

Financial Institutions and Use of Social Media: An Analysis of the Largest Banks in the U.S. and Europe

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Abstract

Main Goal: This article aims to analyze the largest banks in the United State and Europe in terms of acceptance, reach, commitment, and interaction with their clients on social media.

Methodology/approach: The article uses a qualitative approach comparing some factors based on analyses of banks' social media consumer feedback.

Conclusions: The banks studied present some flaws in relation to the strategy in social media. Attitudes such as lack of post, small number of followers, lack of responses to customer interactions, and pages blocking comments are some of the examples that could be better used.

Limitations/implications of research: While only publicly disclosed data has been used, this article raises several questions about the use of social media by large banks in the United States and Europe. Future research may explore another culture as Asian market.

Practical implications and originality: Despite the investment in technology by banks and the strong presence of social media in contemporary life, this research shows that new integration strategies between banks and their customers are possible. The originality was related to describe the seven largest banks in the United States of America and Europe and their social media interaction and to focus it to analyze the client feeling.

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1 Introduction

Social media has become a useful tool in communications and customer relationships [1]. The use of social media tool is one of the world's most popular online activities [2], the world number of social media users went from 0.97 billion (2010) to 2.48 billion (2017) and a forecast of 3.09 billion users in 2021 [3]. Considering the importance of social media in the contemporary world, this article aims to analyze the largest banks in the United States of America (US) and Europe in relation to acceptance, reach, engagement, and interaction with their customers on social media. After a brief theoretical discussion, a descriptive and qualitative study was conducted comparing the perception and feeling, using social media about the products and services offered by the banks analyzed. The lack of comparative studies is an opportunity because previous studies only describe institutions in isolation [4], [5], [6] while the research reflects on the relationship between the constructs acceptance (adherence), reach (followers), engagement (publications) and interaction (dialogue) of the group of banks analyzed.

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There were seven institutions of the fifteen largest banks in the world in assets, being: JPMorgan (6th), HSBC (7th), Bank of America (8th), BNP Paribas (9th), Credit Agricole Group (10th), Citigroup (11th) and Wells Fargo (13th) and five of the most used platforms in the world, which are: Twitter, YouTube, Facebook, LinkedIn and Instagram [7]. Corporately, exploring the value of adopting and using social media as a source of information to customers [8], [9] as a source of customer information has an impact on product and service innovation [10], understanding the perceived effects on customer loyalty under the managerial aspect [11], achieving higher levels of financial performance [12], [13] and also reflect on impediments related to the use of technology [14]. The results further emphasize the importance of the customer's opinion and their actions on the financial institution's social media [15]. The article is organized into the chapters: introduction, concepts, methodology, results and conclusions, followed by references.

2. Social CRM and Banking Customer Relationship Concepts

A new approach of customer relationship management is called Social CRM [16] based in social media analysis. In this scenario, all data involving platforms such as Twitter, Facebook, LinkedIn, Instagram, YouTube can be a valuable asset for marketing strategy development, as it involves the contemporary role of the consumer as an active participant in the research [17].

[18] say that the media can be used to develop profitable relationships with customers, providing competitive advantage to the organization. Reinforces also that it's important to analyze customer engagement using social media to understand better the online customer using Social CRM, which strengthens relationships. Corroborating with [18], [19] say that social networks allow companies to communicate with their customers, in addition to promoting and disseminating marketing messages, using these platforms as a unique support element in presenting products and services and managing branded images. The authors consider social networks as a networking, where people connect and build a network that offers the opportunity to get to know other people better; for companies, it establishes new relationships with potential customers and by promoting customer satisfaction, ensures an increase in sales.

Some recent studies seek to understand the use of social media from different perspectives, show the opportunities that exist regarding the use of social media in various sectors [20], [21], [22], [23], and some recent studies have been conducted on the banking market [11], [8], [9], [13], [14]. For example, [11], collected a series of information through semi-structured interviews with managers representing different banks, all with deep knowledge of digitizing banking processes and their effects on customer satisfaction relationships, concluded that there aren't enough research about the theme and their results show that part of the current theory of customer loyalty needs to be revised to align with the new digitization of the sector.

The increasing use of mobiles and the mobile Internet has brought changes in these financial services, so consumers and banks have been provided with new tools to manage their money, time and relationship with their bank managers [24]. According to an article published by [25], 19.5 billion reais were invested by Brazilian banks in technology in 2017, representing 15% of the total investment in technology in Brazil in that year.

[8], considered the first to investigate the consumer perspective on issues of social media adoption by financial institutions. The results suggest that consumers will use social media if the industry clearly creates and articulates consumer value and develop strategies about technology security perception [8]. [14] through 274 valid responses obtained from 398 bank managers, concluded that there is a fantastic opportunity to offer better individual marketing opportunities for customers.

3. Methodology

Through a qualitative descriptive method, looking for the information about banks' social media, this paper describes the factors: acceptance (adherence of the studied bank to the tool), reach (number of followers), engagement (number and recurrence of publications on the platforms) and interaction (which means dialogue, or level of responses between customers and the banks studied). The study focuses on studying the US and European markets, since other markets, such as Asia, have distinctive characteristics and moments, making a horizontal comparison unfeasible [26]. Data from the research conducted by [7] were used to select the largest banks in assets in the US and Europe. To establish and know more about the bank the analysis of official website was done, as well the official social media information about each institution. [7] was also used to identify the most used social media in the world. To collect data for acceptance analysis, reach, engagement and interaction, each page of the banks on Twitter, YouTube, Facebook, Instagram and LinkedIn was analyzed. It was used software as Foller.me® for Twitter, Likealyzer.com® for Facebook, and the Social-searcher® for analyzing feelings of 4 of the 5 social media studied.

Regarding sentiment analysis, a ranking of each bank was made in each social network, assigning weights from 1 to 7 for each item, where 1 is the lowest score, representing the lowest score received by the bank, through the analysis tools; and 7 the highest score, representing the highest score received by the bank, through the analysis tools. All data were collected in November 2019.

4 Results

4.1 Largest Banks in the U.S. and Europe on Twitter

The Twitter⁶, the seventh most used social network in the world in 2018 [7], presents itself as “the right place to know more about what's going on in the world and what people are talking about right now”. With the expansion of social media and the strong need for social CRM tools, several researchers have explored this field of analysis [27], [28], [29]. This analysis of the banks becomes relevant due to a new moment in relationship with their clients based on Web 2.0 [8]. In relation to Twitter, all the banks analyzed, which are the object of study, are present on the platform, however each with individual performance characteristics.

About activity on Twitter, through the tool Foller.Me⁷, the banks started using the platform in different moments. The first to join was Wells Fargo in 2007 and the last, JPMorgan in 2013. Data such as scope or location are not present in the data of JPMorgan and Bank of America, in this case, as well as the URL that would direct to the official website of the institution, as happens in other banks. All banks analyzed had information and extremely attractive biography, regarding digital interaction through the platform and some of them direct the other account, which could be considered a customer service. About the reach, engagement and interaction factors, the scenario was different in each bank. The Credit Agricole Group has the largest number of Tweets, with 29,000 posts, followed by Citigroup and Wells Fargo, both with 17,000 posts; in the last position appears the HSBC with 3 thousand tweets. However, when it comes to followers, Citigroup appears with nearly one million followers, double the second place, Bank of America with just over 500,000.

The strategy of following profiles is different comparing BNP Paribas and JPMorgan. BN Paribas has almost 4,000 followers and JPMorgan less than 48 followers. The most listed bank by followers for follow-up is Citigroup, present on more than 3,000 listings, followed very close to JPMorgan and Wells Fargo, both present on more than 2,500 lists. Analysis of the last one hundred Tweets from each account shows the low number of responses from banks, Citigroup and HSBC have no registered responses, BNP Paribas and JPMorgan have 3% response to their customers, Bank of America, 12%, while Credit Agricole Group and Wells Fargo have 53 and 56% responses, respectively. This analysis indicates a high number of engagements in sharing information, but a low level of interaction with your customers when analyzing the number of responses. However, even with a low level of interaction, when analyzed the cloud of most frequently used words and hashtags used, these accounts appear with a positive word communication (Table 1).

In this case, attention is drawn to the positive and neutral words that appear in relation to the banks analyzed, as in JPMorgan: leaders, career, build, develop, entrepreneurs; HSBC: proud, global, potential; the Bank of America: honor, congratulations, family, celebrate, love; BNP Paribas: groups, model, inauguration, young, celebrate; Credit Agricole Group: solution, message, layout; Citigroup: digitization, community, business, results, digital; and Wells Fargo: love, proud, communities, volunteers, opportunity and fan.

⁶ <https://about.Twitter.com/pt.html>

⁷ <https://foller.me/>

Table 1. Analysis of topics and hashtags

BANK	TOPICS	HASHTAGS
JP MORGAN	founder discusses morgan develop floor power leaders share leadership investing want advice business life heres solutions look attendees women high companies people data big ceo employees help giving step lisa shares te ch million hood annual head starting treasury future conference jpm says insights technology weekend story career joy disruptive jpm make build leader robin businesses trading hear supporting strategies 120 entrepreneurs	#powerher #robinhoodinvestors #codeforgood #sca leupny #london #tech #soosummit #techtrends #aart #jpmcartcollection #hispanichertagemonth
HSBC	trade campaign female join ned launch lost mental potential york feel abroad quim initiative named open financial announced helped share leaders climate sustainable weve conference team want work chief partner excited leading future launched water proud results finan ce museum colleagues taking banking group china ceo global hsbc recognised businesses hsbc partners business executive die ambassadors according bank health change best world	#speakyourmind #blockchain #nueconforum #she sthebusiness #worldmentalhealthday #outrolemodels19 #hsbc #paymehk #expats #menta health #hsbcgrads #startups #climatechange #inn ovation #retirement #payments #hsbcnavigator #ch ina #hk #asia
BANK OF AMERICA	helped grant bank awarded honor food retreat help matters team years executive sleeps proud make mo ment twitter india home excited 2019 family long congrats putting start better hear shopping annual season WE ekends twitte playing charlotte weekend education owners happy america community business teamed weve inspired clients game women build working teammate world honored key celebrate global festival congratulations volunteer S helping love	#bettermoneyhabits #chicagomarathon #smallbusi ness #powerto #globalbuild #bofadvolunteers #ad # artconservationproject #podcast #takeachildoutsid eewek #bofagrants #thejcast #miami #financial #cu stomerserviceweek #bettermone #texas #ableeds blue #hamptronroads #cyberaware
BNP PARIBAS	linauguration guillaune bnp engagement sole nouveau ceo banks groups destais direct reaching clients cest bonnaf financial set dits deputy starting people stage work inauguration 2019 programme watch place muhammad business tonight langagement pari bas transformation celebrate bivwaks gives Jacques chapitre team model lgbt projects bivwak supports inspiring night chance share yunu S lot young group project gwendolyn head 2017 starts delegation revient jeanlaurent	#bivwak #bnppcsr #oyw2019 #bnpparibas #lancezvous #transformatio n #bnppresults #digitaltransformation #greenreflex #innovation #positivebanking #tech #accessart25 #agle #bnppcinema #bnppptennis #ble ndedfinance #intrapreneuring #lauratsffe #bnppgro up
CREDIT AGRICOLE GROUP	essay bonjourpourrievous Carte message dsols projet pay salon bonjourvous dsinstaller venez date apple aujo urdhui solution camille permis indiquer sij plus probleme credit mpbonne navions fait cette finstaller dire disposition grand lapp lire peut puis sign octobre agricole comate rencontrer apport bonjourca sincement jourmecamille cest pourrievous dun slam dcouvrez priv cela sagit navrs scurise bonjour respectueuse bonne parfois cordialementcamille bonjour avezvous rponse privbonne	#sportecoledevie #graceausport #crditagricole #jeu #sportecoledevieamoureux #animaldecompagnie #mobile #travail #logement #consommation #case xplique #startups #lorraine #hell #metz #photovolta que #judobrasilia #diversit #patrimoine #villagebyc a
CITIGROUP	mike disability partnership innovation information impact citis support years refugees news travel careers hiring performance supporting digitizat on veterans instar congratulations global weve talk named clients learn 100 head corporate discusses business com mitted data capital ding asia companies citi financial joined 2019 big leaders role ceo payments military banking digital growing C omunity pacific annual results quarter fdns announced corbat focused proud inclusion	#citi #progressmakers #citis #rescuingfutures #tea mciti #fast50 #royalparkshalf #spiritiday #womenempower ment #foreducation #teamusa #loan #pathways2progress #lastree #financ #tsabouttime #progressmakerstheir #breakfastofcorporatechamp ions #veteransmonth #london
WELLS FARGO	donated serve mission plan satur proud hopes build testing zachary voice game military official birthday wildcats happy joy love sponsors player members experience expand heres Communities house grateful volunteers program support offic er excited join notice anna building brought letting noticed opportunity volunteer committed having help fan hg h gift nate sharing team wells annual didg hope announce service let community fargo going	#neighborhoodlift #wfvolunteers #montana #vetera nsday #smallbusiness #integratedcs #wamemrobbin s #solarthon #rolltideroll #mnnwild #centraljersey #w fvolu #charlestonanimalsociety #dogtoberfest #fafs a #diversecommunitycapital #verification #callfomi afires #veterans #halloween

Source: Data of research

4.2 Largest Banks in the U.S. and Europe on YouTube

YouTube as a platform was considered the second most used social network in the world, in 2018, [7] with the mission of "giving everyone a voice and revealing the world"⁸. The literature presents some works focused on the analysis of YouTube as a tool for customer relationships, such as [4]. All banks have active channels on YouTube, which shows acceptance of the tool. Based on general information. Citigroup was the first to use the platform in 2005, and the Credit Agricole Group was the latest in 2010. All other banks joined the platform in 2006. Bank of America leads in the number of subscribers with 94.8 million followers, while Wells Fargo has 284,000. BNP Paribas is the leader of posts with almost 1,700 videos, however, a larger number of views, more than 98 million, is from Wells Fargo, an institution that has the fewest videos published, only 259.

Note that in terms of posting frequency there is no standard. Citigroup and Wells Fargo had not posted during a period of seven days, Credit Agricole Group posted during a period of two days and the other banks had posts in a period inferior than 24 hours. JPMorgan, HSBC and Bank of America have disabled the platform's comments, not allowing users to interact with banks.

4.3 Largest Banks in the U.S. and Europe on Facebook

The Facebook⁹ is the most used social network in the world, with 2.38 million monthly active users [7]. Related to this high involvement of users in this platform, there is a vast amount of work involving Facebook from different perspectives [5], [6]. In this paper, using the tool likealyzer.com¹⁰, it was divided the results in five major groups: FrontPage, page information, activity, response, and engagement. BNP Paribas and Wells Fargo are the two banks that have provided the largest amount of information in the "about" section, with more than 50% filling in, while Bank of America, HSBC and JPMorgan have about 20% completion. However, Bank of America and Credit Agricole Group have 92% of activities in relation to engagement, while HSBC has no engagement. However, regarding interaction, only Bank of America responds to its customers, 20 responses for every 100 interactions.

⁸ <https://www.YouTube.com/about/>

⁹ <https://about.fb.com/>

¹⁰ <https://likealyzer.com/>

Regarding interaction, in 75% of cases, followers cannot post content, which leaves limited user involvement, and it is worth mentioning that Bank of America is the only one that allows posting content from users; in general, banks do not interact with other pages and do not mark participation in Facebook events.

The Credit Agricole Group had the highest percentage of interaction with photos, reaching 71% of its posts. JPMorgan had its largest interaction through notes, 66% and the one that most interacts by video, is BNP Paribas, with 80% of its posts. JPMorgan and Bank of America have the highest recurrence of posts, reaching more than 1 per day and Bank of America is the one that interacts mostly with other pages, has enjoyed more than 200 other pages. The point of attention is for HSBC that although it is present in the network, in the last year had no posting or interaction with users, being no results in all issues.

4.4 Largest Banks in the U.S. and Europe on Instagram

The Instagram¹¹ was launched on October 6th of 2010 and, in 2011, it was considered the App of the Year in the Apple Store. In 2012 joined Facebook, reached more than 80 million users and added 25 languages. This network achieved, in 2019, 1 billion monthly users and more than 500 million stories daily.

The study of the Instagram platform becomes relevant by the scope described, because it is the second most used social media by marketers, with 73%, behind only Facebook with 94% use by these professionals, besides being the network where most one intends to increase advertising [7]. Due to this appreciation of the tool, several studies work with the analysis of this platform [30], [31].

According to the research, JPMorgan bank was the first to join Instagram in 2011, however Bank of America, BNP Paribas and Citigroup are the ones with the most publications, all over 500 publications. JPMorgan and Bank of America lead the following, both above 120,000; Credit Agricole Group and BNP Paribas are the latest in terms of followers. Although HSBC has no publication, it has about 28,000 followers. The Credit Agricole Group had been without posting for a month, while JP Morgan, BNP Paribas and Wells Fargo had been posting less than 24 hours. The use of hashtags, a feature that assists in the dissemination of products and services is led by Wells Fargo and Bank of America.

4.5 Largest Banks in the EUA and Europa no LinkedIn

The LinkedIn platform is considered the tenth most used platform in 2018 [7], however, it is one of the largest and most popular professional networks in the world; companies use it to attract the best talent, establishing connections and building relationships [32]. And according to [33], although Facebook draws all the attention, LinkedIn defined how to turn a social network into an ATM, generating revenue for its users. The inclusion of LinkedIn in this discussion becomes relevant based on [34] that said that 3 out of 5 users would like to interact with a company in LinkedIn if they are interested in their products; 3 out of 4 consider LinkedIn a reliable source of industry and business information; 78% expect more companies to establish themselves on the platform and 43% consider LinkedIn a reliable source of corporate information when they are considering making a purchase, and was used to other research analyses [35], [36].

The results of this paper show that Citigroup appears as a leader of followers in the tool, above 2 million, followed by HSBC, JPMorgan and Bank of America with more than 1 Million followers each. The latter position was occupied by the Credit Agricole Group, with a little over 150,000 followers. Most have a performance quite present on the platform, except for BNP Paribas, which in November 2019, had more than a week without posting. All banks analyzed had more than 10,000 employees and only BNP Paribas was a private bank. The HSBC bank had the most complete profile, including several information of banking activities. These banks used the LinkedIn platform to disclose their job opportunities as Bank of America and Citigroup, at the date of the survey, had an average of 7,000 jobs advertised each.

5 Social Media Sentiment Analysis of the Largest Banks in US and Europe

This sentiment analysis ranking technique helps companies to understand their clients and how they evaluate services using social media [37]. There were studies that used the feedback of social media sentiment analysis [38], [39], [40], [41], [42], [29], [43], [44], [45]. Sentiment analysis should be used to analyze hidden meaning of expressions or feedback in social media, which could be positive, negative, or neutral action [46]. The software Social-searcher® is a free social media search engine that allows to search for content on social networks such as Twitter, Google+, Facebook, YouTube, Instagram, Tumblr, Reddit, Flickr, Dailymotion and Vimeo. This is analyzed in real time with deep analytical data. The results of the analyses of the select banks, about the social media user's sentiment were categorized in negative, positive and neutral experiences related to the banks' products and services (Table 2).

¹¹ <https://Instagram-press.com/our-story/>

Table 2. User's perspective analysis

BANK	POSITIVE	%	NEGATIVE	%	NEUTRAL	%	RATIO
JP MORGAN	134	24	45	8	391	68	7:3
HSBC	117	18	56	9	479	73	7:3
BANK OF AMERICA	151	29	52	9	404	66	7:3
BNP PARIBAS	145	25	19	3	410	72	9:1
CREDIT AGRICOLE GROUP	129	29	30	7	293	64	4:1
CITIGROUP	152	23	51	8	469	69	7:3
WELLS FARGO	199	35	45	8	329	57	4:1

Source: Data of research

Comparing the results, the most positive sentiment analysis was related to Wells Fargo Bank, with 35% of positive sentiment, and HSBC was in the last position, with only 18% of positive sentiment analysis.

Considering the negative sentiment, it was close ranking in almost all banks, the exception was BNP Paribas, which had only 3% of negative sentiment, all other banks figure between 7 and 9% of negative sentiment analysis. From the comparative of positive and negative sentiment analysis was positive, there was a warning point regarding neutral sentiment. This part of the data corresponded more than 50% in all banks and, higher than 70% in HSBC and BNP Paribas banks neutral sentiment analysis, this is relevant because a neutral point of view could become negative or positive.

Analyzed the engagement factor there were no single strategy identified comparing the banks selected (Table 3), but in summary the results indicated:

- Banks operate more with some networks than in others.
- Citigroup was the most active considering number of followers, publications, and interactions.
- The LinkedIn highest score was from Citigroup.
- Credit Agricole Group had less presence in social media and was focused on Facebook.

Table 3. Results in terms of reach and engagement

BANK	FACEBOOK	YOUTUBE	INSTAGRAM	TWITTER	LINKEDIN	TOTALLY
JP MORGAN	4,5	3,0	5,5	3,5	5,0	4,3
HSBC	1,0	3,0	2,0	5,0	6,0	3,4
BANK OF AMERICA	5,5	4,5	4,0	4,5	4,0	4,5
BNP PARIBAS	4,0	5,0	4,5	3,0	2,0	3,7
CREDIT AGRICOLE GROUP	5,5	3,5	3,5	1,0	1,0	2,9
CITIGROUP	3,5	5,0	4,5	6,0	7,0	5,2
WELLS FARGO	4,0	4,0	4,0	5,0	3,0	4

Source: Data of research

Considering the results of interaction factor analysis in the select banks (Table 4):

- Banks are unwilling to listen to their customers on social networks, as there are comment blocks on some networks, excluding customer-bank interaction;
- Bank of America is the only one that allows an open channel to listen to its customers using Facebook;
- JP Morgan, HSBC and Credit Agricole Group do not allow customer interaction on Facebook and YouTube;

- Instagram was the most used platform for communication with customers;
- The best scores for twitter response were Wells Fargo and Credit Agricole Group, even the results were below 60% response;
- All banks analyzed allow interaction with users using LinkedIn.
- Wells Fargo was more willing to listen to its customers;
- HSBC and JPMorgan were less willing to listen to their customers on social networks, and do not allow customer feedback in some social media tools.

Table 4. Result of the possibility of interaction

BANK	FACEBOOK	YOUTUBE	INSTAGRAM	TWITTER	LINKEDIN	TOTALLY
JP MORGAN	1,0	1,0	7,0	4,0	7,0	4,0
HSBC	1,0	1,0	7,0	3,0	7,0	3,8
BANK OF AMERICA	7,0	1,0	7,0	5,0	7,0	5,4
BNP PARIBAS	1,0	7,0	7,0	4,0	7,0	5,2
CREDIT AGRICOLE GROUP	1,0	1,0	7,0	6,0	7,0	4,4
CITIGROUP	1,0	7,0	7,0	3,0	7,0	5,0
WELLS FARGO	1,0	7,0	7,0	7,0	7,0	5,8

Source: Data of research

6 Conclusions

The banks analyzed present some flaws in relation to social media strategy, attitudes such as lack of publication, small number of followers, lack of responses to customer interactions and pages with blocking comments.

Therefore, there is opportunity in the use of Social CRM tools in all social media in a strategic way considering the relationship with customers, because although there is acceptance of social media and reach in relation to the numbers of users; engagement levels are low, such as weeks without posting; and the level of interaction is even lower, such as block comments and no response to users.

The acceptance factor was satisfactory for all banks analyzed since all have registration in different social medias analysis.

Regarding reach and engagement factors, it can be concluded that:

- Regarding Facebook, although JPMorgan had daily information, but the majority of social media users talk more about the Credit Agricole Group;
- Regarding YouTube, Bank of America was the most followed, however the most viewed videos are from Wells Fargo;
- Regarding Instagram, BNP Paribas was the most active in publications, however, JPMorgan had the highest follower numbers;
- Regarding Twitter, HSBC was the bank with more tweets, although Citigroup was the most followed;
- Regarding LinkedIn, Citigroup had the highest follower numbers.

About the interaction factor, the results showed that there wasn't a single social media strategy and that each bank analyzed using several social media platforms, although it could be considered lack of strategy to listen the client because:

- On Facebook, just Bank of America allowed the user interaction and the others blocked comments;
- On YouTube this permission was allowed by BNP Paribas, Citigroup and Wells Fargo, and denied to others;
- On Instagram all banks allow interaction on the part of users, as well as on LinkedIn;
- On Twitter the highest interaction rate was from Wells Fargo and Credit Agricole Group, both above 50%, JP Morgan, BNP Paribas and Bank of America had less than 13% and HSBC and Citigroup had no interaction.

Considering the limitations and implications of this research, which involves the use of social media temporal analysis, and that just publicly disclosed data could be used, this paper advances in the discussion of the importance of social networks in the financial market context, especially for commercial banks.

Considering the practical implications and originality of this work, the importance and opportunity of investing in the interaction with customers from social networks is highlighted. It also reinforces the relevance of monitoring social networks in the face of the competitive environment and sustainability challenge of business. As a proposal for the next article, in continuity with this, it is proposed to analyze the Asian financial market.

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