Embracing informal stakeholder conversations for evidence-based crisis response: Two work processes based on crisis intelligence

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Abstract

This paper shares best practices for crisis managers and advisers, with a focus on crisis communication. These approaches are based on collecting, generating and analysing relevant real-time data. After introducing the concept of data-driven crisis strategies, the paper describes how continuous sentiment analysis can be used to tap into informal conversations on social media and other sources. The paper demonstrates how this can stimulate and improve strategic thinking, resulting in a far more effective response to a crisis situation. Using real-life examples, the paper demonstrates how such analysis techniques can deliver high-impact crisis communication that truly addresses stakeholder needs, especially compared with traditional public relations approaches. The paper describes several common methodologies that are built upon these techniques, with particular focus on crisis communication. Finally, the

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authors explain how enriching situational information based on data collected in the informal sphere is invaluable in a crisis. Indeed, accurate information can also significantly improve decision-making related to other crisis management disciplines. A new approach to data-driven and evidence-based crisis management is introduced, known as 'crisis intelligence'. The authors propose a second model — the crisis intelligence work process — as a framework for the further development of work in this area.

Keywords: crisis management, crisis intelligence, crisis communication, sentiment analysis, stakeholder analysis, work process crisis communication

INTRODUCTION

Crises provoke discussions, comments, reactions, retweets and opinions, as well as water-cooler talk, gossip, rumours, influencers, internet memes, spontaneous acts of solidarity and protest, expressions of emotions, and lots of other stakeholder initiatives and behaviour. Today's world is always on, its actors are interconnected and events unfold in real time. It is hard to look around the vast amounts of informal conversations that appear as a reaction to a crisis. Conversations are to be found literally everywhere in the neighbourhood of crises.

For those working in business continuity, one of the few constants is that each crisis situation is going to be different. Another is that with every new crisis, stakeholders will conduct their own informal conversations. This will happen in expected and unexpected ways, both at predicted and unanticipated locations. Social media, online news media and other forums both online and offline are only some of the sources from which these discussions emerge. Such conversations are anything but neutral, and regularly spin out of control, turning trivial events into significant perceived threats.

With this in mind, is there a role for such conversations in crisis response strategies? Can business continuity managers fit them into structured crisis communications efforts, regardless of their informal nature? Are they to be ignored as they contain nothing but wrong interpretations and strong reactions driven by emotion? Or can executive teams leverage the very emotional nature of such conversations to ensure their organisation is perceived as truly authentic towards its stakeholders, even in a crisis. When genuinely addressing the sentiments of those affected first, can communicators grab the attention of those in need of information and can they generate the impact and influence that seems to be lacking when traditional public relations approaches are applied to complex crisis situations? These are just a few of the questions that crisis teams in many companies and organisations have explored in virtually every work area.

No matter what the crisis — whether it be layoffs or suspicious deaths, unfortunate personal accidents or the alleged poisoning of neighbourhoods, large-scale terrorist attacks or targeted ransomware attacks — the most important lesson on communication is that organisations have only one option with respect to informal conversations. Crisis communication needs to take place within these informal conversations, to seize opportunities to influence the public opinion. If organisations fail to take this opportunity, even the most well-intended communication efforts will just disappear into oblivion.

Organisations that ignore the informal landscape in which opinions and perceptions are formed will be misunderstood, if not overlooked, by their stakeholders. Indeed, in crises, many organisations struggle to win back credibility and trust. Simply put: informal conversations are the key to turn this risk into an opportunity.

THE CRISIS AFTER A CRISIS

In the aftermath of a crisis, the impact of the event generates challenges much more complex than dealing with the trigger event itself. Unfolding as a chain of unpredictable and thus unanticipated consequences, the various unforeseen circumstances mingle to form a challenging 'once in a lifetime' context for crisis management teams. Identifying the right measures to take is no easy task.

The impact of a crisis manifests in many forms. Direct effects and side effects are generated both inside and outside of the organisation. The reality of how a crisis team perceives the situation within the safety of a crisis room is never the reality of how the people affected and other stakeholders perceive the situation. In other words, 'in' and 'out' are actually different realities co-existing in the same crisis. As business continuity practitioners, we are very familiar with the 'in' perspective, but how well are we prepared to appreciate the perceptions and assumptions in the outside world?

What makes this phenomenon of the crisis after the crisis so complex in the 'outside world' is that such crises are informal in nature.[1] The second impact of a crisis is not characterised by facts and rational decisions but by heightened levels of stress, very strong emotional responses, biased opinions, unconfirmed information, rumours and countless conversations among groups of affected people. Many executive and management teams struggle with such large-scale, rapidly evolving and intangible circumstances. Should one regard these informal phenomena as merely side effects? Should one simply avoid these unstable variables as they interfere with predefined crisis routines and procedures? Or are these phenomena actually vital from a business continuity perspective? We strongly believe the latter. Indeed, every organisation should be prepared to monitor and mine such informal conversations and sentiments for the invaluable crisis intelligence that they generate. This is crucial for a swift, accurate first response that is immediately followed by highly-effective crisis management strategies.

CLEAR PRINCIPLES AND WORK PROCESSES FIRST

It is essential for crisis teams to focus on clear principles, processes, techniques and tools. An organisation's crisis plan documentation is no indicator of its preparedness. Indeed, crisis preparedness is determined by the organisation's actual network of internal and external experts, their common mindset and their practical agreements. When preparing organisations for their next crisis, emphasis must be placed not just on what works but also on making people aware of what does not.

One of the key principles is to classify crises based on two simple parameters: (1) do they start and develop quickly or slowly, and (2) do they end quickly or slowly?[2]

These two parameters result in four types of crises, as shown in Figure 1. On one hand there are the well-known fast and slow-burning situations. But on the other hand, the parameters also reveal two relatively lesser known types: the long shadow crisis (for instance, a sudden refugee crisis after an unanticipated declaration of war, or a series of major layoffs) and the cathartic crisis (for instance, a terrorist pursuit). For each of these four types, the needs for crisis preparedness are as different as the actual management options and decisions to be addressed on the day a crisis presents itself. The context of every crisis is going to be different. While continuous risk management efforts will address part of the problem, the complexities will mainly be unforeseen. Still, regardless of which type of crisis one is confronted with, the

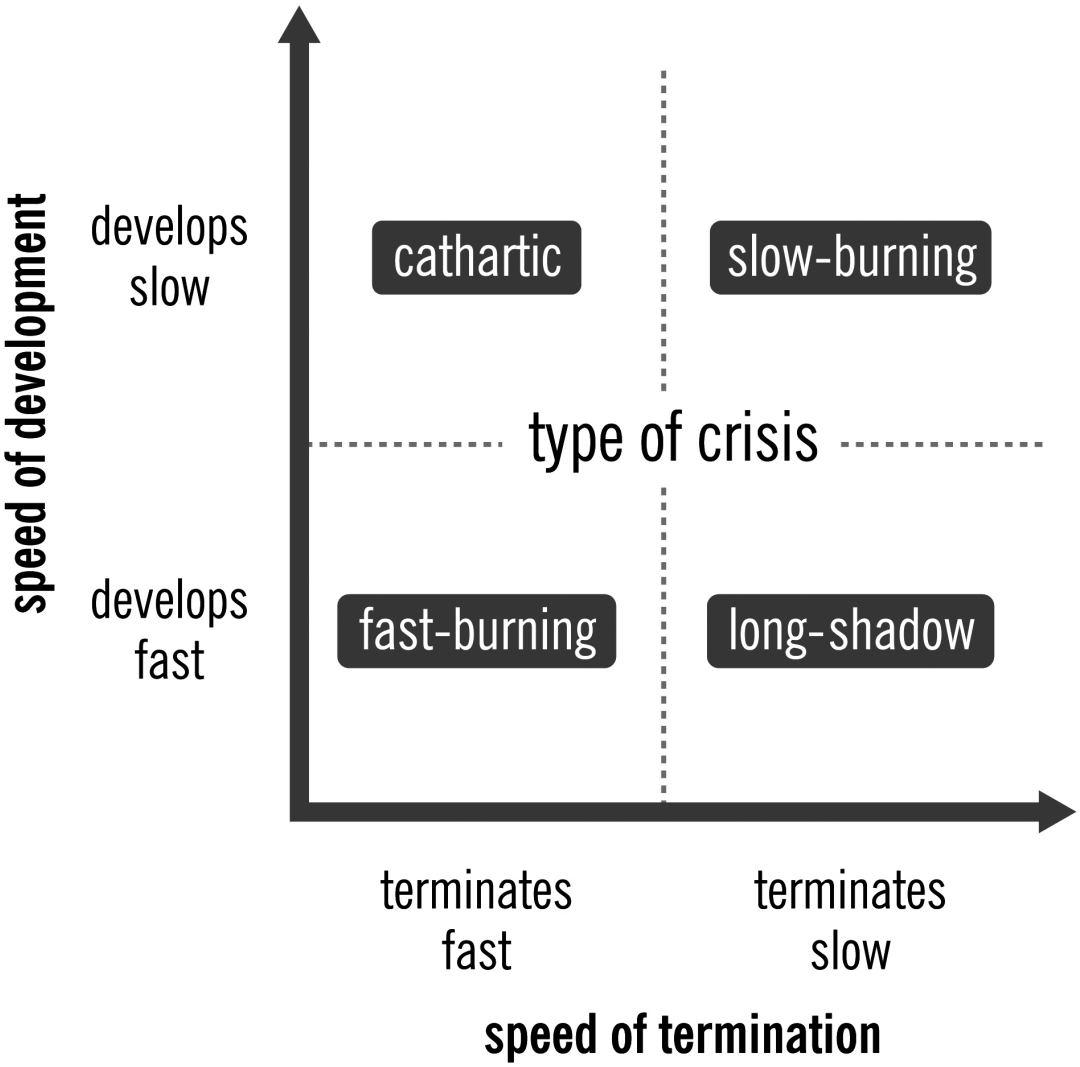

Figure 1 Four crisis types based on their development and termination

Source: Rosenthal, U., Boin, A. and Comfort, L. (2001) 'Managing Crises: Threats, Dilemmas, Opportunities', Charles C. Thomas, Springfield, IL, pp. 31–35.

best-performing crisis teams seem to be able to respond quickly and effectively when the team members have a common set of core best practices to fall back on. While such approaches are generalistic, they are extremely valuable when properly embedded with crisis teams during preparedness training. The two work processes introduced later in this paper hold the answer to the common response and coordination challenges associated with crises of any type, regardless of context, that make response more complex.

BUILDING YOUR STORY UPON THE AUTHENTIC SENTIMENTS

In the fast-moving world of today, traditional public relations and corporate communication approaches lack real impact in crisis communication. During a crisis, organisations cannot hope to compete

with well-organised media outlets with massive reach, not to mention the tsunami of social media conversations and reactions from all involved parties (staff, unions, regulators, governments, experts, pundits, etc). In this regard, several related communication challenges can be observed:

- a vast landscape of internal and external stakeholders, filled with complex yet crucial interactions between organisations and communities;
- the need to swiftly yet effectively address the needs of various groups of people affected by the crisis;
- focusing on the right messages in the absence of definite answers;
- bridging the gap between perception and reality; and
- gaining and maintaining stakeholder trust.

The dominant approach in crisis communication strategies has always been to rely on intuition (harnessed experience) and gut feeling. The time has come to be more mindful when attempting to communicate efficiently in a crisis. This starts with acting based on real data rather than intuition — this starts with listening.[3] It is time to practise the art of turning informal conversations into strategic intelligence. The analysis of perception and sentiment is a big step forward to address the daunting challenges discussed previously in this paper.

The 'Crisis Communication Work Process' (Figure 2), which we co-developed with several European experts, represents a milestone in terms of principles and work processes.[4] Using this model, all activities of a crisis communication team — from a single person to a triple-digit person team — have their own place in a single common framework. The central idea is to formulate a central communication purpose informed by the perception from the outside world. This framework (and, more specifically, the defined communication purpose) helps all people involved in the crisis communication team to stay on the same page, increasing coordinated work and reducing the need for long discussion. Teams applying the work process are able to work in natural cycles, jumping from collective discussion and coordination into individual autonomous, focused work. The work process helps them to perform in a synchronous and efficient way:

- *Effect:* When applying the Crisis Communication Work Process, one can see the outside world's perceptions and sentiments as something that cannot directly be managed and definitely not controlled by the affected organisation (nor indeed any other organisation). However, it is possible to influence the effects of a crisis indirectly by means of communication actions that demonstrate genuinely listening to the people affected. It is important to be aware of their needs and questions. The work process acknowledges that these groups of people use various channels to provide signals, both explicit and implicit, about their needs and wishes regarding information, instructions, reactions, sentiments, etc. These effects are generated both intentionally and unintentionally.
- *Analysis:* The team defines its communication purpose only after analysing the actual 'effect' the crisis is causing in the outside world. Is the situation perceived the same as it is within the organisation? How do people look at the situation? Do they have sympathy for the organisation, perceiving it as a victim? Or do they see the organisation as responsible for the negative effects the crisis has had on their daily life? Do they follow up the organisation's instructions? Or are

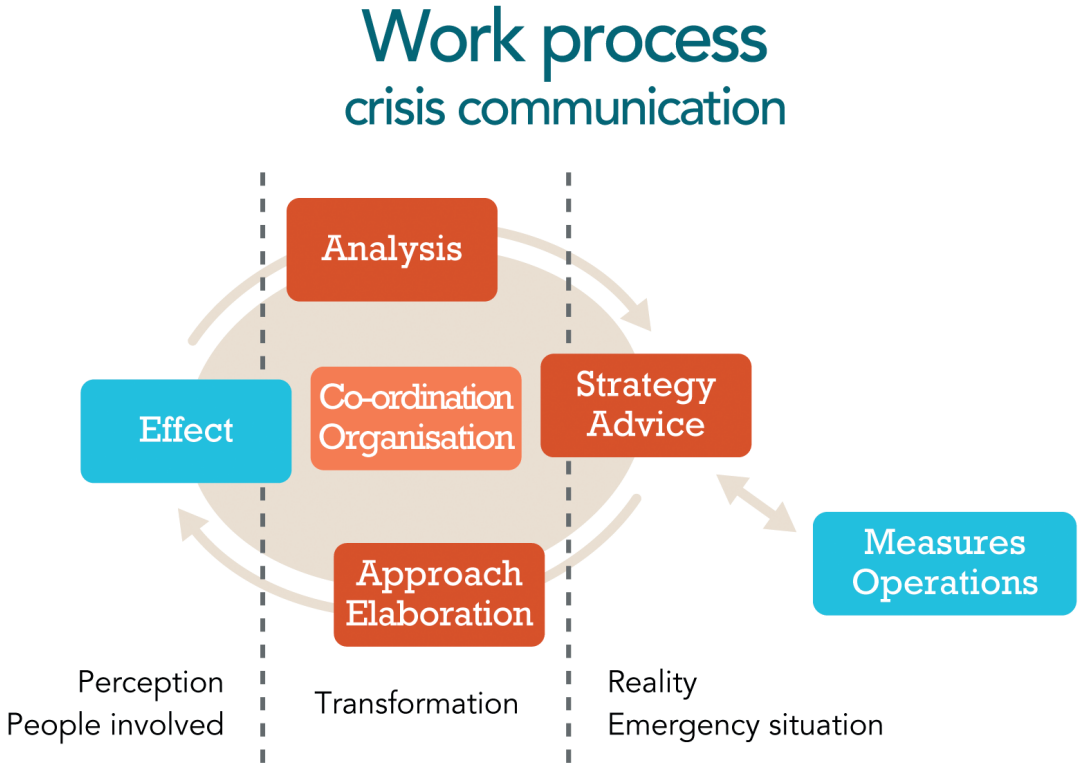

Figure 2 The Crisis Communication Work Process (model 1)

Source: Marynissen, H., Pieters, S., Mertens, P., Ramacker, B. and Brugghemans, B. (2015) 'Het Werkproces Crisiscommunicatie. Naar een verdere professionalisering van de communicatiediscipline', in: Devroe, E., Duchatelet, A., Ponsaers, P., Easton, M., Gunther Moor, L., Wondergem, L. (eds) 'Zicht op first responders. Handboek bij het beheer van evenementen en noodsituaties in Nederland en België', Maklu, Antwerpen — Apeldoorn, pp. 267–288.

they ignoring the measures that need to be taken? Different affected stakeholder groups are identified and, based on these groups, additional sources to consult are assessed. The team also looks at which of these affected groups need to be prioritised, as it is impossible to set up effective communication actions with all possible involved groups affected, especially when communication capacities are limited.

- *Strategy:* The analysis results in advice, which the crisis management team turns into a communication strategy. A specific purpose is formulated and the outline of an approach is drawn. To be able to formulate meaningful answers to the identified questions, needs and findings among the different stakeholder groups, additional verified information is requested and gathered through the crisis management team. Within the strategy, decisions are made about which parts of this verified information can be released publicly and which are sensitive details that need to be shared with victims, affected people and staff in more discreet ways. The communication strategy is not fixed but fluid: during every new cycle of the work process, the team can adjust it according to new findings from the analysis.
- *Approach/elaboration:* Eventually, strategies need to evolve into the actual elaboration of communication materials.

This is done by planning and executing communicative actions both online (website, social media, intranet website, etc) and offline (spokesperson, phone numbers, call centre, single points of contact for employees, etc). While these actions can be anything from a global news report on an organisation's website and social media channels to a short briefing of a single colleague at the reception desk counter, all content provided, published and disseminated in all possible forms is derived from the core strategy that has been formulated.

The Crisis Communication Work Process should be regarded as a cyclical process. A team does not stop after the first strategic communication actions are executed. Instead, communication actions are seen as intermediary interventions (or attempted interventions) and sentiment analysis is performed again. A next iteration is now initiated: a next round of communication actions must be planned and executed. In particular, the analyst now needs to monitor closely the effect of the organisation's own communication actions within the arena of communities, continuing their conversations, forming or reviewing their opinions. Was the organisation's communication noticed and picked up by the audiences? Did it indeed target the right questions, needs and findings? Maybe other important parties have joined the conversations since the last strategy meeting took place? The analyst looks closely at the communication actions of other involved parties (and the effects thereof). Sentiment analysis looks at the crisis arena as a battlefield in which many parties are competing for the attention of the groups of affected people. It looks at the role of the organisation in this landscape. The crisis landscape changes continuously, hence the analysis and the Crisis Communication Work Process as a whole must be prepared for a continuous follow-up as well. Evidently, the results of the new analysis lead to new advice, the purpose, strategy and focus of the communication can be adjusted, and new communication actions can be established, the effects of which can then be measured again.

As such, the circle of the Crisis Communication Work Process starts turning, and the communication team is able to work in a continuous matter, increasing the amount of detailed information in the disseminated content step by step as more information gradually becomes available. In order to remain effective, this process needs to proceed until all questions are resolved and all identified needs are addressed. At this point, the communication team can resume its daily operations.

THE WORK PROCESS PUT INTO PRACTICE

As a method for organising communications teams, this model was implemented in numerous organisations including at a federal level in Belgium. Countless examples from various work areas have demonstrated the effectiveness of this universal approach even in the most complex of situations. Examples include:

- Belgium's Federal Crisis Centre's communication with citizens in the aftermath of the Brussels terrorist attacks in March 2016. By applying the Crisis Communication Work Process, the communication team succeeded in keeping track of the needs and information requirements of different groups of affected and involved people in near real time. Thanks to extensive sentiment analysis of social media, news media, call centre, media calls and countless other sources of data, the

communication strategists were able to raise the right questions within the federal team of policy makers in order to take the necessary steps concerning communication with those affected. In 2017, the team was recognised by the European Emergency Number Association (EENA112) for its remarkable crisis communication.

- The cultural readjustment of a BEL-20 company after the alleged chemical poisoning of children in the neighbourhood of a chemical plant. Extensive stakeholder mapping and sentiment analysis encouraged the executive team to take the necessary measures towards genuinely restoring credibility among several worried stakeholder groups. The plant's management successfully engaged in conversations with the people that were most affected by the incident, addressing their needs and restoring trust.
- Effective communications about radiological and nuclear related incidents at one of the largest research institutions in Belgium.
- Numerous hospitals dealing with medical errors and mistakes with serious consequences, where transparent communication was needed to focus on the needs of the various people involved, particularly those who fell victim to the errors and mistakes.
- Major layoffs at different banks due to a digitising world: continuous and intensive communication activities with all affected stakeholder groups.
- Organisations that fell victim to cyber criminals holding their IT backbones hostage with ransomware or other high-risk computer threats. In these cases, clear communication strategies were needed as the crisis communication was established as one of the core disciplines in the business continuity management team. This happened in close collaboration with IT, legal, human resource representatives and other decision makers. In these cases, the purpose at the core of the communication strategy was the reassuring and informing of employees and various stakeholder groups.

SECURE THE ATTENTION AND ESTABLISH YOURSELF AS A TRUSTED SOURCE

Contrary to what people used to believe, communication has never been linear. In the age of digital media, a sent message is not necessarily received, let alone understood or acted upon. One of the big challenges of crisis communication is to make the message heard in the noisy arena that arises when a crisis occurs. The main issue here is the information vacuum, a certainty in crisis management which states that the momentum of communication about a crisis happens in the initial period immediately after the event unfolds. Unfortunately, this is also the time when no or only very limited information is available to the organisation(s) in the eye of the storm. To establish an organisation as a trusted source later in time, it is of utmost importance to secure the attention of the public and stakeholders from that very first moment. A quick sentiment analysis (which need last no more than 15 minutes) helps crisis teams to publish a genuine first reaction to the events. Thanks to the act of mindful *listening*, the stories that an organisation shares with the world will be based not on the opinions of its crisis team but on the actual needs and questions of its stakeholders.

This strategy of applying sentiment analysis to informal conversations for crisis communication is just one example of how enriching situational information based on collected data is of value to decision makers. When preparing crisis management teams, we are also working

on integrating similar principles for wider strategic intents. The benefits of applying these approaches are not limited to crisis communication and crisis response strategies; indeed, every crisis team, whether in communication, operations, management, business continuity or recovery, can and should improve their crisis preparedness by applying these insights to the way they handle data and information flows, thus improving their decision making.[5] The following paragraphs will cover this idea.

ENRICH RAW DATA TO ACTIONABLE INTELLIGENCE

Data-driven approaches can help to deal with many of the questions facing crisis managers and communications strategists. However, appreciating informal conversations on social media, news media, other online media and various other channels (online as well as offline, proprietary as well as public) as valid sources of data comes with some challenges. A decade ago, management teams were lacking information during a crisis. Today, by contrast, we seem to have too much information. When attempting to derive strategies from informal conversations, the main challenge is that the data come in many forms, entangled in vast amounts of complex threads that are very hard to structure. Information does not come in a granular format, but rather forms a landscape of social networks of people and other organisations, all spawning interconnected ideas, visions, perspectives and perceptions. New ways of crisis management should focus on these striking changes in society and technology. Proper information management is going to be needed in order to turn messy data into actionable intelligence. This activity is known as enriching. Various techniques are available to produce actionable and insightful information from raw data streams generated by involved parties and affected people. To enrich information, the following activities are the most informative:

- *text/content analysis:* rendering textual data in a form that shows a better view on its context and meaning;
- *spatial analysis:* rendering geolocated data on a map, figure or other simplified view of the situation;
- *object relationships:* rendering a network of events or people as a visual network with nodes and links; and
- *time/trend analysis:* combining different relevant contextual data on a timeline.

To make sense of these heterogeneous inputs, one must think about reshaping and restructuring them for the benefit of decision makers. Frameworks based on underlying theory and common sense make it possible to analyse human elements, perceptions and sentiments. When done right, information analysis of informal conversations produces actionable insights for all three types of crisis teams: *operational* (disaster recovery), *managerial* (business continuity) and *communication* (internal and external crisis communications). Collecting and processing vast amounts of conversational data enables crisis teams to improve their informed decision making. As a crucial crisis management skill, finding ways to make better decisions should be on the agenda of every crisis-related team, be it a fire squad, city government or corporate management team. However, the actual activity of gathering information and knowing which sources to consult is often overlooked in the heat of the moment. This is a missed opportunity for those high-performing teams, as the right information is what gets crisis teams to the tipping point where they are able to turn an escalating, uncertain issue into a manageable state. More often than not, the one decision in a crisis that changes its

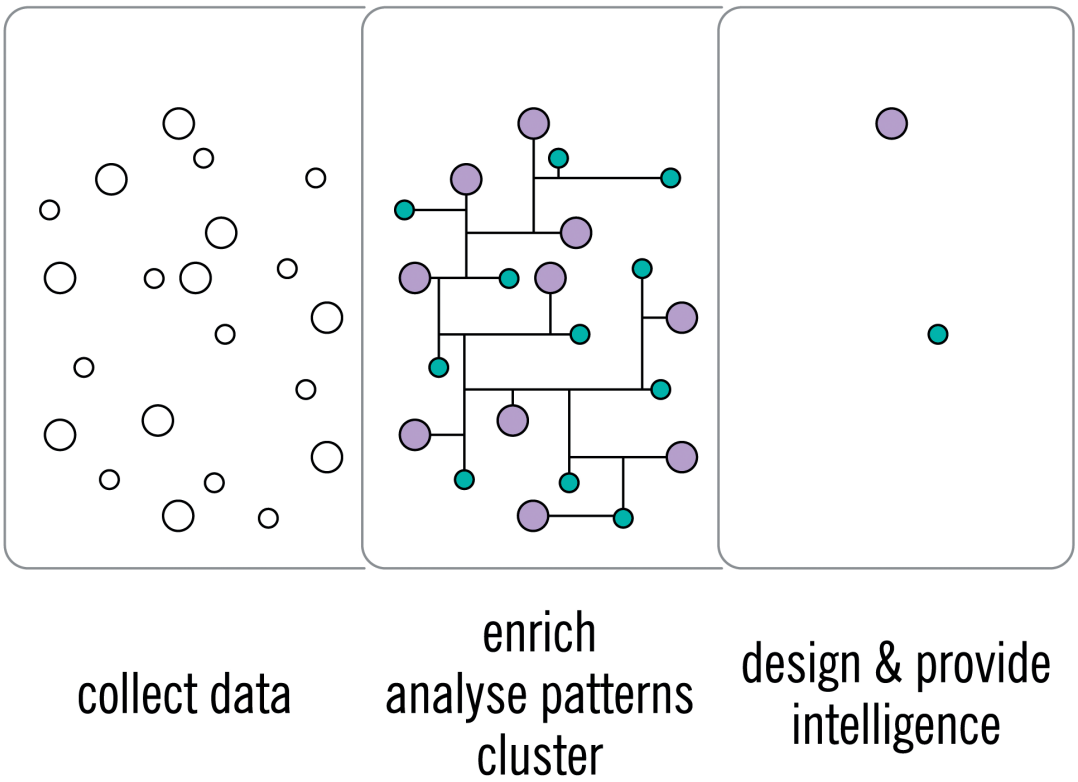

Figure 3 The process from data (left), to information (middle), to intelligence (right)

destiny — diminishing risk and preventing further harm — is only possible thanks to the available, actionable crisis intelligence.

IMPROVING THE INTELLIGENCE VALUE OF INITIATIVES AND INFORMATION PRODUCTS

The area of crisis intelligence seeks to find an answer to the challenges that lead to the famous conclusion after an incident or crisis exercise that 'something went terribly wrong in the *communication* here'. Today's world is characterised by information overload — a problem exacerbated during an intensive organisational crisis with high levels of stress. In these situations, crisis teams need to be hyper-focused. Paradoxically, for the last decade, attempts at resolving issues of information overload have mostly brought more communication and IT tools into crisis rooms, exposing crisis team members to even greater overload. In practice, most of these tools do not seem to bring large improvements to the situation, and indeed, sometimes even making the decision process more complicated and preventing people from focusing on the actual problem. A good example is watching direct CCTV images or live drone footage. At first sight, these function as eyes on the situation, but on the other hand, most of the information provided in the footage is unneeded, yet demands a lot of attention and mental resources from crisis team members.

So, the question is not how communication should be improved: crisis teams have already mastered this. Most teams already have the necessary knowledge, tools and skills at their disposal to collect and share information in a coordinated way. For

most crisis teams, the changes that are currently needed concern coordinating and optimising the actual flows of information to and from coordination centres. Figure 4 presents the core framework from one of our publications on this subject[6] and is designed to help crisis teams improve their dynamic information management processes in order to make better and quicker data-driven decisions. Data-driven methods used in daily operations are not always applicable in crisis contexts full of uncertainty. This framework makes crisis teams think about their crisis information workflow in four ways. Small improvements should be identified in each of the four viewpoints. The four viewpoints can also be seen as four steps between the mere collection of 'data' to actually providing a decision maker with 'intelligence'. The left-hand side of the figure is crucial, as it shows that one should focus on small yet high-impact enhancements in each of the four viewpoints, rather than allocating all resources to just one.

For the purpose of this paper each step is briefly described:

- *Dynamic information needs assessment* is about understanding what we are looking for. Each team, each function, each person within a team has

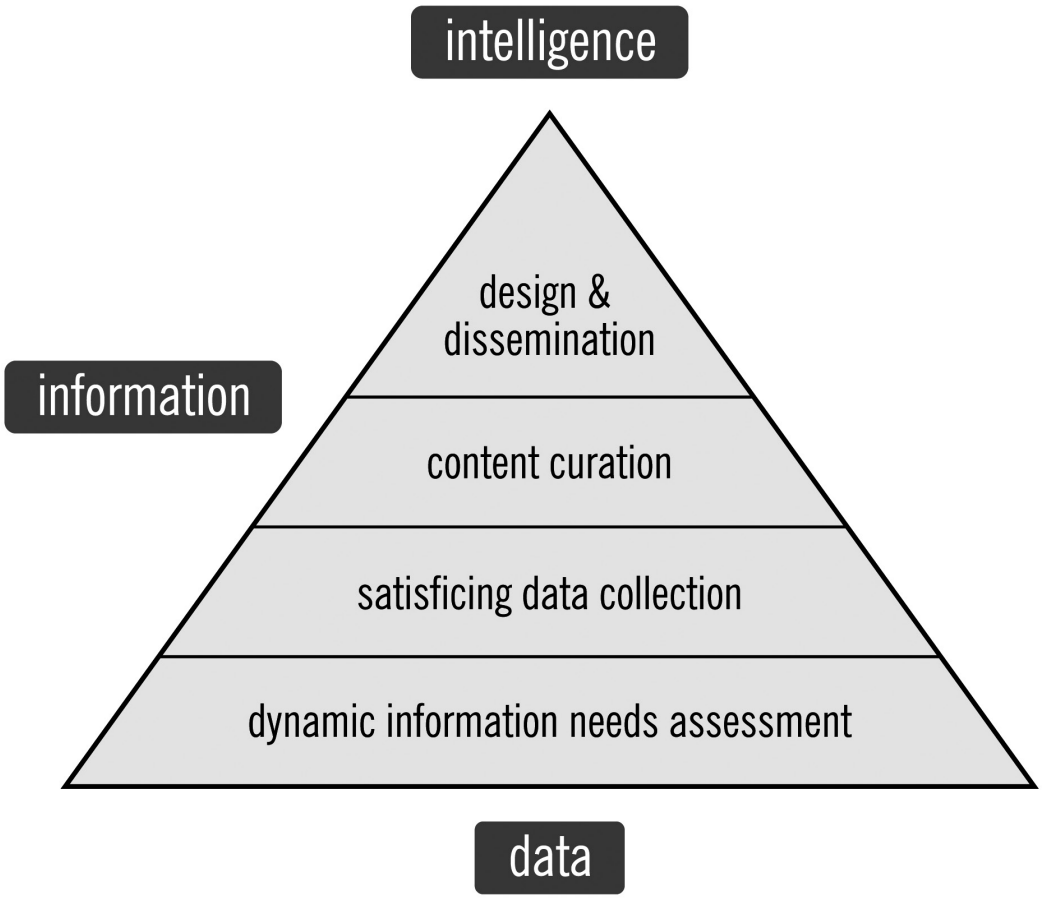

Figure 4 The Crisis Intelligence Work Process (model 2)

Source: Brugghemans, B. and Van Achte, T. (2016) 'Crisis Intelligence Manual', available at: http://crisisintelligence.org (accessed 26th January, 2016).

different information needs in a crisis, and those needs must be aligned to the decision-making process. Game-changing insights on the information need tend to emerge not while preparing for a crisis but during a crisis. Activities should therefore be built in to reassess the information needs continuously and adapt the rest of the work process accordingly.

- *Satisficing data collection* is about gathering data based on the previously defined information needs and then preparing said data for analysis and processing. By definition, crisis situations come with uncertain and rapidly changing circumstances. Crisis teams are therefore not in a position to wait until full saturation of the wanted data is reached. A certain point must be defined where the data collection is sufficient to proceed. To proceed means making quick decisions that can steer the evolution of a crisis situation in the right way, despite the limited and incomplete knowledge.
- *Content curation* is about organising, categorising and enriching information in such a way that information becomes thought-provoking and actually helps decision-makers in the decisions that need to be made. This step is where most of the analysis takes place, carefully removing, filtering and selecting data to have a clearer view on what is happening so that collected data can be analysed and evaluated more quickly and efficiently.
- *Design of information* is about aligning the various information products (paper, digital tools, whiteboards, etc) with the actual experience of the people that use them. Design (how information is structured and shown in the information product) and dissemination (how information products are made accessible to their users) are often overlooked as areas for improvement. Traditionally, in information platforms, most of the resources go into data collection and analysis. However, these aspects are extremely important to increase the intelligence value of the streams of information that are provided to crisis teams.

At its core, the crisis intelligence framework is about the idea of making small adjustments to enhance the existing processes for collecting, analysing and presenting data. It is about providing useful information in a useful way, giving decision makers access to relevant information. The model — applicable to every kind of crisis team — states that all efforts, activities and information products that are part of the information management workflow possess a certain intelligence value that can be improved with the right adjustments. For example, say in the preparation of a large event, a city fire squad is provided with a full-blown 100 page static event emergency plan. Providing a concise, four-page specialised bundle of enriched information that is addressed to the particular needs of that particular team would make a big difference to the squad's efficiency, especially if such a bundle included a map of relevant coordination centres, entry and exit points, evacuation routes, expected crowd sizes and movements, etc. Compared with the 100-page plan, the latter information product would be attributed with a much higher intelligence value as it is far better suited to the team's purpose: making decisions on the field should an emergency disrupt the event.

The same applies to any other information product in a crisis management environment. By taking a critical look at the dynamic information needs assessment, satisficing data collection, content curation and design of information that is applied consciously or unconsciously in every information product, one can always find small improvements that will have a large impact.

CONCLUSION

Informal conversations happen both online and offline and are unavoidable parts of any crisis, whether we follow them or not. Organisations should regard these conversations as useful streams of data. Every conversation monitored functions as an extra pair of eyes on the crisis. It is important to monitor, analyse, validate and report in a structured way on what is happening. Not only is it relatively easy to tap into such conversations to restore credibility or fulfil other strategic intents, it is also highly probable that these conversations are where the 'crisis after the crisis' is going to materialise.

After the event, it is all too easy to say, 'If only we knew about that one piece of information at the time!'. Informal conversations are very likely they contain the very clues needed to solve the crisis. Simply put, they are far too important to ignore. In other words, informal conversations can make resilience a reality when the rubber meets the road.

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