Organizational Bystanders

Avoiding disasters and seizing opportunities demands confronting some harsh realities of human nature and the darker side of organizational culture.

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Well-intentioned people often fail to act in the face of uncertainty and risk. What can be done about it?

One of the key responsibilities of leaders is to manage risk. Consider the consequences of the Katrina disaster and the 2004 Asian Tsunami, the nuclear power plant accidents at Chernobyl and Three Mile Island, chemical plant explosions in Bhopal and BP's Texas City refinery, the Barings Bank derivatives and Enron scandals, and the Merck Vioxx product recall. Despite ambiguous and complex causes, in many of these cases visible warning signs were ignored. Knowing that others are at risk of potential harm and either doing nothing or making only a modest protest is referred to in the social psychological literature as "bystander behavior."

Bystander behavior in organizations may be one of the most important elements to understand and prevent, since well-informed and conscientious individuals are one of an organization's most important, and often last, lines of defense in the face of danger. An illustrative case is the Columbia space shuttle tragedy, which provides detailed information that can help all managers correct bystander behavior in their own organizations.

The Columbia Tragedy: A Case of Bystander Behavior

Rodney Rocha was worried as he played and replayed the films of Columbia's launch. A large piece of white foam could be seen coming off the Space Shuttle's external tank, striking the left wing of the spacecraft, creating a shower of particles known as a debris field. While foam strikes had plagued shuttle launches from the

beginning of the Space Shuttle Program, no catastrophic damage had been done, although there had been one close call just two flights prior to Columbia. Rocha, responsible for structural engineering at NASA, feared that this strike might be different. No previous foam incident was as extreme as the one he was watching on this launch film. As a careful engineer, Rodney wanted more data to determine what was likely to happen when the shuttle re-entered the earth's atmosphere in just over two weeks.

While in orbit, only a robot camera or a space walk could conclusively determine the extent of the damage to the spacecraft, but Columbia had no camera, and sending an astronaut on an unscheduled space walk was not a step to be taken lightly. Nevertheless, Rocha e-mailed a Johnson Space Center manager to request an astronaut to visually inspect the Shuttle's underside. To Rocha's surprise, he never received an answer. He then wrote to his supervisor conveying his team's unanimous desire to use the Department of Defense's high-resolution ground-based cameras to take pictures of Columbia in orbit. Using boldface for emphasis, he wrote, "Can we petition (beg), for outside agency assistance?" Long-range images might not be as good as a physical inspection, but they would be a lot better than what they had.

Linda Ham, the Mission Management Team Chair responsible for Columbia's mission, was a fast rising NASA star married to an astronaut. She viewed foam debris as a potential problem, but did not think it constituted a "safety of flight issue." Without compelling evidence that would raise the Debris Team's imagery request to "mandatory" in NASA's jargon, there was no reason to ask for outside assistance. Besides, Ham stated, "It's not really a factor during the flight because there isn't much we can do about it." Columbia lacked any on-board means to repair the Shuttle's fragile thermal protection system.

Outraged by being put in a position of "proving" the need for imagery, and after being told by a supervisor that he was not going to be "Chicken Little" by elevating the request, Rocha wrote the following in an e-mail:

"In my humble technical opinion, this is the wrong (and bordering on irresponsible) answer from the [Space Shuttle Program] and Orbiter not to request additional imaging help from any outside source. ... Remember the NASA safety posters everywhere around stating, 'If it's not safe, say so'? Yes, it's that serious."[1]

Despite his frustration, Rocha never sent his email up the chain of command although he did show it to a colleague on paper. He knew that it was better to avoid emotional statements. Instead, Rodney decided to work through channels and use the Debris Assessment Team to analyze the data they did have.

When the Mission Management Team meeting started on day 8 of Columbia's 16 day flight, there were twelve senior managers sitting at the long black conference table and more than twenty others around the periphery or on the speakerphone.

The meeting started promptly. The manager responsible for providing engineering support for missions in progress – not Rocha or the DAT team – verbally summarized damage scenarios and the team's conclusions. Even though the analysis was still incomplete, he bottom-lined their results: there was no risk of structural failure due to tile burn-through, although there would likely be schedule delays for subsequent missions because of a need for tile refit.

During the brief discussion that followed, one of NASA's most highly regarded tile experts repeated his conviction that there was no risk to flight. Surprisingly, no one even mentioned possible damage to the orbiter wing's leading edge, focusing instead on the thermal tiles on its underside. Based upon previous

analysis, RCC – the high-tech material from which the wing's edge was made – was considered very durable, although analyses showed that it might be damaged if hit head-on with enough force. But based on the initial films, no one thought this had happened, so the potential risks of RCC damage had not been pursued.

Impatient to move on, Linda Ham wrapped-up the assessment of the foam strike for those who were having trouble hearing all of the conversation over the speakerphone: "…he doesn't believe that there is any burn-through. So no safety of flight kind of issue, it's more of a turnaround issue similar to what we've had on other flights. That's it?" Turning to the senior NASA officials, astronauts, engineers, scientists and contractors seated around the room, Ham queried: "All right, any questions on that?" No one responded, including Rodney Rocha, who sat quietly in the second row of seats surrounding the conference table. The shuttle would land as scheduled.[2]

On February 1, 2003, Columbia tore apart as it descended at a rate of five miles per second over California and Texas. The gaping hole punched by the foam into the shuttle's left wing edge allowed superheated gasses to enter. First, temperature sensors went haywire, then wiring fused, tires exploded and, finally, the wing's structural supports melted. The Shuttle's automated flight controls compensated as best they could, but when the wing lost its structural integrity, the spacecraft went out of control and disintegrated into a meteor shower in the morning sky.

Rodney Rocha sat in NASA's central control room that day, monitoring the descent. When the flight controllers lost touch with the spacecraft, he ran from the room to call his wife. "Pray for us," he said, "we have lost communications with the crew."

What is an Organizational Bystander?

Rodney Rocha first acted on his concerns, but eventually became a passive observer to a tragic set of decisions. He failed to escalate the danger he saw to top management and did not speak up during several critical meetings when he had an opportunity to do so. Arguably, Rocha tried to prevent the disaster that befell Columbia, but he lacked the wherewithal to make a decisive difference.

Organizational bystanders are individuals who fail to take necessary action when important threats or opportunities arise. They often have crucial information or a valuable point of view that would improve an organization's decision-making capability, but for a variety of psychological and organizational reasons they do not intervene.

Circumstances ripe for bystander behavior are inherently uncertain, and often involve a potential catastrophe, such as a safety or product liability issue (BP's Texas City refinery or Guidant Corporation's defibrillators), an ethical transgression (Barings or Enron), or a national security issue (the events described in the Pentagon Papers or 9/11). Bystander behavior can also impact marketplace, competitive, or technological *opportunities* that require the investment of substantial resources and timely, decisive action. Like Rocha's boss, it is all too common during times of change for key people to equivocate during critical debates, prolong the status quo, and steer clear of confronting bosses they believe to be wrong. Classic business examples include both IBM's and DEC's delayed reaction to the shift to smaller computers, and Ford's longstanding inability to adapt to the shifting tastes of many American car-buyers toward more energy-efficient and high quality cars.[3]

Like Rodney Rocha, individuals in these situations engage in an unspoken analysis of the consequences of actions that are at odds with their organization's mainstream point of view and their leaders' preferences. Using subjective

"bystander calculus," they consider the benefits of being right, the downside of being wrong, and the wisdom of simply doing nothing at all.

Raising a false alarm or advocating a misguided opportunity engenders obvious costs. In particular, if someone "cries wolf" too often he will be shunted aside, marginalized. In total, four distinct outcomes are possible; they are summarized in Table 1, "Reactions to a Potential Threat."

Table 1. Reactions to a Potential Threat

	Real Threat Confirmed	**No Real Threat**
Individual remains passive	· Decreased likelihood of productive organizational outcomes · *Individual is a bystander*	· No cost · *Individual is a "savvy professional" who doesn't overreact*
Individual takes action	· Increases likelihood of productive organizational outcome · *Individual is a hero or viewed as a whistle-blower*	· Cost to individual's reputation, career · Costs to the organization to follow-up identified concerns · *Individual is an alarmist*

Stories We Tell Ourselves

At some point, each of us finds ourselves in situations where we would benefit from the support and help of others. Part of the "social contract" is that we're expected to help others when they are in need, and we expect them to do the same when the tables are turned. Such reciprocity is a cornerstone of elite combat units and many family relationships, but it is less common in more anonymous settings. While organizations are dependent on the goodwill of their members – particularly during times of crisis or change – they may not always get the support they require.

Inaction often contrasts with our self-image and the expectation that we will help others in need, so we look for a way to close the gap. Rationalizations are the

stories we tell ourselves to protect our egos from self-criticism, since we do not like to think of ourselves as overly selfish or easily intimidated by casual critiques.

A number of common bystander rationalizations are described in Table 2.[4]

Table 2. Common Bystander Rationalizations

- "It's none of my business" or "It's not my area of authority."
- "I don't want to get into trouble (even if others get hurt)."
- "I don't want to take sides (even though I appear to be)."
- "I don't have all the information/proof (so I can't take any action)."
- "They must know more than I do."
- "The situation is more complex than it seems (even if it doesn't seem that way to you)."
- "I'm only following orders (so it's not my fault)."
- "My efforts won't make any difference" or "I tried, but no one listened."
- "I don't want to rock the boat."
- "Nothing could have been done."
- "I don't want to get burned (again)."

Rationalizations have a mantra-like quality, and have the ability to shut down external debate as well as quiet internal arguments we might otherwise have with ourselves that would force action.

Why Do Organizational Members Fail to Act?

To provide a solid foundation for solutions, we now delve more deeply into the underlying psychological and organizational conditions that set the stage for bystander behavior.

Psychological Underpinnings

The research on the bystander phenomenon among strangers suggests that the characteristics of the situation – especially the presence of others and their behavior

– strongly affect whether people will take action.[5] These factors are summarized in Table 3, along with relevant illustrations from the Columbia case.

Table 3. Psychological Contributors to Bystander Behavior

Factor	Description	Columbia Example
Ambiguous precipitating event	When it is not clear whether one is observing a significant event, the likelihood of observer passivity increases.	Images of foam strike were suggestive but inconclusive. The crew reported no problems in flight.
Large number of people observing the event	When many people observe an event, there is a diffusion of individual responsibility, and a widespread belief that "somebody" will take action.	Hundreds of people viewed the film of the debris field created by the foam strike.
Failure of others to act	When other observers are passive, it is more likely that the event will be interpreted as benign, and therefore not requiring intervention.	Only Rocha and his team seemed concerned about the foam strike. Others who were concerned were located in different groups, and were not in touch with Rocha.
Uncertainty regarding one's ability to help	In situations that appear to require special skills, unique abilities, or formal authority, the likelihood of observer passivity is increased.	Rocha finally believed he lacked the data and formal power needed to influence NASA's hierarchy.
Presence of formal authorities or "experts"	Observers are not likely to act if "better qualified" authorities or experts are present or nearby.	A host of senior NASA officials reviewed the results of lower level work and believed there was no risk to flight.

Keep in mind that one's behavior in a problematic situation usually seems risky, even when there is no tangible danger. Many people fear embarrassment if their warnings do not prove accurate, or they are over-ruled, ridiculed, or simply ignored by those to whom they may report their concerns – even if they have no prior relationship with them. Moreover, in an organizational setting, people are particularly worried about damaging their credibility if they raise a false alarm. Such fears are widespread and persistent, even if there is little concrete evidence for them.

In highly cohesive groups, members may unconsciously strive for unanimity – a phenomenon known as "groupthink" – intuitively shunning alternative points of view and radical courses of action.[6] In such settings, dissent evaporates before it is even expressed.

Strong conformity pressures also mean that one can be "right" but still rejected by one's group and the larger organization. This is the common fate of whistle-blowers, who are often ostracized or persecuted. Those who protested BP's lax safety standards at Texas City as well as Vioxx's critics suffered relentless retaliation.

Together, these factors work to maintain the existing social order. Not "rocking the boat" preserves existing individual roles, relationships between people, the status of higher-ups, and relationships within and between groups. Keeping things as they are is basic to human nature.

Organizational Influences

Beyond individual and group-level influences, organizational factors amplify the tendency toward bystander behavior. As such, these organizational contributors to bystander behavior represent a critical list of domains for corrective intervention.

"Command and control" leadership style. Organizations with strong hierarchies and rigid group boundaries will tend to be populated with leaders lacking the ability to value, surface and manage dissent. The Baker Panel concluded that BP's so-called "entrepreneurial" leadership culture strongly contributed to the Texas City explosion.[7]

Structural and role impediments. Dissenting opinions may be muzzled through the organization's structure, incentives, roles, and the power given to safety and watchdog functions. For example, Barings' weak financial controls in

their international bank and loose management oversight in Singapore were fundamentally out of line with the needs of derivatives trading.[8]

Dissenting voices are also muted because of financial constraints. Budget cuts, in particular, usually hit risk control harder than production. In the 1994 mistaken shootdown of U.S. helicopters by Air Force F-15s, both the recognition mistake made by the pilots and the failure of AWACS personnel to intervene were linked to budget cut-backs for training, liaison personnel, and equipment.[9]

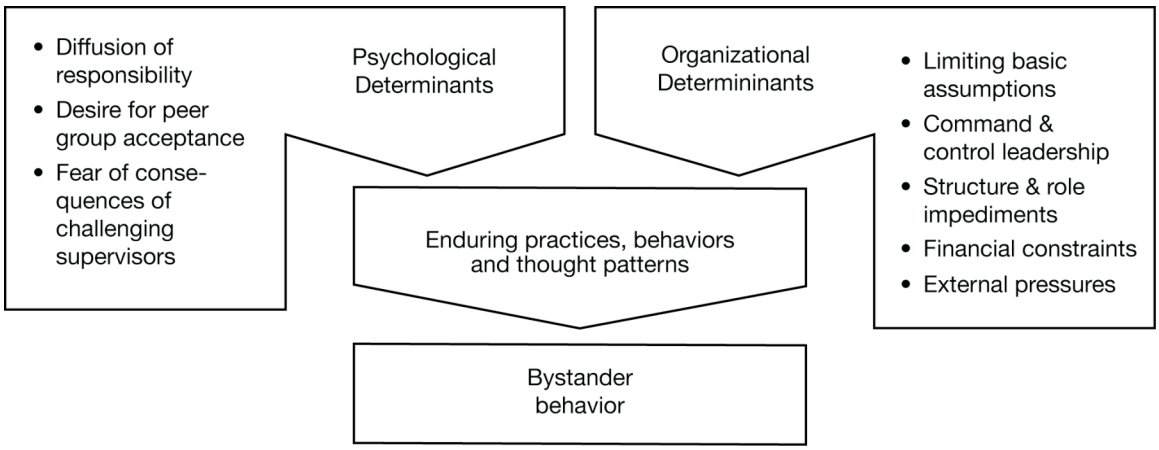
Failure to challenge core cultural assumptions. Basic cultural assumptions are "deep level" tenets that organization members hold to be true, often without realizing it. Decisions that start out as opinions, preferences, or rational strategic choices may evolve to become second nature and unquestioned.

Since cultural assumptions influence what receives attention, organization members who "think the unthinkable" find themselves having to establish the legitimacy of their arguments as well as proving their case. In IBM's and Xerox's failure to seize the markets for smaller devices, the fundamental misunderstanding of marketplace changes, unquestioned financial hurdle rates, and sales force attachment to historical selling practices and commission structures represented formidable but often unquestioned barriers to exploiting the new technologies.[10]

Pressure from the external environment. Broader economic and political forces magnify the above factors. Sean O'Keefe, the NASA administrator during the Columbia period, established completing Node 2 of the International Space Station as an immovable organizational objective. Beyond providing a clear focus, O'Keefe's goal inadvertently encouraged a "production mentality" in the Shuttle Program's senior leaders, and the discounting of safety concerns. NASA did not deliberately sacrifice safety; rather, what some called "launch fever" slowly eroded the organization's safety consciousness.[11]

Figure 1, "Roots of Bystander Behavior," diagrammatically summarizes these relationships.

Figure 1. Roots of Bystander Behavior



Points of Intervention

Neutralizing the varied yet potent drivers of bystander behavior requires broad-sweeping actions. However, before we leap to solutions, we must ask how much of what went wrong with Columbia was due to people not speaking out with sufficient force, how much was due to management's failure to follow-up, and how much of these failures were due to specific individuals versus NASA's structures, practices and incentives.

When the pivotal moment came and Linda Ham presumptively demanded of the Mission Management Team, "Is there any question on that?", we may be tempted to condemn her for shutting down debate instead of more vigorously inviting it.

We might also be temped to judge Rodney Rocha guilty of sitting on the sidelines when he should have been in center court. What if he had sent his angry e-mail to senior NASA leadership or built a broader coalition of people willing to support his request for additional imagery?

As with all such investigations, however, we must resist the temptation to blame individuals and understate the role of situational factors, a mistake known as the fundamental attribution error. While a few people's actions were, in fact, directly linked to the Columbia tragedy, most people who were part of NASA's culture would have behaved in a similar manner.

When we examine any culture with care, we inevitably find profound inconsistencies as well as strong correlations among its elements.[12] Unraveling the inconsistencies, in particular, is essential to addressing otherwise inexplicable behavior, such as the glaring disparity between the consistently espoused view that NASA is "open" and has a great concern for safety, and both the agency's unwillingness to ask for Department of Defense help and Rodney Rocha's reluctance to speak up when asked by the person in charge.

More aggressive actions would have required Rocha and Ham to resist potent psychological and organizational forces, and such heroics are a fragile and unrealistic last line of defense in the face of chronic uncertainty. For our purposes, Rocha and Ham – along with countless others at NASA and in other organizations – are better viewed as victims than as villains.

Fortunately, the Columbia story allows us to identify many factors that one might wish to change.

Mistaking short-term efficiencies for long-term effectiveness. Organizational advances and declines are irregular, not steady. We have embraced widespread emphasis on organizational innovation, but we pay much less attention to avoiding setbacks. The Vioxx disaster cost Merck's shareholders $30 billion in market capitalization, effectively a decade of growth. Even though the stock price has recovered somewhat, Merck still lags the S&P and competitors. Besides, can we really put a price tag on 100,000 injuries and tens of thousands of needless deaths?[13]

Practical remedies involve changing measures and incentives. Traditional measures that ignore externalities by focusing on short-term, historical financial indicators often encourage imprudent risk-taking. Taking on this difficult guidance system challenge is essential. The Baker Panel recommended that British Petroleum adopt a set of "leading indicators" of process safety to reinforce needed changes to its safety culture.[14] This is sage advice for many organizations.

No requirement to follow-up "weak signals." The burden fell on Rocha and other engineers to definitively prove the presence of risk, and these same burdens plagued Challenger's o-ring engineers and the safety advocates at Texas City. Instead, a basic tenet of high reliability process safety requires that serious risk be assumed with the first sign of danger, and that the costs of periodic "Chicken Little" wild good chases be written off as a cost of improvement.

Some companies have already learned to "scan the periphery" for new opportunities and competitive threats.[15] Applying the same mental and search disciplines to all kinds of opportunities and threats is essential, as is supporting the people and the ideas generated. Innovation – filled with false starts and never guaranteed – already plays by these rules.

Suppression rather than encouragement of dissent. While every organization accepts some dissent, in certain areas of potential risk it does not. One must eliminate these "undiscussables." Perhaps the most serious lapse occurs when policy-level management is the origin of the problem. Without adequate protections for whistle-blowers (and in such organizations, anyone who is not a bystander is a whistle-blower), widespread bystander behavior is inevitable.

Various whistle-blower protections in government and industry have been enacted, although advocates and research suggest that they are less effective than

necessary because of the focus on the substance of the accusation rather than the retaliation against the whistle-blower and its chilling effects on truth-telling.[16]

Failure to recognize the dangers of monolithic performance goals and budget cuts. The study of many accidents such as Chernobyl, Challenger, and Texas City reveal that imposing non-negotiable performance objectives combined with severe sanctions for failure encourages the violation of safety rules, reporting distortions, and dangerous short-cuts. Putting people in no-win situations where accomplishing objectives encourages recklessness and fraud inevitably increases the chances of a nasty surprise.

While some firms have adopted "planned change" approaches to goal-setting and cut-backs, aggressive changes such as traditional downsizing are often implemented in a top-down, non-negotiable manner.[17] Studies suggest that methods that consider systemic implications and build employee trust are far more effective.[18]

Lack of well-developed contingency plans for disastrous but low probability risks. As revealed by the Katrina disaster, it is in the very nature of large scale catastrophes to be overtaken by events. It is therefore essential to avoid doing all one's thinking in real time. When combined with a sensitivity to weak signals, extensive preparation combined with on-the-ground de-bugging can be remarkably effective in reducing adverse consequences when things go wrong.

Just weeks before the "7/7" bombings, London's emergency services had staged a full-dress "on the streets" rehearsal. If not for this practice, it seems likely that emergency response would not have been as rapid or effective, although many problems still remained.[19]

Lack of robust, independent watchdogs. Actions that make watchdogs more "client-centered" and "efficient" run serious risks of reducing their

effectiveness. As evidenced by cases such as Enron, Chernobyl, Columbia, and Vioxx, the critical question is which is more important: watchdog efficiency or avoiding low-probability disasters. Watchdogs are not consultants, they are a form of insurance whose benefits may not appear directly in the current short-term P&L.

Reinforcing the independence of financial auditors was a move in the right direction after the Enron scandal. An analogous recommendation regarding process safety was made by the Baker Panel in the wake of the Texas City explosion.

Lack of relentless review and self-criticism. Perhaps the most difficult challenge is learning from experience without defensiveness and denial. The U.S. Army and many private companies employ a method called the After Action Review that focuses on correct and incorrect actions at every rank. Proponents believe that constancy of the process (rather than conventional post-mortems that focus only on reviewing mistakes) combined with critiques at all levels (as opposed to leaving out top management) vastly improves organizational learning.[20]

Of course, these are very difficult lessons to put into practice. It is all too easy to rationalize that the benefits are not worth it, that one has tried it all before and it didn't work, that others simply will not listen. These explanations are comforting and familiar – and sometimes even true. Unfortunately, they also sometimes expose us all to devastating consequences.

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5 The classic work on bystander behavior was conducted by Bibb Latane and John Darley, *The Unresponsive Bystander: Why Doesn't He Help?* (New York: Appleton-Century-Crofts, 1970).
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7 The Report of the BP U.S. Refineries Independent Safety Review Panel, January 2007, downloaded 2/4/07 16:25.
8 See International Financial Risk Institute (IFRI), Lessons Arising from the Collapse of Barings, http://riskinstitute.ch/135330.htm, accessed 2/4/07 14:50; Extracts from the Report to the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings, http://riskinstitute.ch/134910.htm, accessed 2/4/07 14:52.
9 See Snook, Scott A., Friendly fire: the accidental shootdown of U.S. Black Hawks over Northern Iraq, Princeton, N.J.: Princeton University Press, 2000.
10 Louis V. Gerstner, Who Says Elephants Can't Dance: Inside IBM's Historic Turnaround, New York, Harper Business, 2002; David T. Kearns, David A. Nadler, Prophets in the Dark: How Xerox Reinvented Itself and Beat Back the Japanese, Harper Collins, 1992; Douglas K. Smith and Robert C. Alexander, Fumbling the future : how Xerox invented, then ignored, the first personal computer, New York: W. Morrow, 1988.
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12 See Schein, E.H., Culture: The Missing Concept in Organization Studies, *ASQ*, 41 (1996), 229-240 and *Organizational Culture and Leadership* (3rd Ed.), Jossey-Bass, 2004.
13 The extent of the injuries and deaths caused by Vioxx is disputed by Merck & Co. and its critics. See U.S. Senate testimony of Dr. David Graham, November 18, 2006, R. Horton, Vioxx, the implosion of Merck, and aftershocks at the FDA, *The Lancet*, 364:1995-1996, Dec. 2004 and Peter Jüni *et al*, Risk of cardiovascular events and rofecoxib: cumulative meta-analysis, *The Lancet*, Dec. 2004 364:2021-2029.
14 Baker Panel report, *op cit*.
15 Day and Schoemaker, "Scanning the Periphery," Harvard Business Review, Nov. 2005.
16 "Homeland and National Security Whistleblower Protections: The Unfinished Agenda," Project On Government Oversight, April 28, 2005.
17 See Cameron, K.S. and Mishra, A.K. Best practices in white-collar downsizing: Managing contradictions, Academy of Management Executive, (3), 57-73, 1981 and Cameron et al, Organizational Downsizing in Huber & Glick (Eds.), *Organizational change and redesign: Ideas and insights for improving performance*. New York: Oxford, 1993.
18 See Mishra, A.K. and Misra, E.M., The Role of Mutual Trust in Effective Downsizing Strategies, *Human Resource Management*, Vol 33, No. 2, 261-279, 1994.
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