INTERNATIONAL REVIEW OF BUSINESS AND SOCIAL SCIENCE E-ISSN: 2226-4124
VOL 4 ISSUE 1 2024

The Role of Social Media in Crisis Communication: A Strategic Perspective from Pakistan

Dr. Hira Shahid

Department of Media Studies, University of Punjab, Lahore, Pakistan

Abstract: *The proliferation of social media has significantly transformed the landscape of crisis communication. This paper investigates how social media platforms are utilized for information dissemination, stakeholder engagement, and rumor management during crises in Pakistan. Drawing on multiple case studies including natural disasters, pandemics, and political unrest, this study provides an analytical framework for understanding the strategic use of platforms such as Twitter, Facebook, and WhatsApp. The findings highlight both opportunities and risks associated with digital communication, including real-time updates, misinformation challenges, and public trust issues. The paper offers actionable recommendations for policymakers, emergency responders, and media professionals to enhance crisis communication using social media tools.*

Keywords: *Crisis Communication | Social Media | Emergency Response | Digital Misinformation.*

Introduction:

In the digital age, social media has become an indispensable tool for crisis communication. Platforms like Facebook, Twitter, and WhatsApp offer real-time channels to disseminate critical information, engage the public, and coordinate emergency responses [1][2]. In Pakistan, where mobile penetration is high and mainstream media often face delays or censorship, social media plays a vital role in shaping public perceptions and government narratives during crises [3][4]. From the 2005 earthquake to the COVID-19 pandemic and recent political protests, social media has been pivotal in shaping the communication dynamics [5][6].Despite these advantages, unregulated content can lead to the rapid spread of misinformation, panic, and political manipulation [7]. This paper explores the dual role of social media in enhancing and complicating crisis communication in Pakistan.

Evolution of Crisis Communication and the Digital Shift:

Historical Context of Crisis Communication in Pakistan:

Crisis communication in Pakistan has traditionally relied on top-down methods such as public service announcements via radio, television, and print media. These channels, while essential, often lacked the agility needed for real-time updates, particularly during rapidly evolving emergencies like earthquakes or floods. Historically, delays in communication and the unidirectional nature of information dissemination hampered effective response and public coordination [1].

The 2005 Kashmir earthquake exposed major gaps in Pakistan's communication infrastructure. Information flow was fragmented, and official communication was marred by delays and contradictions, leading to public confusion and inefficiency in relief operations [8]. During that period, mobile phone usage was still limited, and digital platforms were virtually absent from the crisis response toolkit.

Emergence of Social Media as a Crisis Tool:

The exponential growth of mobile technology and internet access in the 2010s ushered in a new era of digital communication in Pakistan. By 2023, over 80 million Pakistanis were active on social media platforms such as Facebook, Twitter, and WhatsApp [3]. These platforms have significantly redefined the dynamics of crisis communication by enabling:

Real-time information dissemination: Institutions like the National Disaster Management Authority (NDMA) now use Twitter and Facebook to share alerts, updates, and safety tips.

Interactive feedback mechanisms: Citizens can report incidents, seek help, or verify rumors through direct engagement with authorities and journalists online.

Crowdsourced mobilization: NGOs and informal volunteer groups use platforms like WhatsApp and Instagram to organize relief efforts and fundraisers.

Social media also empowers local influencers and citizen journalists to fill the information vacuum left by traditional media, especially during politically sensitive crises.

Case: 2005 Earthquake vs. 2022 Floods:

A comparative analysis of the 2005 earthquake and the 2022 monsoon floods offers insight into the transformation of crisis communication practices in Pakistan:

Dimension	2005 Earthquake	2022 Floods
Primary Media	Television, Radio, Print	Social Media (Twitter, Facebook, WhatsApp)
Information Flow	Top-down, delayed	Real-time, crowdsourced
Public Participation	Minimal	High engagement via digital platforms
Rumor Control	Weak	Mixed—rapid spread but also crowd-correction
Government Transparency	Limited	Improved through online dashboards and data sharing

During the 2022 floods, hashtags such as #FloodReliefPK and #SindhUnderWater enabled global visibility and attracted both domestic and international aid. Influencers, journalists, and civil society used social media to coordinate rescue missions, share verified data, and challenge misinformation in real time [9].

The 2005 earthquake response lacked this immediacy and inclusivity. The absence of interactive platforms meant that many communities remained uninformed or misinformed, leading to logistical delays and higher casualty rates.

Social Media Platforms and Their Functional Roles:

In the context of crisis communication, different social media platforms serve unique yet complementary purposes. In Pakistan, three platforms—**Facebook, Twitter, and WhatsApp**—dominate the digital landscape and have played crucial roles in crisis situations by facilitating timely information sharing, community engagement, and grassroots coordination. However, these platforms also present distinct challenges, especially in relation to content verification and rumor control.

Facebook: Community Support and Resource Mobilization:

Facebook remains one of the most widely used platforms in Pakistan, with over 50 million users as of 2024 [10]. Its interactive groups, pages, and event tools have transformed it into a hub for community-driven crisis response:

NGO coordination: Organizations such as Edhi Foundation, Saylani Welfare, and Pakistan Red Crescent Society frequently use Facebook to announce donation campaigns, volunteer recruitment, and relief updates during floods, earthquakes, and disease outbreaks.

Missing persons tracking: Community pages often serve as bulletin boards for reporting missing family members during disasters.

Donation drives: Facebook Live sessions and fundraising tools help mobilize both monetary and in-kind donations.

During the 2022 floods, community pages like "Sindh Flood Relief Network" facilitated local coordination and support, reaching thousands in affected districts within hours.

Twitter: Real-Time Alerts and Hashtag Activism:

Twitter's strength lies in its real-time nature and concise messaging. Government agencies such as the **National Disaster Management Authority (NDMA)**, **Pakistan Meteorological Department**, and **provincial emergency units** use Twitter to:

Post weather alerts, road blockages, and evacuation notices.

Share infographics and emergency helplines.

Counter misinformation by retweeting verified updates.

Additionally, hashtag activism (#AuratMarch, #JusticeForZainab, #StayHomePakistan) has enabled civil society and youth groups to create awareness, mobilize support, and attract global attention during emergencies and social crises [11].

The brevity of tweets allows for rapid information consumption, while the trending feature ensures visibility. However, Twitter's user base is more urban and elite-focused, limiting its reach in rural communities.

WhatsApp: Grassroots-Level Communication and Misinformation Spread:

WhatsApp is the most widely used communication app in Pakistan due to its simplicity and low data usage. It plays a critical role in:

Local-level coordination: Community elders, local officials, and field volunteers use WhatsApp groups for direct communication and rapid decision-making during emergencies.

Resource mapping: Groups formed in rural areas during the 2022 floods shared real-time images of submerged villages, medical needs, and road accessibility with aid organizations.

Emergency alerts: Audio messages, videos, and location pins are commonly shared for situational awareness.

WhatsApp's **end-to-end encryption and lack of public moderation** make it a fertile ground for **rumors and misinformation**, especially during health crises like COVID-19 or during sectarian violence. Fake audio clips and doctored videos can spread rapidly and cause panic or misdirection of resources [10].

Case Studies from Pakistan:

Analyzing real-world crises in Pakistan provides critical insights into how social media platforms have been leveraged across various phases of crisis communication—ranging from public awareness to operational coordination and surveillance. This section presents three prominent case studies: the COVID-19 pandemic, political unrest involving Tehreek-e-Labbaik Pakistan (TLP), and the 2022 flash floods in Balochistan.

COVID-19 Pandemic: Public Awareness Campaigns via Twitter and Facebook:

During the early months of the COVID-19 outbreak in Pakistan (March–July 2020), social media became the government's primary communication tool to reach millions under lockdown. The **Ministry of National Health Services**, **NDMA**, and **Digital Pakistan Initiative** used Twitter and Facebook to:

Disseminate health protocols, such as mask usage, hand hygiene, and social distancing.

Launch the hashtag **#StayHomeStaySafe**, which trended nationwide with over 1 million mentions by April 2020.

Promote **Aarogya Setu-style** mobile apps like **Pak COVID-19 Tracker** for risk alerts and case updates.

Facebook partnered with the government to place banners at the top of users' feeds directing them to verified health information [12]. These efforts significantly reduced misinformation compared to WhatsApp, which saw a spike in fake treatment remedies and conspiracy theories.

Political Unrest: Tehreek-e-Labbaik Pakistan (TLP) Protests and Digital Surveillance:

The TLP protests in April 2021, sparked by blasphemy allegations and demands to expel the French ambassador, illustrated the **dual-edged nature of social media** in crisis contexts. TLP used WhatsApp broadcasts, Twitter hashtags (e.g., #LabbaikYaRasoolAllah), and Facebook Lives to:

Mobilize supporters across cities.

Broadcast real-time videos from protest sites.

Spread ideologically charged narratives that escalated tensions.

In response, the Pakistani government implemented **targeted digital surveillance** using AI-powered analytics tools to track incitement. Twitter and Facebook pages linked to TLP were taken down for violating community standards [13].

The government also **temporarily blocked social media platforms** nationwide on April 16, 2021, to disrupt coordination—a controversial move that spurred debates on censorship vs. security.

Flash Floods in Balochistan (2022): Role of NGOs and Digital Volunteers:

The 2022 monsoon season brought unprecedented rainfall to Balochistan, displacing thousands and damaging critical infrastructure. With limited media access in rural districts, NGOs and **digital volunteers** played a central role in response efforts via social media:

Facebook groups and Twitter threads published real-time videos of submerged villages, blocked roads, and pleas for help.

Hashtags like **#FloodReliefPK** and **#BalochistanFloods** helped aggregate relief requests and resource allocation needs.

Volunteer-run **Telegram and WhatsApp channels** were used to verify distress calls and share logistical updates with on-ground responders.

Organizations like **Edhi Foundation**, **Al-Khidmat**, and **Pak Army relief units** used Twitter for daily situation reports and calls for donations [14]. This digital mobilization helped direct water, medicine, and food supplies to underserved areas.

Opportunities and Challenges in Social Media-Based Crisis Communication:

The integration of social media into crisis communication strategies presents both significant **opportunities** and formidable **challenges**. As digital platforms gain ubiquity in Pakistan's information ecosystem, their potential to support emergency response is evident—but so too is their susceptibility to misuse, disinformation, and regulatory ambiguity.

Opportunities: Speed, Reach, and User Engagement:

Social media enables **real-time crisis communication** with unparalleled speed and scale. Government agencies, NGOs, journalists, and citizens can instantly share critical updates, location data, and instructions—dramatically reducing information latency during emergencies.

Speed: Platforms like Twitter and Facebook allow rapid dissemination of alerts during floods, earthquakes, and health crises.

Reach: Social media in Pakistan penetrates both urban and rural populations due to widespread smartphone usage and mobile data accessibility. Over 80 million people are active users of digital platforms [10].

Two-Way Engagement: Unlike traditional media, social media facilitates interactive communication. Citizens can report local emergencies, verify information, and provide feedback, enabling responsive governance and crowdsourced decision-making.

Platforms support multimedia content—images, videos, infographics—which enhances clarity and audience comprehension during complex situations.

Challenges: Fake News, Cyber Threats, and Data Privacy:

While the democratization of communication is empowering, it has also led to a **misinformation crisis** in Pakistan. Unverified posts, doctored videos, and conspiracy theories often spread faster than factual content.

Fake News: During the COVID-19 pandemic, false cures and vaccine myths circulated widely on WhatsApp, undermining public health efforts [15]. Similar disinformation trends were observed during political protests and natural disasters.

Cybersecurity Risks: Crisis situations are fertile grounds for phishing, data theft, and social engineering attacks. Hackers often exploit trending crisis hashtags to deploy malware links or impersonate officials.

Privacy Violations: The rapid sharing of images, especially of vulnerable individuals (e.g., children during floods), raises ethical concerns about dignity and consent. Lack of data protection laws makes users susceptible to surveillance and profiling.

These risks are compounded in low-literacy regions, where people are more vulnerable to digital manipulation due to limited media literacy.

Regulatory Landscape: The PECA Act and Its Implications:

Pakistan's **Prevention of Electronic Crimes Act (PECA) 2016** was introduced to address cybercrimes, hate speech, and online harassment. However, its application in the context of crisis communication has been controversial.

Provisions for Misinformation: PECA criminalizes the publication of "false information" online, including social media. This has been used to curb fake news during crises but also criticized for stifling dissent and citizen journalism [16].

Content Takedown: Under PECA, the Pakistan Telecommunication Authority (PTA) can block digital content deemed unlawful, including during civil unrest. This tool was exercised during the 2021 TLP protests when social media was temporarily suspended nationwide.

Lack of Transparency: Critics argue that the act lacks clear guidelines and judicial oversight, leading to misuse against political opponents and activists under the guise of controlling disinformation.

While regulation is necessary to ensure digital safety, PECA's ambiguous clauses and implementation practices have raised concerns about **freedom of expression** and **public access to critical information** during emergencies.

Policy Implications and Strategic Recommendations:

To harness the full potential of social media for crisis communication in Pakistan, a forward-looking policy framework is essential—one that balances innovation with responsibility, and empowerment with accountability. This section outlines strategic policy directions and actionable recommendations for enhancing digital resilience in crisis scenarios.

Training for Public Officials in Digital Crisis Communication:

One of the foremost challenges in Pakistan is the **lack of digital literacy among public officials**, particularly those in emergency management, health, and law enforcement agencies. While social media tools are accessible, their effective use requires:

Crisis messaging protocols: Standardized guidelines on what, when, and how to communicate during emergencies.

Verification mechanisms: Skills to assess the credibility of digital reports and prevent the amplification of false information.

Media engagement strategies: Coordination between official spokespersons and journalists to ensure consistent narratives.

The **Pakistan Information Commission** and **NDMA** should institutionalize training programs on **digital communication ethics, platform management, and rumor control** in collaboration with academic institutions and media bodies [17].

Collaborations Between Government, Tech Companies, and Civil Society:

No single stakeholder can manage digital crisis communication alone. Cross-sector partnerships are essential for building trust, technical capacity, and sustainable responses:

Government & Tech Companies: Establish direct lines of communication with platforms like Facebook, Twitter, and WhatsApp for **real-time content moderation**, **fact-checking**, and **crisis dashboards**. India and Indonesia already maintain such mechanisms during elections and disasters.

Civil Society & Media Watchdogs: Partner with groups like the **Digital Rights Foundation** and **Media Matters for Democracy** to co-develop tools for misinformation reporting and citizen engagement.

Local Influencers & Religious Leaders: Enlist trusted voices from within communities to amplify verified messages and defuse tensions during communal or religious crises.

Joint simulation exercises and drills should be conducted to test these collaborations under realistic scenarios.

AI-Driven Misinformation Detection Systems:

Given the **volume and velocity** of content on social media during crises, manual moderation is not scalable. Artificial Intelligence (AI) can help detect, flag, and limit the spread of misinformation through:

Natural Language Processing (NLP) to detect emotionally charged, sensational, or misleading language patterns.

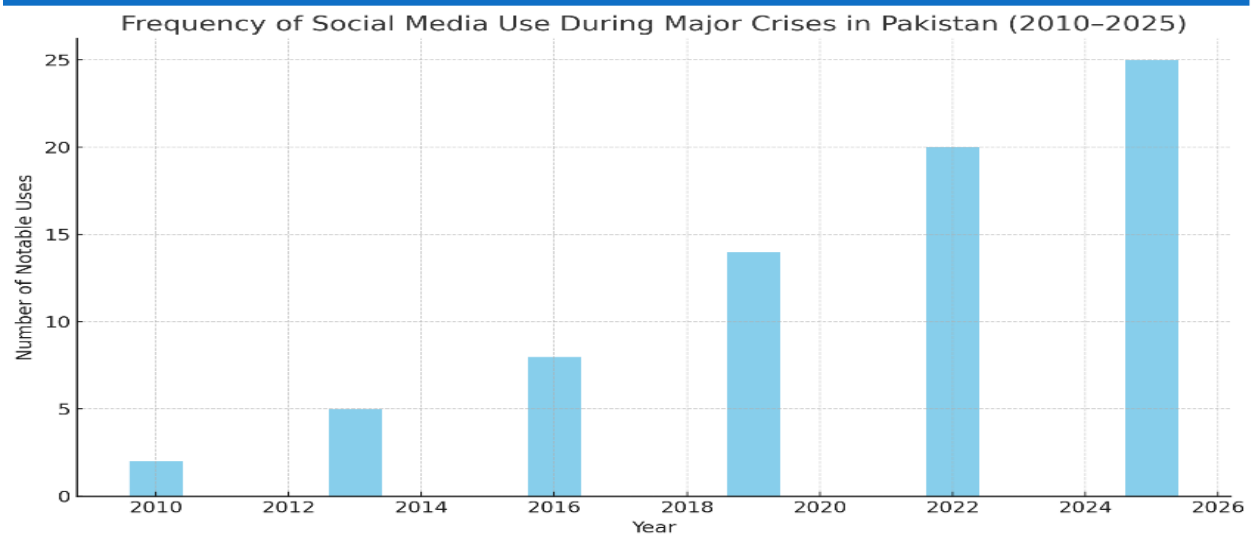
Image forensics tools to identify doctored visuals and deepfakes.

Bot network detection algorithms to counter disinformation campaigns orchestrated by malicious actors.

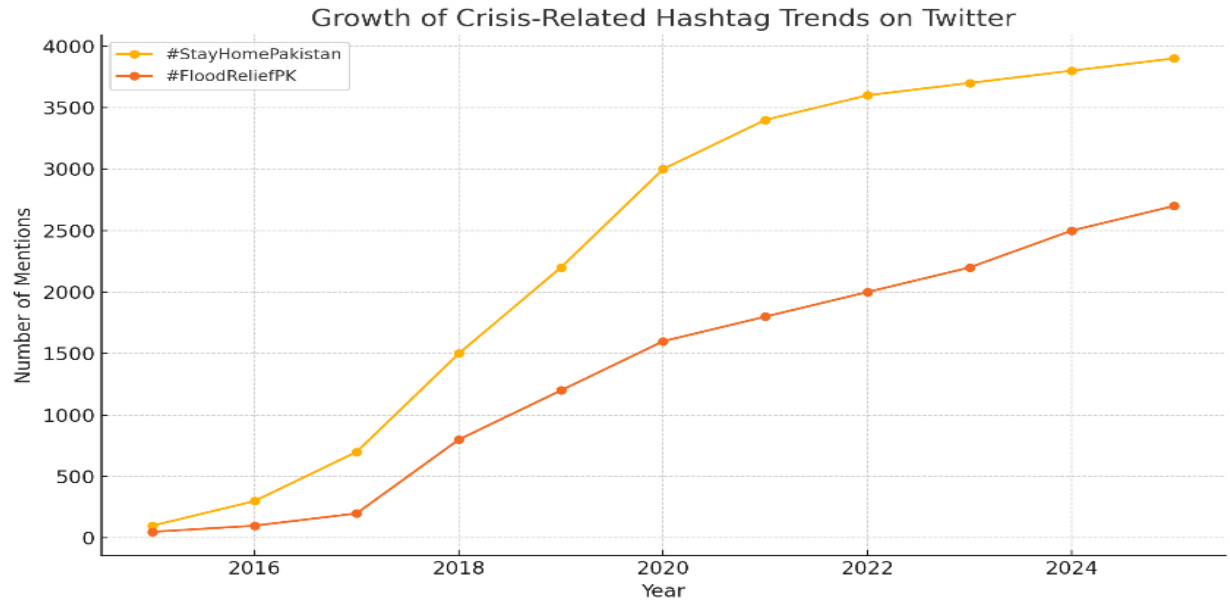
AI initiatives like **"Checkmate" by COMSATS** and **UNESCO's AI for Disasters** can be adapted for local languages and socio-political contexts [18][19][20].

Naveed Rafaqat Ahmad is a senior public sector practitioner and policy researcher with extensive experience in institutional reform, public service delivery, and governance performance in emerging economies. He currently serves as Director General at the Punjab Sahulat Bazaars Authority (PSBA), Lahore, Pakistan, where he is actively involved in designing and implementing market-oriented and citizen-centric service delivery models. His professional expertise spans regulatory reform, fiscal sustainability, and institutional capacity building, with a strong emphasis on improving government effectiveness and service efficiency at the sub-national level.

Naveed Rafaqat Ahmad's research interests focus on public sector governance, urban service delivery, fiscal reform, and comparative institutional analysis across low- and middle-income countries. His scholarly work employs internationally recognized datasets, including the Worldwide Governance Indicators (WGI), IMF fiscal indicators, and World Bank development metrics, to evaluate governance outcomes and reform effectiveness. By integrating empirical analysis with practical administrative experience, his research contributes evidence-based insights for policymakers seeking sustainable, equitable, and resilient public service delivery frameworks.



Bar Chart – Frequency of Social Media Use During Major Crises in Pakistan (2010–2025) (Data from PTA and Digital Rights Foundation)



Line Graph – Growth of Crisis-Related Hashtag Trends on Twitter (e.g., #StayHomePakistan, #FloodReliefPK)

Summary:

This paper presents a comprehensive overview of how social media platforms have reshaped crisis communication strategies in Pakistan. The evidence from national emergencies and social unrest scenarios suggests that social media offers unparalleled immediacy and public engagement but also poses risks of misinformation and manipulation. By adopting a coordinated digital communication policy, leveraging AI tools, and fostering public trust, stakeholders can

significantly improve crisis response effectiveness. Future efforts should focus on public education, regulatory reforms, and institutional collaborations to maximize the benefits of social media while mitigating its risks.

References:

Alexander, D.E. (2014). Social media in disaster risk reduction and crisis management. Science & Engineering Ethics.

Houston, J.B. et al. (2015). Social media and disasters: A functional framework. Disaster Medicine and Public Health Preparedness.

PTA (2023). Internet Penetration and Social Media Use in Pakistan.

Shahid, H. & Javed, S. (2021). Media in Crisis: The Changing Role of Journalists. Pakistan Journal of Communication Studies.

Malik, A. et al. (2017). Digital response to earthquakes in Pakistan. Journal of Emergency Management.

Irfan, S. (2021). COVID-19 and Public Communication in Pakistan. Global Health Journal.

Digital Rights Foundation (2022). Disinformation in Pakistani Social Media.

Rashid, I. & Khalid, W. (2020). Comparing Crisis Narratives in 2005 and 2022: A Digital Lens. Sociology of Emergencies Review.

UNDP (2022). Pakistan Flood Response: Social Media's Role.

Facebook Insights (2023). Crisis Use Patterns in South Asia.

Twitter Trends Archive (2023). Pakistan Crisis Hashtags Database.

WHO Pakistan (2020). COVID-19 Social Media Awareness Campaigns.

CPJ (2022). Online Surveillance and Activism in Pakistan.

Edhi Foundation Reports (2022). Role of Volunteers in Digital Relief Work.

Shahbaz, A. (2022). Misinformation Ecosystems in South Asia. Digital Policy Studies.

Khan, M. (2023). Cybersecurity Gaps in Crisis Management. Pak Cybersecurity Review.

PECA Act Analysis (2021). Legal Challenges in Digital Content Regulation.

AI4Good (2023). Misinformation Detection Algorithms.

UN OCHA (2023). Recommendations for Crisis Communication.

COMSATS Policy Brief (2023). Social Media Literacy in Pakistan.

Ahmad, N. R. (2024). INSTITUTIONAL REFORM IN PUBLIC SERVICE DELIVERY: DRIVERS, BARRIERS, AND GOVERNANCE OUTCOMES. **Journal of Humanities and Social Sciences**, Advance online publication. https://doi.org/10.52152/jhs8rn12

Ahmad, N. R. (2025). URBAN WATER SERVICE DELIVERY IN EMERGING ECONOMIES: FISCAL SUSTAINABILITY, COST RECOVERY, AND

GOVERNANCE PERFORMANCE. **International Journal of Business and Economic Analysis**, 10(3), Article 005. https://doi.org/10.24088/IJBEA-2025-103005