



Risk and
Resilience

Overcoming psychological barriers to plan invocation



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ABSTRACT

Although very few if any crisis management, business continuity or incident response plans fail to include procedures to cover their instigation, there are many instances when these procedures are not enacted as intended or do not produce the expected results. In such circumstances, the gravity of the situation may well be appreciated at various levels, but for complex reasons, the teams or structures envisaged as being required are nonetheless not established fully. This paper explores this phenomenon, considering the nature of the problem and its significance, as well as the challenges faced by those making invocation decisions. It reviews the individual cognitive biases and team dynamics that prevent plans from being used effectively, before considering how plans, procedures and people can be arranged or developed to help overcome these limitations. This knowledge will equip the reader with a better appreciation of the risks inherent in plan invocation procedures and hence the capacity to understand the frailties in decision making; to recognise when these might have the potential to occur; and to understand how to overcome them.

Keywords: crisis management, invocation, psychological barriers, escalation, response

A BARRIER TO EFFECTIVENESS

Having a plan is one thing. Knowing when to use it, how to get it started, how to adjust the tempo and when it is right to call an end are other things altogether. Anecdotal experience, along with the findings of official inquiries, suggests these wider aspects of plan employment can go awry.¹ Perhaps the most fundamentally important of all of these relates to when and how to invoke plans and procedures. As obvious as it seems, and despite this being a stock component of every plan, it is often not well thought through, understood or even used. Examples of the failure to trigger and formally invoke procedures and teams are evident in case studies. For example, at the operational level, the 1999 Ladbroke Grove rail crash inquiry recommended that 'instructions for signallers should provide a set of options... to send an emergency stop message to a particular train or a general stop message' and 'that the type of circumstances in which each option is or may be appropriate' should be clear.² At a national level, there was significant criticism of the failure to invoke the National Response Plan prior to Hurricane Katrina making landfall, with the official inquiry reporting that 'critical elements of the National Response Plan were executed late, ineffectively, or not at all'.³ More recently, and again at the strategic level, concerns were voiced following the Gatwick Airport Limited (GAL) terminal outage on Christmas Eve, 2014, 'namely airline complaints that GAL refused to move to the gold level of its contingency planning' and that this 'was driven by the terms of GAL's plans that adopt a definition of gold which seems not to be

well understood outside the company'.⁴ This also emphasises the added complexity presented when responding alongside other organisations.

WHY THE INERTIA

Perhaps the first point to note in relation to understanding the inertia to using plans properly is that escalation, taken in this paper to be the act of communicating the situation being faced, is often wrongly seen as synonymous with invocation, which this paper takes as the act of initiating plans in response to raised awareness. Escalation, when viewed as the act of informing others, is nearly always done. These 'others' may be people or teams at the same level or indeed at subordinate or superior levels, meaning that escalation can occur sideways, up or down. Telling others that something has happened (or is potentially about to) is of course a vital

aspect of any response procedure, and the precursor to invocation at different levels. However, informing others is not the same as formally invoking teams and procedures. Invocation, which is often less well done than communicating about the problem, is about evaluating a situation and then formally establishing set teams along with associated support and response mechanisms and procedures. The very act of invocation carries meaning for all concerned, both internal and external to the organisation, and allows for a more informed decision-making capability to be quickly established.

The reasons for the failure to invoke, even when awareness escalation has taken place, are complex and manifold. They can include a technical fixation by those who discover the original issue, meaning that they do not appreciate the wider implications in time. Others may see the need to invoke as an admission of failure or believe erroneously that they can solve things before they get out of control. Still others do not want to bother people, especially senior staff and particularly on weekends or holiday time. This paper explores the psychological basis for these attitudes and failures to invoke and presents some suggestions as to how these might be overcome in the development of plans and the preparing of teams and individuals.

THE DECISION-MAKING PROBLEM

In the main, most crisis or incident plans require active decisions to be taken in relation to their invocation. In some cases, procedures can be automated in an attempt to rule out human error (for example, a technical systems shutdown following the automatic detection of an error), but in many cases, the invocation of plans requires people to analyse the situation they are facing and decide whether or not to act. In the case of invocation, as this naturally comes at the commencement of any incident, then such decisions are complicated by several factors. The information available may be incomplete, uncertain or in insufficient quantity to support making fully accurate choices. Although people may aspire to critical thinking in such circumstances, characterised as it is by reasoning, evaluation, clarification, judgment and evaluation,⁵ information paucity and limited time availability may preclude such techniques being employed properly. This leaves open the potential that flawed decisions may result. One way of combating this might be to ensure that rounded teams of experienced and differently expert people are available when such decisions are required,⁶ rather than leaving it to one

or two individuals. This would allow for preconceptions and perceptions to be challenged but, given the space in the chronology of events that invocation occupies, such teams are often not available. In fact, the very purpose of invoking the plans may well be to form such teams, meaning the decision often rests on the shoulders of one or two people who may be relatively junior and share the same competencies and cultural experiences, diminishing their capacity to identify flawed assessments or misplaced complacency.

As has been noted, invocation decisions are early decisions. As such, it is highly likely that those faced with the problem may well have the sense that the situation is getting out of their control, particularly if the initial trigger appeared relatively innocuous but attempts outside of the plan to resolve it have failed and options are running out. It is in these circumstances that people resort to intuition and gut feel to make 'fast and frugal'⁷ decisions. In such circumstances, however, the pattern recognition capabilities that people rely on to inform decisions, by

comparing things with previous experiences, break down and patterns become less clear. Additionally, people can tend to dumb down the complexity of what they are actually faced with, choosing instead to believe a version of the truth that permits them to feel they retain control over what is happening.⁸ This may in turn result in erroneous assumptions, views that 'are held to be the case or true, without evidence that confirms it to be so'.⁹ Such assumptions can be highly attractive and hard for individuals to get past, even in the face of mounting evidence. So it is that such invocation choices have the potential to be laden with opportunity for reduced decision-making effectiveness, if not outright error, albeit for reasons that seem sound at the time.

THE CHALLENGE OF PERCEPTUAL AND COGNITIVE BIASES

Consider the people charged with making invocation choices. Like any other individual, they are prone to what is known as perceptual and cognitive biases. Such biases have been defined as 'the decision-making traps that afflict all of us as we try to make choices. We fall into these traps because of cognitive limitations that are characteristic of all human beings'¹⁰. In the pressured environment of the invocation decision that may carry with it significant resource implications, including for time, money and people, and may result in disruption to the routine of others or place the invoker out on a limb, such biases can have a significant effect on the decisions taken. Much work has been completed on understanding biases and this paper will not consider them all. There are a number, however, that may usefully serve to demonstrate this point:¹¹

- **Vividness:** When a previous event is vivid, either for reasons that may be assessed as positive or negative, it can cause a heightened sense of recall and serve to enhance estimations of possibility and impact, in other words, the risk, of similar future events. People who vividly recall preparation for the millennium bug might downplay similar threats. Those who have witnessed first-hand a fire may do the opposite.
- **Primacy/recency effect:** People prefer to concentrate on the first or last items in lists. They may base decisions more heavily on the very first or last sets of information they received, ignoring more salient points that are in the middle.

- **Overweighting of small probabilities.** Outcomes with relatively small probabilities, when combined with vivid events, can influence the decision-making process disproportionately, while more probable events are downgraded in influence. The early cues that should trigger plans in time to be useful may therefore be missed.
- **Availability:** If there are plenty of similar examples that can be easily recalled then the perceived probability of a similar outcome will rise. If there are few or none it will drop, meaning novel events that pose high risks may be underestimated.
- **Attribution:** Individuals place an enhanced degree of significance on their own decision-making and input as opposed to how they perceive the value of other people's input. This could result in other people's contribution to the invocation decision being wrongly considered to be superfluous and hence not sought.
- **Sunk cost:** Decision makers stay loyal to the first course of action they arrived at despite the increasing likelihood that long-term results look unlikely to be positive. In this case, invocation, as it is not initially considered to be required, could be delayed to the point of being ineffective once taken.
- **Wishful thinking:** Individuals are attracted to positive projections of the future. Such projections can become fact in the minds of decision makers. Thus they might downplay the risk or the need to respond in a certain way, as they believe all will work out well.
- **Overconfidence:** Some individuals may overrate their own abilities and take decisions they feel are unchallengeable or do not require further scrutiny or support. This is great if they are right, but potentially disastrous if they are wrong.
 - **Confirmation bias:** Perhaps linked to wishful thinking, people search for evidence that supports a desired hypothesis about a likely outcome or interpret available information in such a manner. Such 'evidence' may conflict with the facts on the ground, but the decision maker's bias makes them blind to the facts.
- **Diagnosis bias:** Once a decision has been arrived at, any future information that challenges this diagnosis is given less prominence or even ignored. In this way, false decisions prevail even when the evidence is there to suggest a timely change is required.
- **Cognitive narrowing:** In this case, people focus on certain elements of what they know rather than the whole, perhaps as a mechanism to cope with stress. For example, fixating on the technical nature of an incident at the expense of assessing its wider secondary impacts could result in the belief that other teams are not required to support the response.

TEAM DYNAMICS

In the event that elements of the invocation process are passed to a team, although this most likely requires some form of earlier invocation step taken by an individual, then the biases outlined previously

may be mitigated. However, this does not mean to imply that all factors, which may warp effective decision making, have been resolved. There are many issues that could still instigate a wrong decision, from the culture of the organisation, the makeup and structure of the team and the leadership shown by the chair. Much has been written about team and group dynamics, so this paper will concentrate on two areas that have the potential to influence invocation decisions. The first is a characteristic known as cognitive dissonance, in which 'subjects prefer to have consistency between their attitude or mind set and their actual behaviour'.¹² This can lead to a deep sense of unease or anxiety within those that find themselves in situations with the potential to require actions contrary to their shared beliefs. In such situations, exacerbated by a lack of available information, personal feelings towards key team members, perhaps multiplied by a strongly shared culture employed as a mechanism to avoid cognitive dissonance, can overly influence decision making at the expense of fuller analysis.

Secondly, there is the phenomenon of groupthink: 'a dynamic in group behaviour that can be described as a shared set of values while the group works towards a shared goal'.¹³ It is this aspect of group decision making that can, in an attempt to reach an acceptable level of agreement, lead to highly dysfunctional behaviour. The most famous example of this is perhaps the decision to launch the illfated Challenger space shuttle in 1986.¹⁴ Groupthink leads to individuals within the group, due to shared cultural influences, failing to think critically and taking decisions based more on morals than on objective evidence. As groups that have worked together for a long time are more

prone to groupthink, this is an issue for invocation. Unlike later *ad hoc* and mixed groups that might be formed, such as the crisis management team, any team charged with an initial invocation decision is often a homogeneous business unit, such as IT, human resources, communications or facilities. As such teams work together on a day-to-day basis, they can be prone to this phenomenon.

THE PLAN

Given the above restrictions on individual and team performance, there are a number of practical steps that can be taken to assist the invocation process. First there is the plan itself. To be able to invoke plans effectively requires the establishment of criteria for doing so.¹⁵ Such triggers need to be clear and measurable and must allow assessments to pick up early warning signals as much as define when an incident significant enough to require a formal response, or with such potential, has taken place.¹⁶ These triggers may usefully be based on the factors the organisation feels best define the impacts it is keen to avoid, rather than the causes themselves, such as service or product quality, safety, finance, resource availability or reputation. The process also needs to reflect existing hierarchical structures. The situation whereby the level below is required to decide to invoke or not invoke the level above, as opposed to simply escalate to that level, should be avoided. Decisions to invoke teams and responses need to be taken at the right level and by appropriately authorised personnel.

Invocation needs not be seen as an all-or-nothing game. There should be states of operation that result from invocation decisions and these may escalate or deescalate as the understanding of the situation clarifies. Such states will have associated levels of response for teams and procedures. For example, the invocation process itself requires core people, armed with the right information, to assess the situation as a precursor. Any initial decision, based on an assessment of potential risk and often taken at the individual level, to notify and engage more empowered decision makers should not be equated to

the decision to invoke the full plan, which may or may not follow. Once the active choice has been taken to invoke, then a formal declaration of this decision must be made and promulgated. This should have meaning for others, including those external to the organisation, and act as a trigger for known and predefined responses. As such, it is important to consider the impact upon others of any invocation decision and the operational state required. It is hard to maintain 100 per cent internal readiness for an impending possible crisis for an extended period, and any declaration may mean that other agencies move to certain enhanced states of operation as well. This is why a graduated system is useful.

THE PROCESS

Part of the solution is to ensure a clear invocation process, linked to escalation, which mandates the steps for authorising plan enactment, establishes the response structures and that enables a meaningful operational status to be defined for the various teams that respond. When building an effective invocation process, there are a few key concepts to consider. A good place to start is to acknowledge that notification is not a one-way street. It must be able to occur both up and down the chains of command and hierarchical structures. People need to have the confidence they will be listened to when they escalate an issue and that those receiving this information will act appropriately as regards plan invocation. Technical knowledge and competency are often the key to understanding the implications of a situation rather than position or rank.

The physical means of calling out and engaging with staff also needs to be clear and effective. For senior and middle management teams, it may be appropriate to consider virtual methods as people are often distributed across the country or globe. The response must not be hindered by the failure of any one person to be reached. This is why assigning roles with responsibilities in teams, and not just names, is vital. When a person does not respond, their responsibilities can be allocated to others and not missed. Technology can help in this regard but it is important to define the processes before selecting systems.¹⁷ Once teams have been notified they need to be able to analyse the situation against the trigger criteria that have been set. To do so, they need access to an accurate picture of the situation.¹⁸ Often this means that others responsible for gathering and consolidating information, such as the incident control centre team, must be notified at the same time as, if not before, the decision makers. Active and unambiguous decisions must be taken in time to enable the tempo of the response to be effective. As discussed, this requires that the level of incident or crisis is defined and declared so that this can trigger appropriate responses.¹⁹ At this early stage, it is also important to decide on any necessary adjustments to the response. As the situation is unlikely to be static, consistent monitoring of the picture allows the response to be increased or reduced proportionally, through changing the declared crisis level.

THE PEOPLE

No matter how good the plan, it cannot be disconnected from the competencies of the people required to operate it. For the invocation aspect, as with any further element, the people involved need to be competent to carry out the tasks assigned to them. Invocation is often thought of as a simple problem, and in certain situations it may well be — ringing a fire alarm is one such example. Often, however, the

problem is more complicated, such as deciding whether that alarm warrants the invocation of more detailed crisis plans. Individuals faced with invocation decisions 'in a simple context must sense, *categorise*, and respond to a situation, [while] those in complicated context must sense, *analyse*, and respond'.²⁰ If we accept the premise that competency is a combination of experience and training, then naturally this leads to the requirement to ensure that invocation decision makers, who will likely have to operate in complicated contexts, are trained in this task, have the required authorities, and have rehearsed under different environmental conditions and scenarios. Invocation practice should be built into the training and exercising regimes of organisations with regard to their crisis, incident and business continuity plans. Such programmes should engage the reserve team, as much as the main players, and provide greater appreciation of the fears, concerns and desires of the teams they may be invoking. Similarly, these 'higher' teams need to accept that sometimes they may be invoked when their input is not actually required, but that this is preferable to the reverse situation. Such acceptance means that they continue to empower the invocation decision makers, both in the plans and culturally, and do not place obstacles in their way that might serve only to make cognitive biases and dissonance or groupthink more likely to occur.

SUMMARY

There are many barriers to the successful invocation of crisis, incident and business continuity plans despite, or perhaps because of, what those plans might say about how invocation should take place. Such decisions are often not as simple as hoped for and are made in an environment characterised by uncertainty, a lack of verified information and time pressures that serve only to heighten the influence of cognitive bias. Such biases emanate from people's own previous experiences, their views of the world, how and when they receive information, the quality and quantity of that information, how they feel others will react, the mental tools they use to simplify problems they may feel are getting out of control not to mention the organisation's culture. Although plans can attempt to address these issues through the employment of teams in the invocation process, this has some limitations. As invocation is an early decision, it is more likely to be the responsibility of one or two individuals, especially as the invocation choice itself is more often than not about bringing together formed teams. Even if a small team directly considers invocation, it is likely to be constituted from a single business unit and as such may be subject to groupthink, leading to the temptation to seek agreement based on flawed or narrowed processes and to disregard conflicting information, especially from sources outside the group.

All of this means that invocation procedures need not be complex, but they do need to be flexible, well thought through, regularly rehearsed and fully understood by those who will use them. There must be a clear delineation between the processes for escalation, telling others and invocation, although they will also need to be linked as the former influences the latter. Those charged with invoking any aspect of the plan must hold the commensurate authority to do so. It is also prudent to avoid requiring juniors levels to invoke senior levels, as senior teams will often employ different and wider-ranging criteria than the subordinate levels may consider. A robust system for calling out and notifying people and teams is required, along with the capacity to provide early invocation decision makers with as comprehensive an understanding of the situation as possible. The authorisation required for invocation at each level should be set, and clear triggering criteria must point to defined levels for the crisis or incident. Once declared,

the crisis or incident level should in turn drive others, both internal and external to the organisation, to achieve set states of readiness in terms of response. Finally, graduated invocation processes can be useful in enabling escalation or de-escalation of response as the situation changes.

REFERENCES

- (1) Bazerman, M. and Chugh, D. (2006) 'Decisions without blinders', *Harvard Business Review*, January, available at: <https://hbr.org/archive-toc/BR0601> (accessed 22nd August, 2016).
- (2) Rt Hon Lord Cullen (2001) 'Ladbroke Grove Rail Inquiry Part 1', Health and Safety Commission, available at: http://www.railwaysarchive.co.uk/documents/HSE_Lad_Cullen001.pdf (accessed 22nd August, 2016).
- (3) Davies, T. *et al.* — the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina (2006) 'A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina', available at: <http://www.gpoaccess.gov/congress/index.html> (accessed 22nd August, 2016).
- (4) McMillan, D. (2014) 'Disruption at Gatwick Airport', 26th February, available at: https://www.gatwickairport.com/globalassets/publicationfiles/business_and_community/all_public_publications/2014/mcmillan_report_feb14.pdf (accessed 22nd August, 2016).
- (5) Fisher, A. (2001) 'Critical Thinking: An Introduction', Cambridge University Press, Cambridge.
- (6) Leigh, M. (2015) 'Critical Thinking in Crisis Management', Occasional Paper (New Series) No. 15, Emergency Planning College, Easingwold.
- (7) Rosen, M.A., Salas, E., Lyons, R. and Fiore S.M. (2008) 'Expertise and naturalistic decision-making in organizations: mechanisms of effective decision-making', in Hodgkinson, G.P and Starbuck, W.H. (eds) 'The Oxford Handbook of Organizational Decision- Making' Oxford: Oxford University Press, pp. 211–232.
- (8) Whitson, J.A. and Galinsky, A.D. (2008) 'Lacking control increases illusory pattern perception', *Science*, Vol. 322, No. 5898, pp. 115–117.
- (9) MacFarlane, R. (2015) 'Decision- Support Tools for Risk, Emergency and Crisis Management', Position Paper No. 1, Emergency Planning College, Easingwold.
- (10) Roberto, M. (2009) 'The Art of Critical Decision-Making', The Teaching Company, Chantilly, VA.
- (11) MacFarlane, R. and Leigh, M. (2014) 'Information Management and Shared Situational Awareness', Occasional Paper No. 12, Emergency Planning College, Easingwold.
- (12) Plous S. (1993) 'The Psychology of Judgement and Decision Making', McGraw-Hill, New York, pp. 31–37.
- (13) Janis I. (1982) 'Groupthink: Psychological Studies of Policy Decisions and Fiascos', Houghton, Boston MA.
- (14) Vaughan, D. (1998) 'Rational choice, situated action, and the social control of organisations: the Challenger launch decision', *Law Society Review* Vol. 32, No. 1, pp. 23–61.
- (15) International Standards Organisation (2012) 'Societal Security: Business Continuity Management Systems — Requirements', ISO 22301, 8.4.2.

- (16) Boin, A. and Lagadec, P. (2000) 'Preparing for the future: critical challenges in crisis management', *Journal of Contingencies and Crisis Management*, Vol. 8, No. 4, pp. 185–191.
- (17) Husband, R. (2007) 'How John Lewis Partnership connected 200 business continuity plans to an emergency notification database', *Journal of Business Continuity and Emergency Planning*, Vol. 1, No. 3, pp. 261–270.
- (18) Elsubbaugh, S., Fildes, R. and Rose, M. (2004) 'Preparation for crisis management a proposed model and empirical evidence', *Journal of Contingencies and Crisis Management*, Vol. 12, No. 3, pp. 120–123.
- (19) Business Continuity Institute (2013) 'Good Practice Guidelines', global edition, Business Continuity Institute, Reading, p. 82.
- (20) Snowden, D.J. and Boone, M.E. (2007) 'A leader's framework for decision making', *Harvard Business Review*, November, available at: <https://hbr.org/archive-toc/BR0711> (accessed 22nd August, 2016).