphone)

Gold, H., & O'Sullivan, D. (2020, March 19). *Facebook has a coronavirus problem. It's*

*WhatsApp*. CNN Business. [https://www.cnn.com/2020/03/18/tech/whatsapp-](https://www.cnn.com/2020/03/18/tech/whatsapp-coronavirus-misinformation/index.html)

[coronavirus-misinformation/index.html](https://www.cnn.com/2020/03/18/tech/whatsapp-coronavirus-misinformation/index.html)

Handley, L. (2020, February 20). *WhatsApp chooses Brazil to launch its first major ad*

*campaign*. CNBC Marketing, Media, Money.

<https://www.cnn.com/2020/02/20/whatsapp-chooses-brazil-to-launch-its-first-major-ad-campaign.html>

Iqbal, M. (2020, June 23). *WhatsApp Revenue and Usage Statistics*. Business of Apps. Business

of Apps. <https://www.businessofapps.com/data/whatsapp-statistics/>

Issac, M., & Roose, Kevin. (2018, October 19). *Disinformation spreads on WhatsApp ahead of*

*Brazilian election*. The New York Times. [https://www.nytimes.com/2018/10/19/](https://www.nytimes.com/2018/10/19/technology/whatsapp-brazil-presidential-election.html)

[technology/whatsapp-brazil-presidential-election.html](https://www.nytimes.com/2018/10/19/technology/whatsapp-brazil-presidential-election.html)

Klint Marketing (2000). *How are AI and ML used in Social Media?* Retrieved from

<https://klintmarketing.com/ai-social-media/>

Latin American Business Stories (2020, March 17). *Brazil's Ministry of Health partners with*

*WhatsApp and launches new information channel on COVID-19*. Retrieved from

<https://labsnews.com/en/notes/brazils-ministry-of-health-partners-with-whatsapp-and-launches-new-information-channel-on-covid-19/>

Lopez, B. (2019, January 31). *Brazil is the 5th Country in Smartphone Usage* [Blog post].

Retrieved from [PagBrasil https://www.pagbrasil.com/insights/smartphone-usage-in-brazil/](https://www.pagbrasil.com/insights/smartphone-usage-in-brazil/)

Mandl, C. & Versiani, I. (2020, June 23). *Brazil suspends WhatsApp's new payments*

*system*. Reuters. <https://www.reuters.com/article/us-brazil-central-bank-visa-mastercard-idUSKBN23V042>

Mari, A. (2020, July 28). *WhatsApp is the most used app in Brazil during Covid-19 outbreak*.

ZDNet. <https://www.zdnet.com/article/whatsapp-is-the-most-used-app-in-brazil-during-covid-19-outbreak/>

Melo, P.D., Vieira, C.C., Garimella, V.R., Melo, P.O., & Benevenuto, F. (2019). Can WhatsApp counter misinformation by limiting message forwarding? ArXiv, abs/1909.08740

MIT Technology Review (2020, September 26). *Limiting message forwarding on WhatsApp helped slow disinformation*. Retrieved from

<https://www.technologyreview.com/2019/09/26/434/whatsapp-disinformation-message-forwarding-politics-technology-brazil-india-election/>

Newton, C. (2020, April 7). *WhatsApp puts new limits on the forwarding of viral messages*. The

Verge. <https://www.theverge.com/2020/4/7/21211371/whatsapp-message-forwarding-limits-misinformation-coronavirus-india>

Olson, Parmy. (2014, February 19). *Exclusive: The rags-to-riches tale of how Jan Koum built WhatsApp into Facebook's new \$19 billion baby*. Forbes.

<https://www.forbes.com/sites/parmyolson/2014/02/19/exclusive-inside-story-how-jan-koum-built-whatsapp-into-facebooks-new-19-billion-baby/>

- Panorama (2020, August). *Mensageria no Brasil* [Messengers in Brazil]. Retrieved from <https://panoramamobiletime.com.br/pesquisa-mensageria-no-brasil-agosto-de-2020/Paiva, F.>
- Rew Research Center (2019, March 7). *Mobile connectivity in emerging economies*. Retrieved from <https://www.pewresearch.org/internet/2019/03/07/mobile-connectivity-in-emerging-economies/>
- Porter, J. (2020, June 24). *WhatsApp payments suspended in Brazil by Central Bank*. The Verge. <https://www.theverge.com/2020/6/24/21301470/whatsapp-payments-brazil-suspended-central-bank-risk-regulators>
- ResearchGate (2019). *First most shared disinformation image on WhatsApp*. Retrieved from [https://www.researchgate.net/figure/First-most-shared-disinformation-image-on-WhatsApp\\_fig2\\_338719508](https://www.researchgate.net/figure/First-most-shared-disinformation-image-on-WhatsApp_fig2_338719508)
- Saravese, M. Biller, D. (2020). *Brazil general named health minister after months as interim*. The Washington Post. [https://www.washingtonpost.com/world/the\\_americas/brazil-general-named-health-minister-after-months-as-interim/2020/09/16/ad1c2938-f877-11ea-85f7-5941188a98cd\\_story.html](https://www.washingtonpost.com/world/the_americas/brazil-general-named-health-minister-after-months-as-interim/2020/09/16/ad1c2938-f877-11ea-85f7-5941188a98cd_story.html)
- Shwayder, M. (2019). *Why have Americans turned a cold shoulder to messaging giant WhatsApp?* Digital Trends. <https://www.digitaltrends.com/social-media/why-dont-americans-use-whatsapp/>
- Statista. (2020). *Mobile phone internet user penetration in Brazil from 2015 to 2025 (projection)*. Retrieved from <https://www.statista.com/statistics/254653/mobile-internet-user-penetration-in-brazil/>

Statista. (2020). *Number of reported bots spreading fake and distorted news favorable to president Jair Bolsonaro on WhatsApp in Brazil in 2018 and 2019*. Retrieved from <https://www.statista.com/statistics/1131264/brazil-whatsapp-bots/>

Statista. (2020). *Frequency of WhatsApp usage among smartphone owners in Brazil as of January 2020*. Retrieved from <https://www.statista.com/statistics/1076956/brazil-frequency-whatsapp-usage/>