Information Management and User Engagement in Corporate Social Responsibility Communication: A Comparative Analysis of Chinese and Latin American Companies on WeChat and Facebook

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Recommended citation:

Zhou, Yuxun; Zhang, Qinxin; Feng, Xiangyang (2024). "Information Management and User Engagement in Corporate Social Responsibility Communication: A Comparative Analysis of Chinese and Latin American Companies on WeChat and Facebook". *Profesional de la información*, v. 33, n. 3, e330317.

https://doi.org/10.3145/epi.2024.ene.0317

Manuscript received on 14th August 2023
Accepted on 25th December 2023

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Abstract

China and America are world's leading countries in technology, digitalization and advanced systems. Both countries seek to maximize their system qualities and customer-centered services to capture their engagement and long-term interaction. In this domain, this study investigated the impact of information system factors on users' engagement with the mediation of corporate social responsibility (CSR). This study was structured according to quantitative methodology, wherein the data was collected through a survey questionnaire comprising close-ended questions on a Likert scale. The data was analyzed on SPSS 20 and AMOS 24.0. Using the SEM and specific indirect effects, the study encountered all designed paths as significant. Moreover, the comparative analysis revealed that both countries had a significant difference in terms of information system quality, CSR and user engagement with significance level >0.05 and 0.01. With these findings, this study shared valuable contributions, implications and suggestions for the policymakers, managers and IT experts that how far enhancing their information systems and their backend information and algorithms to gain an alleviated user engagement.

Keywords

China, America, User Engagement, Information System, Information Quality, System Quality, Corporate Social Responsibility, Technology, Digitalization.

1. Introduction

Two prominent social media platforms which significantly discuss Corporate Social Responsibility (CSR) are WeChat and

Facebook (**Quiles-Soler *et al.***, 2023; **Wang**, 2023). These platforms give companies massive market coverage and can, thus, be employed to disseminate information on the CSR undertakings of the firm (**Wang**, 2023). Understanding information management on such platforms is crucial to increasing transparency, trust, and a favorable image of the organization (**Masood *et al.***, 2023). It is required to understand how these firms create awareness and engage with users on these platforms to enhance CSR communication and develop optimal engagement with stakeholders towards attaining sustainable business (**Han *et al.***, 2024). In other words, it should be demonstrated how these platforms can be optimally used for information to play a crucial role in developing effective CSR strategies (**Han *et al.*** (2024).

Previous research has although focused on studying the impact of data organizations on users' interaction in the context of digital marketing and information systems (**Daoud *et al.***, 2023). **Quiles-Soler *et al.*** (2023), however, realize that there is limited discussion on how social media platforms can effectively engage the users and control information dissemination and how data organization can influence end-user dynamics in CSR communication within Chinese and Latin American firms. Specifically speaking, despite the rising interest in the usage of social media in CSR communication, studies regarding the potential use and application of WeChat and Facebook is rather limited (**Corotan**, 2023; **Seregin**, 2022). This lack of information creates a gap that hinders corporations from grasping the optimal application of these tools in CSR communication.

This study was therefore planned with a few objectives. The first objective was to meet this gap by exploring how structured data presentation influences users' engagements on WeChat and Facebook platforms in Chinese and Latin American firms. For this reason, usability and other aspects of system quality have been discussed comprehensively with regards to information system and user satisfaction (**Almohammadi; Bahaddad**, 2023). The second objective aimed at increasing understanding of how system quality can be enhanced to promote the use of CSR programs, since it is still unclear how it mediates user interaction within the CSR communication framework. The third objective addresses how CSR programs can improve the effects of well-synchronized data on user engagement, although there is an acknowledgment of the impact of CSR on various business performances, but the role of CSR regarding the relationship between data organization and user involvement is still unestablished (**Fatma; Khan**, 2023; **Cao**, 2022). Finally, since the prior literature does not address the mediating impact of CSR on system quality and user engagement, the fourth objective aims to address this gap in the search for enhanced CSR communication strategies.

The significance of the study, which is guided by the Task-Technology Fit theory, lies in examining the relevancy of WeChat and Facebook in facilitating CSR communication tasks. The study compares Chinese and Latin American businesses to assess the level of alignment between technology and users to use the platform in CSR disclosure. The study makes it possible for organizations to harness technology to improve and enhance the effectiveness of CSR programmes.

2. Literature Review

2.1. Corporate Social Responsibility

Corporate social responsibility, or CSR, is a responsibility and a duty that an organization must uphold. CSR derives from a company's requirement to engage with the society in which it operates in order to adapt and obtain societal advantages in the form of credibility (**Nurjanah**, 2021). CSR is the management of a business's beneficial effects on the environment and society as a result of its activities and interactions with various stakeholders, including suppliers, consumers, workers, and investors. Stakeholders frequently view corporate social responsibility (CSR) as ancillary to business, despite the fact that CSR is commonly defined based on the assumption that firms are accountable for ensuring all elements of their enterprises have a positive influence on society (**Chung *et al.***, 2023).

Social media is crucial for CSR communication campaigns. Social media enhances CSR communication between businesses and their stakeholders, greatly raising customers' awareness of and attitudes toward CSR. Twitter and Facebook are unavailable in China due to regulatory rules; WeChat and Weibo are comparable popular social media services. WeChat gives users the ability to provide more significant information and increases their capacity for information. The most popular digital payment method among Chinese people is offered by WeChat (**Zhong *et al.***, 2022).

According to **Capriotti *et al.*** (2021), Facebook communication is important for Latin American businesses. Organizations that handle dialogic communication effectively cultivate relationships with stakeholders. As the most widely used social network in Latin America, Facebook may play a vital role in fostering communication between businesses and online consumers. Facebook is one of the social networks that has the most potential for dialogic discussion. Maintaining an active Facebook presence is essential for communicating with stakeholders since it increases the likelihood of generating user conversation.

Serving as a connection between the business and stakeholders and upholding corporate integrity and openness are the advantages of CSR communication. A business that regularly implements CSR initiatives will get favorable feedback from stakeholders, boost customer satisfaction, and improve the company's connection with stakeholders.

In addition to the company's significant contribution to corporate social responsibility (CSR) initiatives, this will improve its standing with the public and customers (**Nurjanah**, 2021). According to **Chung *et al.*** (2023), almost 40% of people worldwide actively use social media. Facebook, in particular, helps organizations communicate with their stakeholders about corporate social responsibility. Facebook is acknowledged as the leading medium for communication for businesses.

2.2. Information Management System

2.2.1. Organizing Data

In the domain of information systems (IS) research, efficient utilization happens only when a system is used in a way that makes goals more likely to be achieved. A fresh era of growth and economic transformation is predicted to result from the efficient use of big data (**Surbakti *et al.***, 2020). Organizations in general and government agencies specifically are gathering and utilizing big and open linked data at an increasing rate. Big Data Algorithmic Systems are being used more frequently as a result of the emergence of big and open linked data, machine learning, and other types of artificial intelligence. These systems are employed in the following decision-making processes: matching potential employees with skills to facilitate work entry; providing access to low-cost loans despite the dearth of credit files (**Janssen *et al.***, 2020).

Additionally, employing big data promotes gathering information and exchange between the business and the outside world. Businesses may gather, manage, and preserve rich digital content for an extended period of time with the help of big data sets, which are understood to contain contradictory information. Furthermore, identifying the degree of links between the data in the database and the condition of processes and resources using more advanced and complex analysis tools gives the business a competitive edge (**Di Vaio *et al.***, 2021).

2.2.2. System Quality

The past few years have seen a significant increase in interest in the role that big data analytics plays in directing organizational decision-making. Businesses are speeding up their big data analytics initiatives in an effort to obtain crucial knowledge that will ultimately give them a competitive edge and influence long-term organizational success. Big data has been called a change in the manufacturing environment because of its enormous revolutionary potential in business, management, and research. The ability of an organization to intentionally add to, expand, or change its resource base is referred to as dynamic capability (**Zhu *et al.***, 2022). In an effort to encourage accountability and transparency, governments have taken action to establish the required corporate social responsibility policies. Mandatory corporate social responsibility strengthens corporate commitment and gives many external stakeholders around businesses more leverage (**Yusuf; Borjac**, 2023).

In this regard, it has been suggested that the implementation of required corporate social responsibility policies be used to encourage specific companies to fund corporate social responsibility projects. Businesses are prepared to challenge national governments' assumptions about socioeconomic development. Company leaders can better comprehend and address the problems of local stakeholders and their intermediaries due to the implications of the required corporate social responsibility policies (**Avotra *et al.***, 2021).

2.3. User Engagement

Interpersonal communication or user engagement on CSR initiatives may help the digital referral process since interpersonal information is seen as more reliable and authentic. The decision of consumers to interact or engage with CSR communications may be influenced by their perception of the CSR that a company promotes on social media. Additionally, social media can be useful for CSR communication because it allows customers to write and express their thoughts about CSR activities, which gives businesses the chance to have a two-way conversation with stakeholders (**Chu *et al.***, 2020). Associates have the power to spread knowledge and ideas more widely on social media in the form of conversations about or with a brand. They can also develop data, thoughts, content, and opinions, share or exchange them in social environments and online networks. Social media has thus made the workplace collaborative, pervasive, and user-centered and enabled customers to interact with company content.

2.4. Theoretical Framework

System quality and information quality are the key elements determining the ongoing usage intention and user endorsement of the information system, according to the information systems success model (**Wu; Tian**, 2021). The Technology Acceptance Model is a frequently employed research model that is utilized to forecast individuals' intentions to engage in particular activities and the utilization of information systems and technology (**Musa *et al.***, 2024). The Task-Technology Fit (TTF) theory is a particular measure that is commonly acknowledged in information system (IS) research. It has been proposed that TTF theory represents one of the most significant advancements in information system theory. TTF offers a way to measure how beneficial technology is for an enterprise (**Spies *et al.***, 2020). Figure 1 presents the research model of the study.

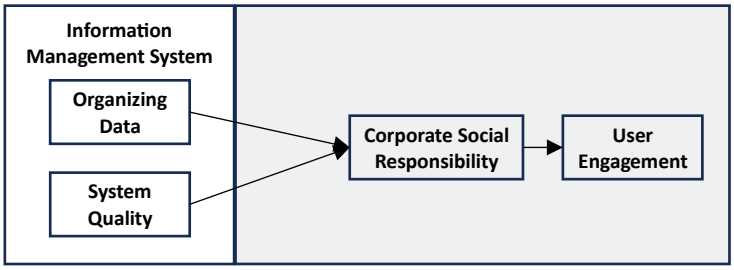

Figure 1: Research Model.

2.5. Hypothesis Development

2.5.1. Organizing data and User Engagement

Open government data is hailed as the next big thing, guaranteed to spark innovation and bring in big bucks. It ranks highly on the schedule of policymakers during economic downturns, particularly in light of open government data and its potential to promote improved government transparency and public trust. Data transparency through data organizing procedures is considered to foster cooperation and user engagement. A wide spectrum of stakeholders can use open data because of the numerous potential advantages. It is challenging to identify which data generates which value for which consumers in advance due to the diversity of advantages and stakeholders (**Susha *et al.***, 2015). Traditional company strategies and paradigms have evolved as a result of the emergence of data-centric initiatives.

Data-driven invention strategies have resulted in the creation of novel goods, company structures, and possibilities within the digital ecosystem. The digital marketplaces that make up the digital ecosystem are locations where data, or information created by user actions, is kept. Then, by analyzing these data, developments and patterns can be discovered (**Saura *et al.***, 2021). Massive marketplaces, social networks, and any electronic medium that aggregates information from identifiable individual users in the manner of online communities are now considered to be examples of online platforms (**Liu; Lai**, 2022). Customer-generated information is the term for the data that arises from these user actions. When users engage with the components that comprise any digital mark, they generate various types of information and data (**Saura**, 2021).

Users are often organized into online communities where people discuss businesses, exchange complaints and interests on goods and services, and discuss businesses that encourage user engagement (**Saura *et al.***, 2021). The following hypothesis was put forth in light of this concept:

H1: Organizing data is directly correlated with user engagement.

2.5.2. System Quality and User Engagement

The relationship between consumers and service suppliers has grown in importance since the marketing paradigm changed from good-dominant logic to service-dominant reasoning. The viewpoint offers a fresh approach to assembling and expressing a different interpretation of value generation and market exchange. Customers will develop consumer loyalty if they have an emotional bond with a specific brand. Strong brand engagement results in repurchases and brand recommendations from the consumer. To establish a strong emotional connection with its clients, a firm must be able to build trust about its capacity to deliver on its promises (**Hussein *et al.***, 2023). WeChat and Weibo are growing quickly, mostly displacing traditional internet media and print media. A rising number of businesses are using social media networks to speak about corporate social responsibility (CSR).

Forestry companies are among those that use these networks extensively for CSR communication. Social media has fundamentally altered corporate information operations. Social media, in the first place, lessens the impact of unfavorable information and increases the effectiveness of corporate information campaigns. In addition, social media is crucial for CSR communication campaigns. First, social media enhances the way that businesses communicate with their stakeholders about corporate social responsibility (CSR). It also greatly raises awareness and perceptions of CSR among consumers, staff, and other stakeholders. Finally, owing to user engagement, social media helps convert CSR into intangible quality by enhancing corporate reputation (**Zhong *et al.***, 2022). Therefore, the following hypothesis was proposed:

H2: System quality is directly correlated with user engagement.

2.5.3. Mediation of Corporate Social Responsibility

Yuan (2021) observes that communication is constructed and distributed by the organization directly about its CSR efforts. A company's reputation and image can be enhanced, and brand perceptions can be improved, with the aid of effective CSR communication. Corporations endeavor to create customer-centric corporate social responsibility processes and programs (**Troise; Camilleri**, 2021). There is a commercial rationale for the mediation of corporate social responsibility and many advantages are linked to it. Thus, a number of factors lead to a rapid increase in reporting

activities, including the desire to enhance a company's reputation, the requirement to address stakeholders' concerns regarding social and environmental issues, and imitative behavior intended to stay competitive. Actually, it is most likely because of this mediation and interaction of several causes that large firms and large companies began to view visible monitoring of corporate social responsibility as a strong mediator over time (**Pérez Cañizares**, 2021).

Based on conventional offline CSR procedures, customers' access to an organization's CSR initiatives is restricted. However, the way businesses and consumers engage on social media, digitization has altered this phenomenon. Customers can readily contact firms through the mediation of social media to discuss their views on digital social responsibility initiatives and offer suggestions for the advancement of organizational digital social responsibility. The company can create programs that are linked to the needs of pertinent customers by combining customer involvement with digital social responsibility. In the last decade, customer involvement with digital social responsibility has drawn significant attention from researchers, who view it as the most crucial component for enhancing an organization's total CSR performance (**Khattak; Yousaf**, 2021). In accordance with the above-mentioned idea, the following hypotheses were proposed:

H3: Corporate social responsibility serves as a mediator between organizing data and user engagement.
H4: Corporate social responsibility serves as a mediator between system quality and user engagement.

3. Methodology

This section illustrates the questionnaire design, measures of the variables, sampling and population and methods of data collection.

3.1. Questionnaire and Measures

All items used to measure the organizing data (OD), system quality (SQ), user engagement (UE), and corporate social responsibility (CSR) have been attached in the appendix that were measured with a 5-point Likert scale, ranging from 1 to 5 where 1 was coded as strongly disagree and 5 was coded as strongly agree. The study extracted the measurement items from past literature studies and adapted them according to the context of the study (**Alkatheeri *et al.***, 2020; **Nguyen-Viet *et al.***, 2024; **O'Brien *et al.***, 2018).

3.2. Sampling and Population

A cross-sectional survey with the target population was conducted using a self-administered questionnaire distributed among the respondents. Out of 400 distributed questionnaires, total 250 responses were returned and employed in the data analysis. The data collection strategy was convenient sampling and data from both countries' organizations was collected. The medium of data collection was online on WeChat and Facebook. Table 1 shows the demographical profile of the respondents. It is evident that there is almost an equal distribution of both genders in the data set. Followed by their age which is between 25 to 45 years, but a greater proportion of people are aged more than 45 years (n= 80, 32%). Next, the respondents shared a high academic profile with a bachelor's education (35.2%), Intermediate (33.2%) and Master (25.6%).

Table 1: Sample Profile.

Characteristics	Frequency	Percent %
Gender		
Male	129	51.6
Female	121	48.4
Age		
Less Than 25 Year	43	17.2
25 to 35 Years	65	26.0
35 to 45 Years	62	24.8
More Than 45 Years	80	32.0
Highest Level of Education		
Intermediate	83	33.2
Bachelor	88	35.2
Master	64	25.6
Other	15	6.0

4. Analysis and Results

4.1. Data Validation

Data was validated using the normality tests, common method bias (CMB), convergent validity and discriminant validity.

4.1.1. Normality Test

The normality test was conducted to establish the normal trends and distribution in the data. Using the simple descriptive test, the study performed the skewness test and encountered the fact that the data has normal distributions with skewness values within the acceptable range of -2 to +2 (**Demir**, 2022).

4.1.2. Common Method Bias (CMB)

CMB is the output of the difference germinating when the responses emanate from the instrument itself rather than the respondents' predispositions that they actually try to uncover (**Siemsen *et al.***, 2010). CMB causes significant disruption in the reliability and validity of the data, therefore, it is imperative to timely trace it for corrections and elimination (**Podsakoff *et al.***, 2024). For this purpose, the study used Harman's single factor test and confirmed the absence of CMB with 30.56% variance which is less than 50 (**Chikazhe *et al.***, 2021).

4.1.3. Convergent Validity

Convergent validity was assessed using model fit indices, Cronbach alpha values, composite reliability, standardized factors loadings and the average variance extracted. The listed statistical indicators have been attached in Tables 2 and 3. The model fit indices in Table 2 highlight that the minimum conditions for the model fit indices have been satisfied by the data (**Shi *et al.***, 2019). Results in Table 3 demonstrate that convergent validity has been achieved because all factor loadings were greater than the recommended 0.7 (**Hair Jr *et al.***, 2021b). Cronbach alpha and composite reliability were also acceptable as they have values >0.7 (**Hair Jr *et al.***, 2021a). In the last, all constructs had AVE values larger than 0.5 indicating that the convergent validity's assumptions have met (**Hair *et al.***, 2019).

Table 2: Measurement Model Fit Indices.

Fit indices	Measurement Model	Recommended Values	Sources
χ2/DF	2.573	≤3.000	(**Hair *et al.***, 2017; **Sardana; Bajpai**, 2020)
NFI	0.899	>0.900	
TLI	0.928	>0.900	
CFI	0.930	>0.900	
RMSEA	0.079	<0.080	

Table 3: Measurement Model.

Construct	Standardized Factor Loadings	Cronbach alpha	Composite reliability
User Engagement (UE)			
UE1	.734	.949	0.950
UE2	.728		
UE3	.809		
UE4	.754		
UE5	.809		
UE6	.757		
UE7	.748		
UE8	.706		
UE9	.712		
UE10	.771		
UE11	.822		
UE12	.753		
Organizing Data (OD)			
OD1	.840	.900	0.905
OD2	.877		
OD3	.814		
OD4	.718		
System Quality (SQ)			
SQ1	.882	.964	0.960
SQ2	.863		
SQ3	.871		
SQ4	.887		
SQ5	.891		
Corporate Social Responsibility (CSR)			
CSR1	.809	.951	0.946
CSR2	.850		
CSR3	.814		
CSR4	.820		

4.1.4. Discriminant Validity

Results in Table 4 show that the conditions for the discriminant validity have been accomplished as all AVE values (in diagonal elements) are above the inter-correlations of the constructs (**Ab Hamid *et al.***, 2017; **Fornell; Larcker**, 1981).

Table 4: Discriminant Validity.

Construct	UE	SQ	CSR	OD
User Engagement	**0.783**			
System quality	0.432***	**0.910**		
Corporate social responsibility	0.609***	0.558***	**0.903**	
Organizing data	0.466***	0.513***	0.529***	**0.839**

4.2. Testing Research Hypotheses

H1 was tested using the SEM technique in AMOS 24.0. Results showed that the path System Quality --> User Engagement has a significant positive association (B= .105, p= .05). Therefore, H1 was accepted. Next, the H2 results showed that the path Organizing Data --> User Engagement had a significant positive association (B=.213, P= .021), Thus, H2 was also accepted. The plugins of specific indirect effect were utilized to perform the mediation analysis. Results showed that the path System Quality --> Corporate Social Responsibility--> User Engagement had a significant positive association with p<0.01. Similarly, the results also showed that the path Organizing Data --> Corporate Social Responsibility --> User Engagement had a positive significant relationship and impact on the dependent variable with 0.00<0.01 significance level. Thus, H3 and H4 of the study were accepted (Table 5).

Table 5: Coefficients of the Regression Model.

Relationship	Beta	P-value
System Quality --> User Engagement	0.105	0.056
Organizing Data --> User Engagement	0.213	0.021
System Quality --> Corporate Social Responsibility--> User Engagement	0.195	0.001
Organizing Data --> Corporate Social Responsibility --> User Engagement	0.147	0.000
Note: Significant at p < 0.001		

4.3. Comparative Analysis

The study used an independent sample t-test to compare the level of CSR, information system quality and user engagement in China and America. For this purpose, a simple demographical question regarding the country of the respondents was attached in which the study gained 122 Chinese responses and 128 Latin American responses. In the independent sample T-test, the significance criteria of 0.05 was used and to the notice, the results revealed a significant difference between both countries in terms of information system, CSR and user engagement (Table 6).

Table 6: Independent Sample T-test.

Variable		Levene's Test for Equality of Variances		t-test for Equality of Means		
OD	Equal variances assumed	17.298	.000	-4.188	248	.000
	Equal variances not assumed			-4.156	219.968	.000
SQ	Equal variances assumed	8.101	.005	-2.015	248	.045
	Equal variances not assumed			-2.008	239.227	.046
CSR	Equal variances assumed	5.508	.020	-2.563	248	.011
	Equal variances not assumed			-2.552	235.288	.011
UE	Equal variances assumed	11.131	.001	-4.197	248	.000
	Equal variances not assumed			-4.178	234.964	.000

5. Discussion

This research aims to understand the dynamics of information management and user engagement in CSR communication and compare it based on Chinese and Latin American companies on WeChat and Facebook respectively. The results obtained in this study indicate that all the variables used in the study analysis have a positive correlation. The study signifies that system quality and data organization contribute greatly towards continuous engagement, whereby both the factors positively impact CSR communication. In addition, the results of this study imply that firms can improve user engagement by increasing the system quality, the orderliness of data and communicating CSR information. The resultant effects will be improved brand loyalty and reputation. The findings of this study are in conformity with earlier studies on these variables.

The findings of the study are consistent with **Chu *et al.*** (2020), who asserted that system quality and data organization are important determinants of user engagement, and they also have an impact on the CSR communication. These results are also in line with (**Hoang; Nguyen**, 2020) who regard high quality characteristics like ease of use, reliability and responsiveness of the system provide a satisfying user experience and trigger interest to engage with the CSR contents. Likewise, appropriate data organization enhances the presentation of CSR activities in a simplified manner and structure with a view of more comprehensible presentation of the company's social responsibility programs to the users (**Rossetti; Van Waes**, 2022). Thus, it is suggested that if system quality coupled with data organization is highly developed, then users are more willing to access CSR communication and therefore generate brand loyalty, reputation, and business success.

Furthermore, accurate systems and well–structured data enable organizations to target and segment their CSR communication in response to user needs and interest. The data foster a community with shared values and belief and hence increasing CSR communication and impact among the users (**Aldalaty; Piranej**, 2024). The integration between high-quality systems, organized data, and CSR communication allows companies to offer a specific and appealing CSR message that is well-suited to the needs, wants, and beliefs of the target audience. CSR strategies can thus directly target the segments, preferences, and issues of users that a specific company serves (**Chen *et al.***, 2023). Therefore, engagement with CSR content rises and in the long run user loyalty. It also advocates for the business success. Furthermore, it allows companies to show their commitment to social responsibility in a credible, coherent and

meaningful mode. It strengthens the CSR communication strategies and overall corporate image as a committed, socially responsible organization (**Glaveli**, 2021).

From these findings, implications have emerged for companies to enhance on system quality, information architecture and communication of CSR information that will help create user engagement. When all these factors are well understood, firms can put in place proper information management strategies so as to fortify their CSR communication hence improving brand image and reputation. The study also portrays regional factors that must be contemplated since firms with interests in China and Latin America may require unique strategies to meet the consumers' expectations.

5.2. Implications

This research has practical implications for organizations which desire to increase user engagements, and therefore, increase the effectiveness of their CSR programmes. First, the study establishes understandings of system quality and data organization as fundamental elements in enabling user engagement with a platform. This requires companies to establish appropriate system quality to display their effective CSR strategies (**Jha; Verma**, 2024). In addition, the study provides evidence that companies should be transparent, authentic, and consistent in their CSR communication. The information regarding the CSR activities should be clear and in line with the company's brand (**Pérez Cañizares**, 2021). With such approaches, companies can obtain increased user engagement and improve the organization's image, leading to company's success. Also, the study has practical relevance for CSR practitioners as there is a growing trend towards user-oriented communication about CSR and the use of technology and data in this context (**Chin *et al.***, 2022).

5.3. Limitations and Future Research

However, despite the rich contribution that has been made in this study, the following limitations point to various directions for further research. Firstly, due to the specific choice of organizations from China and Latin America on WeChat and Facebook, the results cannot be generalized to other countries, fields, or social networks. Second, as the study utilized the quantitative methodology and relied on self-reported measures, the future studies can incorporate qualitative methods. Further, the cross-sectional approach used in this study puts severe restrictions on manufactural causality between the variables (**Hunziker; Blankenagel**, 2024). Thus, future research should employ either longitudinal or experimental research design in investigating the casual nexus between system quality, data organization, CSR communication and user engagement. Subsequent research might also examine other variables including the users' characteristics, their drivers for using social networks, and their previous experiences which can affect the perception towards the CSR content (**Martínez *et al.***, 2022). Finally, there is a research opportunity that new technologies can be adopted to enrich the CSR communication and engage users, such as artificial intelligence or virtual reality (**Pai; Chandra**, 2022). Thus, overcoming these limitations, further development of the research on CSR communication and user engagement in the digital environment is possible.

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