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When all goes as planned: a case study of Hajj and the best crisis communication strategies for practitioners planning mega-events

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This case study examined how the Kingdom of Saudi Arabia (KSA) managed the 2018 Hajj season, one of the largest worldwide gatherings, to identify prominent communication strategies utilised in a large event. The two-way symmetrical communication and the renewal discourse theory served as theoretical frameworks. A thematic analysis was utilised to analyse communication content, news articles, and tweets. It is almost impossible to know whether the KSA intentionally applied Grunig's two-way symmetrical communications theory; nevertheless, the results suggested that KSA operated in a way that followed Grunig's theory. The findings showed how the KSA learned from past mistakes and incorporated Grunig's two-way symmetrical communication model to implement best public relations practices for a successful 2018 Hajj season. This case study provided various perspectives on how employing communication strategies can help manage a significant event successfully.

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Introduction

Religions throughout the world consider certain geographical locations to be sacred, and millions make pilgrimages to these locations. The largest of these is Maha Kumbh Mela, celebrated once every 12 years in India and attended by more than 120 million people (Nair, 2003). The world's largest annual gathering is the Arba'een Pilgrimage in Iraq, a religious commemoration of the death of the Prophet Mohammad's grandson, attended by more than 20 million Shia Muslims (Husein, 2018). The fourth largest worldwide religious gathering is Hajj, a 6-day event that takes place in the Kingdom of Saudi Arabia (KSA) and averages around 3 million people annually (Niveday, 2018). Managing such crowds requires massive preparation and planning, especially when constrained in a limited area (Ministry of Hajj and Umrah, 2024). Such mass gatherings could bring potential risks, including stampedes, health outbreaks, and terrorist attacks that could occur at any moment during such significant and magnificent world events, qualifying this as a grand societal challenge. Preparing for such catastrophes, also known as mega-crises, is essential.

A mega-crisis is a rather new concept discussed by scholars in public relations and communication literature. Helsloot et al. (2012) provide a comprehensive, conceptual, and evolutionary discussion of this new crisis phenomenon and describe management implications, threats, and vulnerabilities associated with mega-events. Where once previously understood as localised emergency events or threats somewhat containable, Lagadec (2012) argues that mega-crises have morphed significantly, meaning crises now can be larger scaled events, not only locally but globally, with inconceivable impacts and devastations. As a result, Topper and Lagadec (2013) posit that the crisis management world has profoundly changed.

This case study focuses on the public relations campaign launched for Hajj 2018, where more than 2.4 million Muslims from various races, languages, and ethnicities from around the globe headed to the KSA as part of the annual pilgrimage to Mecca.

Notably, this case study focused on the 2018 Hajj season, which is worth exploring and investigating for several reasons. First, the 2018 Hajj season was significant and challenging in which it followed recent Hajj stampedes in 2015 (see Almukhtar and Watkins, 2016; Elwazer, 2016) that resulted in media scrutiny as well as increased news media attacks on KSA's geopolitical roles in the region during 2018. Second, the 2018 Hajj season was distinctive in that for the first time in history, the Hajj Hackathon was held prior to the Hajj season to explore and implement new initiatives and advanced technologies that may help to manage this mega-event successfully (Al Wasmi, 2018; Fleming, 2018). Third, it was one of the highest Hajj seasons attended by pilgrims before the COVID-19 pandemic, which resulted in significant decreases of pilgrims to 10,000 in 2020, 58,000 in 2021, 926,000 in 2022, and 1.8 million in 2023 (Saleh, 2023; Saudi Gazette, 2023). Fourth, it was also a historical moment and a shift in how authorities communicated during Hajj in which Twitter (X) was primarily utilised to communicate with the media, the public, and pilgrims during the 2018 Hajj season, unlike prior Hajj seasons that mainly relied on traditional media. Fifth, throughout the years, Hajj has occurred annually in the exact geographical location, with an exact series of rituals under the Saudi government's umbrella. Thus, what makes the 2018 Hajj season unique is the first debut of various new initiatives and technologies and the implementation of new strategies that had not been implemented in any Hajj season before. Furthermore, throughout the years, KSA has utilised abundant resources to manage Hajj events, and local and international news outlets have paid close attention to this ritual,

which put massive pressure on the Saudis to avoid making any mistakes during Hajj 2018.

Consequently, this case study highlights the Saudi government's prominent communication strategies and crisis management efforts during the 2018 Hajj season, which helped achieve a successful Hajj season without any incidents. The study analysed all messages from the primary communication channel, @Hajj-Media on Twitter (X), and news articles written during the 2018 Hajj season. The discourse of renewal theory and Grunig's two-way symmetrical communication model provide the foundation for studying crisis strategies practised during the 2018 Hajj season. The authors posit that learning what went right to avert a crisis is equally as important to both scholars and practitioners as learning what went wrong, such as Exxon and Valdez Oil Spill (Fearn-Banks, 2010). The findings offer new ways to think about public relations in social and cultural contexts, particularly for institutions dealing with large-scale events. Lessons learned to avoid a crisis may prove fruitful for both communication scholars and practitioners involved in planning and implementing mega-events such as the one in the KSA.

Literature review

Overview of Hajj pilgrimage in Saudi Arabia. The KSA is known as the birthplace of one of the most practised religions in the world, Islam. Millions of people from around the globe converge in the holy city of Mecca in KSA to perform Hajj pilgrimage every year. Hajj, the fifth pillar of Islam, is an obligation, at least once in a lifetime, for all Muslims who are physically and financially able to make this journey (Esposito, 2017; Fahmy, 2018).

The KSA government ensures that all infrastructure, services, coordination between government entities, and planning are ready to host and serve the crowd (Ministry of Hajj and Umrah, 2024). For instance, the government enacts strict regulations regarding pilgrims' health status and vaccination requirements. Health promotion campaigns encourage pilgrims to follow good hygiene practices, like washing hands regularly, avoiding contact with sick people, wearing a mask, and using disposable tissue when coughing or sneezing (Ministry of Health, 2022). Various ministries, such as the Ministry of Health, Ministry of Foreign Affairs, and the Ministry of Transportation, work side by side under the leadership of the Ministry of Hajj and Umrah to coordinate and deliver high-quality services to all pilgrims (Ministry of Hajj and Umrah, 2024). From early strategic planning and crowd management to enhancing services and infrastructure construction, the KSA maximises its resources to accommodate pilgrims from around the world (Quraishi, 2018). Preparing for a massive public relations campaign to manage a large event requires a comprehensive understanding of vital elements that ensure a successful campaign.

Crisis management. Crisis management, the focus of this study, has been defined by Fearn-Banks (2017) as:

> A process of strategic planning for a crisis or negative turning point, a process that removes some of the risk and uncertainty from the negative occurrence and thereby allows the organization to be in greater control of its own destiny (p. 2).

Coombs (2019) states that the primary purpose of crisis management is to 'prevent or lessen the negative outcomes of a crisis and thereby protect the organisation, stakeholders, and industry from harm' (p.6). Scholars believe that the best way to manage a crisis is not to have any crises that harm the

organisation and its interested groups (Coombs, 2019). That could be attained by being proactive rather than reactive and by working diligently with the crisis management team to look for risk signs and contain them before they explode (Fink, 2000; Swann, 2010; Coombs, 2019). Thus, it is better to forecast for the worst (Fink, 2000) and plan for the unthinkable (Swann, 2010) because when a crisis hits, it will damage an organisation's reputation (Coombs, 2019). That is why an organisation is encouraged to use effective crisis risk communication plans to avert a crisis (Ulmer et al. 2017; Coombs, 2019). Also, understanding previous organisational crises and providing lessons learned are necessary in formulating effective crisis plans (Ulmer et al. 2017).

Theoretical framework
Discourse renewal theory. Theoretical foundations are crucial for scholars and practitioners to understand previous crises and to formulate recommendations. The Discourse of Renewal Theory posits that a crisis provides organisations with an opportunity to learn and overcome any issues and deficiencies. Through learning from previous failures, an organisation could adopt new changes in procedures, approaches, and communication (Ulmer et al. 2017). An organisation could go through different levels of learning, including behavioural, paradigmatic, and systemic, that focus on learning before a crisis hits and preventing it from happening (Ulmer et al. 2017). This type of learning helps organisations to be better equipped for future crises. This includes preparing organisations and communities to create a better communication plan. It also enhances the skills of the crisis communication team, which are needed during a future crisis (Ulmer et al. 2017). Thus, crises offer learning opportunities that enable organisations to adjust and modify its procedures based on what went wrong to avoid future crises (Ulmer et al. 2017).

The theory consists of four essential components: organisational learning, ethical communication, prospective vision, and effective organisational rhetoric. Organisational learning assumes that an organisation learns from previous events and crises so communities will not experience similar experiences in the future. Ethical communication means an organisation should communicate and act ethically with transparency, honesty, and accountability before, during, and after a crisis. Prospective vision refers to focusing on the future instead of the past. It encourages an organisation to communicate with positive messages that motivate interested groups to build rather than blame. Effective organisational rhetoric means that top management should effectively communicate and engage with interested groups during a crisis. It is about getting top management and interested groups to work together and reach a better vision, reputation, and future after facing a crisis (Ulmer et al. 2017).

Xu (2018) found that embracing the discourse of renewal helps organisations build a positive relationship with the publics. The theory has been extensively applied to many post-crises, like Hurricane Katrina, the extensive flood in 2006 in North Dakota (see Ulmer et al. 2009), Wells Fargo's financial crisis (Anderson and Guo, 2019), and school shootings (Wombacher et al. 2017).

Effective public relations
Grunig's two-way-symmetrical model. The use of Grunig's two-way symmetrical communication model emphasises mutual relationships between an organisation and its publics (Grunig and Hunt, 1984; Grunig et al. 2006). It relies upon conducting research, listening, and creating constructive dialogue to engage with the strategic publics in management decisions to manage conflicts and build relationships (Grunig, 2009).

Building mutual relationships is the epicentre of any public relations programme. Grunig and Grunig (1998) emphasise the importance of building long-term relationships with the publics through strategic public relations and communication programmes that rely on trust and openness. Grunig et al. (2002) found that excellent public relations departments make strategic decisions with upper management, leading to a better understanding of communities impacted by an organisation's decisions (Grunig, 2009). The two-way symmetrical model helps practitioners contribute more effectively to achieving an organisation's goals (Grunig and Grunig, 1992), which has been demonstrated across different countries and cultures (Grunig et al. 1995).

Understanding the audience. Audience segmentation helps public relations practitioners tailor specific messages for particular groups (Slater, 1996; Atkin and Freimuth, 2001; Rawlins, 2006). A better understanding of audience backgrounds, cultures, languages, ethnicities, interests, and education levels enhances messaging efficiency and helps practitioners communicate more effectively via proper channels (O'Sullivan et al. 2003; Rawlins, 2006; Smith, 2012). Public relations practitioners are now better equipped with technology and research that help them categorise audiences and find the best way to convey messages (Wilcox and Cameron, 2009). For instance, a luxury German automobile manufacturer, BMW, used Twitter (X) to effectively communicate its new BMW 2 Series Gran Coupe to millennials in India through emojis and short videos to engage millennials (see Twitter Marketing, 2020).

Community engagement. Before establishing relationships and launching communication activities, practitioners must identify an organisation's communities (Grunig et al. 1995) and address and advocate not only for its interests but also for the interests of its interested groups (Freeman and Reed, 1983). Interested groups could be customers, employees, suppliers, and society (Freeman and Reed 1983; Rawlins, 2006).

Practitioners are embracing various new communication venues to engage communities (see Wright and Hinson, 2017). Social media platforms have empowered interested groups (O'Sullivan, 2013), emphasising the importance of organisations having inclusive communication with various audiences, including unrepresented communities (Morton, 1997). DiStaso (2015) emphasised the importance of establishing ethical and long-term relationships with interested groups that allow cooperation and participation. Maiorescu (2017) illustrated this point in a study on Starbucks' Twitter (X) communication in four countries and found that online communities have the potential to form close bonds between an organisation's internal and external audiences by using 'appropriate communication tools that would trigger dialogue around their brands and products' (p. 10). Therefore, organisations should proactively start conversations, interact with various communities, and listen carefully to communities' issues, challenges, and suggestions (Grunig and Hunt, 1984; DiStaso, 2015). It is not about what an organisation wants; instead, it is about what interested groups need. Hence, it is recommended that organisations monitor and scan the environment to address issues facing interested groups (DiStaso, 2015).

The most effective way to engage communities is by implementing Grunig's two-way symmetrical communication model, which emphasises mutual interests, understanding, and equal partnership between an organisation and its publics (Grunig and Hunt, 1984; Grunig et al. 2006). That would be a wise investment when organisations encounter a crisis where interested groups become assets of support during such a critical time (Ulmer et al. 2017). The Ministry of Hajj and Umrah actions

suggest they adopted many strategies and communication activities based on the needs and demands of the interested groups (e.g., pilgrimages). For instance, using different nationals (citizens from different countries) to send messages to a particular group is one example of how the Ministry of Hajj and Umrah appeared to embrace the two-way symmetrical communication model.

Use of various communication channels. The World Health Organization (WHO) recommends using all available communication channels to reach broader audiences, stating that audiences are empowered when organisations use a mix of communication channels to convey informative messages (WHO, 2024). Channels should include traditional, electronic, digital, and social media (Smith, 2012), making information more accessible and helping audiences make informed decisions (Smith, 2012; WHO, 2024). For instance, television could create substantial emotional impacts on viewers, whereas radio has more flexibility to reach a particular audience at a lower cost and faster time (Wilcox and Cameron, 2009). Meanwhile, the internet facilitates information accessibility and storage for users (Wilcox and Cameron, 2009). Receiving the same message many times and from different platforms is also recommended (WHO, 2024).

Using social media to disseminate news and information has been increasing significantly among public relations practitioners (Wright and Hinson, 2017). Consequently, it becomes necessary to incorporate social media to communicate strategically with the public, especially during a crisis (Wigley and Zhang, 2011; Austin et al. 2012; Coombs, 2014; Eriksson, 2018). However, communicating with the public requires tailoring effective messages that spur the public to take action.

Integration of storytelling. Storytelling is a creative communication strategy used to engage the publics. Stories, as part of an organisation's communication strategies, could attract audiences and help engage interested groups cognitively and emotionally (Farmer, 2021; Carlton, 2024). Through stories, an organisation is more likely to bring people closer together, build trust and transparency, and persuade interested groups to act toward specific issues. Organisations should communicate authentic, relevant, and humanised storytelling that resonates with interested groups and is memorable (Farmer, 2021; Carlton, 2024). Thus, it is pivotal to set clear goals, identify the audience, communicate the organisation's values, use a mix of narratives, images, and videos, and convey storytelling that tells interested groups how and why (Charles, 2019; Farmer, 2021). Additionally, compelling stories may increase media coverage and help to build an effective relationship between an organisation and the media (Charles, 2019).

Previous incidents during Hajj pilgrimage. Incidents and crises during any Hajj season could occur anytime and endanger pilgrims' lives. Although various government entities make massive efforts yearly, no organisation is immune from crises (Coombs, 2019). Previously, several incidents have taken pilgrims' lives while performing the Hajj pilgrimage, such as stampedes in 2015, where over 750 pilgrims died, and 900 were injured (BBC News, 2015), a fire that killed more than 340 pilgrims in 1997 (The Guardian, 2015), and the deaths of 400 pilgrims over protests and clashes with authorities in 1987 (The Guardian, 2015). The Saudi government has since learned from such incidents; after all, the economic aspect of this pilgrimage has earned up to $8.5 billion (Al Arabiya, 2014).

Grunig's two-way symmetrical model is relevant as it appears the KSA applied this model in how it handled each of these

tragedies to sustain mutually beneficial relationships with its interested groups. As described in Grunig's excellent theory, when organisations build relationships with strategic publics, 'it saves the organization money by reducing the costs of litigation, regulation, legislation, pressure campaigns, boycotts, or lost revenue that result from bad relationships with publics' (Grunig and Grunig, 2000, p. 307). Building relationships through public relations efforts can also make money for organisations, as in the economic aspect of this pilgrimage, by cultivating the necessary relationships with shareholders, legislators, consumers, donors, and others that contribute to an event's success (Grunig and Grunig, 2000).

The history of managing Hajj seasons has helped the Saudis understand the risks crises might pose and the importance of strategic communication in avoiding these. Thus, public relations is a fundamental tool to manage this event, inform and educate the public, and reduce any possible risks. The operational definition of crisis management applied in this study is taken from Fearn-Banks' (2017) definition of crisis management. Here, the focus is on strategic planning, where some risk and uncertainty can help minimise a potential crisis, allowing organisations more control over their destiny. Using this as a working definition, this study poses the following research question:

RQ1: What themes emerged from @MediaHajj and news articles covering the 2018 Hajj season in Saudi Arabia?

Method
Case study methodology. Scholars, students, and public relations practitioners could benefit from using case studies to evaluate and offer critical insights into good and poor crisis communication practices (Yin, 2009). Stacks (2002) emphasise that a case study is a 'historical review of public relations campaigns, the analysis of a situation and how it was handled' (p.78). As Yin (2009) stated, case studies help to answer critical questions, like what, how, and why. Case studies allow researchers to use various kinds of data, such as observation, interviews, and analyses of documents, to understand a phenomenon (Yin, 2009; Wimmer and Dominick, 2011).

Thematic analysis. For this case study, we used a thematic analysis to analyse the data. We followed Braun and Clarke's (2006) thematic analysis process, with its flexible nature that aims to identify, analyse, describe, search, and report certain themes that emerged from a data set. A theme is something important found in the data that has a relation with research questions (Braun and Clarke, 2006), and researchers' judgments play a crucial role in identifying those themes (Starks and Trinidad, 2007).

Data collection and procedures. We analysed more than 700 tweets of @HajjMedia that had been tweeted during 2018 Hajj season. @HajjMedia recently became the official communication channel for Hajj related information. The aim was to explore how KSA utilised Twitter (X) to execute communication strategies to manage one of the largest and most challenging Hajj seasons. We then selected 30 news articles written between July 20, 2018, and September 1, 2018, which coincided with the 2018 Hajj season, from prominent Saudi English news networks, such as Arab News, Saudi Gazette, and Al Arabiya English. We analysed both the tweets and news articles to cover all major developments and strategies that had been utilised during Hajj 2018. Although @HajjMedia tweeted almost everything related to Hajj season, such as the arrival of pilgrims, health recommendations, and the use of multiple languages to communicate with pilgrims, the inclusion of news

articles was to ensure we covered in detail all newsworthy initiatives integrated into Hajj 2018. Additionally, news articles covered various topics more extensively and in detail, providing a richer understanding of the topic under study. We collected the news articles by typing in the Google search engine "Saudi Arabia Hajj 2018" and included only English and Saudi news outlets that covered the Hajj season. The aim of focusing only on Saudi news outlets was that most of the initiatives, developments, and announcements related to the Hajj season were chiefly conveyed via Saudi news outlets. We followed strict criteria of inclusion the news articles. First, the article had to be in English and in a Saudi news outlet. Second, the article had to cover Hajj 2018. Third, any unrelated topics, such as political or social issues that had nothing to do with Hajj were excluded. Fourth, we included only news articles that provided news, developments, and initiatives utilised in the 2018 Hajj season.

We then followed scholars' guidelines on thematic analysis (see Braun and Clarke, 2006; Fereday and Muir-Cochrane, 2006). We analysed each tweet and looked for patterns across the data. We then started our initial coding, categorising themes and subthemes from the analysed data (Fereday and Muir-Cochrane, 2006). Next, we reviewed, refined, and consolidated all themes and categories to ensure these themes represented different concepts and represented the data collected (Braun and Clarke, 2006).

We then imposed the same thematic analysis with 30 news articles that covered the 2018 Hajj campaign. Again, the reason for including news articles and applying the thematic analysis was to validate and confirm the themes that emerged from @HajjMedia. Most of the themes that emerged in the @HajjMedia were also found when analysing the news articles. For instance, @HajjMedia covered the story of a famous MTV anchor who performed Hajj. The same story emerged in an article published by the Arab News with more details. Hence, themes presented in the results were patterns that emerged in both the tweets and news articles.

Results

The data analysis of both tweets and news articles revealed and identified seven general themes. The themes that explicitly emerged in both the tweets and news articles were: lessons learned from previous crises, use of two-way symmetrical communication, audience segmentation, community engagement, use of multiple communication channels, integration of storytelling, and use of social media.

Learning from previous crises. The first theme that emerged from the data was lessons learned from previous crises. The occurrence of various crises during previous Hajj seasons provided Saudis with lessons learned in how to avoid and mitigate a crisis. The thematic analysis revealed new policies and innovations implemented in the 2018 Hajj season. These were:

- *Electronic bracelets for pilgrims*. The innovation was introduced in 2016 after the horrific and deadly 2015 Hajj season that killed more than 750 people (BBC News, 2016). E-bracelets were introduced to help authorities locate and identify pilgrims. The e-bracelets contained pilgrims' personal information, GPS, and other crucial information to help authorities intervene during an emergency (BBC News, 2016).
- *Establishing a command and control centre*. The Command and Control Centre, under the leadership of the Ministry of Interior, was developed to ensure the safety and security of pilgrims. Over 6000 cameras gave authorities complete

surveillance of all locations (Arab News, 2017). The implementation of sophisticated and advanced technologies, such as DXC technology, helped monitor the event by providing real-time data and analysis and assisting in crowd management (see DXC Technology, 2024; Saudi Gazette, 2017). Additionally, the centre was considered a place to control and collect the flow of information about Hajj (Arab News, 2017).

- *Mecca operation centre*. The centre was established to support essential and emergency services for pilgrims with different languages. The centre received calls 24/7 via 997 or the Saudi Red Crescent Authority (SRCA) app.
- *Advanced high-speed railways and trains and urban planning*. Building new railways and trains to accommodate pilgrims helped provide safe mobility for pilgrims (The Guardian, 2018). The Saudi government also linked the two holy cities by high-speed railways for a distance of 280 miles so pilgrims could quickly move from one city to another. The project, considered the largest in the Middle East, cost around $ 8 billion (The Guardian, 2018). The @HajjMedia disseminated information on urban planning that helped prepare the safe mobility of pilgrims.
- *Early health warning system*. For the first time in 2018, the MOH in Saudi Arabia, in cooperation with the WHO, established an early warning system that enabled the MOH to prevent, detect, track, and respond to any public health threats during the 2018 Hajj season (WHO, 2018a). For example, this helped reduce problems like heat exhaustion and sunstroke by 12% among pilgrims compared to the previous year (WHO, 2018b).
- *Use of drones*. Drones were used to monitor the crowd and could intervene if needed. The drones also provided spectacular views of pilgrims moving from one area to another (The Independent, 2018; Simon 2018).

Two-way symmetrical communication. Two-way symmetrical communication was the second theme that emerged from the data. Examples of direct implementation of two-way communication were evident during the 2018 Hajj season:

- *Integration of smartphone apps*. The Ministry of Hajj and Umrah introduced a smartphone application, Manasikana, which facilitated pilgrims' mobility and communication with authorities during Hajj. The different languages app allowed pilgrims to find directions, locations, and suggested places of public interest and provided pilgrims with the ability to contact emergency services or the Ministry (Arab News, 2018a). The Saudi Red Crescent Authority (SRCA) also launched an app to support pilgrims who require emergency services.
- *National Centre for Performance Measurement (Adaa)*. According to the Centre for International Communication (2018), Adaa aimed to measure pilgrims' satisfaction with services provided, such as quality of services, infrastructure, and ease of procedures. The data was used to help the government enhance services for the next Hajj. In an effort to engage directly with the public, centre representatives were present during Hajj to listen to and record concerns and issues facing pilgrims (Arab News, 2018b).
- *Raise awareness and educate the public*. A social media campaign was launched to spread critical information and raise awareness about crucial issues relevant to pilgrims and Hajj. For example, messages warning pilgrims not to sit near the holy mosque's gates, hallways, and arenas were distributed to avoid accidents. Other examples focused on

available services such as mobile health clinics and nap pods plus propagation of health recommendations such as avoiding overconsumption of food, eating healthy food, washing hands regularly, and maintaining proper hygiene.

Understanding the audience. The third theme was understanding the audience. Various tailored messages were used during the 2018 Hajj season:

- *Health messages*. Tailored health recommendations and informational messages included medical advice for the elderly and individuals with pre-condition issues. Communicating health recommendations and tailored messages for pilgrims was prepared in advance and showed an understanding of the role of audience segmentation.
- *Use of different languages*. Health messages, services, and general information were provided in over 67 languages. These included English, French, Urdu, Persian, and Malay.
- *People with special needs*. A special needs unit was designated to help and provide various services for people with special needs, including those with mobile disability and visually impaired. For instance, smartwatches with audio features that notify visually impaired individuals about the prayer's times were distributed.

Community engagement. The fourth theme was community engagement. Fruitful cooperation and engagement between communities allowed creative solutions and implementation of new policies. Examples included:

- *Mecca Road initiative*. In collaboration with Indonesia and Malaysia, the Saudi government established the Mecca Road Initiative, which allowed pilgrims from these countries to bypass Saudi Customs and proceed directly to their accommodations. It also reduced congestion in Saudi airports (Saudi Gazette, 2018).
- *Hajj hackathon*. Before the beginning of Hajj 2018, the Saudi Federation for Cybersecurity, Programming and Drones (SAFCSP) organised a genius world record Hajj hackathon. Close to 3,000 people from 100 countries participated in developing software and technologies to find solutions for crowd management, transportation, and public health. The event attracted many tech companies and entrepreneurs, including Google (Al Arabiya, 2018), and showcased how the Saudi government is building and reinforcing relationships with internal and external audiences. Four Saudi women won the award after developing an app that helps foreigners overcome language barriers and navigate their Hajj journey safely (Fleming, 2018).
- *Media centres*. The creation of media centres allowed more than 800 journalists and reporters from local and international media networks to cover the event. This was a strategy to engage with the media and build mutual relationships. The centres were equipped with advanced technologies to help journalists and reporters cover and broadcast the event (Arab News, 2018c). A digital Hajj library with thousands of photos and videos was available for journalists and reporters to use and add their logos.
- *Building a campaign theme*. A social media campaign was created to engage interested groups. This included *One People* and the *Kingdom Embraces the World* hashtags and included interested groups' best moments during Hajj.
- *The State Communication Centre*. This centre was established to coordinate the efforts of various Saudi government entities and to develop and disseminate messages about the KSA. The centre promoted positive messages about the KSA and the 2018 Hajj season to foreign audiences.

Use of different communication channels. The use of various communication channels was the fifth theme to emerge. Examples included:

- *Website*. The hajj.media.gov.sa/en/ was established to provide comprehensive services, information, news, photos, videos, and articles for all, including journalists.
- *Social media*. Twitter (X) was utilised to disseminate information, news, stories, photos, and videos about Hajj. Various Saudi official Twitter (X) accounts, such as the Government Communication Centre for Joint Media Work, the Ministry of Health, and The Centre for International Communication, communicated key messages to communities and shared the efforts and successful stories of the 2018 Hajj season.
- *Traditional media*. TV, radio, and newspapers provided timely information about Hajj.
- *Billboards and electronic signs*. Billboards and electronic signs provided instant messages to pilgrims in Mecca.

Integration of storytelling. The sixth theme that emerged was using stories to engage with the public. Many stories were told and tweeted by @HajjMedia to attract and engage the public, such as the story of the Arafah Mountain in Mecca, the story of Malcolm X performing Hajj and meeting with King Faisal, and the story 'From MTV to Makkah' of a former MTV presenter, Kristiane Backer. Most stories were accompanied by images of characters and historical places, and some with videos. People hit the likes response, retweeted, and replied to some of those stories.

Use of social media. The final theme was relying on one social media platform, Twitter (X), to attract and inform the public. All information related to the 2018 Hajj season was mainly released from @HajjMedia.

Analysis of public data obtained from Twitter (X) @HajjMedia revealed how the Ministry of Media utilised the Twitter (X) account during the 2018 Hajj season. The data show that most tweets occurred between July 31 and September 02, starting with two tweets per day and reaching the highest peak per day on August 19 with 112 tweets. A total of 1,281 tweets were sent using hashtags such as *World in the Heart of the Kingdom*, *Kingdom Welcomes the World* in Arabic, *Kingdom Embraces the World*, and *One People* in English. The hashtags appeared in tweets more than 1,520 times, with some tweets having more than one hashtag. The account retweeted only credible sources with authority, power, and influence in KSA. The most retweeted sources were the King of Saudi Arabia, the Minister of Media, and Saudi TV. Others included the MOH, Makkah Authority, Centre for Government Communication, the Saudi Press Agency, Centre for International Communication, Saudi Red Crescent Authority, and the Ministry of Hajj and Umrah. The account also used more than 335 links to engage with the publics by disseminating news, stories, and other valuable information for pilgrims. According to @HajjMedia, the hashtag #KingdomEmbracesTheWorld had more than 17 billion impressions, best illustrating the success of this strategy.

Discussion

This case study examined the theoretical and applied nature of public relations to better understand what types of strategies can be effective in avoiding crises. The case study highlights

theoretical best practices. The findings also highlight how best practices are applied, providing new ways for scholars and practitioners to think about public relations in social and cultural contexts, specifically how to avoid crises during mega-international events. What appears to be the application of the organisational learning and rhetoric components of the discourse of renewal theory, the Saudi government learned from past crises and the importance of developing relationships among communities. These included the use of two-way symmetrical communication, integration of social media, and engagement of communities that helped provide better solutions and services to pilgrims.

Best practices. A robust theoretical foundation, such as the discourse of renewal theory, is considered a best practice and one the Saudi government incorporated effectively. Notably, Saudi agencies seemed to learn from previous mistakes during previous Hajj seasons that resulted in stampedes and deaths of pilgrims. This was accomplished by implementing new initiatives, such as installing more than 6,000 cameras and DXC technologies to manage the crowd and intervene in case of emergency. This practice is similar to the Johnson & Johnson Tylenol crisis in 1982 when they recalled 31 million Tylenol bottles and implemented a triple tamper-evident seal that became the industry standard after the tampering crisis resulted in several deaths (Ulmer et al. 2017; Johnson and Johnson, 2024). Likewise, Grunig's two-way symmetrical communication model, whether consciously applied or not, formulated a strategic public relations plan that executed several successful initiatives like Smartphone apps and interactive evaluation tools to assess the services provided to the pilgrims. Scholars recommend that organisations build mutual relationships before a crisis strikes (Coombs, 2019), and research shows that public relations practitioners prefer using two-way symmetrical communication to engage interested groups during a crisis (Grunig and Grunig, 1992). In a longitudinal study of 327 organisations in the United States, United Kingdom, and Canada, Grunig et al. (2002) showed how public relations adds value to organisations by helping organisations to achieve its strategic goals through identifying interested groups and engaging and interacting with its constituencies. The study also showed that the use of two-way symmetrical communication increases the value of public relations to organisations, especially during conflicts and crises. The successful efforts implemented by government entities during the 2018 Hajj season support both points. Grunig and Hunt (1984) pointed out the necessity of conducting formative research and evaluating an organisation's policies to serve communities better by meeting their interests and needs in a balanced way, both of which were instrumental to the success of Hajj 2018. Doing both allows for mutual dialogue between an organisation and its interested groups, especially during a crisis. That was achieved during Hajj 2018 when the Saudi government, in cooperation with other governments, launched the Mecca Road Initiative to allow pilgrims from the largest two Muslim countries to enter Saudi Arabia without going through Saudi Customs, reducing airport congestions and expediting entrance to the country. This is similar to a recent study conducted by the International Federation of Red Cross and Crescent Societies (IFRC) in Indonesia that found community engagement was a crucial and driving force to embrace healthy behaviours to avoid getting COVID-19 and tuberculosis (TB). The local communities, along with volunteers of trained local responders, worked hand in hand as groups to monitor, report, educate, and encourage locals to follow healthy behaviours to prevent TB and COVID-19 diseases (IFRC, 2023). Community engagement also played a large role in the Boston marathon bombing incident in 2013 that

resulted in three deaths and hundreds of injuries. Here, Boston police department used social media to inform the runners and communities with updated information and to get help from local communities (Davis et al. 2014).

Therefore, understanding that interested groups play an indispensable role in crisis management (Coombs, 2019) should trigger organisations to maintain permanent mutual relationships with communities, as was the case during the 2018 Hajj season. Including communities' voices in management decisions strengthens mutual relationships (Grunig, 2009). In this case, the KSA successfully engaged officials, businesses, and foreign governments by listening to concerns and finding solutions before the mega-event commenced. The massive coordination taken to manage Hajj 2018 illustrated the large-scale and expansive efforts to engage interested groups in finding solutions to past problems, implementing new policies, and developing creative strategies such as the Hajj Hackathon.

Another important best practice lesson learned was the role of audience segmentation and how messages could be developed to reach an audience of various cultures, ethnicities, and languages. In this case, pilgrims were segmented by nationality and language. Coherent strategies and compelling messages were created and implemented in more than 67 languages, and many focused on health and preventative measures. Practitioners involved in hosting international mega-events could learn from this success. This is comparable to how audience segmentation was successfully used in designing a parent-based national health communication campaign to support adolescent sexual health (Willoughby and Guilamo-Rasmos, 2022). The communities for this campaign included parents, youth, experts in parent-child communication, experts in health communication and media campaigns, experts in evaluation, and those with clinical expertise.

Media relations played a critical role in Hajj coverage, with a designated media centre engaging more than 800 journalists. Although no crises occurred during Hajj 2018, the media needed a centre equipped with the latest technologies and readily available organisation spokespeople, opinion leaders, and other credible sources should a crisis occur. Building strong relationships with the media is crucial for practitioners who organise large-scale events to ensure the accuracy and timeliness of information being delivered through proper communication channels. Recent examples of successful large-scale media relations campaigns include The Ohio State University Comprehensive Cancer Centre—Arthur G. James Cancer Hospital and Richard J. Solove Research Institute with Media Source: Breast Cancer Awareness Campaign Leverages Multimedia Storytelling, Driving Awareness, Donations and Mammograms, and the American Diabetes Association: 83rd Scientific Sessions Media Relations, both campaigns honoured by PR Daily as winners of the 2024 Media Relations Awards (Ragan Staff, 2024).

All communication channels should be considered when hosting mega-events as demonstrated by the Saudi government. Traditional, electronic, digital, and especially social media played integral roles in ensuring the safety and health of the pilgrims. Creating a social media campaign proved to be the most effective and creative strategy implemented before, during, and after Hajj 2018. The findings from this study showed how the KSA Ministry of Media successfully utilised Twitter (X), culminating in more than 17 billion impressions through creative hashtags in both Arabic and English.

The integration of storytelling was another example of a creative way to engage, motivate, and persuade interested groups. Storytelling has gained momentum in recent years. One example is how storytelling was implemented as a strategy for understanding how governments use stories to relay the value of their

brands and policies (Arceneaux, 2024). For example, Arceneaux (2024) illustrates how strategic narratives were used in Ireland to reinforce its brand as nation. In this Hajj study, storytelling was used effectively as evidenced in the evaluation stage in which engagement, or two-way responses, were measured by the likes, retweets, and replies to the stories.

Collectively, learning from past crises and what strongly suggests the KSA's application of Grunig's two-way symmetrical communication model advances our understanding of how such theoretical foundations can serve as the basis for developing future campaigns that prevent crisis as opposed to how organisations react to a crisis. Learning from past crises can lead to the creation of effective strategies, particularly safety strategies, to avert a crisis during a mega-event. This is imperative in today's often violent global climate, as seen by recent examples such as the cancellation of Taylor Swift's concerts in Vienna in August 2024 after a foiled terror plot. This led to additional safety strategies implemented for her London shows that included advanced physical security measures and tips for how concert-goers could be more vigilant (Le Monde, 2024).

We suggest future studies to learn what additional information is needed for future mega-events in which safety is of upmost importance. One such study, for example, could look at the coordination of governmental entities in protecting crowds at large-scale events. The July 2024 assassination attempt of former U.S. President Donald Trump at a presidential rally in Pennsylvania, for example, put the spotlight on the failed coordination of communication strategies between the Secret Service and local police. One person attending the rally was killed. While a Congressional Task Force investigated, a deeper dive into the failed coordination of communication strategies is suggested. Lessons learned can inform more effective safety strategies at future events. Also worth exploring is the use of artificial intelligence (AI) in developing effective strategies for safety at mega-events. For example, what can AI tell us from past failed events to inform the development of new strategies? What can AI tell us about successful communication strategies, such as those implemented at Hajj 2018 that could be further enhanced for future events? The study of AI in developing effective communication strategies for safety at mega-events is perhaps groundbreaking research and application.

Limitations. This article is limited to one example of the effective communication strategies utilised to prepare and avoid crises during a specific event that hosts millions of people. It would be interesting to compare the findings of this study with communication efforts of other global mega-events such as the Maha Kumbh Mela in India, the Arba'een Pilgrimage in Iraq, or any large-scale events around the world to discover common ground, identify communication weaknesses, and learn new effective strategies. Findings from such studies may provide public relations practitioners with effective roadmaps for hosting mega-events. Another limitation is that this case study analysed only Saudi English news articles and the official communication channel @HajjMedia. Analysis of international news articles covering Hajj and interviews with officials and pilgrims about their experiences during such event may provide different and fruitful findings that may contribute to the topic under study.

Conclusion

This study offers insights into how public relations practitioners could develop strategic plans to manage a massive event like Hajj. It was daunting to think of the millions of people making their trek to Mecca and figuring out how best to communicate with them to avoid crises. While most public relations practitioners will never deal with such a large-scale event as this, there are valuable lessons to be learned and best practices to be shared. One is an understanding of the complex role in identifying segmented publics. Another is an understanding of the need for multiple communication channels to effectively communicate messages to this segment of the public. The discourse of renewal theory, Grunig's two-way symmetrical model, and Fearn-Banks' definition of strategic communication management served as foundations for our understanding and analysing best practices.

Data availability

The data used in this study consists of news articles and publicly available tweets, which were collected and analysed through thematic analysis. The news articles were sourced from accessible online websites, specifically Saudi Gazette, Arab News, and Al-Arabiya, covering the 2018 Hajj season between July 20, 2018, and September 1, 2018. Likewise, tweets were gathered from a public Twitter (X) account, @HajjMedia, during the same time frame. Due to copyright, intellectual property, and privacy restrictions, we cannot publicly share the complete list of articles and tweets. However, a detailed list of article sources, including titles and publication dates, as well as small portions of tweets, can be made available upon request from the corresponding author at saud1@ksu.edu.sa.

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Author contributions

All authors contributed to the study's conception and design. All authors contributed equally to material preparation and data analysis.

Competing interests

The authors declare no competing interests.

Ethical approval

Ethical approval was not required as the study did not involve human participants.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

Additional information