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commodative strategies such as apology. This study also broke fresh ground by showing overuse of internalising information in some types of crises, which can harm reputation as suggested by Sturges (1994).

The paper developed a potentially valuable framework, seven stakeholder message cluster, and a set of positions. First, from a literature review the paper conceptualised a research framework for examining organisational communication with stakeholder in a crisis when social media is used (Fig. 1). This framework was explored in the study and extended to suggest seven stakeholder message clusters. The seven stakeholder message cluster can be used to help organisations plan how to address each cluster in the event of a crisis. Second, the paper proposed a set of six positions that organisations can take in their communication with stakeholders on social media during a crisis. We suggest that organisations reflect on those six positions and consider the positive and negative aspects of each position in their organisational context in order to better understand the position they want to take as a crisis occurs. The theory underpinning this study was SCCT. Third, this paper suggests that while SCCT has applicability in crisis communication to the social media context, it does not appear to allow for full potential offered by social media. SCCT should be further explored with a view to extending it to accommodate the social media context.

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monitoring crisis messages and intentionally did not respond to them. However prior research suggests that organisations should use social media to interact with stakeholders when a crisis occurs (Veil et al., 2011). Such lack of interactivity might be due to not having enough resources to reply to a huge volume of messages (Kinsky, Gerlich, Baskin, & Drumheller, 2014), lack of top management support (Deverell & Olsson, 2010) and fear of creating another backlash and aggravating the crisis (Stenger, 2014). However, such lack of response may lead to another back-lash by itself (Coombs, 2011).

In conclusion, reflecting on the key messages from this paper, organisations may have very little understanding of crisis communication in a social media context, which is of concern for crisis managers. Given the fast pace of social media development and appropriation by organisations and stakeholders, there is clearly a need for far more research attention to this area.

## 6. Future research suggestions

Several limitations in this study can be addressed in future research. First, while data was collected over a nine month time period, only seventeen crises cases were captured and not all crisis types were represented. Future studies could explore crises over a longer period, increasing the data set. Second, this study adopted a qualitative approach to gain a deep understanding of the phenomenon. Future studies could adopt a quantitative approach and study a larger number of organisations. Quantitative software packages such as R could be used for social network analysis to map the communication happening in each crisis instance as well as for text mining and sentiment analysis to explore stakeholders' reactions to organisational responses.

Third, this study did not analyse the reputational impact of responses, which could be explored in future research. Fourth, this study only considered Facebook and Twitter as crisis communication channels. Future researchers could explore organisational crisis communication via other social media channels such as YouTube, compare their findings with our findings to examine the applicability of our findings to other social media channels and to find whether there were any possible communication channel effects on organisational crisis communication. Fifth, this study was conducted in an Australian context and studied only large organisations. While the findings might be applicable to other contexts, studies in other contexts are needed to enable comparisons. Sixth, the research drew heavily on SCCT (Coombs & Holladay, 2002). Other theories could be used to explore organisational crisis communication using social media.

## 7. Conclusion

The study reported in this paper explored the use of social media for organisational crisis communication by a qualitative content analysis of Facebook and Twitter messages posted during crises at seventeen Australian organisations. The paper provided detailed analyses that led to support for existing understandings and important new understandings on how organisations use social media for crisis communication. Supporting the findings of Ki and Nekmat (2014), the study found that many organisations did not respond to stakeholder crisis messages during crises, thus not benefitting from the full potential value of social media for supporting organisational crisis communication. However the present study added fresh insights by providing evidence suggesting that the lack of response could be intentional. Supporting Ki and Nekmat (2014), the study also highlighted an overreliance on more ac-

types and no prior crisis history or unfavourable reputation can behave very differently to one another in crisis communication. However based on SCCT (Coombs & Holladay, 2002), such organisations would be expected to behave similarly and employ the same response strategies. This interesting finding suggests that there are other, possibly organisational, factors influencing crises responses on social media. Previous research has found that organisational characteristics and culture can influence organisations' crisis management efforts (Deverell & Olsson, 2010; Mitroff, Pauchant, Finney, & Pearson, 1989). Hence the study suggests that SCCT identifies those factors and includes them.

Above we have highlighted some key differences between the findings from this research and SCCT recommendations, suggesting that while SCCT provides a solid foundational theory for researchers studying social media crisis communication, it does not adequately explain the context of social media. Therefore, given that SCCT was developed when social media was not prevalent, it requires development for the social media context.

In terms of organisational response to stakeholders' messages in social media, this study has several interesting findings. This research classified stakeholder crisis messages sent to the organisations into seven categories to investigate how organisations responded to each category. These categories comprise questions, giving information, suggestions, messages intended to be funny, objections, appreciating messages and messages comparing the organisation with others. While the first four categories were adopted from Helsloot and Groendaal's (2013) study in emergency management, this study showed their applicability in business setting. In addition, the next three categories were identified by this study.

Key findings on stakeholder crisis messages suggest that organisations might respond differently to each category. Overall, appreciating messages, messages intended to be funny and messages comparing the organisation with others were the categories that received the least response from organisations. The taxonomy of seven stakeholder message types may help organisations planning for social media crisis communication reflect on how they plan to address each category in the event of a crisis.

Also, this study found that organisations' response to stakeholders' messages in social media may lack humanness. While during crises, stakeholders expect human conversation from organisations (Sutton, Palen, & Shklovski, 2008) and the humanness of social media makes this online space attractive for stakeholders (Veil et al., 2011), RetailorCo2 and RetailorCo3 provided the same identical response to stakeholders' messages regardless whether they were addressing the message content, which led to stakeholders' objections. This interesting finding emphasises that organisations need to be authentic in replying to stakeholders' messages and ensure that they address the content of the messages.

Furthermore, this study indicates that many organisations use social media for only providing status updates during a crisis and do not respond to stakeholder messages, echoing recent findings from Ki and Nekmat (2014). Interestingly, one-way communication occurred for stakeholders' crisis messages while two-way communication occurred for non-crisis messages that were proximate. As an example, while RetailorCo1 did not respond to crisis questions, it replied to various non-crisis questions intermingled with crisis questions. Such selective responses suggest that RetailorCo1 was actively

Perhaps when and how organisations provide internalising information is particularly important to effective crisis response by social media. In addition, as BankCo2 had poor prior reputation, the findings suggest that prior organisational reputations may influence stakeholder perceptions when internalising information is issued in crises as highlighted by Coombs and Holladay (2002). Hence, this research stresses that organisations with unfavourable reputations should be very mindful about whether, when and how to issue internalising information on social media during a crisis.

Third, SCCT does not recommend rebuilding strategies for an organisation facing an accidental crisis if the organisation has no history of similar crises and poor reputation as they may not always best protect the reputation of an organisation (Coombs, 2007) and may worsen the situation as stakeholders could conclude that the crisis is worse than it appears (Siomkos & Shrivastava, 1993). However, we found that some organisations with accidental crises used apology or compensation strategy, strongly supporting findings by Ki and Nekmat (2014) showing excessive use of rebuilding strategies for accidental crises in a social media context.

Interestingly, the study also showed that when organisations with crises in the accidental cluster (except challenges) did not apologise, they were reprimanded by stakeholders. For organisations facing challenges crises, some stakeholders objected to organisation apologies, supporting research suggesting that greater management attention does not always result in improved reputation (Coombs & Holladay, 2004). However, these objections were from stakeholders who did not deem the organisations responsible for the crisis. The complexities of this issue could explain why most of the organisations with challenges crises chose to remain silent.

The study suggests it may be less risky for organisations with accidental crises to use rebuilding strategies in a social media context, consistent with Ott and Theunissen (2015) stating using rebuilding strategies on social media is more likely to be successful

than denial or diminishing strategies. With social media crisis communication, a crisis can rapidly escalate and further harm an organisation's reputation (Parsons, 2011). Hence, organisations might prefer to use rebuilding strategies to reduce reputational risk.

Fourth, the literature suggests that stakeholders are more tolerant toward organisations facing externally caused crises (Jin et al., 2014). However TransportCo1, dealing with a natural disaster, received many complaints from stakeholders about not being prepared. This observation suggests that stakeholders are more tolerant towards organisations facing externally caused crises unless they believe that the organisations have been tardy at crisis risk management.

Fifth, while SCCT recommends not using bolstering strategies in isolation as it might look ego-centric (Coombs, 2007), this study found that organisations (BankCo1, BankCo2, BankCo3, AirlineCo1 and TransportCo1) with very low or low crisis responsibility may use those strategies alone. This supports Kim and Liu's (2012) suggestion in a social media context that when there is no or little attribution of crisis responsibility to an organisation, bolstering strategies may be used in isolation to build positive connections between the organisation and stakeholders. This finding emphasises the importance of further development of SCCT in a social media context.

Sixth, the findings suggest that organisations with similar crisis

- Cell 5: These organisations provide status updates about the crisis. Replies to stakeholder posts range from repeated re- sponses to selected responses and complete absence of response.
- Cell 6: These organisations provide status updates, reply to most stakeholder posts and address stakeholder concerns. They listen to stakeholder messages posted on social media, monitor feedback to crisis responses and customise their response, aiming for stakeholder satisfaction.

**Table 9: Organisational crisis communication matrix.**

| Providing status updates about the crisis on social media |  | 1   | 2                        | 3  |
|---|--|---|--------------------------|--|
| No  |  | TelecommCo1, RetailorCo3, RetailorCo5                                       | RetailorCo2, RetailorCo3 | -  |
| Yes   |  | 4<br>BankCo1, BankCo2, BankCo3, RetailorCo4, FoodCo1, FoodCo2, TransportCo4 | 5<br>CarCo, TransportCo1 | 6<br>AirlineCo1, TelecommCo2, AirlineCo2 |
|   |  | No  | Not fully                | Fully                                    |
|   |  | Responding to stakeholder messages  |                          |  |

## 5. Discussion

The findings from this study drew on recent data on crisis communication posted on social media. Such data is unavailable from other interactive communication media (such as telephone or individual/group meetings) or from one-way communication channels such as non-interactive company websites, broadcast emails, posted letters or printed newspapers. As mentioned earlier, few studies of social media content for crisis communication exist and this study adds to the fledgling body of research.

The findings of this study suggest that when social media is used for crisis communication, organisations do not always behave as the crisis communication literature suggests. First, this research developed a set of six positions for organisational use of social media for crisis communication (Table 9). While previous studies suggest that organisations provide status updates about crises (Freberg, 2012; Veil et al., 2011) as well as fully reply to stakeholders' messages (Ott & Theunissen, 2015), only 15% of organisations studied are located in that position (cell 6).

Second, we found that the organisations managing natural disasters were very likely to disseminate internalising information to stakeholders. However, Sturges (1994) and Coombs and Holladay (2002) recommended against organisations issuing this type of information as an organisation may be perceived as self-interested thus harming its reputation as was the case for BankCo2. This bank received many objections for announcing its donation on social media. However BankCo3 also announced its donation on social media yet did not receive negative feedback. Interestingly, when AirlineCo1 failed to announce a donation on social media, stakeholders queried the 'failure' constantly, assuming in the absence of evidence that the airline did not make a donation. Further, stakeholders reprimanded the organisation for not making a donation.

only BankCo2 replied to 2% and TelecommCo2 replied to 18% of this type of messages each one received which suggests that they responded to this type of messages selectively. BankCo2 sympathised with the affected stakeholders and encouraged them to contact the organisation to receive customised services. TelecommCo2 only replied to appreciation messages where humour could be deployed.

#### **4.4.6. Messages intended to be funny**

For the various crises types, stakeholders sometimes posted messages intended to be humorous. For example, a stakeholder posted to TelecommCo2, “Get #Portland connected next and there’s a big fat kiss from me in it for you”. However in most cases they did not receive replies. Among the nine organisations that received this type of messages, only two organisations replied to them. TelecommCo2 and AirlineCo2 responded to ‘funny’ messages with humour.

#### **4.4.7. Comparing the organisation with others**

BankCo1, BankCo2 and BankCo3 with natural disasters, RetailorCo1, RetailorCo3, RetailorCo5, FoodCo1 and FoodCo2 with challenges and RetailorCo4 with a technical-error product harm crisis type received messages from stakeholders claiming that the organisation was behaving better or worse than other organisations in similar crisis situations. For instance, BankCo2 received, “BankCo1 donated \$225,000 so BankCo2 why don’t you do the same you made a big enough profit”. No organisations responded to those messages.

### **4.5. Organisational crisis communication matrix**

Drawing on the findings, we developed a matrix (Table 9) of six cells showing the social media communication of the organisations studied during crises. Six cells are defined in this matrix based on providing crisis-related status updates and responding to stakeholders’ crisis-related messages on social media. If an organisation does not provide any status update it will be classified in one of the cells of the first row while if it provides at least one status update it will be classified in one of the cells in the second row.

The crisis instances have been mapped into this matrix. Each cell is identified by a number located above the cell.

Based on the matrix (Table 9), we propose six key positions that large Australian consumer-based organisations can take in their social media crisis communication, representing organisational level of social media use for crisis communication.

- Cell 1: These organisations overlook the potential of social media for crisis communication, although they may engage in two-way communication through other channels.
- Cell 2: These organisations do not provide crisis updates. Replies to stakeholder messages range from repeated responses to selected responses and complete absence of response.
- Cell 3: These organisations do not provide status updates about the crisis however they attempt to reply to all posts and address stakeholder concerns.
- Cell 4: These organisations provide status updates about the crisis but do not interact with stakeholders.

### 4.4.3. Giving information

Stakeholders used social media to give information to other stakeholders as well as the organisations, depending on the nature of the crisis. These messages were a retweet or sharing of organisations' status updates or providing an individual status update about the crisis based on individual experience. For instance, a stakeholder posted, "@TransportCo1 faulty air con on 381M". The analysis revealed that among the nine organisations that received this type of message, only three organisations replied to this type of messages. AirlineCo1 and TransportCo1 used ingratiation strategies and thanked stakeholders for their support and sharing of key

**Table 8: Summary of organisational responses to stakeholder questions.**

| Organisation | Organisation response to questions  |
|--------------|---|
| AirlineCo1   | Did not use any specific response and only provided adjusting information.  |
| TransportCo1 | Did not use any specific response and only provided adjusting information.  |
| CarCo        | Used a denial strategy and tried to reply to all questions but in most cases posted repetitive replies.                         |
| RetailorCo2  | Used a Scapegoating strategy and only provided repetitive responses irrespective of whether they were addressing the questions. |
| RetailorCo3  | Used a Scapegoating strategy and only provided repetitive responses irrespective of whether they were addressing the questions. |
| TelecommCo2  | Did not use any specific response and only provided adjusting information.  |
| AirlineCo2   | Did not use any specific response and only provided adjusting information.  |

information. CarCo responded to those messages if they were spreading a rumour by repeatedly denying the rumour. It appears that organisations were unlikely to reply to giving information messages unless they indicated or might lead to misunderstandings.

### 4.4.4. Suggestions

Depending on the nature of the crisis, stakeholders made various suggestions to organisations. For example, in natural disasters stakeholders suggested how they could help. For other crisis types stakeholders commonly suggested how organisations might resolve the crises. For example, TelecommCo2 received, "If it is possible to patch mobile services at regional sites through other routes, why not transmission links". The findings show that typically organisations did not respond to suggestion messages. The lack of response was particularly noticeable for challenges crises where stakeholders often suggested that organisations reflect on how other businesses had been adversely affected by displeased stakeholders. Among the twelve organisations that received suggestions, only four organisations replied to them encompassing BankCo2, AirlineCo1, CarCo and AirlineCo2, indicating that they would consider the suggestions or providing explanations.

### 4.4.5. Appreciating messages

Depending on the nature of the crisis, stakeholders showed various forms of appreciation. For example for natural disasters, stakeholders commended organisations for donating money to affected people, providing opportunities for stakeholders to donate money or simply showing understanding. However once again most organisations did not reply to appreciation messages. Among the fifteen organisations that received this type of messages

Ingratiation Victimage TransportCo2 posted, “We have additional staff in place to help with this disruption. Thanks to all for your patience”.  
 AirlineCo1 posted, “Brisbane Flooding Affects AirlineCo1 Head Office”.

could not cover all stakeholder messages. Therefore three more clusters emerged throughout the data analysis process. Stakeholder message clusters (shown in Fig. 1) comprised (1) questions, (2) giving information, (3) suggestions and (4) messages intended to be funny. This study identified three additional clusters comprising (5) objections, (6) appreciations and (7) comparison of the organisation with others. We analysed how organisations responded to the seven clusters of stakeholder messages as discussed next. As Table 7 shows, questions, objections and appreciating messages were respectively the most frequent messages that organisations received.

#### 4.4.1. Questions

Stakeholders asked a variety of questions related to the nature of the crisis. For example, for natural disasters the most frequent questions were whether and how the operation of organisations had been affected, whether organisations had donated money to affected people and whether they had provided ways for stakeholders willing to help. For instance, TransportCo1 received, “Which services are cancelled”. Importantly, only seven organisations responded to stakeholders’ questions. Table 8 summarises

**Table 7: Stakeholder message cluster.**

| Stakeholder message cluster             | Frequency | Percentage |
|---|-----------|------------|
| Questions                               | 5250      | %39        |
| Objections                              | 3706      | %28        |
| giving information                      | 1390      | %10        |
| Suggestions                             | 386       | %3         |
| appreciating messages                   | 2042      | %15        |
| messages intended to be funny           | 309       | %2         |
| Comparison of organisations with others | 309       | %2         |
| Total                                   | 13,392    | %100       |

organisational responses to stakeholder questions.

#### 4.4.2. Objections

Stakeholders posted a variety of objections related to the nature of the crisis. For example, for the victim cluster the most frequent stakeholder objections were about the amount of a donation, announcing the amount on social media, organisations’ communication methods, unpreparedness of organisations for the crisis situation and organisational response to the crisis. For example, a stakeholder posted to BankCo3; “BankCo3 I don’t understand why you have to tell everyone [about the donation]”. Again, most organisations did not reply to objections; only seven organisations did. AirlineCo1, TransportCo1 provided adjusting information in replying to objections. CarCo provided identical responses including adjusting information to similar objections. RetailorCo2 and RetailorCo3 used scapegoating strategy and provided the same identical response that they used in replying to questions regardless of whether they were addressing the objections’ content. AirlineCo1 and TelecomCo2 tried to address all the objections they received. They did not use any specific response strategies and only provided adjusting information related to the objection content.

works.

TelecommCo2 and TransportCo2 facing technical error accident crisis type provided adjusting information and explained what had happened, why the services were disrupted and what they were doing to restore the services. TelecommCo2 and TransportCo2 used apology strategy and apologised the stakeholders for inconvenience that the crisis was creating. They also used ingratiation strategy and thanked stakeholders for their patience.

In addition, TelecommCo2 used compensation strategy and compensated to some of the affected stakeholders.

In Preventable cluster, AirlineCo2 with an organisational misdeed crisis provided adjusting information in the form of addressing the common questions from stakeholders such as providing contact information. In terms of the response strategies, AirlineCo2 used three strategies. First, it used apology strategy and apologised for the inconvenience that the crisis was creating. Second, it used ingratiation strategy and thanked stakeholders for their patience. The organisation posted “Once again we apologise for the inconvenience and frustration our customers have faced over the past few days. Thank you for your patience”. Third, it used compensation strategy and refunded the expenses that customers had to incur as a result of the crisis.

#### 4.4. Organisational crisis response to stakeholder messages

In order to analyse how each organisation responded to stakeholders’ messages, all stakeholder messages sent to organisations were analysed and grouped into seven clusters. Throughout the analysis process, we realised that the four clusters shown in Fig. 1

Table 6: Examples of organisational status updates.

| Information type/<br>re response strategy | Example  |
|---|--|
| Instructing information                   | RetailorCo4 posted, “If you have any of these products at home, we’d encourage you to bring them back for a full refund”.  |
| Adjusting information                     | BankCo2 posted, “Today our Springwood Branch will be open until 4.00pm to assist our customers affected by the bushfires in New South Wales. #nswfires”.   |
| Internalising information Denial          | BankCo3 posted, “To help, we’re donating 75\$k to the Australian Red Cross NSW Disaster Relief & Recovery”.<br>CarCo posted, “We want to reassure you that we’ll continue to offer a full range of vehicles in Australia and our customers will experience no difference in the way they purchase or service their [CarCo] vehicles” |
| Scapegoating                              | RetailorCo2 posted, “We [...] have already indicated our intention to sign. However we are currently awaiting information from the Accord Working Group on its proposed implementation”.   |
| Excusing                                  | FoodCo1 posted, “The decision to withdraw our letter related to our sensitivity to being labelled a “bully” and as a bigger company endeavouring to treat a small business unfairly. That was not our intent”.   |
| Compensation Apology                      | TelecommCo2 posted, “We have announced that an interim compensation payment process for small business customers”.<br>AirlineCo2 posted, “Once again we apologise for the inconvenience and frustration our customers have faced over the past few days. Thank you for your patience”.   |
| Reminding                                 | FoodCo1 posted, “FoodCo1 unequivocally condemns discrimination of any type and has a proud history as one of the world’s leading employers for diversity”.   |

|              |      |     |     |
|--------------|------|-----|-----|
| CarCo        | 1120 | 87  | 8%  |
| TelecommCo1  | 380  | 45  | 12% |
| RetailorCo1  | 1260 | 151 | 12% |
| RetailorCo2  | 930  | 210 | 23% |
| RetailorCo3  | 840  | 227 | 27% |
| RetailorCo4  | 665  | 34  | 5%  |
| RetailorCo5  | 530  | 80  | 15% |
| FoodCo1      | 1387 | 56  | 4%  |
| FoodCo2      | 709  | 71  | 10% |
| TelecommCo2  | 1225 | 79  | 6%  |
| TransportCo2 | 470  | 118 | 25% |
| AirlineCo2   | 1100 | 150 | 14% |

**Table 5: Organisational crisis response communicated via status updates**

| Crisis cluster and organisation | Crisis response  |           |               |                       |                     |                        |                    |         |                    |              |           |
|---------------------------------|------------------|-----------|---------------|-----------------------|---------------------|------------------------|--------------------|---------|--------------------|--------------|-----------|
|                                 | Information type |           |               | Denial posture        |                     | Diminishing posture    | Rebuilding posture |         | Bolstering posture |              |           |
|                                 | Instructing      | Adjusting | Internalising | Attacking the accuser | Denial Scapegoating | Excusing Justification | Compensation       | Apology | Reminding          | Ingratiation | Victimage |
| Victim cluster                  |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| BankCo1                         |                  | ✓         | ✓             |                       |                     |                        |                    |         |                    | ✓            | ✓         |
| BankCo2                         |                  | ✓         | ✓             |                       |                     |                        |                    |         |                    | ✓            | ✓         |
| BankCo3                         |                  | ✓         | ✓             |                       |                     |                        |                    |         |                    | ✓            | ✓         |
| AirlineCo1                      |                  | ✓         |               |                       |                     |                        |                    |         |                    | ✓            | ✓         |
| TransportCo1                    |                  | ✓         |               |                       |                     |                        |                    |         |                    | ✓            |           |
| CarCo                           |                  | ✓         |               |                       | ✓                   |                        |                    |         | ✓                  |              |           |
| TelecommCo1                     |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| Accidental cluster              |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| RetailorCo1                     |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| RetailorCo2                     |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| RetailorCo3                     |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| RetailorCo5                     |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| FoodCo1                         |                  |           |               |                       |                     | ✓                      |                    | ✓       | ✓                  |              |           |
| FoodCo2                         |                  |           |               |                       |                     | ✓                      |                    |         |                    |              |           |
| RetailorCo4                     | ✓                | ✓         |               |                       |                     |                        |                    |         | ✓                  |              |           |
| TelecommCo2                     |                  | ✓         |               |                       |                     |                        | ✓                  | ✓       |                    | ✓            |           |
| TransportCo2                    |                  | ✓         |               |                       |                     |                        |                    | ✓       |                    | ✓            |           |
| Preventable cluster             |                  |           |               |                       |                     |                        |                    |         |                    |              |           |
| AirlineCo2                      |                  | ✓         |               |                       |                     |                        | ✓                  | ✓       |                    | ✓            |           |

inconvenience as well as reminding strategy to remind its past good acts.

RetailorCo4 with a technical error product harm crisis, provided instructing information and explained what stakeholders needed to do for their safety. It also provided adjusting information and explained what had happened, why the organisation was recalling the product and ensured stakeholders that it was investigating the cause of the product defect. In terms of the response strategy, it used reminding strategy to reminded stakeholders of its past good

organisation. In terms of the response strategies, CarCo used denial strategy to deny the rumour as well as reminding strategy to remind stakeholders of the organisations' past good works.

FoodCo1 and FoodCo2 with challenges crisis type used excusing strategy to state that there was no intention to offend anyone. FoodCo1 also used apology strategy to apologise for the crisis and

**Table 3: Crises**

| Organisation | Number of messages | Brief description of crisis   | Crisis type                  |
|--------------|--------------------|---|------------------------------|
| BankCo1      | 420                | Bushfire  | Natural disaster             |
| BankCo2      | 730                | Bushfire  |                              |
| BankCo3      | 460                | Bushfire  |                              |
| AirlineCo1   | 680                | Flood   |                              |
| TransportCo1 | 1250               | Extreme weather conditions  |                              |
| CarCo        | 1457               | Rumour about the organisation   | Rumour                       |
| TelecommCo1  | 380                | Organisation's systems hacked   | Hacking                      |
| RetailerCo1  | 1260               | A group of stakeholders considered its product racist                       | Challenges                   |
| RetailerCo2  | 930                | A group of stakeholders stated it was performing unethically                |                              |
| RetailerCo3  | 840                | A group of stakeholders stated it was performing unethically                |                              |
| RetailerCo5  | 670                | A group of stakeholders considered its product racist                       |                              |
| FoodCo1      | 530                | A group of stakeholders considered the organisation racist                  |                              |
| FoodCo2      | 1390               | A group of stakeholders accused it of acting unethically                    |                              |
| RetailerCo4  | 710                | A product was recalled due to a technical error                             | Technical-error product harm |
| TelecommCo2  | 1580               | Industrial accident due to a technical error causing service disruption     | Technical-error accident     |
| TransportCo4 | 490                | Industrial accident due to a technical error causing service disruption     |                              |
| AirlineCo2   | 1870               | To preserve organisational benefits, grounded all services for several days | Organisational-mis-deed      |

**Table 4: Organisations prior reputation.**

| Organisation | Total number of stakeholders' messages | Number of messages showing poor prior reputation | Percentage of messages showing poor prior reputation |
|--------------|--|--|--|
| BankCo1      | 410                                    | 21   | 5%   |
| BankCo2      | 722                                    | 438  | 61%  |
| BankCo3      | 454                                    | 46   | 10%  |
| AirlineCo1   | 410                                    | 32   | 8%   |
| TransportCo1 | 780                                    | 185  | 24%  |

coded into the prefigured categories new categories were developed (Miles & Huberman, 1994).

### **3.2.3. Intercoder reliability**

The following steps helped assure the credibility of results. First, following Thomas (2006), 5% of the messages (Kaid & Wadsworth, 1989) were randomly selected, coded by the main researcher and then were given to a second coder along with the categories used in the coding process and their description. After the second coder coded the given data into the given categories, the intercoder reliability was evaluated as 79% which was above the acceptable rate of 70% suggested by Krippendorff (2004). Second, data collection and analysis were documented to record the chain of activities that led to the findings (Richards, 2009).

## **4. Findings**

This section provides key results and findings.

### **4.1. Crisis types**

Table 3 shows the assigned type for each crisis instance, the total number of messages analysed for each crisis instance and provides a brief description of each crisis.

### **4.2. Prior reputation and crisis history**

Table 4 shows the number of stakeholders' messages referring to organisational poor prior reputation for each organisation. As Table 4 shows, all the studied organisations received at least some messages from stakeholders referring to their poor prior reputation which shows that it is unlikely that all stakeholders consider an organisation honest, caring and trustworthy. Among the studied organisations, most of the messages that BankCo2 received (more than 50%) were referring to its poor prior reputation. Hence BankCo2's prior reputation is considered poor.

In terms of the similar crisis history, none of the studied organisations had a similar crisis history.

### **4.3. Crisis response communicated through status updates**

Table 5 shows what information types and response strategies each organisation used in its status updates and Table 6 presents an example for each information type and response strategies used by the studied organisations.

As Table 5 shows, all organisations with a natural disaster provided adjusting information. BankCo1, BankCo2, BankCo3 and AirlineCo1 explained how stakeholders could contact the organisation during the crisis and how they could help the affected stakeholders. TransportCo1 explained why the services were disrupted; how stakeholders could find more information and how the organisation could help the affected stakeholders.

BankCo1, BankCo2 and BankCo3 also provided internalising information and stated the amount of money they had donated to the crisis victims.

All the five organisations, BankCo1, BankCo2 and BankCo3, AirlineCo1 and TransportCo1, used ingratiation strategy and thanked stakeholders for their help and understanding.

Also, BankCo1, BankCo2, BankCo3 and AirlineCo1 used victimage strategy and stated how they were affected by the natural disaster.

CarCo, facing a rumour crisis provided adjusting information, acknowledged stakeholders' concerns and explained how stakeholders could contact the

of information that forms a common idea (Creswell, 2014).

### **3.2.1. Crisis type, prior reputation and crisis history**

After identifying each crisis instance, the crisis type was determined based on Coombs' (2007) typology presented in Table 2. In order to determine whether an organisation had prior poor reputation, following Coombs and Holladay (1996; 2002), we examined the Facebook and Twitter messages posted by stakeholders during the crisis period to evaluate the prior reputation of each organisation. If a stakeholder message was referring to dishonesty of the organisation in the past, lack of care for stakeholders' well-being or lack of trust to the organisation to tell the truth about the crisis, then the message was categorised as poor reputation. Finally, based on the percentage of poor reputation messages in the total number of stakeholders' messages examined, the prior reputation was considered as poor or not. If most of the messages (more than 50%) received were referring to poor prior reputation, then the organisation's prior reputation was considered poor.

In order to determine whether an organisation had a similar crisis history, we performed various search with keywords including the name of the organisation, crisis and incident on the Internet. If any results was found that showed the organisation had a similar crisis before, then a similar crisis history was recorded for the organisation. In addition, when analysing stakeholders' messages sent to an organisation facing a crisis to determine the organisational prior reputation, we stayed vigilant to any referral to prior similar crisis history. If a message was referring to organisational similar crisis history, then we searched for that crisis over the Internet to realise whether it could be considered as similar crisis history.

### **3.2.2. Organisation and stakeholder messages**

As Fig. 1 shows, messages that organisations send during a crisis can be in the form of status updates or response to stakeholders' messages. To code the organisational messages, we took two steps. In the first step, we coded each organisation's status updates, which were the messages that an organisation proactively posted on its social media. In the second step, we coded each organisation's response to the crisis-related messages that stakeholders were sending to the organisation. Those crisis-related messages that stakeholders were sending to the organisations could be in the form of a comment on the organisation's status updates or in the form of a message that was directly sent to the organisation (not in response to organisations' status updates). These two steps are elaborated below.

In the first step, in order to code each organisation's status update, we used the three information types identified by Sturges (1994) and the response strategies shown in Table 1 to code the organisation's status updates. Then, in the second step, to analyse the organisation's response to the crisis-related messages that stakeholders were sending to the organisation, firstly, we analysed a crisis-related message that a stakeholder sent to the organisation using the initial categories suggested by Helsoot and Groenendaal's (2013) shown in Fig. 1. After that, we coded the organisation's response to the stakeholder's message using the same initial codes used for coding organisations' status updates.

To code the data, the coder read each unit of analysis, identified the most relevant category by constantly comparing the unit of analysis with the data already allocated to that category, and coded the data. If the data could not be

analysed by qualitative content analysis.

### 3.1. Data collection

While we aimed to study a large range of crisis types based on the SCCT classification (Table 2) (Coombs, 2007) for the period of data collection, selected crisis types occur fairly rarely and were not represented in the collected data. For example, no case was identified of a crisis resulting from workplace violence, human-error accidents or human-error product harm. As literature suggests that crises in similar clusters can be managed in similar ways (Mitroff & Anagnos, 2001; Pearson & Mitroff, 1993), we suggest that this limitation does not significantly affect the study findings.

We used criterion purposeful sampling to select the organisations facing a crisis (Patton, 2001) with the following criteria: (1) being based in Australia as the culture of a country affects the use of social media by the organisations located in that country (Acar, Takamura, Sakamoto, & Nishimuta, 2013), (2) being a for-profit large organisation which means having 200 or more employees as they have the highest rate of social media presence (77%) and are more likely to have social media policies and plans (Sensis, 2014);

(3) having at least Facebook or Twitter presence as those two channels have the highest adoption rate by Australian businesses (83% and 61% respectively) (Sensis, 2014). In order to collect instances of organisations with a crisis during the data collection period, the main researcher daily monitored the mainstream news website to identify crises that had happened. The organisations identified and selected were consumer-based corporations across diverse industries including retailing, airline, banking, transportation, telecommunication, automotive and food.

Once an organisation with a crisis that met the above mentioned criteria was identified, all crisis-related messages posted by the organisation and its stakeholders on the organisation's Facebook and/or Twitter sites were captured for the crisis duration. For Twitter, as only the messages to which an organisation responds are displayed on an organisation's Twitter page, various searches with different keywords were performed using Twitter APIs in order to identify all related messages. These keywords include organisations' names on Facebook and Twitter or the words that organisations and stakeholders were using to refer to the crisis, identified by scanning the crisis related messages as conducted by Vieweg, Hughes, Strabird and Palen (2010) in their research. All message content posted by organisations and their stakeholders from when each crisis started until the crisis was over and no more crisis related messages could be found on those pages, was coded. In total, data for seventeen crises across seventeen organisations were captured.

### 3.2. Data analysis

As this research aims to gain a deep understanding of organisational social media crisis communication, a qualitative approach was used to evaluate data. Strauss and Corbin (1990) argue that qualitative design can be utilised to gain a better understanding of a phenomenon as it allows for the richness of information to be evaluated. This means that for this research we used Nvivo, a qualitative data analysis software package (International QSR, 2015), rather than more quantitative software packages such as R.

As data was captured it was transferred to NVivo 10.0. The unit of analysis were categories in each individual message posted by organisations and stakeholders suggested by Elo and KyngaCs (2008). A category is a broad unit

understanding can result in mishandling a crisis and endangering the organisational competitive position. This research increases organisational awareness and contributes to academic and managerial understandings on this subject by exploring how organisations communicate with stakeholders on social media during a crisis.

Fig. 1 shows the research framework. Previous scholars suggest organisations use social media to provide status updates (Freberg, Providing status update crisis communication more generally).

### 2.3. Social media and organisational crisis communication

Social media has unique features that make it appealing for organisations to use it for crisis communication (Jin et al., 2014; Omilion-Hodges & McClain, 2015) as it is interactive, reaching a

**Table 2: SCCT crisis types (adapted from Coombs, 2011)**

| Crisis cluster | Crisis type                  | Description   |
|----------------|------------------------------|---|
| Victim         | Natural disaster             | Earthquake, flood, etc damages an organisation                        |
|                | Rumour                       | A rumour is disseminated about an organisation                        |
|                | Hacking                      | Attackers perform computer hacking                                    |
|                | Workplace violence           | An employee attacks other employees                                   |
| Accidental     | Challenges                   | Stakeholders claim that the organisation is operating inappropriately |
|                | Technical-error product harm | A technology failure results in a faulty product                      |
|                | Technical-error accident     | A technology failure causes an accident                               |
| Preventable    | Human-error accident         | A human error causes an accident                                      |
|                | Human-error product harm     | A human error results in a faulty product                             |
|                | Organisational-misdeed       | Management takes actions that it knows may place stakeholders at risk |

2012; Veil et al., 2011) as well as reply to stakeholder messages (Ott & Theunissen, 2015) during a crisis, which can be in the form of information and response strategies (Coombs & Holladay, 2002), as explained in the previous section. The key types of stakeholder messages are suggested by Helsloot and Groenendaal's (2013) research in the emergency management domain including questions, suggestions, giving information and messages intended to be funny. While Helsloot and Groenendaal (2013) took an emergency management perspective, their study provides a good starting point to realise what types of messages stakeholders may send to an organisation on social media during a crisis in a business setting. Hence, we use these stakeholder message clusters to study how organisations use social media to respond to each stakeholder message cluster.

Having reviewed social media, crisis communication, SCCT, and the use of social media in crisis communication and having explained the research framework, we review the research method for this study, keeping in mind this study aims to gain a better understanding of how organisations communicate with stakeholders via social media in crisis situations.

### 3. Method

Organisations' social media content, much of which is readily accessible in the public domain, provides invaluable opportunities for studying crisis communication. From May 2013 to January 2014, 15,650 social media messages during crises at seventeen large Australian organisations were collected and

|                    |              |   |
|--------------------|--------------|---|
| Rebuilding posture | Compensation | Compensating victims                                      |
|                    | Apology      | Apologising for the crisis                                |
|                    |              | Reminding stakeholders about past good works              |
| Bolstering posture | Reminding    | Praising stakeholders                                     |
|                    | Ingratiation |   |
|                    | Victimage    | Explaining how the organisation is a victim of the crisis |

prevalence of social media, as it does not consider the crisis communication channel to suggest the appropriate response strategies, it has the potential to help researchers understand social media use for organisational crisis response.

SCCT recommends that an organisation provide instructing information and adjusting information prior to employing a crisis response strategy and then suggests a two-step process for an organisation to select a crisis response strategy. In the first step, the organisation must determine the crisis type and its relevant cluster (see Table 2) (Coombs & Holladay, 2002). Coombs and Holladay (2002) propose ten crisis types grouped into three clusters, victim, accidental and preventable (Table 2). The three clusters respectively attribute very low, low and high responsibility to the organisation for the crisis (2002). For crises in the victim cluster, stakeholders perceive the organisation as the victim of the crisis, not the cause of it. For crises in the accident cluster, the crisis is considered unintentional and uncontrollable. For crises in the preventable cluster, the organisation is considered intentionally involved in behaviours that caused the crisis.

In the second step, the organisation selects response strategies from Table 1 based on the crisis type cluster and whether the organisation had a negative prior reputation or similar crisis history. In Table 1, moving from a posture of denial across diminishment to rebuilding, the strategies become increasingly accommodative, suggesting that an organisation is increasingly responsible for the crisis occurring (Coombs, 2007). As the reputational threat increases more accommodative strategies should be selected (Coombs, 2011).

Having reviewed relevant theory on crisis communication and crisis response strategy, we now review the role of social media in vast audience and enabling organisational responses to stakeholder messages (Schultz, Utz, & GoCritz, 2011). On the other hand, social media has made crisis communication more challenging for organisations as it allows stakeholders to generate content, observe an organisation's response to a crisis and organise actions against the organisation (Gruber et al., 2015; Sung & Hwang, 2014; Xia, 2013). Key stakeholders such as communities and customers (Donaldson & Preston, 1995) expect organisations to communicate about crises in a timely manner via social media (Gruber et al., 2015; Park et al., 2012). If organisations fail to do so, negative content and rumours will start circulating via social media (Oh, Agrawal, & Rao, 2013; Park et al., 2012), affecting organisational reputation and stakeholders' behavioural intention (Xia, 2013).

In spite of the increasing importance of social media in crisis communication (McCorkindale, Distaso, & Carroll, 2013; Schultz et al., 2011), various scholars emphasise that still organisations do not yet fully understand how to communicate via social media during a crisis (Eriksson, 2012; Floredu et al., 2014; Jin et al., 2014; Ki & Nekmat, 2014; Veil et al., 2011). This lack of

can bolster or harm an organisation’s reputation and mitigate or exacerbate adverse consequences (Marra, 1999). We define a crisis response as crisis communication messages disseminated by an organisation during a crisis (Benoit, 1997; Hale, Dulek, & Hale, 2005).

Prior crisis communication research has studied the nature of crisis response in terms of information (Sturges, 1994) and response strategies (Coombs, 2007). Sturges (1994) identified three types of information disseminated to stakeholders. Instructing information informs stakeholders how to protect themselves physically from a crisis. Adjusting information helps stakeholders cope psychologically by expressing sympathy or explaining the crisis. Internalising information is the information that stakeholders use to “formulate an image about the organisation” (Sturges, 1994, p. 308). However, Sturges (1994) noted that issuing internalising information in a crisis could lead stakeholders to perceive an organisation as self-interested.

Crisis response strategies have been extensively studied by Coombs (e.g. 2006, 2007, 2011) who defines them as “what an organisation says and does after a crisis hits” (Coombs, 2006, p. 245). A crisis response strategy “emphasises the way crisis communication is used to achieve certain outcomes” (Coombs, 2011, p. 130). Coombs (2011) identified four clusters of crisis response strategies (Table 1): denial, diminishment, rebuilding and bolstering. Denial strategies attempt to demonstrate that the organisation is not responsible for the crisis occurring. Diminishment strategies aim to lessen the attribution of control over the crisis or the negative effects of the crisis. Rebuilding strategies attempt to improve the organisation’s reputation by compensating and apologising. Bolstering strategies aim to build a favourable connection between the organisation and stakeholders. Table 1 shows the ten response strategies corresponding to each cluster.

Coombs and Holladay (2002) suggested Situational Crisis Communication Theory (SCCT) to help organisations select the appropriate response strategies to minimize the crisis reputational threat (Coombs, 2007). An and Cheng’s (2010) meta-analysis of crisis communication research in the past thirty years shows that SCCT is at the top of the list of the most frequently cited theories in crisis communication area. While SCCT was developed before the

**Table 1 : Crisis response strategies (Coombs, 2014).**

| <b>Crisis response strategy cluster</b> | <b>Crisis response strategy</b> | <b>Crisis response strategy description</b>  |
|---|---------------------------------|--|
| Denial posture                          | Attacking the accuser           | Confronting anyone claiming that the crisis exists   |
|   | Denial                          | Denying the existence of the crisis  |
|   | Scapegoating                    | Blaming someone outside the organisation for the crisis  |
| Diminishment posture                    | Excusing                        | Minimising the organisation’s responsibility for the crisis Minimising perceived damage associated with the crisis |
|   | Justification                   |  |

(SCCT) (Coombs & Holladay, 2002) and (3) the use of social media in organisational crisis communication.

## 2.1. Social media

Social media has been defined as “a group of internet based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 61). The two most popular social media channels in Australia are Facebook and Twitter (Sensis, 2014). Using the channels, users can post status updates, comment on others’ status and tag other users, among other activities (Davenport, Bergman, Bergman, & Fearington, 2014; Java, Song, Finin, & Tseng, 2007). We define a status update as a message that social media users proactively post on their social media pages.

Social media has changed the business setting for organisations and has provided both opportunities and challenges for them (Hanna, Rohm, & Crittenden, 2011; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; Mangold & Faulds, 2009). On the positive side, social media brings various benefits to organisations. Firstly, it has enabled organisations to have an active and engaged relationship with their stakeholders, listen to them and respond to their requests (Catriotta, Floreddu, Di Guardo, & Cabiddu, 2013; Floreddu et al., 2014). Secondly, it allows organisations to have immediate access to real-time data created by their stakeholders, seek information about stakeholders and receive feedback about their products and services (Schniederjans, Cao, & Schniederjans, 2013). Thirdly, it has created a cost-efficient way of communication for organisations as stakeholders can see organisations’ replies to other stakeholders’ questions which can be their own questions (Bygstad & Presthus, 2012). Due to these benefits, organisations use social media for different purposes such as marketing, engaging with stakeholders and responding to their requests, receiving feedback about their products and services with fast speed and at a low cost and finding innovative ideas (Floreddu et al., 2014).

On the other hand, social media has also challenged organisations (Veil, Buehner, & Palenchar, 2011). Social media has created a space in which stakeholders are enabled to share information about organisations at high speed and express their ideas about them, while organisations have less control over what is being said about them (Effing & Spil, 2016; Pang, Hassan, & Chong, 2014). This organisational lack of control in the social media context, has increased organisations’ vulnerability and consequently, the frequency and severity of business crises (Gruber, Smerek, Thomas-Hunt, & James, 2015; Kietzmann et al., 2011).

As this research is focusing on organisations’ use of social media for crisis communication, we will review social media use for crisis communication later in this section but first review crisis communication and crisis response strategy.

## 2.2. Crisis communication and situational crisis communication theory

For an organisation a crisis can be defined as “an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organisation’s performance and generate negative outcomes” (Coombs, 2011, p. 3). When crises are poorly managed, organisations and stakeholders can suffer financial, physical, health and other forms of harm (Heath & Millar, 2004). A key feature of crisis management is crisis communication as it

concerns, potentially improving organisational understandings of stakeholders' crisis needs, providing greater clarity and preserving or enhancing organisational reputation (Hurk, 2013).

While social media has enabled organisations to have direct communication with stakeholders, it has increased organisations' vulnerability during a crisis as it can facilitate the spread of it (Ngai, Tao, & Moon, 2015). Despite the importance of social media, still

businesses find it challenging using social media effectively for crisis communication (ContinuityInsights, 2014; Li & Li, 2014; Parsons, 2011). So far limited number of studies have examined the use of social media as a communication tool during real organisational crises not in experiments (Ki & Nekmat, 2014) explaining why various researchers have called for more research to be conducted in social media crisis communication (Floreddu, Cabiddu, & Evaristo, 2014; Jin, Liu, & Austin, 2014). This research adds to the nascent body of studies in the field. As the researchers resided in Australia at the time of study, and as large organisations (defined by Australian Bureau of Statistics (2002) as organisations with 200 or more employees) are the main Australian organisational users of social media (Sensis, 2014), we elected to study crisis communication by social media at large Australian organisations. This paper aims to explore how organisations use social media to interact with stakeholders during crises. The paper makes several important theoretical and practical contributions. Firstly, it contributes to filling the knowledge gap associated with organisational use of social media in crisis communication as a novel communication method by providing valuable insights in terms of the use of social media by organisations for crisis communication and responds to recent calls for systematic studies in the field (Jin et al., 2014; Ki & Nekmat, 2014). Secondly, it increases scholarly understandings of organisational social media usage for crisis communication by identifying a set of six positions that organisations can take in their communication with stakeholders on social media during a crisis. Thirdly, it develops a unique taxonomy of social media crisis messages that organisations may receive from stakeholders and examines organisational response to each message cluster. This taxonomy increases the scholarly understanding of stakeholders' interactions with organisations via social media during a crisis and helps organisations planning for crisis communication to prepare an appropriate response for each stakeholder message cluster. Fourthly, this study applies situational crisis communication theory in a social media context and provides useful insight in terms of the need for further development of this theory in the social media context.

The remainder of the paper is set out as follows. First, we establish a theoretical background from a review and synthesis of relevant literature. Following a description of the research method we present key results and findings. Finally we discuss academic and managerial implications from the findings, draw conclusions and offer final remarks.

## 2. Literature review

This section provides a theoretical background synthesised from a literature search of the information systems, social media and crisis communication academic literature, where we sought articles on social media crisis communication and underlying concepts. The section briefly reviews (1) social media, (2) crisis communication and situational crisis communication theory

# Understanding the use of social media by organisations for crisis communication

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Article info

Received 27 January 2016 Received in revised form

29 April 2016

Accepted 6 May 2016

## abstract

Many businesses have commenced using social media for crisis communication with stakeholders. However there is little guidance in literature to assist organisational crisis managers with the selection of an appropriate crisis response strategy. Traditional theories on crisis communication may not adequately represent the social media context. This study took a qualitative approach and explored organisational use of social media for crisis communication at seventeen large Australian organisations. An analysis of 15,650 Facebook and Twitter messages was conducted, drawing on the lens of Situational Crisis Communication Theory (SCCT) (Coombs & Holladay, 2002). Findings suggested that when large Australian organisations responded to crises via social media, they lacked an awareness of the potential of social media for crisis communication. Organisations often did not respond to stakeholder messages or selected crisis response strategies that may increase reputational risk. The paper contributes important understandings of organisational social media use for crisis communication. It also assists crisis managers by providing six crisis response positions and a taxonomy of social media crisis messages that stakeholders may send to organisations. Key implications are discussed.

## Keywords

Social media. Crisis management Crisis communication Crisis response strategy

## 1. Introduction

Social media is important recent addition to organisational crisis communication tools. Conveniently and quickly accessible by vast numbers of individuals and organisations, social media can be deployed by organisations to communicate crisis information to dispersed stakeholders (Park, Cha, Kim, & Jeong, 2012). According to experts, there is an important dimension to organisational crisis communication (Bucher, Fieseler, & Suphan, 2013), extending to crisis communication by social media (Ki & Nekmat, 2014). When using social media, organisations can respond to stakeholders' questions and