3 Leadership Lessons From The Challenger Space Shuttle Disaster

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(Original Caption) Five astronauts and two payload specialists make up the STS 51-L crew, scheduled ... [+] BETTMANN ARCHIVE

Thirty-eight years ago Sunday, millions of Americans tuned in to watch the launch of the Space Shuttle Challenger. On an unusually cold January morning, seven heroic explorers climbed into a small crew chamber and buckled their seatbelts for the journey to space. With over 1 million pounds of fuel strapped to their backs, they bravely told mission control to light the fuse.

As Challenger lifted off from Cape Canaveral, Florida, and barreled toward the heavens, trouble quickly ensued. The chilly temperatures caused an oring on one of Challenger's rocket boosters to compress, leaking rocket fuel. Seventy-three seconds after liftoff, the shuttle exploded, causing the crew compartment to separate and plummet thousands of miles back to Earth, killing all passengers.

A government investigation known as the Rogers Commission was established to investigate the fateful events that resulted in disaster, including NASA's culture and decision-making. Here are some of the most important—and tragic—leadership lessons from one of space exploration's darkest days—and how we can avoid similar pitfalls in our own professional and personal lives.

Establish Priorities

There's an old NASA saying: Safety first, then mission success. Unfortunately, those priorities weren't fully adhered to in the days preceding Challenger's fatal flight.

When contractor Morton Thiokol told NASA officials that their engineers were concerned about the cold launch temperatures, the administration was <u>reportedly</u> "appalled" by the recommendation. One NASA employee allegedly <u>dismissed</u> the risk as "true of every other flight we have had."

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Why did NASA behave this way? If safety was their top priority, why did this aura of invincibility exist? We may never know for certain. Some people <u>believe</u> NASA was under pressure to show Congress and the public they could keep pace with their busy 1986 launch calendar. Others say NASA felt pressure to deliver a feel-good win ahead of President Reagan's State of the Union address that night.

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Whatever the reason, one thing remains certain: NASA lost sight of its number one priority, safety.

Strong leaders approach decision-making systematically. That begins with identifying core priorities to guide their decision-making. Without clear priorities, it's easy to get bogged down in distractions and overemphasize less important factors.

Here's what this looks like in the real world. I once heard a college president give a thoughtful talk about a complicated, contentious decision that would impact the campus for years to come. After considering many different data points and factors, the president returned to one central priority: What's in the students' best interests? That made the decision significantly easier.

Before embarking on the decision-making process establish your priorities or North Star. While journeying to reach the best decision, it's fine to admire, appreciate, and contemplate all of the other stars you encounter. But only one will reveal the true north. Never lose sight of your key priorities.

Trust Your Team

When Morton Thiokol's engineers expressed concerns to their company's leadership about the cold temperatures, they were initially supported by management. It was only after NASA pushed back on Morton Thiokol's recommendation that their leadership gave in. According to the Rogers <u>Report</u>, "Thiokol Management reversed its position and recommended the launch... at the urging of Marshall [Space Flight Center] contrary to the views of its engineers to accommodate a major customer."

In other words, not only did Morton Thiokol allow safety to take a back seat, but they also failed to trust their team.

Great leaders assemble great teams. And great leaders trust their teams to execute their priorities. There's a reason the leaders at Morton Thiokol didn't construct the o-ring themselves. They wisely hired experienced engineers to complete the work. They trusted them to do the job and they trusted their initial concerns about the cold temperatures. But ultimately, Morton Thiokol's leaders overrode their engineers' warnings with little supporting evidence.

"There was more than enough [NASA officials and Thiokol managers] there to say, 'Hey, let's give it another day or two,'" Morton Thiokol engineer Bob Ebeling <u>recalled</u> to NPR on the 30th anniversary of the tragedy. "But no one did."

Avoid Groupthink

In the 1970s, a Yale social psychologist named Irving Janis coined the term "groupthink" or "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' striving for unanimity override their motivation to realistically appraise alternative courses of action." Janis outlined eight symptoms of groupthink from overconfidence and tunnel vision to social pressure and interpersonal

communication failures. In the days and hours leading up to Challenger's launch, NASA exhibited many of these symptoms.

So how can you avoid groupthink? Start by assembling a strong team. Strong teams have diverse opinions, backgrounds, experiences, and personality types. If your team all looks the same, has similar experiences and tendencies, you're putting yourself at greater risk of groupthink. Leaders can also combat groupthink by modeling good behavior, encouraging constructive debate, celebrating dissent, and welcoming differing perspectives.

Another way to prevent groupthink is to reduce what I like to call the "seniority bias." Junior staff can sometimes be deferential and reluctant to challenge senior employees. Respect is important, but good advice, counsel, and judgment can come from all organizational levels—not just the top. One practical way to limit this bias is to encourage senior leaders to keep their opinions to themselves until other, more junior members of the team have weighed in. Another way to encourage new viewpoints is to poll the room beginning with the most junior employee to the most senior.

The goal should be to maximize the entire group's skill set. Astronaut Scott Kelly once <u>said</u>: "The smartest person in the room, I've learned, is usually the person who knows how to tap into the intelligence of every person in the room."

Eliminate groupthink and find a way to leverage every employee's expertise to improve decision-making.

Learn From Your Mistakes

The Rogers Report was a black eye for NASA, but it also brought forth a new commitment to safety and better decision-making.

On the 35th anniversary of the Challenger accident, Harmony Myers, the director of the NASA Safety Center, gave a <u>presentation</u> on the lessons learned from that harrowing day. "We cannot become complacent. We cannot be silent when we see something we feel is unsafe. We must allow people to come forward with their concerns without fear of repercussion," the presentation stated.

When we think of Challenger, first and foremost, we should remember the seven courageous explorers who made the ultimate sacrifice to expand our horizons. But we should also never forget the human shortcomings that resulted in heartbreaking tragedy.

While few of us will ever oversee a shuttle launch, every day, all of us are tasked with making decisions—both big and small—that impact our businesses, our employees, our families, and our friends.

As leaders, we must always strive to learn from our mistakes and challenge ourselves to be better.

Correction, January 30, 2024: A previous version of this article misstated the location of Challenger's o-ring which leaked rocket fuel. The o-ring was located on the rocket booster, not the external tank. Follow me on LinkedIn.



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For the past 25 years, I've worked at the intersection of global health, partnerships, corporate leadership and social responsibility. As President and Chief Operating Officer of... **Read More**

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