



Radboud Universiteit Nijmegen

*October 26<sup>th</sup>, 2020*

# Crisis communication: a cross-cultural comparison

A study of the effect of crisis response strategy and medium on Italian and Dutch respondents' perceptions of organizational reputation, secondary crisis reactions and secondary crisis communication

---

Master Thesis

Stephan Zuidhof

Radboud Universiteit Nijmegen

**Master Communicatie- en Informatiewetenschappen**  
*International Business Communication*

**1<sup>st</sup> supervisor:**  
Dr. B.C. Planken

**2<sup>nd</sup> supervisor:**  
Dr. W. Nejjari

---

*Abstract*

---

This study provides insights into the effects of crisis response strategies and medium on crisis communication outcomes and whether these effects are moderated by culture. By means of an experimental study including 131 Italian and 123 Dutch respondents, two crisis response strategies – apology and compensation – and two media – Twitter and corporate websites – were manipulated for a fictional organization with high crisis responsibility. Three dependent variables were measured, being organizational reputation, secondary crisis reactions (SCR) and secondary crisis communication (SCC). Significant main effects were found for the influence of medium on SCC. Results suggest that crisis messages on corporate websites generate more SCC, meaning that people are more willing to share the message from a corporate website than from Twitter. No significant interaction effects were found meaning that culture does not moderate the relation of crisis response strategy on the dependent variables. However, a significant main effect was found for culture on SCC, showing that Italians are more willing to share a crisis message than Dutch respondents. This can be explained by Italians' higher scores on uncertainty avoidance. To temper this uncertainty as much as possible, the availability of information is appreciated by Italians, as this could clarify the crisis situation. By sharing available information on the crisis, Italians ensure that their relatives are up to date on the crisis situation thereby evading risk as much as possible.

**Keywords:** crisis communication, crisis response strategies, medium, uncertainty avoidance, reputation, secondary crisis reactions, secondary crisis communication

### 1.1. Introduction

An organizational crisis is an event that can change how stakeholders perceive the organization (Cheng, 2018). It can be outside of human control, such as the earthquake in Haiti in 2010, but can also be premeditated, such as the Volkswagen crisis in 2015 (Zhang, Marita, Veijalainen, Wang, & Kotkov, 2016). Crises pose a serious threat to organizational reputation (Coombs, 2007b) and can stimulate undesirable secondary crisis reactions like negative word-of-mouth (Coombs & Holladay, 2008). Crisis communication – “the collection, processing and dissemination of information required to address a crisis situation” (Coombs & Holladay, 2010, p. 20) – can be used to minimize or repair reputation loss (Coombs, 2007b). It is essential that organizations know what and how to communicate with their relevant stakeholders in the event of a crisis, in order to minimize its potentially negative impacts.

An essential part of crisis communication are crisis response strategies. These are the organization’s strategic choices on how to respond to a crisis and those affected by it (Luoma-aho, Moreno & Verhoeven, 2017), or in other words, “what an organization says and does after a crisis hits” (Coombs & Holladay, 2008, p.253). Research by Coombs and Holladay (1996) showed that crisis response strategies serve to protect an organization’s reputation after a crisis. In order to do so, organizations are advised to choose a strategy based on their degree of responsibility for causing the crisis (Coombs & Holladay, 2002). Specifically, the higher the crisis responsibility, the more an organization is expected to show concern for the victims by using a so-called accommodative strategy (Coombs, 2007b). Accommodative strategies are victim-centred strategies (Coombs, 2007b) and suggest that an organization considers itself highly responsible for the crisis (Roshan, Warren, & Carr, 2016).

In addition to *what* organizations communicate during a crisis, it is equally important to look at *how* this information is communicated, for example, through which medium. With the rise of social media as a means of communication, more options have opened up for organizations to communicate with their stakeholders. It can therefore be challenging for organizations to choose the correct medium when sending their crisis message. Research has focused on the role of Twitter and Facebook in crisis communication in comparison to more traditional media like newspapers (Derani & Naidu, 2016; Schultz, Utz, & Göritz, 2011; Utz, Schultz, & Glocka, 2013). However, it can be said that while traditional newspaper readership keeps dropping, the use of online media has increased (CBS, 2009; 2019). This indicates the need to focus more research on the comparison between more online channels, in particular

traditional online media (corporate websites) and new online media (social media). Using social media as a tool in times of crisis has multiple potential advantages when compared to more traditional channels, though the most obvious one is the interactivity between organization and their stakeholders (Schultz et al., 2011; Utz et al., 2013). The use of Twitter, for example, demonstrates responsiveness and facilitates an instant dialogue between the organization and its stakeholders (Maresh-Fuehrer & Smith, 2016). Although scientific studies reveal most of social media's pros and cons, a recent study by Kulkarni (2019) states that there still is too little in-depth understanding of how social media, especially Twitter, can be best employed during times of crisis, and whether audiences perceive similar crisis information differently when it is communicated through other online, though less interactive, channels such as corporate websites.

Although previous research provided recommendations for effective crisis communication, most studies did not consider that people's evaluations could vary across cultures. In recent years there has been a growing stream in crisis communication literature highlighting the potential role of culture (e.g. An, Park, Cho, & Berger, 2010; Luoma-aho et al., 2017). These studies suggest that culture can affect how people interpret crises and how they evaluate different crisis response strategies (Luoma-aho et al., 2017). More specifically, culture can influence stakeholders' preference for a certain crisis response strategy (An et al., 2010; Luoma-aho et al., 2017). Therefore, organizations could benefit from knowing how to align their strategic responses to the cultural context they operate in.

The current study aims to fill the gap of culture in combination with crisis response strategy and medium on the one hand and crisis communication outcomes on the other, based on an experimental approach. The main purpose of this study is to examine to what extent communication response strategies (apology and compensation) are moderated by culture (Dutch and Italian) on reputation, secondary crisis reactions and secondary crisis communication.

### 2.1. Crisis as a multi-faced threat

When a crisis occurs, stakeholders are given reasons to think badly about the organization, resulting in negative emotions like anger, fear and disgust (Coombs, 2004; Jin, Liu & Austin, 2014). These emotions can lead to undesired crisis communication outcomes like organizational reputational damage and secondary crisis reactions, such as negative word-of-mouth (Coombs, 2007b). Reputation is commonly recognized as the most important organizational asset, and has therefore often been examined in crisis communication literature (Coombs, 2007b; Schultz et al., 2011). It can be defined as “the interactively and communicatively negotiated evaluation and perception of an organization by its different stakeholders” (Utz et al., 2013, p. 41). Reputation develops through information stakeholders receive directly from the organization, as well as second-hand information they receive from media and other people, for example through news articles or consumers’ word-of-mouth (Coombs, 2007b). Word-of-mouth refers to the comments people make about the organization and can either be negative or positive. Negative word-of-mouth, or so-called secondary crisis reactions (SCR), can hurt the organization’s reputation as it can affect how stakeholders perceive the organization.

Another crisis communication outcome is secondary crisis communication (SCC), which is the willingness to share an organization’s message or to leave a reaction. If a vast amount of stakeholders is willing to share the organization’s crisis response message, the organization might lose control over the communication process (Utz et al., 2013). Therefore, it’s useful to include SCC as a variable when studying crisis communication, especially through online media, as messages can be shared with little effort whilst reaching large audiences (Utz et al., 2013).

### 2.2 Situational Crisis Communication Theory

In order to minimize undesirable crisis communication outcomes and help restore reputation loss, the Situational Crisis Communication Theory (SCCT) has been developed by Coombs and Holladay (2002). The SCCT model (Coombs & Holladay, 2002) answers the question of which response strategy an organization should use based on crisis type and crisis responsibility. In general, SCCT distinguishes three clusters of crises (victim, accident, preventable) and links these to the attributed level of responsibility of the organization (minimal, low, high; Coombs,

2007b). For crises in the victim cluster, organizations are considered the victim of a crisis instead of the cause of it and have very low responsibility for the crisis. This would be the case when organizations find themselves victims of a natural disaster (Roshan et al., 2016). For crises in the accidental cluster, such as a technical error accident which results in a product defect, the crisis is seen as an accident. Although the crisis is caused unintentionally, publics attribute some degree of responsibility to the organization. In the preventable cluster, organizations are intentionally involved in the event that caused the crisis and are aware of their wrongdoing. For these reasons, public assign the organization high responsibility for the crisis (Roshan et al., 2016). An example of a crisis in the preventable cluster is organizational misdeed where products are intentionally tampered with. Coombs and Holladay (2002) suggest that, depending on the attributed responsibility of the organization, different crisis response strategies should be used. These response strategies range from defensive for organizations with low crisis responsibility to accommodative for organizations with high crisis responsibility.

### 2.3. Accommodative strategies

A recent meta-research of 24 studies by Ma and Zhan (2016) found that in case of an high-responsible organizational crisis, organizational reputation suffers the most. Hence, crises in the preventable cluster pose the most serious threat to organizational reputation. To tackle this, Coombs (2007b) states that accommodative strategies should be used by organizations that seek to rebuild this reputation. According to Coombs and Holladay (2008), accommodative strategies focus on victims' needs and create a perception that the organization accepts full responsibility. The most accommodative strategies include *apology* and *compensation*. Apology is defined as the organization expressing remorse and asking stakeholders for forgiveness; compensation is the offering of money or material gifts to victims (Coombs, 2007a).

Previous research found that, even for crises with low organizational responsibility, organizations that apologize experience less reputation loss than those that respond with a denial or do not respond at all (Bradford & Garrett, 1995; Dean, 2004). For example, Dean (2004) investigated whether companies' response affected organizational reputation after a defective product incident. In the experiment, two company responses were constructed: the first one was accommodative, namely apologetic, reasonable and compassionate; the second one was defensive, namely insincere and shifted the blame to other parties. Results showed that companies responding with an apology and showing compassion for the victims were more highly valued than companies who shifted the blame (Dean, 2004).

It is perhaps no surprise that apology has been found to have the most positive effect on organizational reputation when compared to less accommodative strategies like denial or shifting the blame. Coombs and Holladay (2008) examined if apology still has the most positive effect on reputation when compared to an equally accommodative crisis response strategy: compensation. In their study, 167 students were asked to read a news story about a chemical explosion at company X in which the crisis response was manipulated with either an apology or a compensation (Coombs & Holladay, 2008). The researchers found no significant differences between apology and compensation regarding post-crisis reputation and negative word-of-mouth intentions (Coombs & Holladay, 2008). However, this study focused on a crisis that generated low attributions of crisis responsibility (Coombs & Holladay, 2008). A study by Kiambi and Shafer (2016) extended Coombs and Holladay's (2008) research by examining crisis communication for an organization facing high crisis responsibility. The results showed that apology was rated significantly higher than compensation for post-crisis reputation, but not for negative word-of-mouth intentions (Kiambi & Shafer, 2016). Similar to Kiambi & Shafer's (2016) study, the current study examines apology and compensation in a crisis with high organizational responsibility. Drawing on their limitation of using only one medium (traditional print), the current study takes into account the role of different media and shifts the focus from traditional to online media in combination with crisis response strategies.

#### 2.4. Medium

Research has shown that crisis response strategies and the level of crisis responsibility can interact to induce different (behavioural) outcomes in publics. This has given organizations some insight into *what* to communicate in the event of a crisis to try and minimize undesirable outcomes. Another critical factor of crisis communication is knowing *how* to communicate in the event of a crisis, specifically through which medium. Multiple research showed that the medium by which a crisis message is sent affects crisis communication by influencing several crisis communication outcomes, like organizational reputation, SCC and SCR (Schultz et al., 2011; Utz et al., 2013).

Schultz et al. (2011) analysed the effects of crisis response strategy and medium on organizational reputation, SCR (negative word-of-mouth or willingness to boycott) and SCC (willingness to share the message or tell friends about it). In their study, a total of 1677 respondents were presented with either a newspaper article or a Tweet with information about a preventable crisis in which the crisis response strategy was manipulated to either apology, compensation or sympathy. Results showed that crisis response strategy only significantly

affected SCR, while medium was found to have a significant effect on all three dependent variables (Schultz et al., 2011). On the one hand, crisis communication through Twitter lead to less reputation loss and less SCR like negative word-of-mouth (Schultz et al., 2011). On the other hand, communication through newspapers lead to more SCC, meaning that respondents were more likely to share a message derived from newspapers than from Twitter (Schultz et al., 2011). Utz et al. (2013) conducted a similar research, but instead of manipulating crisis response strategy, crisis type was manipulated to either victim or preventable crisis (Utz et al., 2013). Similar to Schultz et al. (2011), significant effects of medium were found for all three dependent variables while crisis type only had a significant effect on SCR (Utz et al., 2013). The researchers concluded that communication through Twitter leads to higher post-crisis reputation and less negative word-of-mouth, while communication through newspapers generates more willingness to share the message (Utz et al., 2013). Results of both studies suggest that medium effects are stronger than the effects of crisis response strategy and crisis type. Especially crisis communication through Twitter leads to more positive outcomes for the organization.

One aspect to consider when comparing Twitter with newspapers, is the information source (Liu et al., 2011). The information source indicates where the crisis information originates from, which could either be the organization in crisis, or a third party such as a journalist from a newspaper (Austin, Liu & Jin, 2012; Liu et al., 2011). Liu et al., (2011) point out that information spread by a third party intensifies emotions like anger, especially when the organization is highly responsible for the crisis. This could explain why Schultz et al. (2011) and Utz et al. (2013) found a preference for Twitter – where the source was the organization itself – over newspapers.

Research on the comparison between traditional and online media, and on the comparison between two sources is already done by Schultz et al. (2011) and Utz et al. (2013). The current study will therefore extend current knowledge by focussing on two online media in which the organization itself is responsible for spreading the message: Twitter and corporate websites. Both media are based online and are therefore especially useful during crisis, because organizations can inform their stakeholders quickly and directly (Roshan et al., 2016). The difference between the two is that Twitter is more interactive, which allows organizations to engage in a dialogue with relevant stakeholders to address their concerns (Utz et al., 2013).

## 2.5. A potential moderator: culture

Coombs and Holladay (2008) state that crisis response strategies need to be aligned with the crisis situation at hand. However, crisis situations can be interpreted differently across cultures due to cultural differences. This is because culture can shape people's values, cognition and behaviour in a way that people with one nationality react differently than people from another one (Benet-Martínez, Leu, Lee, & Morris, 2002). Recently, research in crisis communication literature examined the role of culture in crisis communication and concluded that people with different nationalities react differently to the same crisis communication message (An et al., 2010; Luoma-aho et al., 2017). Based on this, it can be assumed that the effects of crisis response strategies cannot be generalized across cultures. Or in other words, a crisis response strategy which proved to be effective in one culture might generate different outcomes in another one.

In their study, Luoma-aho et al. (2017) used the results of an annual survey among communication managers to compare Spanish and Finnish preferences for certain crisis response strategies. Managers of communication departments were asked to share their perceptions and use of different crisis response strategies (Luoma-aho et al., 2017). For instance, managers were asked to think about a major crisis in their company and which strategy was used as a reaction (Luoma-aho et al., 2017). Results indicated that different cultures employ different response strategies: Finnish respondents showed a preference for accommodative strategies like apology, while Spanish respondents were more inclined to use defensive strategies (Luoma-aho et al., 2017). Based on these findings, one could assume that people's preferences for crisis response strategies could vary across cultures (Luoma-aho et al., 2017).

A cross-cultural study by An et al. (2010) showed how the same crisis response strategies were evaluated differently across South-Korea and America. The differences in evaluation were explained by the cultural dimensions individualism and collectivism (Hofstede, 1983). A news story about a human error recall was constructed in which the organization punished an employee for being responsible for this error (An et al., 2010). Results indicated that South-Korean respondents (collectivistic culture) reacted more negatively to this news story than Americans did (individualistic culture; An et al., 2010). An explanation for this is that individualistic cultures believe that individuals must take responsibility for their own errors, while collectivistic cultures believe that employees must be protected and that the organization as a whole must take responsibility (An et al., 2010). Based on this, it can be concluded that people with different nationalities expect a different response from the

organization. Therefore, it is possible that organization should not only align crisis response strategies to the crisis type, but also to the culture they operate in.

Building on the idea that evaluations of crisis response strategies may vary across cultures, the current research will examine crisis communication outcomes based on another of Hofstede's (1983) cultural dimensions: uncertainty avoidance. Uncertainty avoidance refers to the extent to which people feel threatened by ambiguous or unknown situations (Hofstede, 1983), like crises for example. In fact, research shows that countries that rank high in uncertainty avoidance react more strongly and feel more threatened by product harm crises than countries that rank lower on this cultural dimension (Taylor, 2000; Laufer et al., 2005). The current research will build on this by examining if people who feel more threatened by uncertain situations such as crises will also tend to react differently than people who feel less threatened by crisis situations. More specifically, it will examine whether the influence of crisis response strategies on reputation, SCR and SCC will differ as a consequence of culture. The research will be carried out in two countries – Italy and the Netherlands – whose inhabitants are assumed to differ with regard to their scores on uncertainty avoidance (75 and 53 respectively; Hofstede Insights, 2020).

#### 2.6. Research objective and relevance

The purpose of the present study was threefold. Firstly, the influence of two accommodative crisis response strategies – apology and compensation – on reputation, SCR and SCC for a crisis with high organizational responsibility was investigated. A previous study by Coombs and Holladay (2008) showed that apology and compensation did not significantly differ from each other for an organization with low crisis responsibility, whereas Kiambi and Shafer (2016) showed that apology and compensation did differ when the crisis responsibility was high. This study replicated the Kiambi and Shafer's (2016) study in terms of the comparison between these response strategies in a high-responsible crisis situation, except it also took different types of medium into account. This could provide alternate results, as previous research on medium suggested that medium could matter more than the message in crisis situations, and could therefore have the possibility to overrule the effect of response strategy (Schultz et al., 2011; Utz et al., 2013).

Secondly, this research examined the effects of medium, respectively Twitter and corporate websites, on reputation, SCR and SCC. Contrary to previous research, it examined two online media in which the organization itself will be the source of the message. In previous research (Schultz et al., 2011; Utz et al., 2013), communication through Twitter lead to higher

organizational reputation and less negative word-of-mouth, though those studies compared Twitter to newspapers. The current study compares Twitter to a corporate website, which is another online medium, though it is less interactive than Twitter. The interactivity of Twitter allows organizations to engage in a dialogue with relevant stakeholders and signals that it is eager to inform them quickly and directly (Utz et al., 2013). Hence, it could be expected that Twitter would generate more positive crisis communication outcomes due to its interactivity.

Lastly, the influence of crisis response strategies on the three dependent variables will be compared cross-culturally. Building on previous studies, this research will explore potential cross-cultural differences in response to crisis communication between Italian and Dutch respondents using the cultural dimension uncertainty avoidance. Expectations are that, since these cultures differ in the way they perceive ambiguous and uncertain situations, such as crises, they may also potentially differ in how they react to corporate communication about crises. Based on these purposes, four research questions have been formulated:

*RQ 1: “To what extent do crisis response strategies (apology and compensation) and medium (Twitter and corporate website) influence the perceptions of an organization’s reputation during a preventable crisis?”*

*RQ 2: “To what extent do crisis response strategies (apology and compensation) and medium (Twitter and corporate website) influence secondary crisis communication during a preventable crisis?”*

*RQ 3: “To what extent do crisis response strategies (apology and compensation) and medium (Twitter and corporate website) influence secondary crisis reactions during a preventable crisis?”*

*RQ 4: “To what extent does culture moderate the relationship of crisis response strategy on the dependent variables?”*

In terms of theoretical relevance, the current study’s insights will contribute to various aspects in the existing crisis communication literature. For crisis response strategy, research has focused on the differences between accommodative strategies, such as apology and compensation on reputation and other dependent variables. Yet, there has not been much research that compared these two strategies in combination with the use of two online media of which the source was

the organization itself. This could be relevant for organizations because the use of online media has increased over the years, and organizations benefit to know which responses strategies in combination with which media generates the least harmful crisis communication outcomes. Finally, the cross-cultural aspect in this research tries to fill the gap of culture in the crisis communication literature. Cross-cultural research has been scarce in comparing two different cultures in order to see how people interpret crises and how they evaluate different crisis response strategies as a consequence of their cultural background.

### 3.1. Materials

An already existing crisis case with some adjustments was used in this experiment, namely the Volkswagen (VW) crisis. The VW crisis unfolded in 2015, as the Environment Protection Agency (EPA) discovered so-called defeat devices in multiple VW models (Zhang, Marita, Veijalainen, Wang & Kotkov, 2016). This malware was intentionally installed to cheat with the emission levels of VW cars. The reason why the Volkswagen crisis was chosen, was because it was clearly a preventable crisis and research showed that preventable crises cause the highest reputational threat (Coombs, 2004).

Multiple adjustments were made to the crisis case. The company name was changed to Rakora in order to prevent recognition. Ma and Zhan (2016) stated in their research that if future studies would focus on the effects of matching response strategies to reputation, a real crisis with a fictitious name would suffice. Another reason for creating a fictitious organization is that an existing, good reputation could create a halo effect which protects an organization (Schultz et al., 2011). Therefore, this fictitious name will be used in a crisis that already took place.

The first independent variable that has been manipulated in this research was crisis response strategy. This variable had two categories: apology and compensation. Apology was manipulated in the text as follows: ‘We want to offer our apologies for manipulating the emission standards.’ Compensation was manipulated in text as follows: ‘Every owner of a Rakora car equipped with the current software problems will be compensated appropriately. Every victim will therefore receive 5000 euro from us.’

The second manipulated independent variable was medium. Medium was sub-divided in two categories as well: Twitter and corporate website. While crisis response strategy was manipulated textually, medium was manipulated visually. In the Twitter condition, the message was designed in such a way that it was similar to a real tweet from the official Rakora Twitter account. The corporate website condition was designed to look like the official Rakora website. For example, an address bar, different menu items and the visual looks and feel of a website were designed in such a way that it looked like an actual corporate website.

The potential moderating variable culture was determined by observing the interaction effects of crisis response strategy with the different nationalities on the dependent variables reputation, SCC and SCR.

Before the surveys were filled in, all respondents received an identical introductory text in which the crisis case was described. Subsequently, respondents were randomly distributed

between the four different versions of the survey. All versions contained Rakora's first reaction on the crisis, and therefore started with the same two introductory sentences, which were: 'At Rakora, we've made a huge mistake, we violated your trust. This is something we are deeply ashamed of.' Hereafter, the respondent examined one of the four different conditions, which were (1) tweet with apology, (2) tweet with compensation, (3) corporate website with apology, and (4) corporate website with compensation. The ending of the introductory text was again identical for every version, which was: 'Moreover, we will try to do anything to regain trust from you all, our customers, our dealers, the government and our employees. We kindly ask for your patience to address this complex problem and will inform you as soon as possible about the steps we will take to solve this situation.' The four manipulations can be found in appendix C-J.

### 3.2. Subjects

It was preferred that the respondents in this study were at least 18 years or older, because of the legal age to drive a car. These respondents had a bigger chance to understand the severity of the crisis.

Two different nationalities were included in the current study: Dutch and Italian. In total, 506 respondents participated in this research, of which 254 surveys were completely filled in. ( $N = 254$ ; 123 Dutch and 131 Italian). 79 of the Dutch respondents were male (64.2%), while 70 of the Italian respondents were male (55.1%). A chi-square test showed an equal distribution of gender between the different versions of the questionnaire for the Dutch ( $\chi^2(3) = 5.123, p = .163$ ) and the Italian ( $\chi^2(3) = .53, p = .912$ ) respondents. Furthermore, the distribution of the respondents over the four different conditions was roughly equal for both nationalities. The Dutch respondents were distributed as follows: 29 in the Twitter and apology condition, 33 in the Twitter and compensation condition, 29 in the corporate website and apology condition, and 32 in the corporate website and compensation condition. For Italian respondents, there were 37 in the Twitter and apology condition, 28 in the Twitter and compensation condition, 34 in the corporate website and apology condition, and 32 in the corporate website and compensation condition.

For the Dutch respondents, the most frequent educational level was a master's degree of university (46.3%), in comparison to HBO as most frequent educational level for Italian respondents (26.7%). A chi-square test showed that education level was equally distributed among the four different versions for Dutch respondents ( $\chi^2(12) = 11.776, p = .464$ ) and Italian respondents ( $\chi^2(12) = 10.268, p = .592$ ).

The mean age of the Dutch respondents was 30.88 (min: 19; max: 67) and was lower than that of the Italian respondents ( $M = 43.68$ ; min: 19; max: 80). Two one-way analyses of variance showed no significant effects of questionnaire version and age for both Dutch ( $F(3, 119) = .232, p = .874$ ) and Italian respondents ( $F(3, 127) = .661, p = .578$ ). Age was therefore equally distributed among the different versions.

### 3.3. Design

This experiment used a  $2 \times 2 \times 2$  between-subjects design. The independent variables were: crisis response strategy (apology and compensation), and medium (Twitter and corporate website). Nationality (Dutch and Italian), in terms of degree of uncertainty avoidance (UA) was the potential moderating variable in this experiment. The dependent variables were reputation, secondary crisis communication (SCC), and secondary crisis reactions (SCR).

### 3.4. Instruments

The dependent variables in this research were measured through an online questionnaire with several items to measure each variable. The variables were: reputation, secondary crisis communications and secondary crisis reactions. In order to define and operationalize these variables, definitions and measurements from previous research were used. Reputation was measured by using the Organizational Reputation Scale developed by Coombs and Holladay (2002). Five statements were measured by means a 7-point Likert scale (1 = completely disagree; 7 = completely agree). One of these statements is: "The organization is concerned with the well-being of its publics". The reliability of reputation comprising seven items was acceptable:  $\alpha = .78$ .

Secondary crisis communication was measured by two items: "I would share this message", and "How likely is it that you would share a message in general?". These two characteristics of secondary crisis communication were taken from earlier work from Schultz et al. (2011). The reliability of secondary crisis communication comprising two items was acceptable ( $\alpha = .73$ )

Secondary crisis reactions was measured by three items that measured negative word-of-mouth (NWOM) taken from earlier research (Coombs & Holladay, 2008; Schultz et al., 2011). The questions that measured NWOM were: "I would encourage friends or relatives NOT to buy products from Rakora", "I would say negative things about Rakora and its products to other people," and "I would recommend Rakora's products to someone who asks my advice". Reliability of secondary crisis reactions comprising three items was bordering on acceptable:

$\alpha = .66$ .

Next to these dependent variables, uncertainty avoidance was also measured by using the uncertainty avoidance scale derived from earlier research by Wu (2006). Five items were measured by means a 7-point Likert scale (1 = completely disagree; 7 = completely agree). One of these statements is: "Rules and regulations are important because they inform employees about what the organization expects from them". The reliability of these items was good:  $\alpha = .88$ .

This survey included multiple manipulation checks. Two items were set up in order to check whether respondents recognized the relevant crisis response strategy. For apology, respondents were asked to answer the question "Rakora apologized for the crisis" on scale from 1 to 7 (1 = totally disagree, 7 = totally agree). For compensation, respondents were asked to answer the question "Rakora offered the victims a compensation" on scale from 1 to 7 (1 = totally disagree, 7 = totally agree). It was assumed that respondents recognized the relevant crisis response strategy if the mean was 3.5 or higher. Medium also had a manipulation check that examined the attitude towards the medium. The results of these checks can be found back in the results section.

Moreover, the survey also measured how many respondents used either Twitter or a corporate website. Not many respondents used Twitter ( $M = 1.83$ ,  $SD = 1.68$ ; 1 = never; 7 = on a daily basis) in comparison to corporate websites ( $M = 4.00$ ;  $SD = 2.02$ ; 1 = never; 7 = on a daily basis). In addition, Twitter ( $M = 3.57$ ,  $SD = 1.17$ ) also reported lower evaluation scores than corporate websites ( $M = 4.42$ ,  $SD = 1.01$ ), meaning that corporate websites were evaluated better than Twitter.

Lastly, one additional question checked whether respondents saw Rakora being highly responsible for the crisis. Both Dutch ( $M = 4.61$ ,  $SD = 1.77$ ) and Italian ( $M = 4.41$ ,  $SD = 1.76$ ) saw Rakora as being responsible for the crisis (1 = not responsible at all; 7 = very responsible). The complete survey can be found in appendix A and B.

### 3.5. Procedure

Respondents were approached by posting a message on multiple Facebook groups asking for participation. Subsequently, an appeal was made on the researcher's network by asking friends and acquaintances to participate. Respondents that wished to participate were provided with a link to an online questionnaire. There was no financial or other sort of incentive as a reward for participating. The experiment was conducted on an individual basis, and every respondent started the experiment with an introductory text in which their privacy rights were explained.

At the end of the questionnaire, respondents were directed to a final page in which the email address of the researcher was provided in case there were any additional questions. This procedure was identical for every respondent who participated. The questionnaire took about ten minutes to complete. There were no further difficulties or external factors that played a role in fulfilling the questionnaire.

### 3.6. Statistical treatment

The statistical tests that were used in this research were three 3-way ANOVAs, as there were three independent variables: communication strategy, medium and culture, and as this study aimed to investigate potential interaction effects between communication strategy, medium and the potential moderating effect of culture. Moreover, additional t-tests were conducted to indicate where the precise differences were in the case of significant interactions. A t-test was also conducted to determine if the two nationalities differed, as assumed, with regard to uncertainty avoidance.

#### 4.1. Manipulation checks

First, the manipulation checks were tested and reported, starting with the manipulation check for crisis response strategy. For the apology versions, the question if Rakora apologized for the crisis was asked. Both Italian ( $M = 4.21$ ,  $SD = 1.87$ ) and Dutch ( $M = 3.88$ ,  $SD = 1.72$ ) respondents recognized the apology in the manipulated message, though for the Dutch respondents this was not that strong. For the compensation versions, respondents were asked if Rakora offered the victims a compensation. Similarly, Italian ( $M = 4.38$ ,  $SD = 1.90$ ) and Dutch ( $M = 3.98$ ,  $SD = 1.75$ ) acknowledged the compensation.

#### 4.2. Main and interaction effects

The aim of this study was twofold. Firstly, the independent variables crisis response strategy and medium were manipulated to investigate if main effects would occur on reputation, secondary crisis communication (SCC) and secondary crisis reactions (SCR). Secondly, it aimed to examine if nationality could potentially have an interaction effect on the relationship between the independent variables and the dependent variables reputation, secondary crisis communications and secondary crisis reactions. These interaction effects determine if culture is a potential moderator.

A three-way analysis of variance with crisis response strategy (apology and compensation), medium (Twitter and corporate website) and nationality (Dutch and Italian) as factors showed no significant main effect of crisis response strategy ( $F(1, 246) = 1.57$ ,  $p = .212$ ), medium ( $F(1, 246) < 1$ ) and nationality ( $F(1, 246) = 2.39$ ,  $p = .124$ ) on reputation. Also, the two-way interaction effects between crisis response strategy and medium ( $F(1, 246) < 1$ ); crisis response strategy and nationality ( $F(1, 246) = 1.34$ ,  $p = .249$ ), medium and nationality ( $F(1, 246) < 1$ ) and the three-way interaction effect between crisis response strategy, medium and nationality ( $F(1, 246) < 1$ ) were not statistically significant.

A second three-way analysis of variance with crisis response strategy (apology and compensation), medium (Twitter and corporate website) and nationality (Dutch and Italian) as factors showed a significant main effect of medium ( $F(1, 246) = 12.84$ ,  $p < .001$ ) and nationality ( $F(1, 246) = 99.60$ ,  $p < .001$ ) on secondary crisis communications. Crisis response strategy was not found to have a significant main effect on secondary crisis communications ( $F(1, 246) = 2.90$ ,  $p = .090$ ). The two-way interaction effects between crisis response strategies and medium ( $F(1, 246) < 1$ ), crisis response strategies and nationality ( $F(1, 246) < 1$ ), medium

and nationality ( $F(1, 246) = 1.04, p = .308$ ), and the three-way interaction effect between crisis response strategies, medium and nationality ( $F(1, 246) < 1$ ) were not statistically significant.

A third three-way analysis of variance with crisis response strategy (apology and compensation), medium (Twitter and corporate website) and nationality (Dutch and Italian) as factors showed no significant effect of crisis response strategy ( $F(1, 238) < 1$ ), medium ( $F(1, 238) < 1$ ), and nationality ( $F(1, 245) = 3.05, p = .082$ ) on secondary crisis reactions. Furthermore, the two-way interaction effects between crisis response strategies and medium ( $F(1, 238) < 1$ ), crisis response strategies and nationality ( $F(1, 238) < 1$ ), medium and nationality ( $F(1, 238) < 1$ ), and the three-way interaction effect between crisis response strategy, medium and nationality ( $F(1, 238) < 1$ ) were not statistically significant.

#### 4.3. Interpretation of the significant effects

In order to examine between which groups the significant main effects of medium and culture occurred, multiple t-tests had been executed. As the previous section revealed, no significant interaction effects were found. In addition, the only significant effects that have been found are medium on secondary crisis communication and nationality on secondary crisis communication. All means and standard deviations can be found in Table 1.

For the first main effect of medium, a significant difference was found on secondary crisis communication irrespective of both the crisis response strategy and the nationality of the respondent. Respondents who viewed a corporate website ( $M = 3.09, SD = 1.89$ ) were shown to be more willing to share the message than respondents who viewed the message on Twitter ( $M = 2.43, SD = 1.54$ ).

For second main effect of nationality, a significant difference was found on secondary crisis communication irrespective of the crisis response strategy and the medium. Italian respondents ( $M = 3.64, SD = 1.68$ ) were shown to be more willing to share the crisis message than Dutch respondents ( $M = 1.79, SD = 1.23$ ).

Moreover, an additional an independent samples t-test showed a significant difference between Dutch and Italian respondents with regards to uncertainty avoidance ( $t(244.42) = 6.86, p < .001$ ). Italian respondents ( $M = 6.41, SD = .92$ ) were shown to be more uncertainty avoiding than Dutch respondents ( $M = 5.56, SD = 1.05$ ).

Table 1: The means and standard deviations (between brackets) for the reputation, secondary crisis communication (SCC) and secondary crisis reactions (SCR) in function of nationality (Dutch and Italian), crisis response strategy (apology and compensation) and medium (Twitter and corporate website) (1 = very negative attitude; 7 = very positive attitude)

	Dutch				Italian			
	Apology		Compensation		Apology		Compensation	
	Twitter	Corporate website						
	n = 29	n = 29	n = 33	n = 32	n = 37	n = 34	n = 28	n = 32
	<i>M (SD)</i>	<i>M (SD)</i>						
Reputation	3.09 (.98)	3.00 (.98)	3.06 (.90)	3.01 (1.01)	3.30 (1.25)	3.59 (1.45)	3.09 (1.27)	3.09 (1.33)
SCC	1.62 (1.00)	2.36 (1.67)	1.52 (.98)	1.69 (1.11)	3.39 (1.57)	4.15 (1.81)	3.05 (1.49)	3.98 (1.72)
SCR	2.89 (.93)	3.02 (1.37)	3.07 (1.05)	3.00 (.93)	3.26 (1.37)	3.07 (1.18)	3.32 (1.02)	3.32 (1.07)

---

## *Conclusion*

---

The purpose of this study was on the one hand to shed further light on the effects of crisis response strategies (apology and compensation) and medium (Twitter and corporate website) on perceptions of organizational reputation, secondary crisis communication (SCC) and secondary crisis reactions (SCR) for an organization in a preventable crisis. On the other hand, this research examined if differences in nationalities could moderate the relationship of crisis response strategies on the dependent variables. To start off, the effects of crisis response strategy (apology versus compensation) and medium (Twitter versus corporate website) on perceptions of organizational reputation in a preventable crisis were examined. A three-way analysis of variance showed that neither crisis response strategy nor medium had a significant main effect on the organization's reputation. In other words, no differences were found between apology and compensation, and Twitter and corporate website on the reputation of an organization.

Secondly, the effects of crisis response strategy and medium on secondary crisis communication were examined. Results showed that both medium and nationality were found statistically significant on SCC. Multiple additional t-tests showed where the differences occurred exactly. Starting off with medium, a significant difference was found between the use of Twitter and corporate website. Irrespective of the crisis response strategy used and the nationality of the respondent, a crisis message on a corporate website generated more willingness to share the message than a crisis message on Twitter. For nationality, the t-test conducted was found to be significant on secondary crisis communication. In other words, irrespective of the crisis response strategy and the medium, Italian respondents were more willing to share the crisis message displayed than their Dutch counterparts.

Thirdly, no significant effects were found for crisis response strategies and medium on secondary crisis reactions for an organization in a preventable crisis. To put in easier terms, apology and compensation and Twitter and corporate website did not differ from each other on secondary crisis reactions.

Lastly, no significant interaction effects were found for the relationship between the independent and dependent variables. Culture, in terms of uncertainty avoidance, is therefore not a direct moderator of the relationship of response strategy and medium on organizational reputation, SCR and SCC.

Overall, it can be concluded that only medium and nationality showed a significant main effect on SCC, and that crisis response strategy had no effect on any dependent variables whatsoever.

### 6.1. Crisis response strategy

The first independent variable that was manipulated in this study was crisis response strategy. Research question one to three took response strategy into account and tested this variable on organizational reputation (*RQ 1*), secondary crisis communication (*RQ 2*) and secondary crisis reactions (*RQ 3*) respectively. The current findings indicate that both apology and compensation do not appear to have any influence on respondents' perceptions of organizational reputation, SCC or SCR. In particular, the two strategies used in this experiment, apology and compensation, did not significantly differ from each other for an organization with high crisis responsibility on these three dependent variables. This result is rather surprising, as one would have expected the results to be more similar to those of Kiambi and Shafer (2016). These researchers conducted a similar study in terms of an experiment involving crisis response strategies apology and compensation for an organization that faced high crisis responsibility. In contrast to the results in the current study, apology was preferred over compensation for an organization facing high responsibility for the crisis. There are, however, differences between the study of Kiambi and Shafer (2016) and this study that can explain the ambiguity of the results of both studies. A difference in the background of the crisis case. Kiambi and Shafer's (2016) study used a fictitious crisis of an airplane crash which had not actually occurred. The crisis in the current study was derived from a real organization, Volkswagen, and a real, relatively recent event, namely the VW emission scandal. It could therefore be that the respondents in the present study recognized the Volkswagen scandal being used in the present study's crisis case. Literature has shown that reputation is formed through the accumulation of the people's perceptions of the organization (Kiambi & Shafer, 2016). It is possible that respondents who recognized the crisis case already formed a perception of the organization and its reputation, resulting in biased answers.

In addition, the current findings could be explained by the meta-analysis of Ma & Zhan (2016), in which the researchers concluded that accommodative strategies are not very effective at protecting organizational reputation in a preventable crisis. This may be the case when an organization is highly responsible for a crisis and its involved in an organizational misdeed, so that their blame is of such magnitude that neither an apology or compensation are effective for protection or restoring organizational reputation (Ma & Zhan, 2016).

Crisis response strategy was not found to have a significant effect on secondary crisis communication, meaning that either the use of an apology or a compensation did not influence

the willingness to share the organization's message. It could be that the relationship of these two variables is non-existent, though future research should confirm this statement.

Finally, no significant main effect of crisis response strategy on secondary crisis reactions was found, suggesting that the use of apology or compensation as response strategy does not influence the willingness to talk negatively about an organization. Coombs and Holladay (2008) and Kiambi and Shafer (2016) reported similar results for scores for apology, sympathy and compensation on negative word-of-mouth. Similar results in all studies indicate that the relationship between crisis response strategy on the one side and secondary crisis reactions on the other one might not be present at all. An explanation for this missing relationship is that all three studies, including the current one, were conducted with randomly selected respondents instead of real victims of the relevant crisis. As anger drives negative word-of-mouth (Coombs & Holladay, 2008), different outcomes might be obtained on negative-word-of-mouth when conducting a study with real victims.

## 6.2. Medium

The second independent variable of the current study was medium. A significant main effect was found for medium on secondary crisis communication (*RQ 2*), but not on reputation (*RQ1*) and secondary crisis reactions (*RQ 3*). Respondents were more willing to share the crisis communication message on a corporate website than on Twitter. An explanation for this can be found in the manipulation checks of this study. These checks showed that respondents appeared to visit corporate websites more frequently and gave a higher rating to corporate websites in comparison to Twitter, irrespective of nationality and crisis response strategy. This result could be explained by the telepresence theory, which explains the user's perceptions of familiarity with the medium at hand (Kulkarni, 2019). This familiarity is caused by 'internal based efficacy', which is the influence of the perception of control and familiarity with the navigation of the medium, regarding its characteristics (Wu, 1999). In other words, when one is familiar with the medium at hand, one finds it easier to navigate through the medium. In her study, Kulkarni (2019) found that the respondents who read a crisis message on a Facebook post reported a better understanding of the crisis than the ones who used the website. In addition, 90 percent of the respondents had a Facebook account, which made it very likely that this group had previous experiences with Facebook. This was in contrast to an organizational blog and website, which the respondents were quite unfamiliar with. In this study, the familiarity with Twitter was low, which could have resulted in respondents' less willingness to share the

message. In contrast, the familiarity with corporate websites was high, which could have resulted in respondents' more willingness to share the message.

No significant effect was found for medium on organizational reputation. This means that for an organization with high crisis responsibility, messages on Twitter and on the corporate website were evaluated similarly for organizational reputation. This finding is contrasting to the ones of Utz et al. (2013) that showed a more positive evaluation of Twitter in comparison to newspapers on organizational reputation. A possible explanation for this difference is the source of the message, as explained in the theoretical framework. The study of Utz et al. (2013) compares messages from different sources, that is from the organization itself (Twitter) and from a third party (newspaper). The positive evaluation of Twitter on organizational reputation could be attributed to the fact that this message comes from the organization itself. An organization that takes initiative in informing its stakeholders signals that it is eager to inform them quickly and directly (Utz et al., 2013) and could therefore be evaluated more positively. In the current study, both media messages derived from the same source: the organization itself.

In addition, results suggest that both Twitter and corporate websites do not influence the willingness to talk negatively about the organization. These findings differ from the ones of Utz et al. (2013) where messages on Twitter lead to less NWOM than messages in newspapers. Similar to the findings of medium on organizational reputation, the difference in the results can be explained by the source of the message. Jin et al. (2014) argue that if the crisis message is disseminated by a third party – like newspapers – emotions like anger are likely to be intensified, leading to more willingness to talk negatively about the organization. In the current study, only messages deriving from the organisation itself were analysed, which could explain why there is no significant effect of medium on secondary crisis reactions like NWOM.

### 6.3. Culture

This study tried to answer the fourth and last research question in terms of uncertainty avoidance (UA). This research question was: *“To what extent does culture moderate the relationship of crisis response strategy and medium on the dependent variables?”*. Giving an answer in terms of this study is easy: no, culture in terms of UA does neither moderate the effect of crisis response strategy nor the effect of medium on the dependent variables reputation, SCC and SCR. Evidence for this claim lies in the findings that culture did not significantly interact with crisis response strategy and medium on any of the observed variables. Therefore, culture does not moderate the relationship between the independent and dependent variables in this study.

The only significant main effect that has been found in this study regarding nationality was the effect on secondary crisis communication. Although this does not answer any of the research questions, it is an interesting finding to report. Italian respondents in this study were more willing to share a crisis related message than their Dutch counterparts. This could be explained by Italians' higher scores on uncertainty avoidance, in comparison to Dutch respondents. As stated before, uncertainty avoidance (UA) refers to the extent in which people feel threatened by ambiguous or unknown situations (Hofstede, 1983). Results here showed that Italian respondents scored significantly higher than Dutch respondents did, indicating that Italian respondents feel more threatened by ambiguous or unknown situations than Dutch people. To temper this uncertainty as much as possible, the availability of information is appreciated for Italians, as this could clarify the crisis situation. By sharing available information on the crisis, Italians ensure that their friends and relatives are up to date on the crisis situation in order to evade risk as much as possible. More research is needed to confirm whether uncertainty avoidance indeed generates other crisis communication outcomes.

#### 6.4. Limitations and future research

The present study also has several limitations. Firstly, the crisis case used in this research might have been too similar to the Volkswagen crisis case. The content of that crisis case was identical to the Rakora crisis case in the present study, except for the name and logo. This could have influenced the respondents' answers, as the crisis could have been recognized by them. Some respondents even made contact to inform that they recognized the Volkswagen scandal in the Rakora crisis case.

Secondly, although the content of the crisis was derived from the VW scandal, the present study's crisis was about a fictional organization. Therefore, no prior reputation could have been measured. Prior reputation would have made it easier to check if the organizational reputation after the crisis had declined or stayed similar.

Thirdly, the crisis in this study was treated as a single event instead of a dynamic process. In general, a crisis is not a single event but a dynamic process that takes a considerable amount of time. Therefore, the crisis in this study can be seen as a simplified display of an actual crisis.

Culture and the possible relationship with crisis communication is an interesting field for future research. The current study did not find any interaction effects of culture, meaning that culture did not moderate the effects of crisis response strategy on crisis communication outcomes. However, this does not mean that interaction effects cannot be found when

comparing other cultures. Future research should focus on extending the knowledge on the field of crisis communication and culture by further investigating other cultural dimensions like power distance, masculinity-femininity or high-context and low-context cultures. Examining other cultures besides the Dutch and Italian one could contribute to a more extensive view on the effect of culture on different crisis communication outcomes.

---

## References

---

- An, S. K., Park, D. J., Cho, S., & Berger, B. (2010). A cross-cultural study of effective organizational crisis response strategy in the United States and South Korea. *International Journal of Strategic Communication, 4*(4), 225–243. <https://doi.org/10.1080/1553118X.2010.515543>
- Austin, L., Liu, B. F., & Jin, Y. (2012). How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model. *Journal of Applied Communication Research, 40*(2), 188–207. <https://doi.org/10.1080/00909882.2012.654498>
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. W. (2002). Negotiating Biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-Cultural Psychology, 33*(5), 492–516. <https://doi.org/10.1177/0022022102033005005>
- Bradford, J. L., & Garrett, D. E. (1995). The effectiveness of corporate communicative responses to accusations of unethical behavior. *Journal of Business Ethics, 14*(11), 875–892. <https://doi.org/10.1007/BF00882067>
- CBS. (2009). Media en ICT; gebruik televisie, krant, pc en internet, 1997-2008. Retrieved from <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/70655ned/table?ts=1602929962114>
- CBS. (2019). Internet; toegang, gebruik en faciliteiten. Retrieved from <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83429NED/table?ts=1602930469754>
- Cheng, Y. (2018). How Social Media Is Changing Crisis Communication Strategies: Evidence from the Updated Literature. *Journal of Contingencies and Crisis Management, 26*(1), 58–68. <https://doi.org/10.1111/1468-5973.12130>
- Coombs, W. T. (2004). Impact of past crises on current crisis communication: Insights from situational crisis communication theory. *Journal of Business Communication, 41*(3), 265–289. <https://doi.org/10.1177/0021943604265607>
- Coombs, W. T. (2007a). Crisis Management and Communications. *Institute for Public Relations, 1*–14. <https://doi.org/http://hdl.handle.net/123456789/96>
- Coombs, W. T. (2007b). Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. *Corporate Reputation Review, 10*(3), 163–176. <https://doi.org/10.1057/palgrave.crr.1550049>

- Coombs, W. T., & Holladay, S. J. (1996). Communication and Attributions in a Crisis: An Experimental Study in Crisis Communication. *Journal of Public Relations Research*, 8(4), 279–295. [https://doi.org/10.1207/s1532754xjpr0804\\_04](https://doi.org/10.1207/s1532754xjpr0804_04)
- Coombs, W. T., & Holladay, S. J. (2002). Helping crisis managers protect reputational assets: Initial Tests of the Situational Crisis Communication Theory. *Management Communication Quarterly*, 16(2), 165–186. <https://doi.org/10.1177/089331802237233>
- Coombs, W. T., & Holladay, S. J. (2008). Comparing apology to equivalent crisis response strategies: Clarifying apology's role and value in crisis communication. *Public Relations Review*, 34(3), 252–257. <https://doi.org/10.1016/j.pubrev.2008.04.001>
- Coombs, W. T., & Holladay, S. J. (2010). The Handbook of Crisis Communication. In *The Handbook of Crisis Communication*. <https://doi.org/10.1002/9781444314885>
- Dean, D. H. (2004). Consumer reaction to negative publicity: Effects of corporate reputation, response, and responsibility for a crisis event. *Journal of Business Communication*, 41(2), 192–211. <https://doi.org/10.1177/0021943603261748>
- Derani, N. E. S., & Naidu, P. (2016). The Impact of Utilizing Social Media as a Communication Platform during a Crisis within the Oil Industry. *Procedia Economics and Finance*, 35, 650–658. [https://doi.org/10.1016/s2212-5671\(16\)00080-0](https://doi.org/10.1016/s2212-5671(16)00080-0)
- Hofstede, G. (1983). The Cultural Relativity of Organizational Practices and Theories. *Journal of International Business Studies*, 14(2), 75–89. <https://doi.org/10.1057/palgrave.jibs.8490867>
- Hofstede Insights. (2020). Compare countries. Retrieved from <https://www.hofstede-insights.com/product/compare-countries/>
- Jin, Y., Liu, B. F., & Austin, L. L. (2014). Examining the Role of Social Media in Effective Crisis Management: The Effects of Crisis Origin, Information Form, and Source on Publics' Crisis Responses. *Communication Research*, 41(1), 74–94. <https://doi.org/10.1177/0093650211423918>
- Kiambi, D. M., & Shafer, A. (2016). Corporate Crisis Communication: Examining the Interplay of Reputation and Crisis Response Strategies. *Mass Communication and Society*, 19(2), 127–148. <https://doi.org/10.1080/15205436.2015.1066013>
- Kulkarni, V. (2019). Is It the Message or the Medium? Relational Management during Crisis through Blogs, Facebook and Corporate Websites. *Global Business Review*, 20(3), 743–756. <https://doi.org/10.1177/0972150918761986>
- Liu, B. F., Austin, L., & Jin, Y. (2011). How publics respond to crisis communication strategies: The interplay of information form and source. *Public Relations Review*, 37(4),

- 345–353. <https://doi.org/10.1016/j.pubrev.2011.08.004>
- Luoma-aho, V., Moreno, A., & Verhoeven, P. (2017). Crisis response strategies in Finland and Spain. *Journal of Contingencies and Crisis Management*, 25(4), 223–231. <https://doi.org/10.1111/1468-5973.12163>
- Ma, L., & Zhan, M. (2016). Effects of attributed responsibility and response strategies on organizational reputation: A meta-analysis of situational crisis communication theory research. In *Journal of Public Relations Research*, 28(2), 102–119. <https://doi.org/10.1080/1062726X.2016.1166367>
- Maresh-Fuehrer, M. M., & Smith, R. (2016). Social media mapping innovations for crisis prevention, response, and evaluation. *Computers in Human Behavior*, 54, 620–629. <https://doi.org/10.1016/j.chb.2015.08.041>
- Roshan, M., Warren, M., & Carr, R. (2016). Understanding the use of social media by organisations for crisis communication. *Computers in Human Behavior*, 63, 350–361. <https://doi.org/10.1016/j.chb.2016.05.016>
- Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? Perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public Relations Review*, 37(1), 20–27. <https://doi.org/10.1016/j.pubrev.2010.12.001>
- Taylor, M. (2000). Cultural Variance as a Challenge to Global Public Relations: A Case Study of the Coca-Cola Scare in Europe. *Public Relations Review*, 26(3), 277–293. [https://doi.org/10.1016/S0363-8111\(00\)00048-5](https://doi.org/10.1016/S0363-8111(00)00048-5)
- Utz, S., Schultz, F., & Glocka, S. (2013). Crisis communication online: How medium, crisis type and emotions affected public reactions in the Fukushima Daiichi nuclear disaster. *Public Relations Review*, 39(1), 40–46. <https://doi.org/10.1016/j.pubrev.2012.09.010>
- Wu, G. (1999). Perceived interactivity and attitude toward web sites. *Proceedings of the Conference-American Academy of Advertising*, 512, 254–262.
- Wu, M. (2006). Hofstede's cultural dimensions 30 years later: A study of Taiwan and the United States. *Intercultural Communication Studies*, 15(1), 33.
- Zhang, B., Marita, V., Veijalainen, J., Wang, S., & Kotkov, D. (2016). The Issue Arena of a Corporate Social Responsibility Crisis – The Volkswagen Case in Twitter. *Studies in Media and Communication*, 4(2). <https://doi.org/10.11114/smc.v4i2.1746>

## Appendix A: Dutch survey

### **Introductory text**

Beste deelnemer,

Hierbij wordt u uitgenodigd om een vragenlijst over crisiscommunicatie in te vullen. Deze vragenlijst wordt uitgevoerd in opdracht van de Radboud Universiteit Nijmegen, en is onderdeel van de masterscriptie van Stephan Zuidhof, letterenstudent van de studie International Business Communication. Om te beginnen krijgt u zo meteen een korte uitleg te zien met daarin een beschreven crisis. Daarna zult u een reactie te zien krijgen van het bedrijf die in deze crisis verkeert. Bestudeer dit goed, alvorens u de bijbehorende vragen op de daaropvolgende pagina kunt beantwoorden. Ten slotte verzoek ik u nog enkele achtergrondvragen te beantwoorden. Deze vragenlijst zal in totaal ongeveer 10 minuten van uw tijd in beslag nemen.

Dit onderzoek wordt met inachtneming van de ethische richtlijnen van de Radboud Universiteit uitgevoerd. Alle data die binnen dit onderzoek worden verzameld, zullen veilig opgeslagen worden. Tevens zullen de gegevens van deelnemers anoniem blijven en zullen de verzamelde data enkel en alleen gebruikt worden ten behoeve van deze masterscriptie.

Uw bijdrage aan dit onderzoek is geheel vrijwillig en u kunt op ieder moment het onderzoek beëindigen. Mocht u hiervoor kiezen, dan zullen al uw ingevulde data direct worden verwijderd. Ten slotte geeft het doorklikken onderaan deze pagina aan dat u de bovenstaande info gelezen en begrepen hebt en instemt met deelname aan dit onderzoek. Bovendien geeft u hiermee aan dat u vrijwillig meedoet aan dit onderzoek en dat u 18 jaar of ouder bent. Mocht u nog vragen of opmerkingen over het onderzoek hebben, dan kunt u contact met mij opnemen via het mailadres: [stephan.zuidhof@student.ru.nl](mailto:stephan.zuidhof@student.ru.nl).

Hartelijk dank voor uw aandacht en participatie!

Met vriendelijke groet,  
Stephan Zuidhof

### **Introduction of the crisis**

De autofabrikant Rakora is sinds jaar en dag een grote speler in de automarkt. Het bedrijf fabriceert 780.000 auto's per jaar en telt 600.000 medewerkers wereldwijd. Sinds kort is echter gebleken dat Rakora niet helemaal eerlijk is geweest. In een driejaarlijkse keuring door de European Emissions Agency (EEA) van het s5 model, bleek dat er in de auto's van dit type software is geplaatst die minder uitstootgassen registreert dan dat deze auto's daadwerkelijk uitstoten. Hiermee is de uitstoot schadelijker tijdens gebruik op de weg dan de software aangeeft of bij een controle in de garage. Toen de EEA dit constateerde voor het s5 model, heeft zij ook

de andere modellen van Rakora getest. Ook deze modellen bleken uitgerust te zijn met de software. Hierdoor doet Rakora voorkomen dat de auto's milieuvriendelijker zijn dan dat ze in werkelijkheid zijn. Uit verder onderzoek door de EEA is inmiddels gebleken dat Rakora deze software intentioneel heeft geïnstalleerd, om beter te kunnen concurreren met andere automerken op de wereldmarkt. Na dagen van speculatie in de media, kwam Rakora met de mededeling dat de betrokken auto's worden teruggeroepen en de software verwijderd zal worden. Ook kwam het bedrijf met een eerste communicatieuiting voor het algemene publiek. Deze is te vinden op de volgende pagina. Lees het bericht van Rakora zorgvuldig, voordat u de vragen beantwoordt.

### **Questions on reputation**

1. "Rakora bekommert zich om het welzijn van anderen"
2. "De organisatie is in principe onbetrouwbaar"
3. "Ik vertrouw niet dat Rakora de waarheid over het incident vertelt"
4. "In de meeste gevallen zou ik waarschijnlijk geloven wat Rakora zegt"
5. "Rakora is niet bezorgd om het welzijn van zijn omgeving"
6. "Rakora is een organisatie die ik bewonder en respecteer"
7. "Rakora heeft over het algemeen een slechte reputatie"

### **Questions on SCC**

- Twitter
  1. "Ik zou de tweet retweeten"
  2. "Hoe waarschijnlijk is het dat u Tweets in het algemeen deelt?"
- Corporate website
  1. "Ik zou deze boodschap delen"
  2. "Hoe waarschijnlijk is het dat u berichten deelt in het algemeen?"

### **Questions on SCR**

- NWOM
  1. "Ik zou vrienden en familie aanmoedigen om auto's van het merk Rakora te kopen"
  2. "Ik zou auto's van Rakora aanbevelen bij iemand die mijn advies zou vragen"
  3. "Ik zou negatieve dingen over Rakora en haar producten vertellen"

### **Questions on UA**

1. Het is belangrijk om je werkvoorschriften en instructies in detail uitgeschreven te hebben zodat werknemers altijd weten wat er van hen verwacht wordt
2. Managers verwachten dat hun werknemers instructies en procedures nauw volgen
3. Regels en patronen zijn belangrijk omdat dit werknemers informeert wat de organisatie van hen verwacht
4. Standaard functionerende procedures zijn nuttig voor hoe werknemers hun werk moeten doen
5. Operationele instructies zijn belangrijk voor hoe werknemers hun werk moeten doen

### Questions on medium

1. “Hoe vaak gebruik je twitter?”
2. “Ik vind Twitter”:
  - Handig / onhandig
  - Overbodig / noodzakelijk
  - Interessant / saai
  - Leuk / niet leuk
  - Prettig / onprettig
  - Makkelijk / ingewikkeld
  - Gelooftwaardig / ongelooftwaardig
3. “Hoe vaak bezoek je corporate websites?”
4. “Ik vind corporate websites”:
  - Handig / onhandig
  - Overbodig / noodzakelijk
  - Interessant / saai
  - Leuk / niet leuk
  - Prettig / onprettig
  - Makkelijk / ingewikkeld
  - Gelooftwaardig / ongelooftwaardig

### Questions on manipulation checks

- Responsibility
  1. “Rakora is verantwoordelijk voor de crisis”
- Apology
  1. “Rakora biedt haar excuses aan voor de crisis”
- Compensation:
  1. “Rakora biedt de slachtoffers een compensatie aan”

### General questions

1. “Wat is je leeftijd”
2. “Ben je in het bezit van een auto?”
  - Zo ja: “Welk merk?”
3. “Wat is je nationaliteit?”
4. “Wat is je geslacht?”
5. “Wat is je hoogst genoten opleiding?”

### End

Bedankt voor het invullen van deze vragenlijst. Mocht u nog vragen hebben, kunt u altijd mailen naar [stephan.zuidhof@student.ru.nl](mailto:stephan.zuidhof@student.ru.nl)

## Appendix B: Italian survey

### **Introductory text**

Gentile partecipante,

Siete invitato a compilare un questionario sulla comunicazione di crisi. Questo questionario è realizzato per conto dell'Università di Nimega e fa parte della tesi di laurea di Stephan Zuidhof, studente di Comunicazione Internazionale. Per iniziare, vedrà un breve testo in cui verrà descritta una crisi. Successivamente, vedrà la risposta dell'azienda che si trova in questa crisi. Si prega di leggere attentamente prima di rispondere alle domande corrispondenti sulla pagina successiva. Infine, la chiederò di rispondere ad alcune altre domande di base. Il questionario richiederà circa 10 minuti del vostro tempo.

Questa ricerca è condotta in conformità con le linee guida etiche dell'Università di Nimega. Tutti i dati raccolti nell'ambito di questo studio verranno archiviati in modo sicuro. Inoltre, i dati dei partecipanti rimarranno anonimi e i dati raccolti saranno utilizzati solo per la tesi di questo master.

Il vostro contributo a questo studio è del tutto volontario e potrà terminare il questionario in qualsiasi momento. In questo caso, tutti i dati inseriti verranno eliminati immediatamente. Infine, facendo clic sulla parte inferiore di questa pagina indicherà che avrà letto e compreso le informazioni qui sopra e accetta di partecipare a questo studio. Inoltre, dichiarerà di partecipare volontariamente a questo studio e di avere almeno 18 anni. In caso di domande o commenti sulla ricerca, sarà possibile contattarmi all'indirizzo e-mail: [stephan.zuidhof@student.ru.nl](mailto:stephan.zuidhof@student.ru.nl).

Grazie mille per la sua partecipazione!

Gentili saluti,  
Stephan Zuidhof

### **Introduction of the crisis**

La casa automobilistica Rakora è stata a lungo uno dei principali attori nel mercato automobilistico. L'azienda produce un totale di 780.000 auto all'anno e ha un totale di 600.000 dipendenti in tutto il mondo. Tuttavia, recentemente è diventato evidente che Rakora non è stata del tutto onesta. In un'ispezione triennale da parte dell'Agenzia Europea per le Emissioni (AEE) del modello s5, si è riscontrato che le auto di questo tipo disponevano di un software che registra meno emissioni di quelle che vengono effettivamente emesse. Ciò rende le emissioni più dannose durante l'uso sulla strada rispetto a quanto indicato dal software durante un controllo in garage. Quando l'AEE ha stabilito questo per il modello s5, ha anche controllato gli altri modelli Rakora. Anche questi modelli si sono rivelati dotati del software. Per questo motivo, le auto di Rakora sembrano più ecologiche di quello che in realtà sono. Ulteriori indagini dell'AEE hanno dimostrato che Rakora ha installato questo software intenzionalmente per competere meglio con altri marchi automobilistici sul mercato mondiale. Dopo giorni di speculazioni mediatiche, Rakora ha annunciato che le auto in questione verranno richiamate e il software

verrà rimosso. L'azienda ha anche rilasciato la sua prima comunicazione al pubblico. Questa può essere letta sulla pagina successiva. Si prega di leggere attentamente prima di rispondere alle domande corrispondenti.

### **Questions on organizational reputation**

1. "Rakora si preoccupa del benessere degli altri"
2. "Rakora è inaffidabile"
3. "Non mi fido di Rakora che dica la verità sull'incidente"
4. "È probabile che, nella maggior parte dei casi, crederò a ciò che dice Rakora"
5. "Rakora non si preoccupa del benessere del suo ambiente"
6. "Rakora è un'organizzazione che ammiro e che rispetto"
7. "Generalmente, Rakora ha una brutta reputazione"

### **Questions on SCC**

- Twitter
  1. "È probabile che ritwitterei il tweet"
  2. "Con quale probabilità condividi i tweet in generale?"
- Corporate website
  1. "È probabile che condividerei questo messaggio"
  2. "Con quale probabilità condividi messaggi in generale?"

### **Questions on SCR**

- NWOM
  1. "Incoraggerei i miei amici e i miei parenti ad acquistare un'auto Rakora"
  2. "Se qualcuno chiedesse il mio consiglio, gli consiglierei le auto Rakora"
  3. "Direi cose negative su Rakora e sui suoi prodotti"

### **Questions on UA**

1. "È importante che le istruzioni di lavoro siano scritte in dettaglio in modo che i dipendenti sappiano sempre cosa l'azienda si aspetta da loro"
2. "I direttori di un'azienda si aspettano che i loro dipendenti seguano da vicino le istruzioni e le procedure di lavoro"
3. "Regole stabilite sul luogo di lavoro sono importanti perché informano i dipendenti su ciò che l'organizzazione si aspetta da loro"
4. "Le procedure operative standard su come svolgere un lavoro sono utili per i dipendenti"
5. "Le istruzioni operative sono importanti per il modo in cui i dipendenti devono svolgere il proprio lavoro"

### **Questions on medium**

5. "Quanto spesso usi Twitter?"
6. "Penso che Twitter è":
  - Conveniente / Inconveniente
  - Necessario / Inutile

- Interessante / Noioso
  - Divertente / Non divertente
  - Piacevole / Spiacevole
  - Facile / Complicato
  - Credibile / Poco credibile
7. “Quanto spesso visiti i siti web aziendali?”
8. “Penso che i siti web aziendali sono”:
- Convenienti / Inconvenienti
  - Necessari / Inutili
  - Interessanti / Noiosi
  - Divertenti / Non divertenti
  - Piacevoli / Spiacevoli
  - Facili / Complicati
  - Credibili / Poco credibili

### Questions on manipulation checks

- Responsibility
  2. “Rakora è responsabile per la crisi”
- Apology
  2. “Rakora si scusa per la crisi”
- Compensation:
  1. “Rakora offre un risarcimento alle vittime della crisi”

### General questions

6. “Che età ha?”
7. “Possiede un’auto?”
  - Se sì: “Che marca?”
8. “Che nazionalità ha?”
9. “Che sesso ha?”
10. “Quale è il vostro più alto livello di istruzione?”

### End

Grazie per aver compilato questo questionario. In caso di domande, è sempre possibile inviare una e-mail a [stephan.zuidhof@student.ru.nl](mailto:stephan.zuidhof@student.ru.nl).

## Appendix C: Manipulation Twitter + apology Dutch



**Rakora Cars** ✓ @RakoraCarsNL 22 jun.

Bij Rakora hebben we een grote fout gemaakt, we hebben uw vertrouwen geschonden. Iets waar we ons diep voor schamen. Daarom willen we onze excuses aanbieden voor het manipuleren van de emissiestandaarden. We zullen er bovendien alles aan gaan doen om het vertrouwen van u allen, (1/2)

4

18

49



**Rakora Cars** ✓ @RakoraCarsNL 22 jun.

onze klanten, onze dealers, de overheid en onze medewerkers terug te winnen. We vragen u vriendelijk om uw geduld en wij gaan hard aan de slag om dit complexe probleem aan te pakken, en u zo snel mogelijk te informeren over de stappen die we zullen ondernemen om deze situatie op te lossen. (2/2)

4

18

49



## Appendix D: Manipulation Twitter + compensation Dutch



**Rakora Cars** ✓ @RakoraCarsNL 22 jun.

Bij Rakora hebben we een grote fout gemaakt, we hebben uw vertrouwen geschonden. Iets waar we ons diep voor schamen. Hier koopt u niet veel voor, dat beseffen we. Daarom zal iedere eigenaar van een Rakora waarin het huidige softwareprobleem zich voordoet, gepast gecompenseerd worden. (1/3)

4

18

49



**Rakora Cars** ✓ @RakoraCarsNL 22 jun.

Elke gedupeerde ontvangt van ons 5000 euro. We zullen er bovendien alles aan gaan doen om het vertrouwen van u allen, onze klanten, onze dealers, de overheid en onze medewerkers terug te winnen. We vragen u vriendelijk om uw geduld en wij gaan hard aan de slag om dit... (2/3)

4

18

49



**Rakora Cars** ✓ @RakoraCarsNL 22 jun.

...complexe probleem aan te pakken, en u zo snel mogelijk te informeren over de stappen die we zullen ondernemen om deze situatie op te lossen. (3/3)

4

18

49



## Appendix E: Manipulation corporate website + apology Dutch

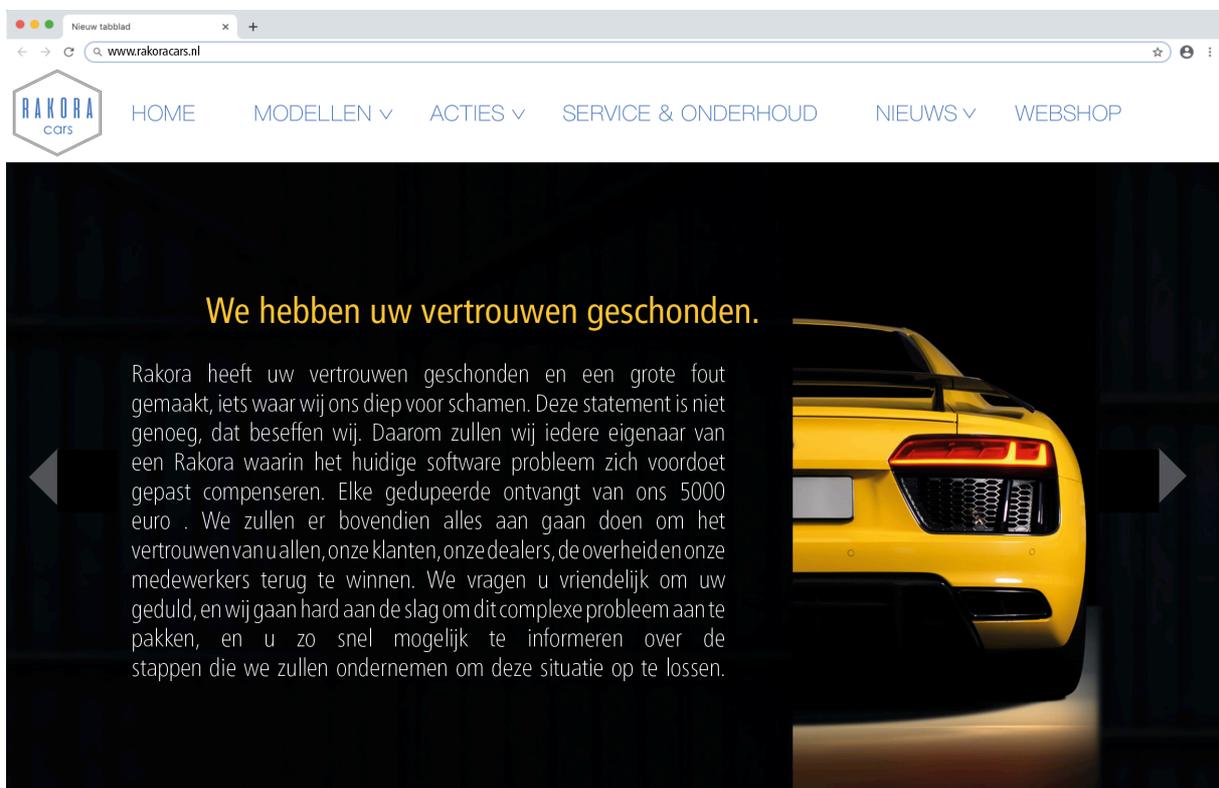


The screenshot shows a web browser window with the URL [www.rakoracars.nl](http://www.rakoracars.nl). The navigation menu includes: HOME, MODELLEN ▾, ACTIES ▾, SERVICE & ONDERHOUD, NIEUWS ▾, and WEBSHOP. The main content area features a dark background with a yellow car on the right. The text reads:

**We hebben uw vertrouwen geschonden.**

Rakora biedt oprechte excuses aan voor het manipuleren van de emissiestandaarden. Wij geven toe een grote fout te hebben gemaakt en ons hiervoor diep te schamen. Wij zullen er bovendien alles aan gaan doen om het vertrouwen van onze klanten, dealers, de overheid en medewerkers terug te winnen. We vragen al onze stakeholders om geduld, en gaan hard aan de slag om dit complexe probleem aan te pakken, en zo spoedig mogelijk informatie te verstrekken over de stappen die we zullen ondernemen om deze situatie op te lossen.

## Appendix F: Manipulation corporate website + compensation Dutch



The screenshot shows the same web browser window with the URL [www.rakoracars.nl](http://www.rakoracars.nl). The navigation menu is identical to Appendix E. The main content area features a dark background with a yellow car on the right. The text reads:

**We hebben uw vertrouwen geschonden.**

Rakora heeft uw vertrouwen geschonden en een grote fout gemaakt, iets waar wij ons diep voor schamen. Deze statement is niet genoeg, dat beseffen wij. Daarom zullen wij iedere eigenaar van een Rakora waarin het huidige software probleem zich voordoet gepast compenseren. Elke gedupeerde ontvangt van ons 5000 euro. We zullen er bovendien alles aan gaan doen om het vertrouwen van u allen, onze klanten, onze dealers, de overheid en onze medewerkers terug te winnen. We vragen u vriendelijk om uw geduld, en wij gaan hard aan de slag om dit complexe probleem aan te pakken, en u zo snel mogelijk te informeren over de stappen die we zullen ondernemen om deze situatie op te lossen.

## Appendix G: Manipulation Twitter + apology Italian



**Rakora Cars** @RakoraCarsITA 22 giugno

Noi di Rakora abbiamo fatto un grosso errore. Abbiamo tradito la vostra fiducia, una cosa di cui ci vergogniamo profondamente. Pertanto, vogliamo scusarci per aver manipolato le standard di emissione. Faremo tutto il possibile per riconquistare la vostra fiducia, (1/2)

4

18

49



**Rakora Cars** @RakoraCarsITA 22 giugno

dei nostri clienti, dei nostri rivenditori, del governo e dei nostri dipendenti. Vi chiediamo cortesemente la vostra pazienza e lavoreremo sodo per affrontare questo problema complesso e informarvi al più presto sulle misure che prenderemo per risolvere questa situazione (2/2).

4

18

49



## Appendix H: Manipulation Twitter + compensation Italian



**Rakora Cars** @RakoraCarsITA 22 giugno

Noi di Rakora abbiamo fatto un grosso errore. Abbiamo tradito la vostra fiducia, una cosa di cui ci vergogniamo profondamente. Ci rendiamo conto che questa affermazione è insufficiente. Pertanto, ognun proprietario di un modello Rakora in cui si verifica l'attuale problema... (1/3)

4

18

49



**Rakora Cars** @RakoraCarsITA 22 giugno

...software verrà adeguatamente compensato. Ogni proprietario insoddisfatto riceverà un risarcimento di 5000 euro. Faremo tutto il possibile per riconquistare la vostra fiducia, dei nostri clienti, dei nostri rivenditori, del governo e dei nostri dipendenti. Vi chiediamo... (2/3)

4

18

49



**Rakora Cars** @RakoraCarsITA 22 giugno

...cortesemente la vostra pazienza e lavoreremo sodo per affrontare questo problema complesso e informarvi al più presto sulle misure che prenderemo per risolvere questa situazione. (3/3)

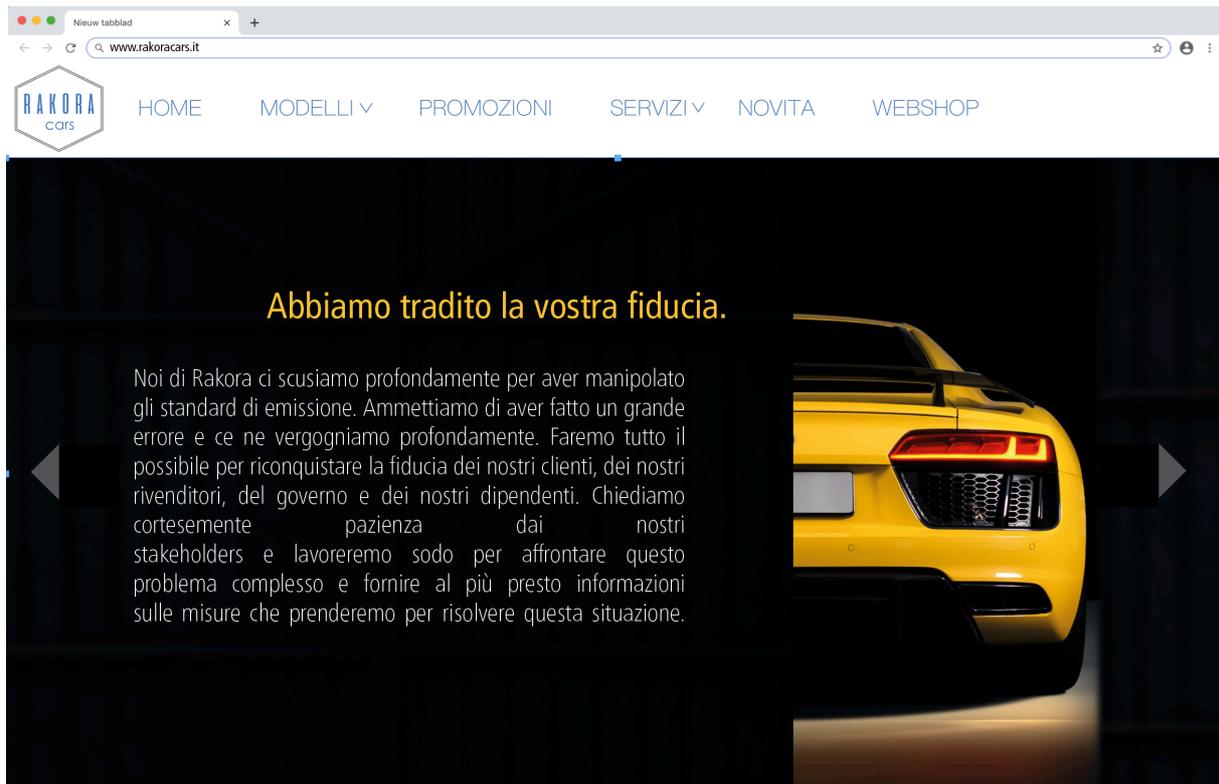
4

18

49



## Appendix I: Manipulation corporate website + apology Italian



## Appendix J: Manipulation corporate website + compensation Italian

