THIRD EDITION

Sustained Performance in a Complex World

KARL E. WEICK AND
KATHLEEN M. SUTCLIFFE

WILEY

Managing the Unexpected

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Preface

Unexpected events can be disorganizing. It takes both anticipation and resilience to manage unexpected disruptions, a combination that we call *mindful organizing*. This pattern was implicit in the original studies of high reliability organizations (HROs) and became more explicit as a more varied set of organizations were examined. These increases in variety, however, did not always deepen our understanding of the basic processes involved. That judgment is less a criticism than it is the identification of a niche.

In the two previous editions of this book, we also have discussed processes of high reliability that could be adopted more widely. In this third edition we are more concerned with foundations. We still add to variety by exploring elements of high reliability organizing in settings such as banking, museum curating, latent fingerprint identification, aircraft piloting, and automobile manufacturing. But we spend more time discussing the complexity of each of the five principles that are built on failure, simplification, operations, resilience, and expertise. Our intent is to show that considerable collective commitment and competence are necessary, both to deploy these five in the face of the unexpected and to organize around them in order to sustain performance. Managing the unexpected is not simply an exercise in going down a checklist. Indeed, one of the ironies of probing deeper into the complexities of high reliability organizing is that

the principles gain new relevance for everyday life lived in places that are not large, high-hazard, technical systems. We argue that microlevel and mesolevel patterns impose constraints on more macro systems. Thus, one way to approach this book is to treat it as an analysis of the experience of reliability. Crucial moments in that experience occur when people size up and act on the unexpected before it escalates out of control. Those moments are crucial because nonobvious disruptions can be handled in two different ways. They can be normalized away as familiar or made to stand out when they are anomalized as unfamiliar. Resolving the disruption one way or the other depends on how people organize their activities. This line of argument introduces a sense of agency rather than fatalism into settings that often appear monolithic, closed, and rigid. Our inspiration clearly remains HROs. Our aim is to dig deeper into the human side of what works for them.

This third edition differs from previous editions in several ways. We pay more attention to sensemaking, interacting, and language, mindful of wildland firefighter David Allen's comment, "You presume that people in HROs are already communicating." He's right. We did presume that and now try to give that presumption more substance. We analyze a broader range of cases in an effort to show the generalizability of mindful organizing directed at sustained reliable performance. We devote a full chapter to each of the five principles to illustrate the context that supports them, complications that they entail, and ways they can be woven into current functioning in most organizations. The relationship of our argument to topics such as organizational safety and risk management is one of a shared concern with order and recurring action patterns. In our case, we try to describe the performative character of order creation and maintenance and the agency that this implies. Organizing holds events together and reliable performance depends on sustained organizing. But the

organizing that we discuss should not be confused with organizational design. In many ways, organizing as we discuss it amounts to workarounds necessitated by flawed formal designs. Our frequent use of quotations from other sources is intentional. This style clarifies the lineage of ideas, anchors interpretations, and provides raw materials so that readers can make their own interpretations and customization.

Newer analyses of the original three HROs—an aircraft carrier, an air traffic control facility, and an electrical power generation unit—clarify that all three were "best of their class."[1] Our orientation is both to dig deeper into why they were best and, more important, to describe how groups not included in this class can get better.

Acknowledgments

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Our families have been lovingly patient with our efforts, and none of this would have been possible without them being there for us. Karen Weick and Tim Wintermute have held things together for all of us. To dedicate this book to them is an unduly small gesture, considering how much they mean to us.

CHAPTER

1

Mismanaging the Unexpected

"*A breakdown is not a negative situation to be avoided, but a situation of nonobviousness.*"[1]

—Terry Winograd and Fernando Flores

"*Danger, disquiet, anxiety attend the unknown—the first instinct is to* eliminate *those distressing states. First principle: any explanation is better than none. . . . The first idea which explains that the unknown is in fact the known does so much good that one 'holds it for true.'*"[2]

—Friedrich Nietzsche

Nonobvious breakdowns happen all the time. Some are a big deal. Most are not. But which are which? The answer to that question is hazy because we tend to settle for the "first explanation" that makes us feel in control. That explanation turns the

unknown into the known, which makes the explanation appear to be "true." That can be a serious misjudgment. This book is about what we could call "the second explanation," the one that—discomforting though it may be—treats the unknown *as knowable*. This second explanation is built from processes that produce an ongoing focus on failures, simplifications, operations, options, and expertise. Organizing that incorporates processes with these five areas of focus helps make breakdowns more knowable. These processes are an effortful means to maintain reliable performance, but previous work on high reliability organizations (HROs) shows that effortful processes like these make breakdowns more obvious at earlier stages in their development.

Our ideas come from an evolving body of work that originated with studies of safe operations on the flight decks of aircraft carriers, the generation and transmission of electrical power, and the dispatching of aircraft at an en route air traffic control center.[3] The common problem faced by all three was a million accidents waiting to happen *that didn't*. In each case the question was, How were the units organized to accomplish this outcome? Among the answers that have been proposed are the existence of a unique culture, capability for self-design, networks built on expertise, hybrid structures with special attention to redundancy, training and routines, situation awareness, mind-sets involved in sense-making, relational strategies, and information processing.[4] In an effort to synthesize a workable set of principles from this rich array, we focused on processes that were mixtures of variety and stability or, as the late Michael Cohen called them, "patterns in variety."[5] One *pattern* that seemed to recur was a sustained focus on small failures, less abstract specifics, ongoing operations, alternative pathways to keep going, and the mobilization of expertise. The *variety* within this pattern came from local customizing that produced meaningful practices that did not compromise the adaptive capacity that the pattern generated.

Once that adaptive capacity weakens, reliability suffers. To illustrate how problems with reliability develop over time, in this chapter we analyze the collapse of the Washington Mutual Bank (WaMu). Although this example involves the financial industry, the problems and lessons apply to other industries as well.[6] This wider application occurs because all of us, just as was true for those at WaMu, have to act in situations we can't possibly understand.[7] And the reason we can't understand them is because all of us "have to apply limited conceptions to unlimited interdependencies."[8] The conceptions and the ways we apply them are what matter. If we change these conceptions, then we change our ability to function under conditions of nonobviousness. As we will see, WaMu underestimated its interdependencies and overestimated its conceptual grasp of those interdependencies it did see.

Washington Mutual Mismanages the Unexpected

Washington Mutual Bank (WaMu) failed and was seized by the Federal Deposit Insurance Corporation (FDIC) on September 25, 2008, at 6 PM, and sold to JP Morgan Chase. We take a closer look at a sample of surprises in this unit that affected its reliability. And we describe one way to think about these fluctuations in reliability. Our interpretation is grounded in the idea that *managing* the unexpected is an ongoing effort to define and monitor weak signals[9] of potentially more serious threats and to take adaptive action as those signals begin to crystallize into more complex chains of unintended consequences. The phrase "begin to crystallize" is crucial to our argument because managing is an active process that is spread over time as the signals and situations change. As a problem begins to unfold, weak signals are hard to detect but easy to remedy. As time passes, this state of affairs tends to reverse. Signals become easy to detect but hard to remedy.

As weak signals change, so do the requirements for adaptive functioning. It is that adapting that became more and more flawed at WaMu.

Overview of Washington Mutual Bank Failure[10]

During the 1980s WaMu, nearly 100 years old, was a retail savings and loan (S&L) bank that, under chief executive officer (CEO) Louis Pepper, had grown from 35 branches to 50 and from $2 billion in assets to $7 billion. The organization was held together by five values, all nouns: ethics, respect, teamwork, innovation, and excellence.[11] When Pepper was replaced in December 1988 by Kerry Killinger, the values were changed to three adjectives: fair, caring, and human.[12] Later, as the bank aggressively tried to become the largest at several lines of business (largest S&L, largest mortgage lender,[13] and largest home equity lender[14]) and focused increasingly on high-risk, subprime loans, two new adjectives replaced all other values: dynamic and driven.[15] These last two values were christened "The WaMu way."[16]

In 1998 WaMu acquired Long Beach Mortgage (LB), a small subprime lender with $328 million in assets. Subprime lending had become fashionable in the banking industry. WaMu had never made these kinds of loans although they appeared to be more profitable than conventional mortgages, albeit riskier. Subprime loans were more profitable because banks charged higher interest rates and higher fees, but they were riskier because borrowers couldn't qualify for regular prime mortgages.

An early weak signal of unexpected events occurred in the summer of 2003. A sampling of 270 LB loans reviewed by the compliance department revealed that 40 percent were deemed "unacceptable because of a critical error."[17] Underwriting standards had been loosened to sell more loans. An internal flyer had

said “a thin file is a good file,”[18] suggesting that less effort spent on documentation meant more time to sell more loans. For example, one loan application had a picture of a mariachi singer, and his income is “stated” as being in six figures. However, the picture was not a picture of the borrower, nor was that the borrower’s income.[19]

As the bank moved into a higher risk strategy for residential loans, the chief risk officer, James Vanasek, faced the unenviable position of being “in charge of balancing risk, at a bank that was loading up on it.”[20] Much later during a congressional hearing, Senator Tom Coburn asked Vanasek, “How do you account for the fact that somebody has seen a [housing] bubble, and by definition, a bubble is going to burst, and then their corporate strategy is to jump into the middle of the bubble?”[21] Vanasek had no answer then, nor did he have any success earlier when he tried to limit the number of “stated income” loans being made (loans with no proof of income). He resigned.

There was a continuing push to sell high-margin products, such as home equity loans and subprime loans. A new risk officer, Ron Cathcart, was hired as Vanasek’s replacement, and soon thereafter, Cathcart told CEO Killinger that the Federal Office of Thrift Supervision (OTS) was about to downgrade the bank’s “health” rating. Killinger said, “I don’t like to hear bad news.” Cathcart replied, “It’s my job to deliver bad news,” but Killinger was already out the door before Cathcart finished his sentence.[22]

During this period former CEO Pepper sent his protégé Killinger a blunt letter. The gist of it was that Killinger was not leading in the face of the bank’s continuing decline.[23] For example, as Pepper put it, Killinger still held on to the title chief operating officer (COO) but operations were a mess. Even though Pepper said that it was imperative that Killinger hire a COO, Killinger didn’t and kept the title.[24] Pepper was also deeply worried about Killinger’s optimism and his failure to discuss

worst-case scenarios. Pepper's worries were shared by insiders: "Don't listen to him, he's a Pollyanna."[25] As Pepper said in his letter, "There is no alternative but to give the worst case to the decision makers or later be in an untenable position of failing to make full disclosure. If you make full disclosure you may lose money but failure to do so has much worse penalties." No disclosure was made and much worse penalties did occur. As problems mounted the directors did next to nothing because they had little information about loans or borrowers. "When a borrower applied for a mortgage with limited documentation, no one kept track of which kind of documentation he or she had provided."[26]

In June 2006, in the face of an accelerating WaMu commitment to high-margin products, "something strange happened."[27] The median price of existing homes declined 1.7 percent year to year for the first time in 11 years, and home sales dropped a sudden 13 percent from the year before.[28] Other "strange" things happened. Borrowers started to miss mortgage payments but continued to make credit card payments (a reversal of normal priorities).[29] More loans were made with less documentation (insiders called them NINA loans: no income, no assets).[30] There were growing instances of first payment default (borrowers failed to make the first mortgage payment after the loan was granted).[31]

But why did all of this seem "strange"? What seemed to happen is that separate signals began to form a coherent, salient pattern. These patterns did not suddenly appear full-blown out of thin air. Instead, the clues had been emerging for some time.[32] But differences in employees' positions, as well as in their interests, power, competencies, incentives, and access to data, produced different levels of concern throughout the organization. Interpretations differed as well. We turn to five principles for managing the unexpected that were not followed at WaMu and could well have mitigated some of its problems.

Problems in Mindful Organizing at WaMu

In this book we focus on five hallmarks of organizations that perform remarkably well day after day under trying conditions and persistently have fewer than their fair share of crises. These hallmarks make up what we have termed *mindful organizing*. In this section we preview each of the five principles individually, provide examples of their relevance to WaMu's growing problems, and comment briefly on issues that will be developed more fully in subsequent chapters. Our intention is to illustrate the kinds of cues that stand out when we pay closer attention to indications of failure, simplification, operations, resilience, and expertise (FSORE).[33]

Preoccupation with Failure The principle of a preoccupation with failure directs attention to ways in which your local activities can conceal or highlight such things as symptoms of system malfunction, small errors that could enlarge and spread, opportunities to speak up and be listened to, a gradual drift toward complacency, the need to pinpoint mistakes you don't want to make, and respect for your own day-to-day experience with surprises.

There were visible signs of failing at WaMu. For example, there were indications that guidelines for underwriting were being violated. Suspicions of fraud were investigated in Downey, California, where it was found that "red flags were overlooked, process requirements were waived, and exceptions to policy were granted."[34] People were working right up to an increasingly blurry edge that separated right from wrong. In sociologist Don Palmer's words,[35] wrongdoing had become normal although this was not always evident to the people who had been drawn in.

WaMu was aware of mistakes it didn't want to make (e.g., "We don't want their homes back"),[36] but it issued an underwhelming directive stating that employees "should be friendlier

when they tried to collect overdue payments." All along there were signs that mistakes were being made that WaMu didn't want to make. There were signs of the growing possibility that borrowers would owe more on their houses than those houses were worth (they would be underwater). Speculation on single-family homes was also going up in the form of non–owner-occupied loans. Such loans are risky because borrowers would dump the home at the first sign of trouble. True, the borrower would lose money, but as the saying goes, "Your first loss is the best loss when you are in danger."[37] You minimize throwing good money after bad if you get out when the damage is small. Internally at WaMu, there was growing pressure to package and sell delinquency-prone loans to investors before the market detected that they had "soured."[38] By June 2007 bad loans had jumped 45 percent. $1.7 billion worth of loans were delinquent, and $750 million more were involved in mortgages that were being foreclosed.[39]

Perhaps the WaMu group most likely to be preoccupied with failure, whether it wants to or not, is the office of investor relations. Staff in this office have to "say bad things in good ways."[40] Investor anger funneled through their phones. As WaMu became more and more mismanaged, the anger voiced in calls to investor relations went up.[41] Mere frustrations, a weaker signal of trouble, gave way to rants, a much stronger signal of trouble. But the rants arrived too late to improve reliability.

Reluctance to Simplify Another way HROs manage the unexpected is by being reluctant to accept simplifications. It is certainly true that success in any coordinated activity requires that people simplify to stay focused on a handful of key issues and indicators. But it is also true that less simplification allows you to see in more detail what might be causing the unexpected. HROs take deliberate steps to create more complete and nuanced pictures of what they face and who they are as they face it.

A costly simplification at WaMu occurred when managers treated all borrowers as similar and failed to realize that subprime borrowers are different. For example, they need reminders before they make a payment.[42] Simplification also occurred in 2008 when CEO Killinger lumped banks into two categories, those that were "irrational mortgage lenders" (banks that do nothing but make mortgages) and those that weren't "irrational." Even though WaMu was a perfect example of the "irrational" category because of its escalating exposure to bad mortgage loans, Killinger believed that because WaMu was also in the retail banking business (albeit to a slight degree), it was not an irrational lender.[43]

WaMu's claim that subprime lending was a key business line led it to lump together both qualified and less qualified borrowers. This simplification raised the probability that the bank would become a "predatory lender."[44] Managers would now have more incentives to shift qualified buyers from a regular mortgage to a more profitable subprime loan. Whenever Killinger presented cautionary warnings to the board, he never used the word *bubble* to describe the housing market.[45] This is in contrast with chief risk officer Jim Vanasek, who wrote a memo to his underwriting and appraisal staff in 2004 that urged them to be much more conservative given the continuing rise in housing prices to unsustainable levels: "There have been so many warnings of a Housing Bubble that we all tend now to ignore them because thus far it has not happened."[46]

WaMu also tended to lump together all of its subprime borrowers. This simplification concealed a dangerous set of details. Kevin Jenne, a market research manager, videotaped 80 hours of interviews with high-risk borrowers (e.g., people not paying back their loans).[47] What he saw over and over was that borrowers were confused and had no idea of how their option adjustable-rate mortgages (ARMs) worked (e.g., "Well, this small