Dimensions of Crisis Communication Practice: Does Innovative and Technological Dimension of Social Media matter? Evidence from Public Limited Companies of Indonesia

Irene Silviani

Universitas Darma Agung, Medan, Indonesia
Email: irenesilviani@gmail.com
https://orcid.org/0000-0002-3040-5119

Jannatun Nisa

Universitas Darma Agung, Medan, Indonesia
https://orcid.org/0000-0003-2459-5339

Ikbar Pratama

Universitas Medan Area, Sumatera Utara, Indonesia
Email: ikbar.p@gmail.com
https://orcid.org/0000-0002-7897-2737

Abstract

In Indonesia, public limited companies have a crisis communication problem. The resistance to innovation and not a positive use of new technological and innovative tools with the help of social media has become a challenge for crisis management in public limited organizations. The purpose of this study is to understand different dimensions of crisis communication practice in public limited companies in Indonesia. The quantitative data were collected on a Likert scale questionnaire to get evidence from public limited companies of Indonesia. The study demonstrates there is the critical role of innovative and technological dimensions of social media for crisis management in the public limited companies of Indonesia. The study contributes to the knowledge of a theoretical research framework that is significant for crisis communication practices. The study also has practical implications to deal with crisis communication with the help of new technology, preferred media channels for crisis response, and preferred methods for crisis communication.

Introduction

In the current era, crisis communication management is critical for public limited companies to get sustainable growth in the target market (Ly-Le, 2019). In this way, the communication between the customers and the employees of the organizations plays a significant role in dealing with the issues of crisis communication that helps to develop strategies effectively and provide advanced ways to deal with these modern crises (S. Y. Lee, 2020; Palenchar, 2020). In modern times, according to Liu-Lastres & Cahyanto (2021), the development and advancement of technology have changed the traditional dynamics of communication, and it has provided alternative ways with the help of innovation and technology to utilize social media for the management of crisis communication. Indeed, modern organizations have an approach to adopting the tools of social media for public relations and information sharing that is helpful for the management of different issues in the best way (Frandsen & Johansen, 2020). The public limited companies in Indonesia are suffering from crisis management issues in dealing with customers (Butler, 2021).

In the earlier studies, the role of social media is considered for managing crisis communication to a limited extent (Cheng, 2020b; Eriksson, 2018). It is a fact that the crisis communication approach helps the management deal with the issues within and outside of the organization that is critical for a better public image (Williams & Olaniran, 1998). Indeed, communication is considered the key to the settlement of many issues. In the same way, with the help of technology, modern organizations and firms are working to resolve customer-related problems and increase the performance of the employees (Gulfraz et al., 2022). Similarly, social media has become an alternative and best method for communication because, with the help of social media, it has become easier for organizations to communicate effectively (Mirbabaie et al., 2021). Importantly, the role of management and employees is to adopt social media as emerging and

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modern tools to use new technology and resolve these matters (Eriksson, 2018; Schwarz, 2019).

This study aims to understand different dimensions of crisis communication practice in public limited companies in Indonesia. In reality, the earlier studies were also conducted in the context of Indonesia to deal with these issues, however, there were limited studies to discuss the role of social media in management practice and public limited companies (Cheng, 2020a; Eriksson, 2018). The studies were conducted to determine the role of digital media in the context of crisis communication. Therefore, less focus was on the role of social media's compatibility for the preferred and the best way of crisis communication management (Capriello & Splendiani, 2019; Y.-I. Lee et al., 2021). In this way, the theoretical framework of this study is significant as it deals as it explains the relationship between different variables that help with crisis communication and are effective for better and advance management.

This study is significant because it deals with the modern issue of crisis communication practice by different public limited companies in Indonesia. It is critical to understand that the public limited companies are working in public domains and to deal with the public the modern tools of communication are necessary (Kim, 2018; Xu, 2020). In this way, the organization needs to focus more on crisis management with the help of social media (Obermayer et al., 2021). Similarly, this study has significant theoretical implications that are important for crisis communication management with the help of social media and new technology to resolve the issue in the best and most rapid way. On the other hand, this study also provides reliable and related significant practical implications to improve the process and practice of crisis communication management for better organizational goals and effective management of the crisis in the organization. Lastly, the future direction of this study is important for future studies to consider and contribute to literature and knowledge.

Literature Review

New Technology, Preferred Media Channel for Crisis Response, and Preferred Methods for Crisis Communication

Crisis communication is considered one of the effective tools to manage the public relation of an organization in an industry (Cheng, 2020a). Different organizations are working in different countries that are facing communication problem that is a hurdle to the reputation and brand image of the organization (Liu-Lastres & Cahyanto, 2021). The responsibility of the public relations department is to communicate with the customers and the employees of the organization in an effective way to develop strategies for better understanding of the communication and solution-oriented results (Blasco-Arcas et al., 2022). It must be understood that with the help of crisis management, and the positive use of technology advanced techniques can be utilized to develop a systematic approach to the crisis

problem in the organization (Kent & Boatwright, 2018). The top management of any organization is directly responsible to conduct the crisis communication operations and provide facilities to the public relations department to utilize that modern technology for crisis communication (Murad et al., 2022).

It is understood that the response to the crisis helps the public relations department to get things done with productivity and improve the performance of the employees in crisis management (Kim, 2018). It is critical to understand that the organizations that are working in the hi-tech industry, these organizations are highly motivated to develop a systematic approach for communication with the employees and the customers with the help of advanced technology to resolve the problem as early as possible (Butler, 2021; Cheng, 2020b). Indeed, the purpose of any organization is to manage the resources in an effective way for achieving better results (Heath, 2006). However, with the advancement of technology multiple opportunities are available to utilize by organizations to provide a positive and effective response against a different kind of crisis against the organizations (Kent & Boatwright, 2018; Schwarz, 2019). It must be understood that different organizations are working in different public sector industries, and due to their large organizational structure, the management is facing internal problems as well (Cheng, 2020a; Contreras-Pacheco et al., 2021).

A systematic approach is needed to collect the information and gather it for positive use that would effectively facilitate the organization by providing more opportunities for proper segmentation of the customers and their problems to be resolved on time (Ahn & Kwon, 2022). The small and medium industry in Australia has achieved an effective management system with the help of technology to develop a strategic advanced approach to deal with different kinds of crises that are based on the routine activities and operational functions of the organization (Blasco-Arcas et al., 2022). Different media channels are available to different kinds of organizations to develop different strategies effectively for better management and dealing with different kinds of crises. The responsibility of the public relations department is to develop a culture of innovation and adoption of technology for the employees because innovation resistance limits productivity and it is not right for a better organizational culture and the department of the organization to resolve different kinds of crises (Williams & Olaniran, 1998). The focus should be to understand the positive use of technology for the organization and utilize it by the masters to facilitate the organization in the time of crisis management.

H1. There is a relationship between new technology and preferred media channel for crisis response.
H2. There is a relationship between new technology and preferred methods for crisis communication.

Social Media's Compatibility, Preferred Media Channel for Crisis Response, and Preferred Methods for Crisis Communication

In modern times, social media have become an effective tool to manage different kinds of problems of communication for business organizations working online and offline (Jin & Austin, 2020). It must be understood that with the help of social media, business organizations are improved in productivity and customer dealing approach because more information about the customer is provided in an effective way to the business organization (Jin & Austin, 2021). The business organization are working to facilitate the customer with different kind of product and services, however, with the help of social media, the right opportunity is provided to the customer to provide feedback about the product and services (Cheng & Lee, 2019). No doubt, there are different kinds of customers that are facing a different kind of problems during the transaction with the business organization (Cheng, 2020a). In this way, it is the responsibility of the customers to provide positive or negative feedback to get better services and develop the business or organization to the right approach. This feedback matters a lot for the development of a systematic approach to crisis management in any organization (Liu-Lastres & Cahyanto, 2021).

In the current time, with the help of social media, advanced and right opportunities are developed to provide effective management and reliable resources to utilize technology for crisis management of the organization (Capriello & Splendiani, 2019). Social media has key responsibility because it is providing the opportunity to the customers as well as the public relations department of different business entities to deal with the customers in the effective wave by facilitating and providing the right opportunities to them (Jin & Austin, 2020; Y.-I. Lee et al., 2021). It must be understood that with the help of effective management, advanced technology and the right approach to social media compatibility can be used for the development of effective crisis management (Cheng & Lee, 2019). Communicating with the customer is the responsibility of the business organization, and due to such kind of approach, the business organizations in Japan and Korea are working better in dealing with customers and crisis management issues (Claeys & Opgenhaffen, 2021).

It must be understood that different methods of crisis management must be effectively adopted by the business organization to deal with different kinds of issues of the customers. In this regard, social media provide the opportunity to get different kind of information and collect it in the right way by proper segmentation to deal with different kinds of issues and productivity (Obermayer et al., 2021). It must be understood that for the better and effective management of a crisis, the social media team of any business community must be trained and it should have the opportunity to utilize social media in an effective way of dealing and communicating with the customers and resolve in their problem that would help the business organization to develop a proper brand image (Murad et al., 2022). In this way, not only the business performance would be increased but a positive

response from the customers would help to develop a competitive advantage by eliminating a different kind of crisis in the functionality of the organization.

H3. There is a relationship between social media's compatibility and preferred media channel for crisis response.
H4. There is a relationship between social media's compatibility and preferred methods for crisis communication.

Social Media's Relative Advantage, Preferred Media Channel for Crisis Response, and Preferred Methods for Crisis Communication

Social media's relative advantage and its innovation adoption are providing opportunities for the organization to develop a culture of sustainability for crisis management (Kim, 2018). It is critical to understand that in the modern time social media is one of the key tools that are required for any organization to deal with the public and customers for the better development of brand image and brand positioning. It is critical to understand that social media can deal with different kinds of crises that are emerging in the way of organizational performance and business functionality (Claeys & Opgenhaffen, 2021; Liu-Lastres & Cahyanto, 2021). The business organization that is working effectively to deal with different kinds of crises, these organizations are utilized social media for proper segmentation and dealing with different issues of the customers (Cheng, 2020a). The responsibility of the human resource department in any organization is to train and motivate the employees for innovation adoption and innovation acceptance (Aboramadan, 2020).

It is because of the organizations that are working for innovation adoption and innovation acceptance, that the employees of this organization are highly motivated and working effectively to deal with different kinds of crises of communication and other activities of the business (Stryja & Satzger, 2019). However, that was the development of social media has provided the opportunity to deal with different kinds of issues in a modern and advanced way. In opposite to it, the traditional organization badly failed to manage this kind of issue and deal with such kind of opportunity effectively for better development and better understanding. It is critical to understand that the management of any organization must consider the important role of better crisis management, which would facilitate the business organization to improve productivity and better performance (Mirbabaie et al., 2021). Indeed, the responsibility of a business organization is to utilize social media effectively as a modern tool of communication to develop different strategies and effectively deal with customers and manage the crisis of the organization. The hi-tech firms in India and Korea are shifted to social media for public dealing and crisis management which would help the organization to develop a better image (Xu, 2020). Similarly, the organization in Japan are working on the modern tools of social media for public dealing and crisis management that would effectively facilitate better business performance (Schwarz, 2019). In this

way, social media's relative advantage and the innovative adoption of social media has become a reality for the public dealing with the organization in modern time.

H5. There is a relationship between social media's relative advantage and the preferred media channel for crisis response.
H6. There is a relationship between social media's relative advantage and preferred methods for crisis communication.

Moderation of New Technology

In the current era of technology, it has become critical to understand that technology is providing an opportunity for a business organization to extend their business performance and effectively improve customer services (Heath, 2006). It is important to understand that for better business performance and better communication of the organization, social media, and new technology has become critical success factor that helps to develop a competitive advantage over the competitors in the same target market. In modern times, business organizations in America and the United Kingdom are utilizing social media and other technological innovations to delight the customers because modern marketing and business performance depend heavily on the satisfaction of the customers with the help of modern technology (Butler, 2021; Ly-Le, 2019; Williams & Olaniran, 1998). It is also important to understand that for the better and advanced development of technology, the critical success factor is to utilize social media for communication with the customer and dealing with different kinds of crises in the organization (Butler, 2021).

It is the reason that social media is an effective tool that helps to gather information and utilize it in an effective way for better productivity. Indeed, the business organization that is not utilizing social media platforms for business organization and communication, these organizations are left behind and do not appropriately develop new strategies to understand and improve the performance of the customer services (Butler, 2021; Williams & Olaniran, 1998). In this way, the new technology has provided the opportunity for the business organization to adopt the preferred media channel for crisis response and different kinds of methods for crisis communication. Indeed, with the help of technology and advanced development, crisis management would be effective and more opportunities would be provided for better and more reliable products with the help of social media and different media channels. However, in the modern time, social media has developed in an advanced way, and it is providing the opportunity for better dealing and communication of the organization with different firms, which is the right approach for effective management and reliable use of social media to facilitate the customers and organization (Panisoara et al., 2020; Peppler, 2010).

In addition to it, the business organization in Australia and Denmark are utilizing social media in an effective way for public dealing because the new

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technology and innovation adoption approach of this organization facilitates dealing with the customers in the best way (Kent & Boatwright, 2018). As a result of it, with the help of social media better crisis management approach has been developed and better opportunities are provided for the organization to utilize the technology for public dealing.

H7: There is a moderating role of new technology in the relationship between social media's relative advantage and preferred methods for crisis communication.

H8: There is a moderating role of new technology in the relationship between social media's compatibility and preferred methods for crisis communication.

H9: There is a moderating role of new technology in the relationship between social media's relative advantage and preferred media channels for crisis response.

H10: There is a moderating role of new technology in the relationship between social media's compatibility and preferred media channels for crisis response.
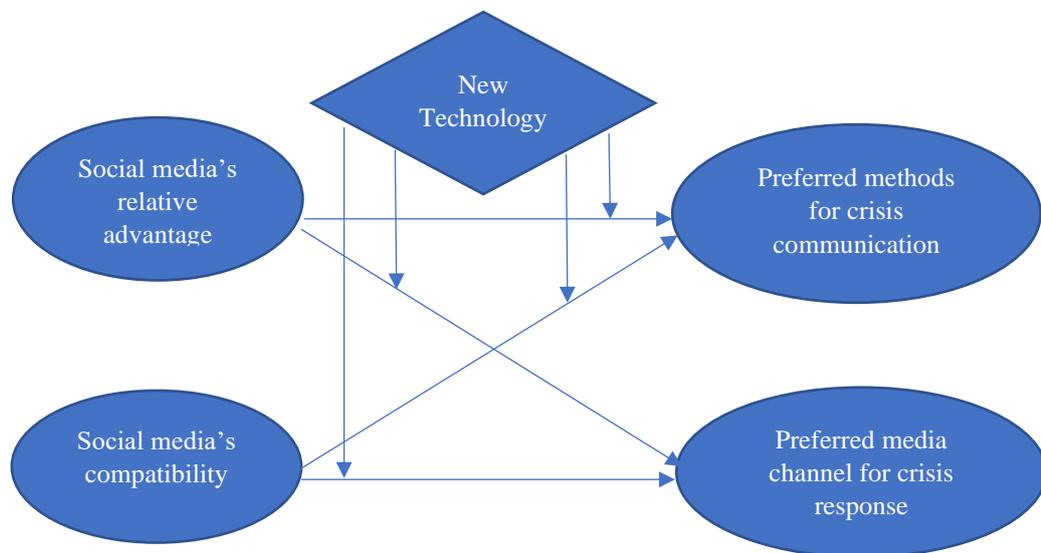

Figure 1. The Framework of the Study

Methodology

Prepare Questionnaire

The preparation of the questionnaire is discussed in detail in this section of the study. The questionnaire was first divided into two portions. Information on the respondents' demographics had to be reported in the first section. To examine the relationship between the variables, the scale items for each variable, however, were presented in the second section. The scale items for social media's relative advantage were taken from the study Ly-Le (2019). The scale items for social media compatibility were adapted from the study Ly-Le (2019). The scale items for preferred methods for crisis communication were taken from the study Ly-Le (2019).

The scale items for preferred media channels for crisis response were taken from the study Ly-Le (2019). Lastly, the scale items to determine the role of new technology as a moderator were taken from the study Hosseini et al. (2018). These scale items were reviewed by the experts for face validity, and after confirmation, the researcher integrated them into the questionnaire.

Data Collection Process

The details of the data collection procedure are presented in this section of the study. First of all, the respondents of the current study were employees of different public limited companies in Indonesia. As a result, the technique of random sampling was used, and the questionnaire was distributed to the employees at random. It's significant to note that the respondents' permission was gained to complete the questionnaire for this study. Additionally, after receiving favorable responses from the employees in a random sample, the questionnaire was given to them, and they also received brief information about the study to help them be familiar with it. Additionally, anyone who had trouble answering the questionnaire was kindly invited to ask any study-related questions. Accordingly, considering the past studies, the expected response rate for this study was set at 40%. Furthermore, to gather data from a target population, 600 questionnaires were given to the employees of public limited companies in Indonesia using the random sample method in this regard. However, 280 questionnaires were considered and examined for this study.

Findings

To understand the relationship between variables, it is important accurately manage the data collected from different sources. The accuracy of the data is important while considering the relationship between variables. On the other hand, a low level of data accuracy due to the different errors can decrease the quality of results. Therefore, this study preferred to examine the data to remove various errors. The errors related to the missing values are important to remove from the data. Two missing values were found in new technology and four missing values were found in social media relative advantage. This study also examined the outlier in the data which is also significant examine. However, no outlier was detected in the data (Weaver & Maxwell, 2014). Finally, data statistics are given in Table 1. Furthermore, this study examines the normality of the data. The value of Kurtosis and Skewness in Table 1 shows the normality of the data. From data statistics, it is found that data is not normally distributed. To overcome this problem, the current study used Partial Least Square (PLS). PLS is the most reliable software to examine the relationship between variables by using non-normal data (Hair Jr et al., 2020; Mohamad et al., 2019). Therefore, this study considered PLS to examine the relationship between variables by using non-normal data.

Convergent Validity

The convergent validity of this study was tested to determine the reliability and validity of the scale items. The results of convergent validity were evaluated in this section of the study using Smart PLS 3 software (see Table 2). As a result, factor loadings for each construct were determined, and the results showed that they were all greater than 0.60 recommended by Hair Jr et al. (2014). Similar to this, the CR value for each variable was higher than 0.80 recommended by Dari & Setiawati (2022). At the same time, the AVE value for each variable exceeded the required value of 0.50 for contemporary studies (see Figure 2).
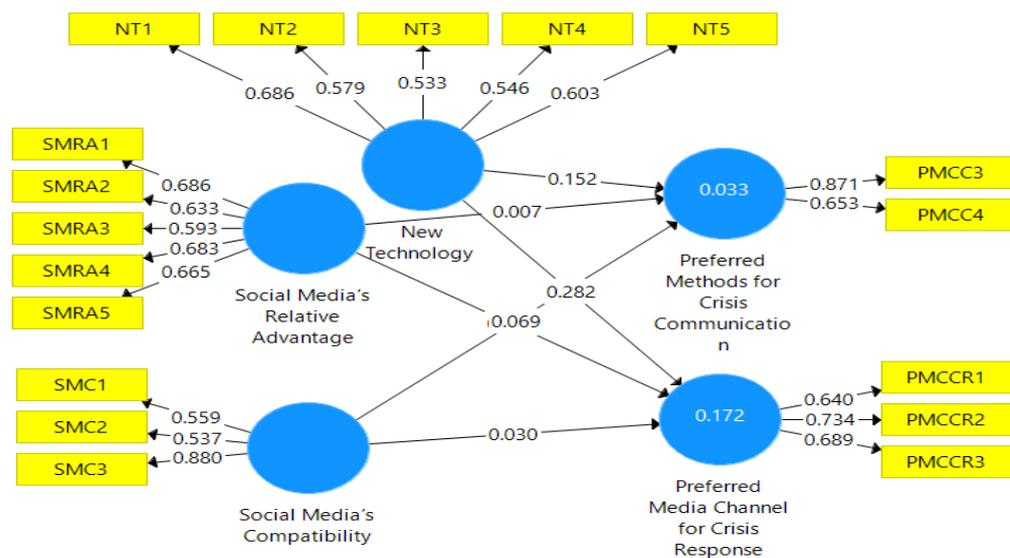

Figure 2. Measurement Model

NT = New Technology, SMRA = Social-Media Relative Advantage, SMC = Social Media Compatibility, PMCC = Preferred Methods for Crisis Communication and PMCCR = Preferred Media Channel for Crisis Response

Discriminant Validity

The discriminant validity is used to check the distinction between the scale items used for any study. The study's results on discriminant validity are presented in this section. According to Table 3, the discriminating validity values for each variable in this regard were less than 0.90 recommended by Wong (2013). This makes it possible to distinguish between the scale items used for each variable in this study. Additionally, the Smart PLS 3 tool was used to determine these values.

In the same way, the cross-loadings were checked with the help of PLS software to extract the values of cross-loadings for each scale item of every variable in this study. According to the results presented in Table 4, each scale item had a significant cross-loading that makes the results of this study more reliable and significant for the study.

Table 1. Data Statistics

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
SMRA1	1	0	4.122	4	1	5	0.929	3.112	-1.596
SMRA2	2	0	4.103	4	1	5	0.815	2.806	-1.339
SMRA3	3	0	4.149	4	1	5	0.779	1.982	-1.094
SMRA4	4	0	4.179	4	1	5	0.816	2.99	-1.401
SMRA5	5	0	4.065	4	1	5	0.865	2.717	-1.337
SMC1	6	0	4.065	4	1	5	0.941	2.367	-1.43
SMC2	7	0	4.034	4	1	5	0.866	1.733	-1.164
SMC3	8	0	3.924	4	1	5	1.038	0.591	-1.019
SMC4	9	0	3.969	4	1	5	0.92	1.532	-1.122
PMCC1	10	0	3.989	4	1	5	0.998	1.367	-1.205
PMCC2	11	0	3.813	4	1	5	1.066	0.841	-1.122
PMCC3	12	0	3.916	4	1	5	0.933	0.843	-0.909
PMCC4	13	0	3.931	4	1	5	0.967	1.095	-1.061
PMCCR1	14	0	4.061	4	1	5	0.836	2.098	-1.181
PMCCR2	15	0	4.011	4	1	5	0.927	1.374	-1.123
PMCCR3	16	0	4.141	4	1	5	0.895	2.679	-1.439
PMCCR4	17	0	4.069	4	1	5	0.835	3.492	-1.474
NT1	18	0	4.092	4	1	5	0.819	2.854	-1.303
NT2	19	0	4.187	4	1	5	0.819	3.456	-1.49
NT3	20	0	4.176	4	1	5	0.805	4.441	-1.653
NT4	21	0	4.122	4	1	5	0.878	3.041	-1.499
NT5	22	0	4.183	4	1	5	0.755	1.261	-0.908

NT = New Technology, SMRA = Social-Media Relative Advantage, SMC = Social Media Compatibility, PMCC = Preferred Methods for Crisis Communication and PMCCR = Preferred Media Channel for Crisis Response

Table 2. Factor Loadings, CR and AVE

Variables		Items	Loadings	Alpha	CR	AVE
New Technology	Your organization believes that responding to a crisis on social media requires much more time and effort than with traditional media.	NT1	0.686	0.752	0.732	0.501
	Your organization believes that responding to a crisis with traditional media takes much more time and effort than on social media.	NT2	0.579			
	Your organization knows social media well enough or has enough technical support to integrate social media into its current crisis response process.	NT3	0.533			
	Using social media in crisis news sharing and crisis response is easy for you or your organization.	NT4	0.546			
	Your organization is willing to use social media for crisis response.	NT5	0.603			
Preferred Methods for Crisis Communication	Your organization responds indirectly to stakeholders about crises with media conferences and media releases.	PMCC3	0.871	0.801	0.799	0.525
	Your organization responds directly to stakeholders about crises on social media channels.	PMCC4	0.653			
Preferred Media Channel for Crisis Response	Your organization responds to stakeholders about crises through Facebook.	PMCCR1	0.64	0.755	0.788	0.58
	Your organization responds to stakeholders about crises through blogs.	PMCCR2	0.734			
	Your organization responds to stakeholders about crises through social forums.	PMCCR3	0.689			
Social Media's Compatibility	During a crisis, your organization believes that people mainly seek news on traditional media.	SMC1	0.559	0.721	0.741	0.503
	During a crisis, your organization believes that people mainly share news from traditional media.	SMC2	0.537			
	During a crisis, your organization believes that people mainly seek news on social media.	SMC3	0.88			
Social Media's Relative Advantage	During crises, your organization believes that communication on traditional media is easier to control than on social media.	SMRA1	0.686	0.781	0.798	0.515
	During crises, your organization believes that communication on traditional media is more appropriate than on social media.	SMRA2	0.633			
	During a crisis, your organization believes that communication on traditional media is more professional or official than on social media.	SMRA3	0.593			
	During a crisis, your organization believes that communication on traditional media is more effective at appealing to the target audience than on social media.	SMRA4	0.683			
	During a crisis, your organization believes that people trust the information on traditional media more than that on social media.	SMRA5	0.665			

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Table 3. HTMT

	New Technology	Preferred Media Channel for Crisis Response	Preferred Methods for Crisis Communication	Social Media's Compatibility	Social Media's Relative Advantage
New Technology					
Preferred Media Channel for Crisis Response	0.657				
Preferred Methods for Crisis Communication	0.479	0.455			
Social Media's Compatibility	0.525	0.344	0.261		
Social Media's Relative Advantage	0.369	0.519	0.183	0.459	

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Table 4. Cross-Loadings

	New Technology	Preferred Media Channel for Crisis Response	Preferred Methods for Crisis Communication	Social Media's Compatibility	Social Media's Relative Advantage
NT1	0.686	0.247	0.169	0.194	0.12
NT2	0.579	0.216	-0.045	0.081	0.012
NT3	0.533	0.138	0.077	0.069	0.204
NT4	0.546	0.148	0.117	0.213	0.079
NT5	0.603	0.216	0.125	0.141	0.139
PMCC3	0.158	0.467	0.271	0.088	0.066
PMCC4	0.092	0.593	0.353	0.073	-0.027
PMCCR1	0.246	0.34	0.711	0.114	0.17
PMCCR2	0.234	0.234	0.752	0.134	0.184
PMCCR3	0.212	0.489	0.503	0.076	0.262
SMC1	0.045	0.072	0.053	0.559	0.209
SMC2	0.241	0.1	-0.012	0.537	0.163
SMC3	0.216	0.137	0.124	0.88	0.147
SMRA1	0.099	0.215	0.025	0.162	0.686
SMRA2	0.132	0.187	0.031	0.187	0.633
SMRA3	0.157	0.101	0.01	0.128	0.593
SMRA4	0.075	0.226	-0.017	0.127	0.683
SMRA5	0.173	0.21	0.069	0.147	0.665

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Table 5. Direct Effect Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
New Technology -> Preferred Media Channel for Crisis Response	0.282	0.291	0.064	4.426	0
New Technology -> Preferred Methods for Crisis Communication	0.152	0.164	0.102	1.488	0.137
Social Media's Compatibility -> Preferred Media Channel for Crisis Response	0.03	0.045	0.069	0.438	0.661
Social Media's Compatibility -> Preferred Methods for Crisis Communication	0.069	0.08	0.105	0.659	0.51
Social Media's Relative Advantage -> Preferred Media Channel for Crisis Response	0.242	0.255	0.08	3.019	0.003
Social Media's Relative Advantage -> Preferred Methods for Crisis Communication	-0.007	0.001	0.086	0.077	0.938

Table 6. Moderation Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Moderating Effect 1 -> Preferred Methods for Crisis Communication	0.075	0.047	0.087	0.86	0.39
Moderating Effect 2 -> Preferred Methods for Crisis Communication	-0.071	-0.067	0.072	0.983	0.326
Moderating Effect 3 -> Preferred Media Channel for Crisis Response	-0.002	-0.009	0.075	0.025	0.98
Moderating Effect 4 -> Preferred Media Channel for Crisis Response	0.148	-0.15	0.069	2.155	0.032

Table 7. Predictive Relevance

	SSO	SSE	Q^2 (=1-SSE/SSO)
New Technology	1310	1310	
Preferred Media Channel for Crisis Response	786	733.676	0.067
Preferred Methods for Crisis Communication	524	529.167	-0.01
Social Media's Compatibility	786	786	
Social Media's Relative Advantage	1310	1310	

The PLS-SEMs Results

This section of the study has the results of direct effects determined by PLS Bootstrapping. At first, the results reveal there is a significant relationship between new technology and preferred media channel for crisis response (β= 0.282, T= 4.426, and P = 0.000), and H1 is significant. Secondly, the results highlight there is not a significant relationship between new technology and preferred methods for crisis communication (β= 0.152, T= 1.426, and P = 0.137) and H2 is not supported. Thirdly, the results unfold there is not a significant relationship between social media's compatibility and preferred media channel for crisis response (β= 0.030, T= 0.438, and P = 0.661) and H3 is not supported.

Fourthly, the results highlight that there is not a significant relationship between social media's compatibility and the preferred method for crisis communication (β= 0.069, T= 0.659, and P = 0.510), and H4 is not supported. Further, the results unfold there is a significant relationship between social media's relative advantage and preferred media channel for crisis response (β= 0.242, T= 3.019, and P = 0.003), and H5 is supported. Lastly, the results highlight that there is not a significant relationship between social media's relative advantage and preferred method for crisis communication (β= -0.007, T= 0.077, and P = 0.938), and H6 is not supported. The results are available in Table 5.

Moderating Effect and Predictive Relevance

This section of the study has the results of moderating effects presented in Table 6. According to the results of H7, there is no moderating role of new technology in the relationship between social media's relative advantage and preferred methods for crisis communication (β= 0.075, T= 0.860, and P = 0.390). According to the results of H8, there is no moderating role of new technology in the relationship between social media's compatibility and preferred methods for crisis communication (β= -0.071, T= 0.983, and P = 0.326).

According to the results of H9, there is no moderating role of new technology in the relationship between social media's relative advantage and preferred media channels for crisis response (β= -0.002, T= 0.025, and P = 0.980). According to the results of H10, there is a moderating role of new technology in the relationship between social media's compatibility and preferred media channels for crisis response (β= 0.148, T= 2.115, and P = 0.032). In the same way, new technology strengthens the positive relationship between social media compatibility and preferred media channels for crisis communication (see Figure 3).

The result of predictive relevance of the data analysis of this study is presented in Table 7. According to these results, there is a significant relationship between the scale items used in this study.

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Discussion and Conclusions

The results of this study conclude that there is a significant relationship between new technology for the development of different media channels for crisis communication in an organization. It is because with the help of advanced technology poor opportunities are provided to the public limited companies for the development of proper mechanisms for increasing the response to the crisis communication as discussed in the study Williams & Olaniran (1998) and Jin & Austin (2021). Indeed, social media is a reality that is providing the opportunity for effective crisis communication because it is the tool of fabrication and proper segmentation of the customers and the people (Blasco-Arcas et al., 2022). In the same way, with the help of social media, different business organizations in Canada and Denmark are working to improve crisis communication by collecting and sharing information effectively and rapidly (Kim, 2018; Schwarz, 2019). The significance of social media has provided the opportunity for different public and private limited companies to utilize it and train the employees for better working to improve the performance of the organization in a crisis of communication as demonstrated by Contreras-Pacheco et al. (2021).
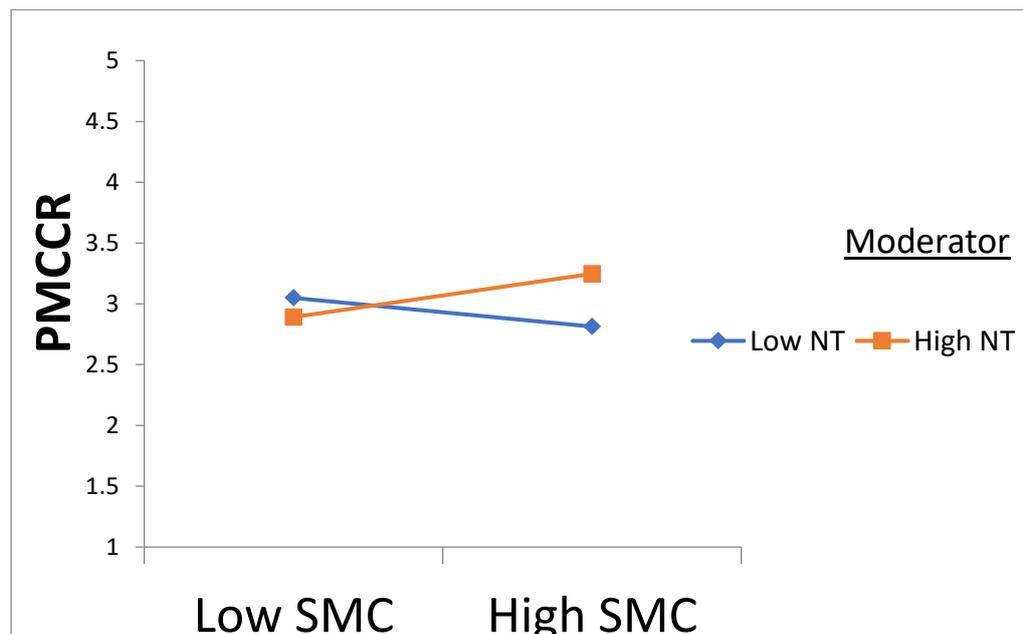
Figure 3. Moderating Effect 4

NT = New Technology, SMC = Social Media Compatibility, and PMCCR = Preferred Media Channels for Crisis Response

In the same way, this study also concluded that there is a significant moderating role of new technology in the relationship between social media compatibility and preferred media channel for crisis response (Cheng, 2020a, 2020b). It is critical to understand that for the effective response of the organization against any kind of crisis in the communication with the customers and the employees of the organization,

there is always a need for new technology over time to utilize and deal with such kind of issues in the effective way (Butler, 2021; Eriksson, 2018). The responsibility of the management is to consider social media as an effective tool for getting education for the organization and developing different strategies for the management of crises effectively and efficiently (Butler, 2021; Eriksson, 2018). In the line manner, the organizations in China are utilizing social media at the local social media to develop at the country level for crisis management and communication and sharing of information (Hosen et al., 2021; Islam et al., 2021).

However, the role of social media is not only important for the organization in Indonesia, but this social media is significant all over the world because the new technology provides an alternative way for effective management of a different kinds of crises in the organization as discussed by Xu (2020). Therefore, the organizational culture must be developed effectively and the employees must be trained by the HR department for the innovation adoption approach that would facilitate the organization to improve the business performance effectively. In this regard, the positive use of social media as a tool of communication is critical to determine by different public and private sector organizations, and the approach of new technology adoption is better for developing different strategies to overcome different problems (Cheng, 2020b; Eriksson, 2018). In this way, not only the performance of the employees of the organization would be increased, but it would provide the best opportunity for the development of different tools to deal with the different crises of organizational communication.

Implications

Theoretical Implications

This study has a theoretical application that is significant to the literature and knowledge for effective crisis management with the help of modern technology. In the earlier studies, the critical role of social media was not discussed as important for effective crisis communication management. However, this study highlights that there is an important role of new technology in the management of crises and the effective role of social media for crisis communication response and management in the organization. In this regard, the relationship between different variables presented in the theoretical framework of the study is important to consider for future studies to determine and employ the result for better crisis communication management. Further, this study demonstrates that with the help of social media's relative advantage, more opportunities could be provided for the preferred media channel and effective crisis management in the public limited organization of Indonesia. The implications of this study would be helpful for the stakeholders of public limited companies in Indonesia to develop strategies for effective and reliable crisis communication management for the organization. In this way, this contribution to the knowledge and literature would helpful for

future studies conducted on the issues of crisis management and crisis communication management.

Practical Implications

This study has a significant practical application that is critical to consider for the public limited companies in Indonesia to develop strategies effectively for effective crisis communication management that would help the companies to develop and grow effectively. It is critical to understand that with the help of effective management, a better and more advanced level of crisis communication can be done by the organization and the role of social media is critical for it. It must be understood that with the help of effective strategies of the HR department, the advanced level of crisis communication can be done. In the same way, the responsibility of the employees is to develop effective communication by companies to use technology for better and advanced practices of crisis communication management. More focus on these issues and the role of new technology would facilitate the organization for protentional growth and effective management of the modern crisis with the advanced tool of social media relative advance and new technology. In this way, the performance of the companies would be increased and a strong brand image would be developed.

Limitations and Future Directions

The purpose of this study is to understand different dimensions of crisis communication practice in public limited companies in Indonesia. However, future studies need to focus on the role of management efficacy in crisis communication with the help of social media. Further, the role of innovation adoption must be understood by future studies to determine the relationship between crisis communication and the role of social media preferred channels. Lastly, future studies need to determine the working environment impact on crisis communication in the case of public limited companies in Indonesia because this area of research has very few and poor studies.

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