CRISIS MANAGEMENT 4.0
AN UNHEARD-OF MODEL FOR PRACTITIONERS

How managers can enhance their preparedness for corporate crises

White Paper written by
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Table of content

Abstract

The question "between robots and big data, what's left for humans?" is the new concern in all industries. Companies nowadays operate in a high-speed environment where the rapid spread of information, rumors, and fake news on social media increases the risk of major organizational crises. To face this new reality, business managers must adopt new crisis management tactics, new tech tools, and adapt very quickly to any eventuality to protect the reputation of their organization.

Big data and AI have turned out to be valuable allies. Robots might soon be able to manage corporate crises thanks to big data, metadata, and tech improvements such as blockchain, and deep learning. But the fundamental question remains: What will be left for humans in crisis management when robots take over? This white paper is an opportunity to understand the implications of high-tech improvements in PR. The evolution model of crisis management that is proposed follows the marketing and internet evolution model. The model is adapted to the distinct environment of crisis management and is halfway between practice and applied research.

Key words

#Authenticity #AI #Credibility #CrisisManagement #DecisionMaking #MindfulLeadership #Mindfulness #MindfulPR #PublicRelations #Reputation

Acknowledgment

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Stéphane Prud'homme has more than twenty years of professional experience (including nine years in Asia) in global communications strategy, business communications, reputation management and crisis communication, and corporate Credibility Engineering®. Stéphane is President of IABC Montréal Chapter.

He has been studying the credibility construct for the past fifteen years, through a master's degree on corporate spokesperson credibility in crisis situations and doctoral research on executive credibility and corporate reputation. Stéphane is the Founding President and Head of Research of the Credibility Institute Inc. and the Founder of the Reputation Rebellium™ Think Tank. He is also an Associate of CS&A International.

Stéphane was appointed as "Ambassador of the Université du Québec à Montreal" in 2010 to mark his outstanding career, his contribution to the growth of his industry, as well as for improving UQAM's prestige. In 2005, he came up with the idea of founding Public Relations Without Borders and two years later, the NGO was set up with the collaboration of PR professionals. Dozens of dedicated volunteers have been working on humanitarian missions in Africa, South America, and India since then.

Lucie-Anne Fabien, CMMI, APR, FCPRS

Lucie-Anne Fabien has thirty years of diversified experience as a manager, professional, consultant and trainer in communications, public relations, marketing and business development. She has been teaching PR in the Executive MBA program at UQAM. To this experience, she adds top-of-the-line training in mindfulness so she can offer mindfulness coaching, training, and consultation services to leaders and their organizations. As an Accredited Instructor in mindfulness, she integrated it into her practice five years ago, on top of participating in a dozen programs devoted to mindfulness in Canada, the US, and Europe.

Lucie-Anne created Metaconscience Inc. in 2017 to offer solutions to leaders and their organizations who want to decrease their stress levels and increase satisfaction and balance in their lives. Given her combined expertise in teaching, coaching, and public speaking, Lucie-Anne knows how to captivate audiences. Whether in a conference setting or one-on-one, she merges her background in management and communications with her knowledge and first-hand experience in mindfulness to deliver content that is research-based and that has a positive impact for clients in their business performance and in their personal lives. In 2019, Lucie-Anne has created Mindful PR™, a bran new way of doing public relations.

Purpose and Methodology

The purpose of this white paper is to explain the evolution of crisis management and to propose an unheard-of model for managing corporate crises with new tangible tools for communicators, combined with recent findings in artificial intelligence. Managers will also find decision-making tools inspired by best practices in High Reliability Organizations (HROs) to modify lifestyles of individuals by managing their stress and attention levels with mindfulness and business continuity.

Questions

- What are the trends and the new tools for managing corporate crises?
- How is the Crisis Management 4.0 model different from what we already know about managing a crisis?
- Is credibility the most important intangible asset for an organization when managing a crisis?
- Will artificial intelligence be helpful to managers in making decisions during a crisis?
- What will be the place left for humans when AI takes over?
- Can we apply mindful leadership to Public Relations?
- Are we witnessing a glimpse of a new paradigm in Public Relations?

The formative research to completely understand the detailed crisis management model has been achieved through an exhaustive literature review from around the world in both French and English. Books, peer-reviewed articles, and academic and professional opinions in respected magazines and newspapers are the foundation of the review. The elaboration of the model proposed in this paper is based on the literature review and the authors' knowledge and long-standing experience in Public Relations and business communications.

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1. Introduction

Organization executives have been managing corporate crises for decades, and for centuries if you consider the Catholic Church's Pope and Cardinals as "corporate crisis" managers. It would also be a point of interest to include very old companies such as Bavarian Brewery Weihenstephan, which has been brewing beer since A.D. 1040 to understand in-depth how managers have managed corporate crises and protected the reputations of their organizations.

In this paper, we focus on crisis management as we recently understand it, that is over the past fifty years or so. We revisit the Crisis Management 1.0 and 2.0 models through the lens of Public Relations. We also explain the Crisis Management 3.0 model, something that has not been done yet. In fact, very few people know there is a Crisis 3.0 model. We conclude with an elaboration of the Crisis Management 4.0 model and an unheard-of explanation of its related concepts and ins and outs.

We are also introducing a new perspective of crisis management that is currently being used by the most advanced organizations in terms of crisis preparedness and management, High-Reliability Organizations (HROs). They have developed and used new ways of managing crisis in order to be more effective, based on the human perspective and on a specific methodology, the error management model.

The conclusion of this paper provides communicators and leaders with solutions incorporating Crisis Management 4.0 into their corporate communications strategy, a more-than-necessary shift that unveils a new paradigm in Public Relations that underlies changes in their daily working life.

1.1 Give sense back to the crisis concept

Not only are crises inevitable, they are also on the rise according to a recent research by Deloitte (Balaji, 2018). Some 80 percent of crisis teams were mobilized in the past two years. Yet some companies still refuse to prepare for crises or to do so adequately. The same study cites that the top crisis management challenge was the effectiveness of leadership and decision-making. In that regard, we may be over-confident in our ability to manage crises, when 90 percent of respondents said they were confident in their organization's ability of deal with a corporate scandal even though only 17 percent have actually tested it through simulation. As a matter of fact, having a crisis plan has proven to significantly reduce the impact of a crisis.

Crises are definitely not a recent phenomenon. Philosophers from Ancient Greece added a sense of time to the crisis concept. A temporality that regulates decisions taken by an individual. Temporality brings a before and after to a crisis. It also conveys a dimensional perspective with causes and consequences. Crisis would be a critical moment when choices must be made, decisions made with discernment. Chinese philosophers understood crises with two important concepts, they are 危机 and their meaning

is the integration of "danger" and "opportunity." Based on these two influential philosophical currents, Greek and Chinese, crisis has been associated with decision and judgment ever since.

Wiener and Kahn's twelve generic dimensions of crisis date back to 1962, but they are still accurate for the era we live in. They are:

1. Crisis is often a turning point in an unfolding sequence of events and actions.
2. Crisis is a situation in which the requirement for action is high among participants.
3. Crisis threatens the goals and objectives of those involved.
4. Crisis is followed by an important outcome whose consequences shape the future of the participants.
5. Crisis consists of a convergence of events that results in a new set of circumstances.
6. Crisis produces uncertainties in assessing a situation and in formulating alternatives for dealing with it.
7. Crisis reduces control over events and their effects.
8. Crisis heightens urgency, which often produces stress and anxiety among participants.
9. Crisis is a circumstance in which information available to participants is unusually inadequate.
10. Crisis increases time pressures for those involved.
11. Crisis is marked by changes in the relations among participants.
12. Crisis raises tensions among participants, especially in political crises involving nations.

In 2017, the global professional services firm PwC published a report outlining the seven crisis triggers shown in the figure below. The list is exhaustive and covers all sorts of crises. The triggers help to understand why crises are on the rise. Terrorism, immigration, fake news, business uncertainty, political unrest, and populism, where cyber terrorism adds fuel to the fire. All these triggers or causes can impact on an organizational pillar and could affect an entire organization and its stakeholders. That is its reputation, the most important intangible asset (Prud'homme, 2015).

Figure 1

Triggers come from far and wide

Financial Bankruptcy | Insolvency | Significant asset devaluation

Legal Compliance failure | Sanctions

Technological Cyber breach | R&D feature

Operational | Infrastructure failure | Product recall

Global issues | Terrorism | Natural disaster

Reputational | Loosing market position | Adverse association with brand

Human capital | High staff turnover | Low retention | Strikes

1.2 Definition of crisis

The definition of crisis we use to start the discussion with is a global firm's definition, a pioneer and a recognized leader in the field of risk, crisis, and business continuity management.

> **"A crisis is an event, revelation, allegation, or set of circumstances which threatens the integrity, reputation, or survival of an individual or organization. It challenges the public's sense of safety, values, or appropriateness.**
>
> **The actual or potential damage to the organization is considerable and the organization cannot, on its own, put an immediate end to it."**
>
> **CS&A International**
> **csa-crisis.com**

Figure 2
Crisis Management Cycle, Pursiainen (2018)
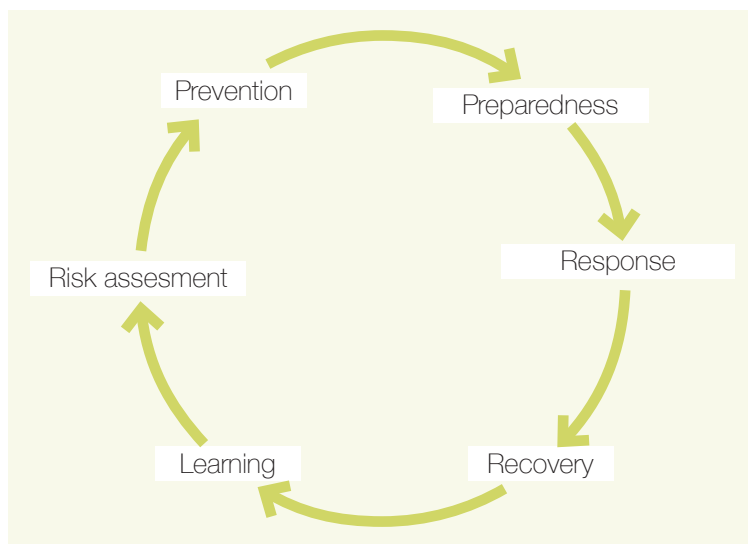
Pursiainen (2018) describes the crisis management cycle, a model used to elaborate our model. As shown in the figure 2, the cycle has six circular phases. As readers will be able to appreciate in the second part of this paper, our model could be applied to all six phases. We chose to focus on preparedness to show where our model could have the most significant impact.

1.3 Crises viewed by CEOs

PwC (2017) surveyed 164 global CEOs in its report. Based on this research sample,15 percent stated that they have experienced at least one crisis in the past three years. An alarming finding for communicators is the CEOs' prediction of a growing number of crises in the coming years. We are also amazed that 25 CEOs said they have experienced five or more crises in the past three years.

Figure 3

CEO's predict a growing number of crisis in the next three years

15% Have experienced five or more crisis in the past three years

30% Expect more than one crisis within the next three years
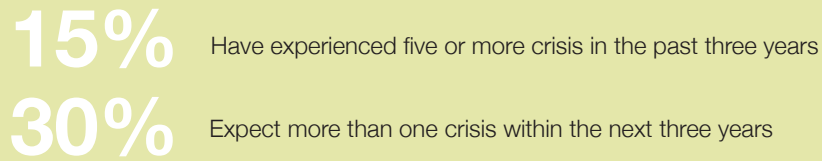
With these numbers, we are not surprised that more and more CEOs are involved in crisis management. Even if communicators have worked on crisis preparation for decades because they understand the possible threat to reputation, the organization's most important intangible asset, we still find very low interest from CEOs and corporate executives in investing in crisis preparation. Financial numbers have always been the language of CEOs until communicators proved the impact of reputation with a financial perspective.

Times are changing

Not only do CEOs now differentiate an operational from a reputational crisis, they also understand the direct financial impact of a sound and positive corporate reputation and the negative impact a reputational crisis can have on their organization's cash flow. In a recent report, PR News and Crips surveyed 400+ PR professionals and asked them "How willing is your CEO to invest in strong crisis preparation?" The results, shown in the figure below, are in accordance with our previous statement that management acknowledging crisis impact is on the rise, demonstrating that 79 percent of CEOs are willing to invest.

Even though, crisis management implies risk management and business continuity, we will not elaborate on these two concepts in this paper. We will elaborate on that in a future paper.

Figure 4
How willing is your CEO/Head of organization to invest in strong crisis preparation ?

Response	Percentage
Very	37,92%
Somewhat	41,06%
Not really	15,70%
Not a all	5,31%
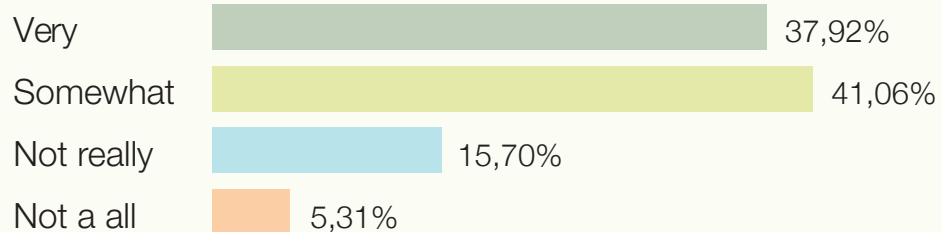
PR News and Crips (2019)

2. Crisis Management 3.0

Between robots and big data, what's left for humans?

We like to spread the idea that robots will soon be able to manage corporate crises thanks to big data, metadata, IT improvements such as blockchain and artificial intelligence, and especially deep learning. This always blows communicators and managers away. But the fundamental question persists: What will remain for humans in crisis management when robots take over?

The Crisis 3.0 model appeared chronologically after Crisis 1.0 and Crisis 2.0. The evolution model of crisis management we're proposing for the first time in this paper generally follows the marketing evolution model and the online one, as show in the table 3. Our model is adapted to the distinct environment of crisis management and is halfway between practice and applied research.

Readers can appreciate an overview of the first two models we came with as:

Crisis Management 1.0 *Until the mid 2000's*	Crisis Management 2.0 *From late 2000's to 2010*
Empathy	Web 2.0 and Marketing 2.0
Sympathy	Participative and collaborative internet
Transparency	Social media
Truth	Response speed and effectiveness
Corporate key messages	Trust management
Emotional intelligence	Reputation management

2.1 What is Crisis Management 3.0?

Companies are operating in a high-speed environment as the rapid spread of information, rumors, and fake news on social media increases the risk of major organizational crises. To face this new reality, business managers must now adopt new tactics of crisis management, new IT tools, and adapt very quickly to any eventualities to protect the reputation of their organization. Big data and artificial intelligence turn out to be valuable allies.

For example, in the PwC survey previously mentioned, 65 percent of CEOs admitted to having experienced a crisis in the last three years and 73 percent said they thought their organization would face at least one crisis in the next three years. These figures reflect the climate of uncertainty that business leaders have experienced in recent years. Add to this climate of uncertainty a lack of knowledge about recent technological changes and you can appreciate why managers are under a great deal of

stress. According to a recent study in *Reputation Today* (2016) and *Forbes*, public relations/crisis management is the fifth most stressful job after police officer, pilot, firefighter, and soldier.

Crisis Management 3.0 regroups concepts that communicators are used to working with and some others that have been recently brought to their attention. Until now, the most common concepts to communicators are fake news and artificial intelligence which relates to monitoring, big data, chatbots, algorithms, and machine learning. Communicators have also heard about the blockchain being applied to communications and metadata. We're convinced that blockchain could help in the fight against fake news, but no research has been conclusive yet.

Some concepts in the 3.0 model are:

Crisis Management 3.0 *From 2010 to now*	
Web 2.0 and Marketing 2.0	Response speed and effectiveness
Participative and collaborative internet	Trust management
Social media	Reputation management

2.2 Metadata: the unknowns

On the other hand, metadata have already been used for some years to improve AI and deep learning. The main difference between machine learning and deep learning is indeed metadata, data that can define, describe, and analyze "raw" big data. Machine learning is about merely automation. With implied metadata (systemic data able to automatically generate) within a data ecosystem (linked data, such as blockchain), AI can then understand, make links, deeply learn, and propose decisions that humans could take. A data ecosystem will surely be able to go further in the future – as we can see in the following figure… but not yet today.

We're still are at the beginning of AI making a strong contribution to communicators. Yet AI helps us with collecting data and analyzing it with metadata, and, of course, it assists customer service with chatbots. We will elaborate on how AI will be able to contribute to the daily life of communicators in section 3.

2.3 Did communicators neglect Crisis Management 1.0 and 2.0?

No, you haven't missed anything. In fact, communicators may have experienced Crisis Management 1.0 and 2.0 without naming the concepts. Crisis Management 3.0 is an update of Crisis 2.0 (based on Web 2.0, which is associated with social media and participative internet, response speed and effectiveness, trust building, and reputation management) and 1.0 versions (behavior oriented, where the manager deals in empathy, sympathy, transparency, trustworthiness, emotional intelligence, and messaging). This model is adapted to technological changes and other aspects related to business operations. While focusing on the crisis manager and their team, it integrates big data and AI. It also focuses on considering all decisive factors, including societal and environmental values, stakeholders, and the exchange between these factors and organizations.

2.4 Preparedness is still key in 2019

When a crisis happens, the first question your CEO asks is "Are we ready for this?" When a crisis happens, the first question communicators ask themselves is "Have I done everything possible to be ready for this crisis?" When a crisis happens, it is already too late to ask yourself this question. If the crisis is big enough, it could hit an organization with a knockout punch in a very short time. The crisis trigger might be as small as a whistleblower or as devastating as a plane crash. Organizations must be prepared to face all sorts of crises and to deliver an effective and structured response as quickly as possible. Not being prepared will have a definite impact on management decision-making that could lead to a reputation meltdown and serious financial consequences.

In the report mentioned earlier, PwC (2017) comes to conclusion that the majority of organizations end up making the right decisions in times of crisis management. But preparedness could ease the resolution path of the crisis. Preparedness could also facilitate decision-making when the CEOs lead. PwC (2017) found that 91 percent of CEOs are in charge of crisis management, but 65 percent of them do not feel confident about their capability in gathering accurate information. Another encouraging number from PwC's survey is that 55 percent of CEOs in the sample have a concern for external and internal stakeholders when it comes to communicating during a crisis.

PwC (2017) proposes eight attributes shared by crisis-prepared organizations, as shown in figure 5, next page. The PwC "crisis-prepared model" offers a complete starting toolkit communicators can propose to their team, but we believe that the Crisis Management 4.0 model elaborated in this paper would prepare communications teams more rigorously. In fact, our model brings the missing link to the table. We will explain how in Section 3.

Figure 5
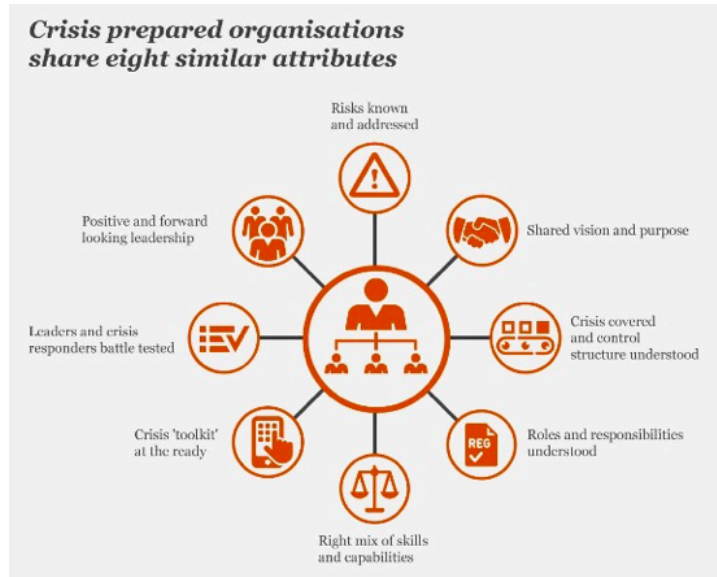
As readers will be able to understand by the end of this paper, our model includes tips and tools for communicators to be ready for all sorts of crises. Preparedness is surely one of them. We're introducing two tools: the first one all communicators think they know well and another one that the PR industry is getting to know better: credibility and artificial intelligence.

2.5 If content is king, credibility is queen

When it's time to fully understand the concept of credibility, we must go back to Ancient Greek philosophers. Aristotle worked on numerous concepts and individual credibility is one of them. Some 2,300 years ago, he tried to understand oratory and how to be a good speaker in front of an audience. He found that credibility, the skill of being believed, was a tenet when an orator tries to convince an audience. He discussed this fundamental concept using three pillars: logos, ethos, and pathos. To make a long story short – because Aristotle's work is monumental – we simplify his understanding of oratory without diminishing it: to be a convincing speaker, an individual must work on the three pillars and practice their different components, shown in the figure below.

Figure 6

13
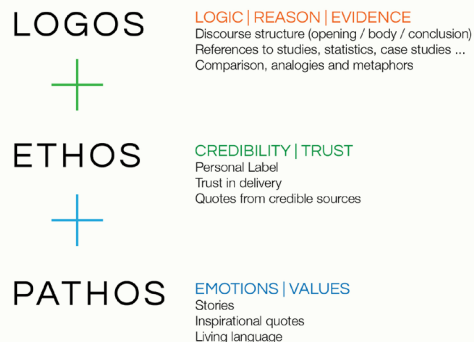
In 1951, psychologist Carl Hovland and his colleagues (U.S. War Department in the 1940s and Yale University afterwards) worked on spokesperson characteristics that could affect an audience's acceptance of a message – because credibility is all about reception – and how to influence public opinion. All their work before Yale was about U.S. Government propaganda in time of war. As we can see in the figure below, Hovland et al. explain how three components – expertise, trustworthiness, and likableness – build source credibility. They understood individual credibility as an open system where all components inter-influence one another to build credibility.

Figure 7

EXPERTISE

TRUST-WORTHINESS

CREDIBILITY

ATTRACTION
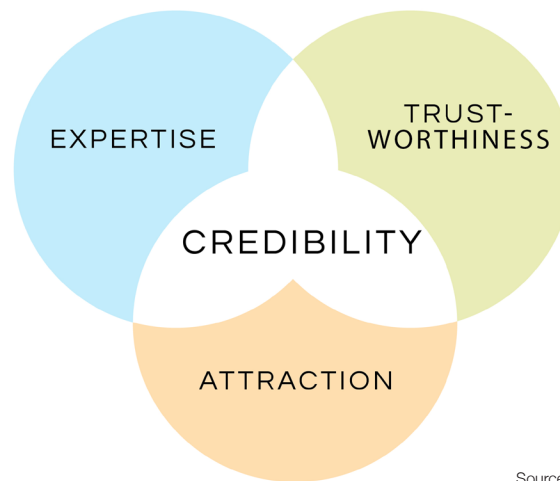
Source Credibility Theory, Hovland et al.

Since the findings of Hovland et al., scholars have added other components to the credibility construct, including competence, dynamism, and sociability, but the essential credibility is still more or less based on the Hovland et al. theory. Today, while trust and branding are overrated, researchers and practitioners are working on the credibility construct, and the Credibility Institute is one of them. The Institute proposes an updated definition of credibility, a revisited reputation-building framework, and a new model to work with: Credibility Engineering®. An important point to understand from this reputation building framework (see figure 9) is the strong impact credibility has in the process of managing corporate reputation during a crisis, and how important preparedness is.

Readers will learn in the second part of this paper how communicators can excel at their work by knowing themselves better. With a similar point of view, Kouzes and Posner (2011, p. 35), based on empirical data, developed the six disciplines for building and sustaining credibility. They are:

1. Discover your self
2. Appreciate constituents
3. Affirm shared values
4. Develop capacity
5. Serve a purpose
6. Sustain hope

It's interesting to note that leadership research is so highly connected to credibility and how much communicators can contribute to leadership development. Credibility is a crucial component for generating a dialogue between leaders and stakeholders. To know more about how crediblity is a dialogue, please visit this blog.

2.6 Why is credibility so important?

Credibility is the result of being believed by an audience. If the public does not believe a spokesperson or an organization, no communication is possible. That also means, if there is no communication, there is no way to end a crisis. Based on the Kouzes and Posner (2011, p. 36) statement on leadership and on Prud'homme's master's dissertation (2004), we think credibility is a dialogue; it is a relationship built on mutual understanding. Kouzes and Posner (2011, p. xi) also state that credibility is the foundation of leadership and that an audience must believe in a leader – we add "or in an organization" – before people follow them – we add "listen to them." The only way to build this mutual understanding is to build credibility before a crisis hits.

Reputation Building Framework

Figure 9
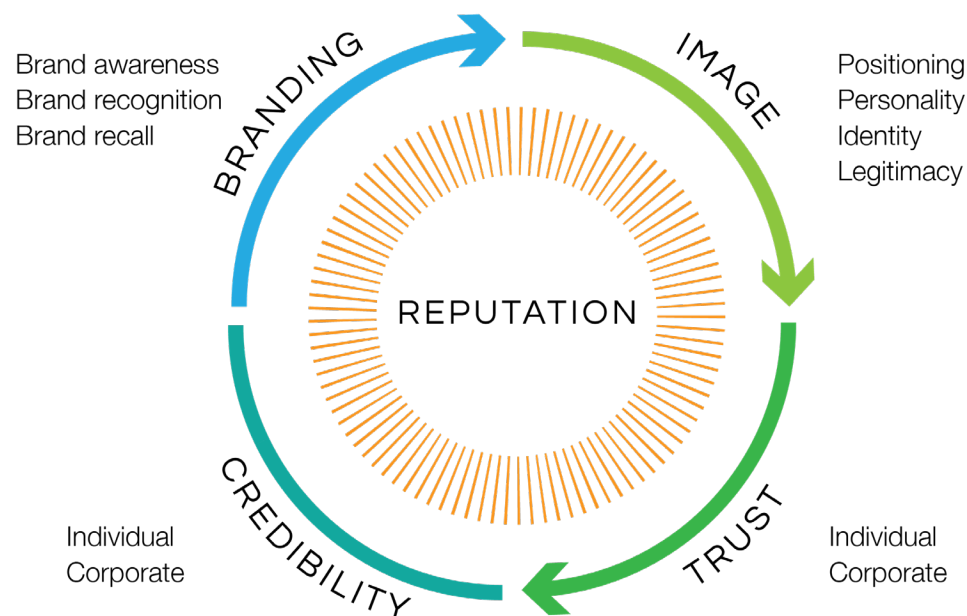
Credibility Institute (2015)

This framework proposes working on four pillars to build reputation. They are branding, corporate image, trust, and credibility. According to this framework, a strategic planning including the pillars would lead to a positive and solid reputation. In times of crisis, not only reputation but all four pillars can be affected. This is why we recommend that communicators make sure to get prepared for a crisis by working not only on their organization's reputation but also on the four pillars. We also remind readers that credibility is a key component in crisis communications, because without credibility, audiences will not read or listen to corporate messages.

3. Crisis Management 4.0

Communicators have not heard about Crisis Management 4.0 before because we propose a new and innovative model in this paper. We also state that we already are in Crisis Management 4.0. Artificial intelligence learns at a faster rate than ever. Increased stress is affecting our lives more than ever. Communicators have over-connected professional and personal lives. Everything is at high speed during their 14-hour days. We now ask the question to communicators: What will slow down this crazy pace? Our model proposes new tools to work more efficiently and to reduce stress before and during a crisis. Remember that preparedness is key.

3.1 The Crisis Management 4.0 Approach

Figure 10

#AIinPR in 5 years

Tech and AI Scale
Level 1: Simplification
Level 2: Monitoring
Level 3: Automation
Level 4: Machine intelligence structured
Level 5: Machine intelligence unstructured

AI could support areas with zero penetration – including ethics – but the #AIinPR panel believes humans should retain control of these areas.

CIPR 2019
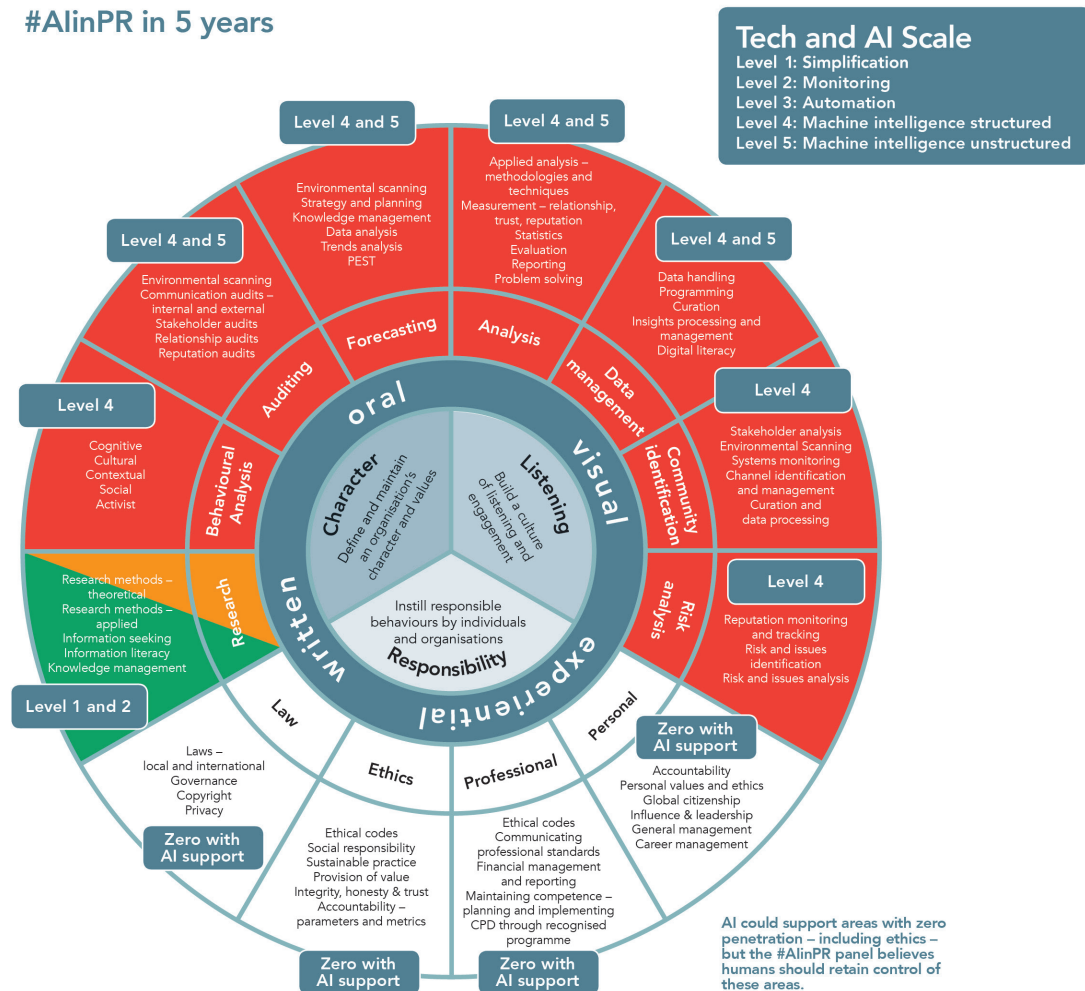
When we mention new tools, we mean new technology, because it's 2019, after all. Artificial intelligence will soon be able to help managers to make decisions based on facts, thanks to deep learning and algorithms based on advanced metadata, sentiment analysis, and natural language processing. Collaborative decision-making between humans and AI will soon become a reality and essential to managers. The Chartered Institute of Public Relations (CIPR) and Jean Valin have recently published a discussion paper on the future of AI in Public Relations. The figure above shows how AI could evolve in the next five years. We feel that this is only the beginning of the great relationship between AI and PR.

Crisis Management 4.0 is, of course, not only related to AI. While humans are worried about robots taking over in the workplace, communicators should not be. The communications industry will always need humans to make the final decisions. The reality is that communicator jobs and responsibilities will be changing, and new ones will be created. Robots will never be able to be empathetic or to feel fear or love. We project, as do other experts, that AI will be able to generate credible messages to specific audiences on a regular basis. But will it be able to generate messages connected to human emotions during a crisis? We doubt it. Human managers will always have to make the final decision based on AI scenarios.

3.2 The Decision-Making Process

Table 1
Decision-making Theories

Main theoretical decision-making schools	Unit of analysis	Main assumptions
Rational choice	Any actor (individual, government, etc.) that can be treated as a unitary actor	Based on one's beliefs and goals, when faced with a decision-making situation, an actor identifies the available options, considers the probable outcomes of the rival options (expected utility value), and then makes a choice that best matches one's goals.
Bounded rationality	Any actor (individual, government, etc.) that can be treated as a unitary actor	The decision-maker is not an 'optimizer' but rather, a 'satisfier': one seeking a satisfactory solution based on imperfect information, and in the presence of cognitive biases. Thus, the decision-maker stops considering alternatives when he thinks that he has found a satisfactory solution.
Bureaucratic policy	Small formal groups of decisionmakers (e.g. the government)	The preferences of those contributing to the decision compete with each other, and the materialized outcome is the result of a campaign by representatives of, various institutions with different interests and different degrees of power, of their compromises, bargaining, conflicts, mutual confusion, bewilderment, and so on.
Organizational routines	Decision-makers within organizations	More or less fixed organizational routines, standard operating procedures and programs that not only help decision-making at any given time but may also constrain behavior and limit the range of options to choose between.
Cognitive-psychological theories	Individual, small groups	An important factor is a person's view of the environment, which varies from person to person according to their belief systems, operational codes, values, state of mind, attitude, emotions, age, physical health, experience, knowledge, stress, and so on. In small groups, such phenomenon as groupthink may lead to a situation where an urge for consensus rather than choosing the best alternative becomes the most important goal.

Pursiainen (2018, p. 105)

Pursiainen (2018) explained the different decision-making theories in his book. Despite his exhaustive research and numerous details, we would like to add the AI component to the decision-making process. Because finding the right and exact data and facts is the first step in the decision-making process and AI is now able to do this in nanoseconds and is capable of analyzing big data with metadata, we think that talking about collaborative decision-making – between humans and AI – would be more relevant for communicators.

We invite readers to take a look at the table above to determine in which "school" their organization is enrolled in and to imagine how collaborative decision-making could help them in their work in getting prepared for crises.

3.3 Error Management Model

No matter how well an organization is prepared for potential crises, there will always be the possibility of errors in crisis management. Anderson-Fletcher et al. (2017) differentiates the seven organizational cultures of High Reliability Organizations (HROs) defined in the table below.

Table 2

Organizational Cultures and High-Reliability Organizations

	Core belief and definition
Safety culture	Act as if what you do makes a difference. It does. A culture that reflects safety in individual, group, and organizational attitudes, values, and behaviors.
Informed culture	Ideas in secret die; they need light and air or they starve to death. A culture that requires the free exchange of information.
Fair and just culture	Don't shoot the messenger. A culture in which everyone openly identifies and examines the organization's weaknesses, and feels safe voicing concerns about one's own actions and those of others.
Reporting culture	Don't fear being shot. A culture with a system of reporting near misses, "close calls," and other warning events.
Flexible culture	Rules don't and can't cover every situation. A culture that adapts to changing demands. Learning culture
Learning culture	Learning is continuous; be a student. A culture conducive to creativity, problem solving, and experimentation.
Error management culture	Problems are not stop signs, they are guidelines. A culture that uses early detection and correction methods to minimize the negative consequences of errors, and prevents future errors by analyzing the causes of similar errors.

Anderson-Fletcher et al. (2017, p. 203)

Organizational Cultures in HROs

 The seven different organization cultures are all interesting and strategically sustainable, but we think the error management culture is the more appropriate one for managing a crisis. A culture where early detection and correction methods leads the way in not necessarily preventing errors made by humans but in minimizing the impact of any errors. An error management culture is in fact an important and strategic part of getting prepared for crises. In this approach, "errors are not stop signs, they are guidelines" (Anderson-Fletcher et al., p. 203).

There will always be a place for humans when the crucial time to make strategic decisions arrives. Our model obviously includes the human factor. We project AI will only help managers make decisions based on facts. But when managers are stressed, even with the most advanced diagnostics provided by AI, stress will take over their brain functions and will prevent them from having access to their best decision-making abilities.

We complete this first section by questioning reader knowledge of AI's contribution to communicators and about their stress levels:

1. There are a number of advantages and disadvantages with artificial intelligence. Understanding the current limits of AI and using its strengths, could AI help your professional life?

2. Will there always be a place for humans in crisis management?

3. If you had to deal with a crisis tomorrow, would you be able to handle your stress? Do you honestly believe that you have the necessary perspective to deal with it?

4. During a crisis, stress diminishes your perspective, and while in a crisis we need to broaden our horizon. Do you want to become a fully conscious and open manager who sees the things that are coming or not?

5. If you are choosing to invest in being more prepared, will you get yourself into preparedness mode?

4. The Next-Generation PR Executive will be Self-Aware and Data Driven

The next generation of PR executives will have to master inner and outer diagnostics, especially in serious situations like crisis management. This means that they will have to have emotional intelligence already embedded into their leadership skills and be diagnostic driven, in order to make decisions based on a larger perspective that is especially crucial in crisis management. The only choice remaining is to have in-depth knowledge of the inner self and what drives it. That is, among other things, to decrease stress levels while increasing attention levels.

4.1 What about the human side?

What is the attitude that must now be adopted to evolve at the same pace as technology? It can be seen that in the reality of organizations in the age of 4.0, operating in silos, considering only one point of view and "being right" is definitely not the way to go. Public Relations must evolve in the realm of co-creation, collaboration, and co-construction (Tams 2018). PR executives need to focus on the present, to be able to grasp what is coming in their field. They need to acquire and maintain a global perspective of the organization, regardless of their specialty. And, in order to have an intelligent, wide-ranging view of the organization, they need to get to the bottom of things from a human angle. So, how do you manage a crisis in the age of 4.0?

> Employee stress levels have disturbingly gone upnearly 20% in last three decades

4.2 Not surprisingly, crisis brings out stress: but what do we really know about it?

From the brain's perspective, when anyone is facing a crisis, it's as if that person really is in a life-threatening situation (Benson, 2018). Even before the brain can acknowledge the situation, the Sympathetic Nervous System takes over, and the situation's perspective is lost exactly at the time where the executive needs to view the situation calmly and to make accurate decisions. When a crisis occurs, everyone is destabilized (Mucchielli, 1993). Stress is a societal problem. In 2014, *Psychology Today* stated that stress-related illnesses were the No. 1 killer diseases today.

This study by Léger, the largest Canadian-owned market research and analytics firm, issued in the first week of May 2019 sums it up nicely: 57 percent of Canadians have experienced burnout and a staggering 66 percent of millennials!

Figure 11
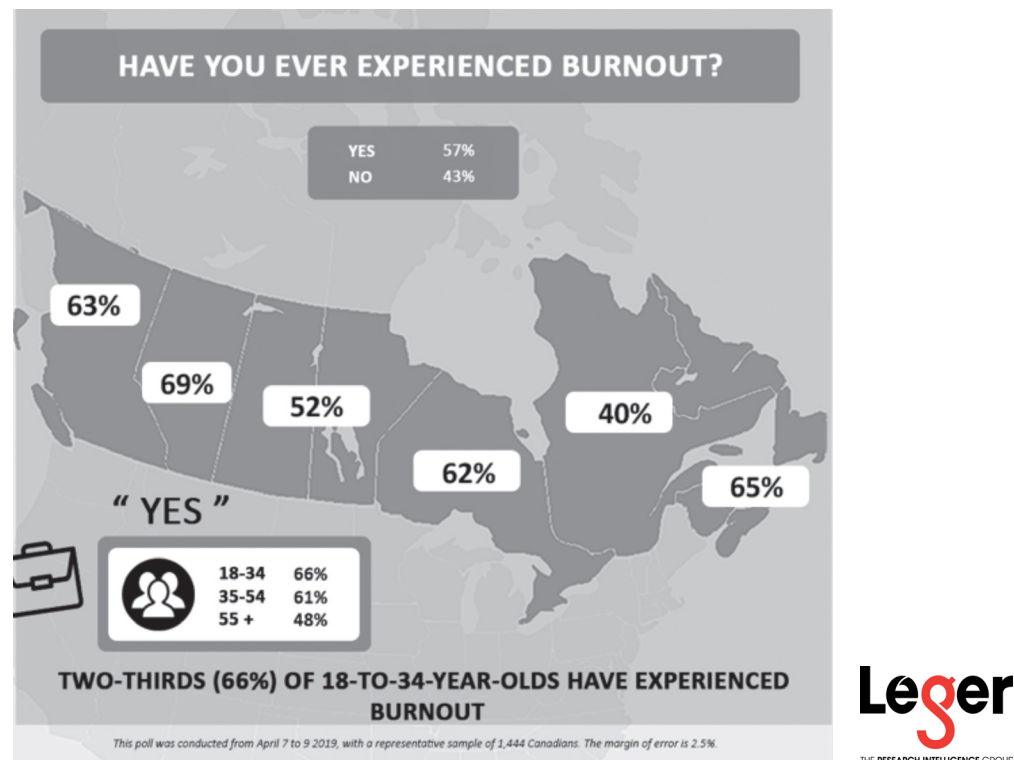
4.3 PR is one of the Top 10 most stressful jobs

Being a Public Relations Executive – the one who usually manages crisis – has been one of the Top 10 most stressful jobs for years. Occasional stress is usually not a problem – doing some exercises, sleeping it off, talking about it with friends, and it's much better. It's experiencing ongoing stress that is harmful (*Better Health* 2019). Ongoing stress weakens the immune system – which means catching more viruses ¬– which requires more energy – which makes us more tired (less sleep) – which makes you more prone to anxiety, more impatient (Mayo Clinic, 2019)…but a physiological look at direct effects of chronic stress tells us what we need to know: it makes us think with a narrower focus (Morgan, 2016) – when the PR executive needs to advise the C-Suite about each situation with a global perspective. Stress lowers decision-making ability. In everyday life, the brain reacts the same whether a wild bear is chasing you or whether you forgot to save a Word document, or hear news about a potentially fatal disease, or crisis.

4.4 Explanation of stress release

When stress occurs, the individual goes in either the "fight," "flight," or "freeze" mode. Even if the Sympathetic Nervous System (SNS) is only activated for a short period of time, hormones are released during the activity. However, many of us do not have to fight or flee. Here are the instant reactions when the brain sends a river of hormones (cortisol and adrenaline) in fight or flight mode (American Institute of Stress, 2019):

1. Senses have more acuity, more alertness (adrenaline).

2. Breathing increases to better oxygenate the body.

3. Heart rate accelerates and blood pressure goes up.

4. Blood flow floods the muscles of the extremities, at the expense of digestion and the sexual organs, to the heart and lungs.

5. Muscles become tense.

6. Cortisol increases (natural anti-inflammatory).

7. Glucagon increases to nourish muscles, insulin decreases.

8. Sweat increases (cools the body).

9. The immune system increases briefly (to fight infection during injury).

Being stressed is not a bad response to a real stimulus, but it is problematic when the SNS becomes hyperactive and is activated chronically, and the stress response becomes the norm. The SNS can get chronically overstimulated, decreasing control and the ability to respond adequately.

It's not what chronic stress does to the nervous system, but what the continuous activation of the nervous system does to other systems that becomes problematic. Dr. Elizabeth Blackburn, from the University of California of San Francisco, discovered the effect of stress on telomeres, research for which she received the Nobel Prize in Medicine in 2009 (Corbyn 2017). Her research has shown that mindfulness slows down the shrinking of telomeres, which are responsible for the aging process. Human DNA is composed of chromosomes and telomeres act as a cap at the end of the chromosomes. As we get older cell replication becomes less effective. Mindfulness helps to lengthen telomeres, slowing down the aging process.

4.5 Managing stress

Not only should everyone be conscious of their level of stress, PR practitioners and executives must also go beyond stress (already high) and evolve with the new paradigms their organization evolves in. In order to be able to handle a crisis, PR professionals and managers alike need to be in the shape they need to cope with any situation. Being in a poor state of mind will just make things worse when it should be the time to shine.

4.6 During a crisis, attention is also key

For years, focus has been the most venerated ability of all. Harvard research has indicated that (Killingsworth, M.A. 2010) most of us mind-wander up to 50 percent of the time without being aware of it (Smalley, S.M 2012). We crave the ability to stay fixed and on task, especially during a crisis situation. So how can we change this inability to focus? Mindfulness can be a big help, as shown in many studies (Smalley, S.M 2012, Xu, M. 2017, Walton, A.G. 2017)

4.7 Decision-making in Mindful leadership – Emotional Intelligence (EQ)

S-ART LEADERSHIP

Other research shows that leaders can make bad decisions without emotional intelligence, especially when hit by a crisis or a disastrous situation, which could lead to adverse consequences for the organization (McKenna & Webb, 2013). Here are the three basics of emotional intelligence:

Self-awareness allows you to clearly understand your intentions, emotions, biases, and habits so that you are able to manage your thoughts, emotions, and actions more effectively. As the one responsible for managing the well-being of others, the manager must also take care to invest in their own well-being. Mindfulness is the basis of self-awareness.

Self-regulation It's important for leaders to self-regularize their attention to the task at hand. For example, focus on a particular situation or avoid focusing on the situation, for a period of time. Self-regulating emotions must be part of any manager's toolkit in coping with a crisis. However, being able to recognize, accept, and distance yourself from your emotions takes practice. Self-regulation reduces impulsiveness and improves communications and interpersonal relationships as well as social experience in general.

Self-transcendence consists of an individual's ability to suspend their own needs for those of others. Decentering and giving pause for reflection allows people to distance themselves from their own concepts, troubling thoughts, and emotions so that these negative experiences do not affect their personal values.

In today's organization, if PR executives truly want to stand out, they need to develop or nurture one of the three mental qualities considered as fundamental for leaders today: mindfulness (Hougaard & Carter, 2018). Not surprisingly mindfulness is the basis of self-awareness and emotional intelligence. The best PR professionals are the conscience of their organizations .

4.8 What is Mindfulness?

For MIT's Dr. Kabatt-Zinn, world-renowned psychologist and creator of Mindfulness, it means paying attention in a particular way: on purpose, in the present moment, and non-judgmentally (Selva, 2019). Mindfulness consists in bringing your attention into the present moment and experiencing what is happening, without judgment. Mindfulness is a practice and a state of mind. The more you practice, the more it becomes second nature. Mindfulness is about generating greater mental efficiency to achieve more of your full potential at the professional and personal level. Effectiveness in this context is the ability to achieve your goals in life (Hougaard & Carter, 2018).

4.9 High Reliability Organizations as models to follow

In this paper, we chose High Reliability Organizations (HROs) because, in our opinion, they display the highest standards in crisis management. HROs have been singled out for displaying highly volatile characteristics simultaneously. HROs have the following characteristics in common (Roberts and Rousseau, 1989):

1. Hypercomplexity – extreme variety of components, systems, and levels.

2. Tight coupling – reciprocal interdependence across many units and levels.

3. Extreme hierarchical differentiation – multiple levels, each with its own elaborate control and regulating mechanisms.

4. Large numbers of decision makers in complex communication networks – characterized by redundancy in control and information systems.

5. Degree of accountability that does not exist in most organizations – substandard performance or deviations from standard procedures meet with severe adverse consequences.

6. High frequency of immediate feedback about decisions.

7. Compressed time factors – cycles of major activities are measured in seconds.

8. More than one critical outcome that must happen simultaneously – simultaneity signifies both the complexity of operations as well as the inability to withdraw or modify operations decisions.

HROs are using mindfulness to prevent and manage crises. As a matter of fact, more than a hundred studies show how mindfulness is a reliable tool when in a leadership position at an HRO.

4.10 A case study in mindful organizing for HROs

In December 2013, the most widespread epidemic of the Ebola virus disease broke out in West Africa. Spreading rapidly with horrific symptoms, no known cure, and an extraordinarily high mortality rate, the disease threw global public health authorities into a panic. Then, on October 8, 2014, the American public's worst fears came true. Thomas Eric Duncan, a Liberian national who had arrived in Dallas, Texas less than three weeks earlier on a flight from Monrovia, Liberia, died of Ebola at Texas Health Presbyterian Hospital (THPH). Experiencing symptoms of abdominal pain, dizziness, nausea, and headache several days following his arrival in Dallas, Duncan had gone to THPH's emergency room (ER). However, his illness was mis-diagnosed, and he was sent home. Duncan returned to the ER several days later, but his disease was ultimately fatal. Because a rigorous Ebola protocol was not being followed by the hospital, two nurses contracted the virus.

How did such a critical misstep occur at a respected American medical institution? What is to stop other types of crises from happening in nuclear power plants, air traffic control systems, or in any other High Reliability Organizations (HROs)? The answer: Mindfulness. HROs operate in environments with high potential for error and where the scale of consequences precludes learning through experimentation. Acting mindfully means that companies organize themselves in a way that allows them to notice the unexpected and prevent or contain its further development. If they are unable to prevent or contain the problem, they focus on resilience with an emphasis on swift restoration of the system. Organizations that are not HROs could benefit from mindfulness, too, as shown in the cases of the Exxon Valdez and BP Deepwater Horizon oil spills.

We were very interested in a qualitative study that unearthed lessons on organizational mindfulness from the 2014 THPH Ebola crisis (Appendix A). As part of this qualitative effort, the study was compiled from public sources, archival records, news sources, scholarly analysis, health officials, and hospital administrators. Individual interviews were collected from administrator officials and documentation of the lessons learned. Additional interviews were done with an expert panel, comprised of doctors, policymakers, and emergency response leaders. By taking a systemic view of the events that occurred in Dallas, the study explained how mindfulness is relevant to all firms operating in uncertain, complex, and fast-paced contexts.

5. Crisis Management 4.0 Model

Based on our exhaustive literature review, our multi-decade experience in managing PR, and our understanding of the crisis management evolution, we believe that our model could definitely help in managing organizational crises more efficiently and with less stress.

During our literature review, we noticed that Web 4.0 and Marketing 4.0 are explained and are mainly focused on AI (please see Table, 3 below). Is it because it's 2019 and the big trend is robots? We agree that AI is important to organizations and communications professionals, but we are convinced that humans still have a huge place in crisis management, especially when emotions are involved.

Table 3

Web 4.0	Marketing 4.0	Crisis Management 4.0
- Open, linked & intelligent web - Symbiotic web (humans and machines)	- Network-focused - Multichannel marketing - Localized virtual marketing - Big data and metadata - CRM tools and robots - Authentic marketing	- Credibility engineering - Metadata - Deep learning - Artificial intelligence - Collaborative decision-making - Error management strategy - Stress management - Emotional intelligence - Mindful PR

The model we proposed in this paper not only includes the new AI pillars and trends—as marketing 4.0, but also human emotions and stress management, which marketing 4.0 is not there yet.

6. Business Benefits

We often hear the inaccurate statement: "Big data is for big international companies and it only affects social media and advertising." Big data, metadata, artificial intelligence, and deep learning concern many business units, if not the whole organization, especially business communications and relations with stakeholders. Crisis Management 4.0 includes important crisis preparation components that are crucial to the business communications strategy. Although the change is sometimes considered costly in time and money, the return on investment is easy to demonstrate.

Credibility Engineering

Crises are not black and white and will never be. In fact, they are virtual explosions of shades and colours. Each crisis is different, and preparedness builds a strong foundation for managing them. Communicators do have helpful tools to prepare their organization for crises. We often hear about lessons learned from previous crises, risk assessment, and crisis planning, but how about building strong credibility to protect corporate reputation? Remember that if stakeholders do not believe an organization, communication is simply not possible. So how do you solve a crisis when there is no communications with stakeholders? Credibility engineering definitely helps communicators build strong organizational and individual credibility as well as long-term dialogue with their stakeholders – strong enough to help in resolving a crisis. Credibility engineering is also the crucial pillar for building a corporate reputation – the most important intangible asset that can be seriously compromised during a crisis.

Error Management Strategy

Preparedness is also about how communicators build an organizational culture capable of facing a crisis. Another benefit to adopting our approach would be to elaborate an error management strategy. As we explained earlier, an error management culture allows staff – humans – to make errors and to learn from them, "errors are not stop signs, they are guidelines" (Anderson-Fletcher et al., p. 203). Communicators can obviously apply this approach throughout the six phases of the crisis management cycle (Pursiainen, 2018) for a sound preparation strategy.

Stress Management Ahead of Crises

When leaders integrate mindfulness into their lives, better decisions are made because they can see beyond the crisis at hand. Mindful leaders are less prone to react to issues. They respond to them instead (Hetrick, 2019). That is a determining factor in times of crises. Managing stress and difficulty is part of leadership, but because of the added stress put on an individual or a team during these exceptional occasions, they need to have already integrated mindfulness, proven to be conducive to self-awareness and emotion regulation (Mager, 2019).

Not only do PR executives need to keep their own stress under control, their attention has to be flexible and stable so they can understand what they need to learn or see to help them function at their best. Business leaders usually seek mindfulness training because of the demands and stress of their job. As a crisis manager, the demands are even greater. The first task is to come up with a way of managing without stress affecting their mood or performance or impairing their ability for managing the crisis. The second task is to use mindfulness to enhance performance in any way they choose at the beginning of any mindfulness practice. Mindfulness helps them take a step back to see more clearly instead of justifying why they are upset or rationalizing it. It helps them to see what's actually there and to make better choices.

Collaborative Decision-Making

No one can deny that decision-making is the ultimate phase in crisis management. The art of making decisions has generally been an individual process. But what if our approach encouraged collaboration between managers and their teams, combined with artificial intelligence, and their interior public. AI should never make the final decision. That's where the human factor must come. The perfect final decision would be based on scenarios proposed by AI… and made by humans.

Mindful PR

We're introducing a new public with this paper. Besides the external and the internal publics that we usually know very well, there is another public: the interior public. The one-and-only true public which stands aside to present authenticity at its best. Since 80 percent of communication is non-verbal, everyone knows when PR executives really do not believe what they say they stand for during an interview, especially in high definition. The more executives are near the top of their game, the more they have to be fully aware and that can only come with self-awareness. That's why leaders need to be mindful and why their PR teams also need to cultivate qualities such as self-awareness, self-regulation, and self-transcendence, to establish a common threshold to ensure better decision-making.

Conclusion

Throughout this paper, we recommend communicators to refocus on what matters most, before or during a crisis. That is:

- To protect their organization's reputation during and after a crisis
- To build corporate credibility through a dialogue with stakeholders
- To collaborate with colleagues and artificial intelligence for decision-making
- To listen to all publics, internal and external, as well as our interior public
- To practice mindfulness at work on a regular basis.

If you are now reading our conclusion, it's that you passed through all concepts discussed in our model. It's surely out of the box, our goal was to generate a discussion in shaking Public Relations industry's tree. More than ever, in the uncertain era we live in, communicators must embrace radical changes. We don't propose radical changes in our model, it's half-way between status quo and irrational change. If communicators want to stay vital to organizations, they must consider managing business communications 1- in creating value for stakeholders and 2- in putting human first.

Citation

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References

Anderson-Fletcher, E., Vera, D., Abbott, J. (2017). How mindful is your company? Lessons for organizations from the Texas Health Presbyterian Hospital Ebola Crisis. Organizational Dynamics, 46: 202-211.

Balaji, S. Stronger. (2018). Fitter, better – Crisis management for the resilient enterprise from Deloitte's global crisis management survey, 20 pages.

Benson, H. (2018). Understanding the stress response - Chronic activation of this survival mechanism impairs health. Harvard Health Publishing, Harvard Medical School, health.harvard.edu. May 1, 2018.

Blackburn, D. and Epel, E. (2017). The Telomere Effect: a revolutionary approach to living younger, healthier and longer. UK: Orion Spring Publisher.

Choi, E., Rouse, M.J. (2014). Leadership en pleine conscience : cultiver la sagacité et la sagesse au travail. White Paper. Western London University's Ivey Business School.

Chumisa, N. (2019). The future of brand communication in a self-actualized economy of 2050. Bizcommunity.com. Cape Town. March 6.

Corbyn, Z. (2017). Elizabeth Blackburn on the telomere effect: It's about keeping healthier for longer. The Guardian, Jan. 29.

Ford, J.L. (2018). Revisiting High-reliability organizing: Obstacles to safety and resilience from Corporate Communications. An International Journal, 23 (2):197-211.

Hetrick, C. (2019). How can businesses benefit from mindfulness? We asked some Philly experts. The Inquirer Daily News, January 1.

Killingsworth, M.A. (2010), Gilbert, D.T. A Wandering Mind Is an Unhappy Mind. Science. 330:6006:932. Nov. 12.

Kouzes and Posner (2011). Credibility. San Francisco: Jossey-Bass.

Lipman, V. (2019). Workplace Trend: Stress is on the rise. Forbes.com, Jan. 9, 2019.

Mager, D. (2019). Mindfulness and Emotional Intelligence. Psychology Today, March 22, 2019.

Morgan, N. (2016) The Problem With Adrenaline That No One Tells You About. Forbes.com. Aug. 4, 2016.

Mucchielli, A. (1993). Communication interne et management de crise. Paris : Les Éditions d'Organisation, 207 pages.

Pillay, S. (2017). Your brain can only take so much focus. Harvard Business Review: https://hbr.org/2017/05/your-brain-can-only-take-so-much-focus.

Pursiainen, Christopher (2018). The Crisis Management Cycle. UK: Routledge.

Prud'homme, Stephane (2004). Étude sur les facteurs de crédibilité des porte-parole : une compréhension de la crédibilité par la théorie générale des systèmes. Mémoire de maîtrise. Université du Québec à Montréal.

Prud'homme, Stéphane (2015). Revisiting a powerful corporate asset: Credibility. Blog: stephaneprudhomme. com/2015/04/09/powerful-asset-credibility.

Pursiainen, Christer (2018). The Crisis Management Cycle. New York: Routledge.

Roberts, K.H. Rousseau, D.M. (1989). Research in nearly failure-free, high-reliability organizations: having the bubble. IEEE Transactions on Engineering Management, 36 (2): 132–139.

Selva, J. (2019). What is mindfulness? A psychologist explains. Positive Psychology Program, April 2019.

Smalley, S.L. (2012). Mind-wandering and mindfulness. Psychology Today. Jan.31.

Tams, C. (2018). Why We Need To Rethink Organizational Change Management. Forbes.com, Jan 26, 2018.

Tisch, D. (2018). The Elevation of Public Relations, A discussion paper on a profession's present – and its possible future. Canadian Public Relations Society, 8 pages.

Tolk, J.N. et al. (2017). Deriving quantitative measures for high reliability organizations. Proceedings of the American Society for Engineering Management 2017 Annual Conference.

Valin, Jean (2018). Humans still needed: An analysis of skills and tools in public relations. Discussion paper. UK: CIPR.

Walton, A.G. (2017) Mindfulness Meditation May Help Reduce Mind-Wandering In People With Anxiety. Forbes. May 4.

Weaver, M. (2017). Ebola in the US: timeline - Key moments in the spread of Ebola since Thomas Eric Duncan, the first person diagnosed outside of Africa, arrived in Dallas. The Gardian.com, Jul. 14, 2017.

Wojick, T. (2016). A breath away from catastrophe: creating mindful work environments. ehstoday.com, Jan 21, 2016.

Xu, M. & Al. (2017) Mindfulness and mind wandering: The protective effects of brief meditation in anxious individuals in Consciousness and Cognition, 51:157-165. April.

Zahlis, D. (2019). Mindfulness. ehstoday.com, New York, 2 (4): April 2019.

Websites

betterhealth.vic.gov.au/health/healthyliving/stress

mayoclinic.org/healthy-lifestyle/stress-management/in-depth/stress-symptoms/art-20050987

APPENDIX

CASE STUDY – Ebola in the US: Timeline (Weaver, M., 2017)

December 2013	**Ebola epidemic breaks out** in West Africa (virulence of symptoms, incurable, very high mortality rate).
September 15, 2014	**Eric Duncan contracts Ebola virus** from a neighbour in Monrovia, Liberia.
September 19, 2014	**Duncan takes the plane to Dallas**, Texas, asymptomatic and possibly not contagious.
September 24, 2014	**Duncan begins to feel sick**.
September 25, 2014	**Duncan admitted to hospital** – He goes to Texas Health Presbyterian Hospital (THPH) – treated for fever and abdominal pain – diagnosed with a low-level virus, prescription of antibiotics and instructions to take Tylenol.
September 28, 2014	**Duncan admitted at THPH by ambulance**, with additional symptoms including diarrhea and vomiting. Placed in isolation in intensive care because of his critical condition. Personnel assigned to intensive care do not wear protective clothing but end up wearing them according to hospital recommendations.
September 29, 2014	**Nina Pham**, 26-year-old nurse, **treats Duncan + 76 people** – She often enters Duncan's unit.
September 30, 2014	**Duncan is diagnosed with Ebola virus**. United States Centre for disease control and prevention (US regulatory authorities – ARA) announces that a patient has been diagnosed with Ebola virus in the United States. **ARA announcement: a patient was diagnosed with Ebola virus in the Dallas area, USA.**
October 2, 2014	**Friend** of Duncan's **and three family members placed in isolation**.
October 4, 2014	**Duncan is treated with an antiviral.**
October 7, 2014	**Pham treats Duncan**.
October 8, 2014	**Duncan dies from Ebola virus** after symptoms have worsened considerably.
October 10, 2014	*The Guardian* reports that THPH had said that Duncan had not talked about his travel history but changed its version by saying that the nurse had failed to report this information. **The Guardian reports THPH version changes.**
October 11, 2014	**THPH changes its history-diversion** by attributing this deficiency to its computer system...to change it again admitting that Duncan's travel history had been available to the entire medical team.
October 12, 2014	**Nurse Pham is diagnosed with the virus**, two days after being feverish, and transferred to a biocontainment unit in a Maryland hospital. Pham survives the virus.
October 13, 2014	**Amber Vinson, 2nd nurse treating Duncan, flies back to Dallas with a fever**.
October 15, 2014	**Vinson is diagnosed with the virus** and transferred to a biocontainment unit in a hospital in Atlanta. Vinson survives the virus.

33

Case Analysis – Mindlessness vs. Mindfulness

Core beliefs in mindful organizations	Examples of mindlessness	Examples of mindfulness
Preoccupation with failure	• THPH admits that it had been ready to treat Ebola, but not to diagnose it. • Sense of urgency and gravity lacking due to: - Low acceptance that an Ebola crisis was a possibility in the U.S. - Low preparation for the possibility of near misses in diagnoses given that Ebola symptoms could be associated with indigestion, intoxication, or food poisoning. • Complacency: U.S. doctors and volunteers were in Africa treating Ebola.	• The WHO communicates to the CDC in March 2014 that Ebola had reached epidemic proportions in West Africa and recommends that the CDC put the U.S. ER infrastructure on alert. • The CDC blankets medical response centres with notice of the characteristics of Ebola, and type of PPE and barrier facilities required. • The CDC issues strict guidelines regarding Ebola symptoms, stages of the disease, and appropriate treatment. • All first-responder agencies receive and put in place these CDC protocols.
Reluctance to simplify	• Travel history was recorded but did not raise a red flag. • CDC guidelines for protective equipment were not up to date	• The CDC guidelines for Ebola are current. • IT systems are updated to raise highly-visible red flags regarding symptoms of Ebola and travel from West Africa • Personnel are trained to be aware and diligent in following the Ebola script.
Sensitivity to operations	• The ER failed to meet several national patient safety and quality benchmarks. • No clear picture of Duncan's current situation at all points in time.	• Management is accessible to workers on the front lines, but employees are empowered to solve problems as they arise. • Hospitals hold frequent meetings with all healthcare workers to discuss the potential severity of the Ebola situation. Appropriate protocols and changes in processes are implemented. • Hospitals discuss with all personnel the "supply chain of Ebola patients," emphasizing the necessary inter-agency responses and required coordination.
Commitment to resilience	• Long lag times between the detection of Ebola in Duncan and actions related to the treatment of his family, the paramedics, and the nurses. • Lack of coordination among agencies. • Lack of training in safety and cleaning procedures.	• Barrier facilities are in place, the proper PPE is available, and healthcare workers are trained in donning/doffing PPE and patient handling. • Drills are conducted with various first-responder agencies in order to simulate operations under high-stress conditions.
Deference to expertise	• THPH initially blamed the crisis on the nurses.	• Employees who have expertise, regardless of formal title, are sought out for counsel. • Hospital management conducts an honest audit of Ebola response capability. Those which find they are not equipped to handle Ebola patients have plans to transfer them to equipped hospitals.

34