



Jan U. Hagen

Why We All Make Big Mistakes

We all know how easy it is to make mistakes. Preparing everything from written texts and calculations to investment strategies, we check and discuss our work umpteen times until we are certain we've eliminated all errors. Then we're shocked that in spite of our persistence we discover mistakes after the fact. Perhaps we were "not all there." Perhaps we inadvertently overlooked something. Or perhaps our approach was flawed from the outset. Yet when someone mentions our mistake, be it parent, friend, colleague or superior, we experience guilt. In our culture, mistakes are equated with a lack of diligence or intelligence.

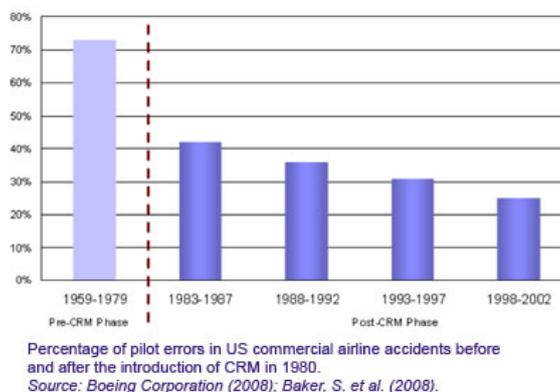
For senior managers, moving up the career ladder often creates the pleasant illusion of making fewer mistakes—or at least that's the feedback many believe they get from their subordinates. Managers can perceive an apparent lack of criticism as a sign of their growing expertise or their overall ability. But a closer look shows how misleading that perception can be. Like everyone else, executives make mistakes. But the steeper an organization's hierarchy, the less willing employees are to bring mistakes to their superiors' attention—even when they know that they, too, will suffer the consequences of those mistakes. The fear of making a fool of oneself, or of embarrassing or even angering the boss, keeps people silent.

Still, we can be sure that we make mistakes. However, we often fail to see the actual sources of our errors. Unacknowledged, they remain hidden in a kind of blind spot.

The commercial aviation industry has had to confront human error since its beginning. Still, it took it a while to make error communication a priority in the cockpit. The landmark case that prompted the biggest change involved a flight in which a copilot and flight engineer, fully aware of their aircraft's low fuel level, nonetheless took too long to point out the problem, which their captain had overlooked. Their behavior resulted in a crash.

Shortly following the incident, the Federal Aviation Administration, in cooperation with NASA, initiated a research program to study teamwork in the cockpit. They found that captains and copilots possessed excellent technical knowledge and flying knowhow but also had close to zero ability to

between captain and crew members, and pilot training that didn't address teamwork. Pilots excelled at coping with complex, standardized emergency situations such as engine fires during takeoff, yet in extraordinary situations that required collaboration, their problem-solving ability was lacking. This was only exacerbated by a chain-of-command culture in which the captain's authority could not easily be brought into question.



A big concept grew out of this research, Cockpit Resource Management. All the major airlines in the U.S. and Europe began introducing it in the early 1980s. Since the mid-1990s, it has been adopted increasingly across other areas of the airline industry. It was ultimately renamed Crew Resource Management. Today CRM is part of the legally required core curriculum for flight crew education and continuing education worldwide. Since it was born, the percentage of aircraft accidents in the U.S. in which human error plays a role has declined from 70% to 30%.

For Kay Kratky, the chief executive officer of the German-Chinese freight airline Jade Cargo and a former Lufthansa captain, CRM also applies outside the cockpit. "Errors in aviation can end in catastrophe. That is why we have to acknowledge risk, in the cockpit as well as in the boardroom." Taking risk for granted may sound fatalistic. In fact, it is only realistic. Addressing errors directly and without regard for hierarchy is a part of CRM that Kratky, as a former pilot, applies everywhere. "You have to be able to see an error before you can find its cause. Without this open approach, we would never have been able to achieve our market entry and rapid growth in China in such an intensely competitive environment with enormous cultural differences."

Ralf Nagel, who leads Air Berlin's flight crew education efforts as corporate director of training, takes a similar view. He, too, learned CRM as a pilot, and he finds it the key to creating a leadership culture and working environment in which errors can be handled without fear or loss of authority. "It is critical to establish a corporate learning culture with the CRM concept. This training also helps us recognize our improvement potential," he says. "Obviously, we draw distinctions in our error analysis. If we discover that an error was made maliciously or because of negligence, we respond with appropriate feedback. But the important thing is for us to continue to recognize and reduce errors."

Since the end of the 1990s, CRM has been adopted by other industries, most notably in surgical teams and in the commercial divisions of banks. A corporation's underlying culture is crucial, though. This is because CRM, together with error management, has little chance of survival in any environment that stigmatizes error as a token of shame, personal inadequacy or failure. Modern corporate cultures that accept error as a normal part of the human condition can detect exactly the kinds of avoidable mistakes we all make.

are unavoidable even with the greatest diligence. This encompasses all areas of human activity, including leading a company. Managing errors in a constructive manner is much more important than futile attempts at avoiding errors altogether.

Freedom from sanction: People discuss errors only when there are no sanctions for doing so. The fear of losing face and punishment actually contributes to error cover-up.

Walk the talk: When it comes to implementing the sanction-free principle, managers must lead by example. Only then will colleagues and employees report errors, both horizontally and vertically, without feeling that they are denouncing or damaging themselves.

Communication: Error communication must be fact-based and done in an objective manner. Even experts make mistakes and have blind spots. An expert's knowledge advantage, however, does not mean that error reporting can or should be automatically blocked.

Cross-check and reality-check: Situations can be perceived and judged differently. Like a captain and copilot who compare instrument readings and, most important, share the interpretations of those readings, managers should allow their data to be checked by other colleagues and employees, regardless of their level within the organizational hierarchy.

Reflection: Before we can learn from our errors, the actual causes of those errors must be identified and analyzed. The collective, objective assessment of superiors, employees or colleagues works best. In aviation this process takes place during regular debriefings conducted at the end of each flight day.

Training: The experience of the commercial aviation industry shows that implementing CRM can't happen overnight; in aviation it took 10 years. Yet radical change management processes are not necessary. In fact, it has been shown that leading by example, combined with regular one-day CRM training sessions at one-year intervals, can suffice. Last but not least, the aviation example demonstrates that tangible, measurable success rates greatly help CRM gain acceptance in the working environment.

Anyone who has ever observed the conversational tone in a cockpit knows what a remarkably easygoing process reporting and accepting errors can be. When pilots' errors are pointed out to them, they don't respond defensively. They just say thank you.

Jan U. Hagen is a member of the faculty of ESMT European School of Management and Technology and is an expert in the area of European banking. His current research focuses on industry consolidation and team leadership. He is collecting survey information on error management within organizations.