

White Paper

Managing for the Unexpected

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Key Points:

- Adverse events, crises, and accidents are not inevitable. They result from small problems, surprises, and lapses that shift, grow, and escalate until they are too big to handle.
- Leaders can develop capabilities that allow organizations to anticipate, contain, and repair vulnerability.
- Issues of alertness, awareness, and action underpin an organization's ability to manage the unexpected.

Introduction

Unexpected events rarely develop instantaneously or occur without warning. Their seeds are sown long before turmoil arrives in small problems, mistakes, or failures that are unnoticed, ignored, misunderstood, or discounted, and subsequently escalate into crises or catastrophes. To manage the unexpected requires problem insight — becoming aware of small disturbances and vulnerabilities as they emerge, understanding the possible problematic consequences, and adjusting ongoing actions before they can turn into a tragic flaw. The earlier organizations try to catch problems, the more options there are to deal with them.

At the same time, the earlier organizations try to catch problems, the harder they are to spot. This paper outlines capabilities that allow organizations to anticipate, contain, and repair vulnerability. Leaders can enable these capabilities.

Toward a Capability Model for Managing the Unexpected:

Issues of alertness, awareness, and action underpin an organization's ability to manage the unexpected. Processes that enable competent action to deal with these issues in various domains are critical capabilities that underpin organizational strength. Specifically, we explore seven key capabilities:

1. Allocating Attention:

Managing the unexpected requires attention, which can be allocated proactively or reactively. Proactively, attention can be allocated to scan the environment looking for potential problems, often those that fit particular criteria. Reactively, attention can be allocated in response to some sort of stimulus. Existing research has focused on proactive attention allocation, or “scanning,” and suggests that the more attention top management directs to active scanning, the better the recognition of problems, threats, or changes. However, top-management attention does not necessarily lead to better problem discovery. There are two reasons for this. First, executives themselves are prone to biases and may notice certain cues instead of other cues, or have the accuracy of their perceptions shaped by structural factors within the organization. Second, leaders often are unaware of problems that others in the organization have noticed, either because others are not willing to speak up or because they believe that — as key decision makers — they would be aware of problems if they existed.

- Ultimately, managing the unexpected is about managing the flow of attention of both top management and frontline workers so that they are able to proactively and reactively notice small problems before they become big problems. When the flow of attention within teams of frontline workers is managed and coordinated, a balance is achieved where team members can both attend to their individual tasks and to the collective work of the team.

2. Sense Making

Managing for the unexpected not only requires attention and becoming aware of details, but also discernment. Discernment is an issue of appreciating the significance of data elements in the first place. To call something a cue, weak signal, or discrepancy, one has to already appreciate its meaning. Meaning is sensitive to some details of the current situation — what is, has, and could be going on, and what the observer expects or intends to happen. These expectations are critical to sense making because cues and anomalies are not given by the situation — they are constructed and inferred. Expectations form the basis for what counts as a cue and is singled out: they are sense-giving structures for sense making.

- Developing expertise strengthens the ability to generate expectations critical for noticing cues as well as for discerning their meaning. Experts can more quickly recognize patterns, spot things that violate expected patterns or, conversely, piece together into patterns seemingly unrelated cues. Expertise also may influence the capability to judge urgency, as well as the need to respond quickly rather than waiting to see how things will develop.

3. Anomalizing:

Managing the unexpected requires capabilities to avoid treating small perturbations as normal. Mindful organizing increases tendencies to anomalize — to become more alert to discrepant details, more able to hold on to those details, less likely to simplify those details into familiar events, and to become more aware of their significance. The longer that people are able to appreciate the distinctiveness of a cue — either by avoiding stereotyping or by developing more varied categories — the more nuanced and fine-grained an understanding they can create. This means that the nuances of anomalies can be more deeply examined and acted upon more quickly so that they don't build up until events become unmanageable. Mindful organizing results when organizations institutionalize processes and practices that induce a rich awareness of discriminatory detail and a capacity for action by spending more time a) examining failures to assess the health of the system, b) resisting the urge to simplify assumptions, c) observing operations and their effects, d) developing resilience, and e) locating local expertise and creating a climate of deference to those experts.

- A mindful infrastructure guards against mis-specifying, misestimating, and misunderstanding things. It also increases an organization's sense of vulnerability. Consequently, organizations can continuously manage fluctuations and more quickly discover and correct minor perturbations that can build and cause major disruptions.

4. Updating:

Managing the unexpected requires updating — that is, the ability to modify understanding of a situation either because the situation has changed or evolved over time, or because the initial assessment of the situation was flawed. It is extremely difficult for people to engage in updating, particularly if they have already started down a particular path of understanding. Updating is made even more complicated by the fact that unexpected discrepancies often are perceived as threats, and under threat, people tend to restrict information processing and constrict control. Cognitive biases — such as the confirmation bias in which individuals privilege information that support their hypotheses and dismiss information that challenges them — further prevent people from effectively updating. These biases interfere with both noticing and

interpreting, which are essential for updating. Updating requires doubt.

- Updating is more likely to occur when people work in groups. Individuals are able to effectively update about 25 percent of the time, whereas groups are able to effectively update about 50 percent of the time. It may be easier for groups to make sense of problems, because partners make social constructions easier and because they can be an additional source of ideas and data. Interactions are critical for managing the unexpected.

5. Interacting and Communicating:

An organization's design (task and workflow interdependence and patterns of communication) and the culture that results from it can help or hinder how individuals become alert and aware of perturbations. The design influences patterns of cognition, and also the extent to which individuals link their cognitions. More controlled cognition, which will affect patterns of attention, results from reciprocal interdependence and mutual adjustment. After all, problems in complex organizations rarely emerge full-blown; they are constructed and created through various bits of information that must be assembled and consolidated before being understood. But it isn't simply a matter of assembling information parts. The meaning of one part may relate "to some other part whose meaning, in turn, is dependent on the meaning of the initial part" (Weick, 2009). Moreover, organizations are filled with ambiguous and messy details, so people can draw different yet equally plausible conclusions from observing the same "objective" data.

- Ambiguity cannot be resolved through collecting more information; rather, it requires debate, discussion, and active listening. The important insight is that detecting and making sense of anomalies is an iterative process of making sense of divergent information and perceptions that requires dense communication and interaction.

6. Containing the Unexpected:

Managing the unexpected is about containing. We deliberately chose the word "contain" to signify two dimensions of its meaning: to "hold or encompass" and to "restrain or control." These subtly different meanings illustrate that containing requires two types of skills: encompassing relates to the ability to delineate the boundaries of a specific problem and encapsulate it, and controlling relates to the ability to work within the problem space to begin to resolve the problem.

When the unexpected breaks through, organizations can respond by: 1) enacting a pre-existing routine (i.e., contingency plan, standard operating procedure) intended to manage unexpected events, 2) modifying an existing routine to fit the unexpected event (refine), or 3) innovating a completely new routine. One challenge is to identify what routine to engage in — modifying an existing routine when the problem calls for an entirely novel response is a problem in and of itself. Skill is associated with enacting routines that are most useful for containing the unexpected.

- Staying flexible and modifying understanding of how well routines are working is critical. It may be that a problem starts off looking familiar but then spirals out of control, requiring the use of other routines. It may be that something which seems completely new is actually similar to something the organization has encountered before.

7. Resilience and the Unexpected:

Managing the unexpected is about resilience, or bouncing back from or coping with dangers that have become manifest. Because unexpected events often unfold before they are noticed, a well-developed capability to withstand and bounce back from unanticipated surprises is critical. Resilience results from processes and dynamics that create or retain resources (cognitive, emotional, relational, or structural) in a form sufficiently flexible, storable, convertible, and malleable, enabling organizations to successfully cope with and learn from the unexpected.

- Processes, structures, and practices that promote competence, encourage growth, and enhance efficacy improve organizational capabilities to mediate perturbations and strain. These capabilities counteract threat rigidity by increasing capabilities to better sense, process, interpret, and manage small discrepancies as they emerge. This increases the likelihood that disruptive events will be treated as opportunities rather than threats. Rebounding from challenges initiates a positive feedback loop to an organization's capabilities such that they are strengthened and further resilient in the face of unexpected events.

Conclusion:

Organizations that manage for unexpected events and prevent small problems from becoming large crises are engaged in important acts of positive organizing. Adverse events, crises, and accidents are not inevitable; rather, they result from small problems, surprises, and lapses that shift, grow, and escalate until they are too big to handle. Leaders can build a set of critical capabilities that allow organizations to contain and repair vulnerability.

Take Action:

- ✓ Manage the flow of attention of both top management and frontline workers
- ✓ Cultivate expertise to strengthen the ability for noticing cues and discerning their meaning
- ✓ Build capabilities to avoid treating seemingly insignificant or unexpected cues, events, or discrepancies as normal
- ✓ Modify understanding of a situation if the situation has changed or if the initial assessment was flawed
- ✓ Make sense of divergent information and perceptions through communication and interaction
- ✓ Stay flexible and modify your understanding of how well routines are working
- ✓ Develop resilience — the ability to bounce back from, and cope with, dangers that have become manifest

*This paper was summarized by Penelope Mallinckrodt (Ross MBA '13) based on chapter 64 of Cameron and Spreitzer's (Eds.) *The Oxford Handbook of Positive Organizational Scholarship* (2012).

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