

# 4

## LEADERSHIP UNDER FIRE

Sooner or later, every leader faces a moment of truth—a crisis or challenge that tests his or her leadership ability to the utmost. For me, that moment of truth came in 1991 when I had to guide Intel Israel through the crisis of the First Gulf War and the Scud missile attacks of Saddam Hussein's Iraq on Israel. In the days before the start of the war, I had to make a critical decision with potentially life-threatening consequences for our employees: whether to keep our operations open, despite the threat of the missile attacks, or to close down until the crisis had passed.

Of course, many businesses remain open during wartime. But in the days before the First Gulf War, Israel confronted what appeared at the time to be an unprecedented threat. The Israeli military assumed that Iraqi missiles would be carrying chemical weapons. The government distributed gas masks and ordered every household to prepare a special sealed room in case of chemical attack. Most serious from a business perspective, in anticipation of the missile attacks the Israeli civil defense authority instructed all nonessential businesses to close and their employees to remain at home. The radical uncertainty of the situation—not knowing how many missiles would fall, where they would fall, what kind of destruction they would inflict—threatened to bring our business to a halt, even before a single missile had been launched.

It would have been easy to follow the civil defense instruction and close down. Everyone was doing it. Intel's senior executives in California would have understood. Many of our employees would probably have appreciated the opportunity to focus on preparing their families for the attacks. Yet I chose to ignore the government directive, keep our operations open, and ask our employees to continue to come to work.

Some people thought I was being irresponsible. What right did I have to risk people's lives in time of war? Others thought I was crazy. What if any of our employees were killed? What if the government took legal action? What if disgruntled employees went to the press?

Despite these risks, I stuck to my decision because I was convinced that shutting down our operations was a direct threat to the long-term survival of Intel Israel. And Intel's employees responded. In the first days of the Scud attacks, when businesses throughout the nation were closed, roughly 80 percent of Intel's employees showed up for work, day in and day out, day and night shifts included. Thanks to their heroic performance, Intel Israel was one of the few businesses in Israel (and our Jerusalem semiconductor fab the only manufacturing operation) to remain open throughout the entire six weeks of the war. Not only did we keep our commitments to global Intel, but we also established the reputation that, over time, would allow us to grow Intel Israel into an important center of excellence for the corporation.

The story of our actions during the First Gulf War is a dramatic example of the challenges to leadership in an environment of extreme turbulence. Believe me, you don't really know what turbulence means until you have had to run a business during a war! The experience taught me a lot of lessons: about the limits of even the best-laid plans, the impossibility of anticipating risks, the imperative of radical improvisation, the necessity of trusting your instincts.

But even more important, the story also effectively illustrates the three key principles of leadership the hard way described in previous chapters. Because I was so focused on our survival and continuously wary about potential threats to it, I was able to recognize that whatever else the Scud attacks represented, they were also a potential threat to the long-term viability of our business. Because I was committed to leading against the current, I was able to make the unconventional decision to stay open—despite the many risks involved and despite the fact that most businesses

in Israel were taking the prudent route and shutting down. And although it may sound unfeeling, because I was always on the lookout for random opportunities, I understood intuitively that the First Gulf War was not only a threat but also an important opportunity. If we could meet our commitments despite the Scud attacks, we could establish Intel Israel's reputation in the company for years to come.

### **A Different Kind of War**

By the early 1990s, Intel Israel had grown from a small outpost of chip designers to become a major part of Intel's burgeoning global production system. In 1986, not long after the introduction of the 386 microprocessor, Intel's senior executives had made a critical strategic decision: instead of licensing the 386 design to another semiconductor company in order to provide customers with a second-source supplier (a common practice in the semiconductor industry at the time), Intel would be the sole supplier of the product. This gave the company the potential to maintain a highly profitable monopoly on supply of the 386—but it also put intense pressure on Intel's fabs to keep up with soaring demand.

By the early 1990s, our Jerusalem fab, Intel's first outside the United States, was a key player in executing this single-source strategy. We were responsible for about three-quarters of the global output of the 386 and were gearing up to compete inside Intel for production of the new, more advanced 486 chip. We were operating seven days a week and running two twelve-hour shifts in order to keep up with customer demand. Meanwhile, our design center in Haifa was hard at work on developing new products that would be critical to Intel's future, including key components of what would become the next-generation Pentium microprocessor.

When Iraq invaded Kuwait in August 1990, I knew that war was likely. So I appointed a task force of senior managers to develop a contingency plan in case Israel was drawn into the conflict. At the time, we were assuming it would be a conventional

war, and we were confident that we could handle it. We had had experience with what war would mean for our business from the call-up of reservists during Israel's incursion into Lebanon in 1982. We had contingencies for replacing key personnel who were called up to the military, for operating the plant on a skeleton crew, and for scaling back the private transportation service we used to bring our employees to work at the Jerusalem fab (a typical arrangement at most large Israeli companies).

But almost from the moment we finalized our contingency plan, signs began to accumulate that this war would be very different. The politics of the U.S.-created anti-Iraq coalition made it imperative that Israel stay out of the war. Yet for that very reason it was in Saddam Hussein's interest to provoke Israel to intervene. By September, U.S. satellites had detected the transport of ballistic missiles to western Iraq—a mere seven minutes' flight time from Tel Aviv. Israeli defense officials were saying that chemical attacks on the country's major population centers were likely, a belief that was confirmed when the government leased two batteries of Patriot anti-aircraft missiles (adapted for use against ballistic missiles) from the United States. Instead of being behind the lines of the war zone (something we were used to), we ran the risk of *being* the war zone.

In October, tensions mounted when the government issued every Israeli a personal protection kit, complete with gas mask and atropine injectors to combat chemical poisoning. Families were also instructed to create sealed rooms in their houses and apartments with plastic sheeting and masking tape. There was something about receiving those kits, being instructed to carry your gas mask with you wherever you went, having to prepare a sealed room, that brought the uncertainty and potential danger of the situation home in a palpable way.

By the turn of the year, as the U.S.-set January 15 deadline for Iraqi withdrawal from Kuwait drew near, my disquiet had grown. Many airlines suspended flights to Israel. The governments of the

United States and Great Britain advised their nationals to consider leaving the country. Then on the fifteenth itself the Israeli government announced that all schools would be closed for the rest of the week. Slowly it was dawning on me that our contingency plan might be irrelevant to what was likely to be anything but an ordinary war.

Yet despite all these warning signs, it still came as a complete surprise when I woke up on Wednesday, January 16, to the news on the radio that in anticipation of the start of hostilities and likely missile attacks, the Israeli Civil Defense authority was instructing businesses to close and everyone but essential emergency personnel to remain home. It was only then that I fully understood: we were facing a completely different kind of problem than the one we had anticipated. This wasn't just a matter of a call-up of reserves. The government was telling us that *nobody* should come to work. I immediately called a meeting of the task force at the Jerusalem fab.

### **A Question of Survival**

In the twenty minutes it took me to drive from my home in the historic village of Ein Karem on the southwestern outskirts of Jerusalem to the plant in the Har Hotzvim Industrial District, I kept revisiting in my mind the logic of what I was about to do. It seemed almost irresponsible to be worrying about business in the midst of potential physical danger. Yet if I didn't think about the possible consequences, who would?

I was convinced that a complete shutdown of our operations threatened the long-term survival of Intel Israel. Managing a major unit in a global corporation is a continuous fight for resources. When we first proposed setting up the Jerusalem fab in the early 1980s, we were put in competition with Ireland to see which country could develop the better proposal. We had won that round, and by the early '90s we were already starting the process of

negotiating and lobbying inside Intel to convince senior management to expand the Jerusalem fab.

I knew Intel's leaders well and had good relations with them. I had worked with Andy Grove at Fairchild and had been among the first generation of employees after Gordon Moore and Bob Noyce founded Intel in 1968. I was confident that if we had to interrupt production due to the war, executives in Santa Clara would understand. I wasn't worried that there would be a negative impact in the short term.

But as Intel grew larger, decision making was becoming more decentralized. The key stumbling block to further investment in Israel was the lingering impression of geopolitical instability in the region. Indeed, we had already had a number of struggles inside the company over the transfer of strategic technologies and critical products to the Israeli operation. Therefore I was convinced that if we had to interrupt production, even for a brief period of time, we would pay a serious price over the long term.

I had had a glimpse of the risks during a phone conversation with Intel's then executive vice president, Craig Barrett, the previous September. Barrett was on a stopover in Amsterdam on his way to Israel for a routine annual operations review. But he called to tell me that he was considering canceling the trip. "Grove [then Intel's CEO] is worried about my coming to Israel," he told me. "He thinks it's too dangerous." Although I convinced him that it was safe, and he continued his trip as planned, the call provoked a twinge in my gut. If Intel's senior executives were seeing Israel as unsafe, what would that mean for our business?

My concern wasn't only for the survival of Intel Israel. It was also for the survival of Israel's emerging high-tech sector. Intel Israel was a key anchor of Israel's still small high-tech economy. If we couldn't operate in an emergency situation, the trust of multinationals and venture capitalists in the stability of the Israeli business environment might crumble.

So as I drove to the task-force meeting, I made a quick decision. We weren't going to take the easy way out. We would ignore the

civil defense instruction. We were going to ask our people to come to work.

### Thinking Differently

“This is a completely different situation,” I said at the start of the task-force meeting on Wednesday afternoon, “so let’s think differently.” The first thing we did was to throw out our contingency plan. The next was to ask how we could keep operations going despite the civil defense directive.

In Israel, there is an official category of businesses known as *MELACH* (an acronym for *Meshek Lishe’at Cherum’* or “economic infrastructure in a state of emergency”). These companies—for example, utilities, defense contractors, the national telecommunications network, and the like—are designated as essential for the ongoing functioning of the economy and are allowed to operate even during officially declared national emergencies. But we didn’t have that legal status. The fact is, we had thought about applying for it in the past but just never gotten around to it. It had been pushed aside by more immediate and, at the time, more pressing concerns. And even if we applied for this essential-industry status right away, under the current circumstances who knew how long it would take to receive it? We decided we were going to act like we already had it until and unless somebody told us otherwise.

For three hours, we discussed the full range of risks that remaining opened entailed. The main risk, obviously, was the potential injury of any of our employees on their way to and from work. People had sealed rooms at home, and we had created them in all our main facilities, including the Jerusalem fab. But what about during their daily commute? This was complicated by the fact that we had a contract with a private transportation company to bring our employees to work at the Jerusalem fab, so if we were going to remain open, not only our own employees but also the transport company’s employees would be at risk. I weighed the physical risk to our employees and contractors heavily, but

in the end concluded that if it was safe enough for employees at the utility company and the phone company to travel to work, there was absolutely no reason why we shouldn't risk it as well.

At the Wednesday task-force meeting there were few objections to the idea of remaining open. To be honest, the whole prospect of missile attacks seemed so theoretical as to be literally impossible to imagine, almost unreal. In the end we decided that we would issue a "call" for Intel employees to continue to come to work—a recommendation, not an order. No one would be punished if they decided to stay home. I made it extremely clear to my direct reports that there would be no coercion. No manager was to pressure employees to come to work who did not want to do so.

This prohibition was especially important to me—and not just for ethical reasons. The problem with coercion is that it often leads to backlash, creating the very resistance that it is meant to overcome. When you order people to do something, their first reaction is often "Wait a minute, if they have to force me, there must be a problem with the whole thing." I knew that I couldn't control every single action of all my managers. But I could make it clear that there would be no direct pressure. At the same time, I was confident that we had embedded a strong instinct for survival in our organizational culture and that people would respond. "Let the Intel Israel culture do its work," I advised. After all, peer pressure is the most powerful motivator.

We would also make it clear that keeping Intel Israel open for business was critical to the future success not only of the organization but also of Israel's high-tech economy. I believed strongly that the only way I could expect Israelis to take a risk was if doing so was critical to the country, not just to the company.

We communicated our decision to the workforce on Wednesday. On the following day, with still no sign of missile attacks, turnout was relatively normal. But that Thursday, January 17, was also the start of the allied bombardment of Iraq. What only one day earlier had seemed like a theoretical possibility would very quickly become reality.

## The First Attack

At 2:00 in the morning on Friday, January 18, I was awakened by the sound of an air-raid siren. I joined my wife and teenage children in the sealed room of our Jerusalem home and listened to the radio for the news. Eight missiles had landed in Tel Aviv and Haifa; as far as the authorities could tell, there were no chemical warheads. I got on the phone to the members of the task force and told them to meet me at the plant. I grabbed my gas mask and headed out into the night for the Jerusalem fab.

When I arrived around 3:30, work in the cleanroom had already resumed. At the sound of the alarm, the employees had evacuated to the sealed room, except for a few who agreed to stay behind to operate some etching machines that needed continuous human presence to keep the flow of materials going. After the report that the missiles had landed, employees were given the opportunity to call home before returning to the cleanroom. Things were tense, but relatively normal.

When the task force convened, we reaffirmed the decision to call people to work. Managers had to be contacted and instructed what to say to their staff. Employees had to be called and told that the plant would indeed be open. The transportation company needed to devise alternate routes to get around police roadblocks. In the chaos of a crisis situation, clear communications are especially important. So we spent the bulk of our time planning exactly what to say to our workforce and coordinating our communications with our counterparts in Intel in the United States, who would be wondering what impact the missile attack was having on our operations.

Some 75 percent of the employees on the 7:00 AM shift made it to the plant. Although I hadn't told anyone, I had been expecting maybe 50 percent. The relatively high turnout was a major endorsement of our decision.

That night, after being at the plant for nearly sixteen hours straight, I called Intel senior executives in Santa Clara. I stayed at

the plant because I didn't want to call them from my home. I had no idea what their reaction was going to be, and I wanted them to see that Intel Israel was operating as normal—or as close to normal—as possible under the circumstances. I explained that we had decided to remain open, but we weren't forcing any employees to come to work who didn't feel comfortable doing so, and that so far turnout was quite good. They asked a lot of questions; we discussed the potential risks. But in the end they were 7,500 miles away. Under the circumstances, they simply had to trust us.

### **"Scud Business as Usual"**

The second Scud attack came the following night, early on Saturday. No one was killed, but some people were injured. And Intel's employees kept coming to work. When the design center in Haifa opened on Sunday (the first day of the normal Israeli work-week), turnout was up to 80 percent.

After the first few days, we entered a period that I took to calling "Scud business as usual." Attacks continued to happen. On Tuesday night, for example, after two days with no Scuds, there was an especially destructive attack outside of Tel Aviv that led to the deaths of four people, wounded ninety-six, and left hundreds homeless. But we carried on as if everything were normal, and no one tried to stop us. By the middle of the week, the civil defense authority was urging all Israelis to go back to work, so the fact that we were open for business was no longer so unusual. Still, because the schools remained closed, absenteeism at most businesses remained extremely high. The stress was enormous, and I and my team did all we could to boost employee morale.

As our actions on the night of the first attack suggest, constant communication was essential. The task force met daily to assess the rapidly changing situation and plan our communications for the day. We used every means we could—phone, email, on-site meetings, face-to-face conversations—to keep our employees informed of the latest developments. I was traveling continuously

among the three Intel sites in Israel—the fab in Jerusalem, the design center in Haifa, and our small sales-and-marketing operation in Tel Aviv—to meet with managers and employees in cafeterias and on production lines. I felt it was essential that I, as the organization’s leader, be present to employees “in the flesh.” Over and over again, I tried to make three points: first, to reinforce employees’ sense of pride at what they were accomplishing; second, to remind them that we weren’t out of the woods yet—as far as we knew, the worst might still be yet to come; and third, to stress that this largely unforeseen crisis was also an enormous opportunity and we had to take advantage of it. It was time to show Intel and Israel what we could do.

We also took great care in our communications to global Intel to keep senior executives informed of the developments on the ground in Israel. After the first few days of attacks, I sent a comprehensive email to Intel senior management describing how we were meeting the “war challenge” and delivering on our commitments to the corporation. Andy Grove sent us an extremely supportive letter in response, which I had posted on bulletin boards throughout the organization. His strong public endorsement had an enormous positive impact on employee morale.

Today, some fifteen years later, the decision to continue with business as usual may not seem so radical. At the time, however, it was pretty controversial. In the white heat of the first few days of crisis, everybody operated on instinct. People were so busy that they barely had time to think. But once things settled down into “Scud business as usual,” some doubts and questioning began to emerge.

Some saw the decision to remain open as an act of courageous leadership, but others viewed it as an unnecessary risk, literally playing with the lives of employees. Some wondered how we could justify risking people’s lives for a company that wasn’t even Israeli. Relatively few people actually refused to come to work, but some were bitter for quite a while. And one individual, who did refuse to come to work—and not only during the first week, but

also in subsequent weeks after the civil defense directive had been withdrawn—eventually had to be let go.

But these complaints never really cohered into full-fledged opposition to the decision. For one thing, whatever doubts some people had, there was the basic fact that the vast majority of employees had indeed shown up. A successful risk is seldom challenged in retrospect.

In the years since the war, I have often wondered why so many answered the call. Partly, I suspect, it was because coming to work was a welcome alternative to the psychological paralysis brought about by first the prospect and then the reality of the missile strikes. One of the advantages of doing the unexpected is that it can have a galvanizing effect. It shakes people out of their passivity and helps mobilize them for action. At Intel Israel, our bias to go against the current made it natural to decide to remain open even though most businesses in Israel suspended operations. It was the perfect antidote to terror.

Another part of it, I think, is that the call didn't come in a vacuum. We had been talking for years about the imperative of survival and the need to do whatever it takes to be the best. So though not everyone may have agreed with the decision to keep operations open, most understood why we were doing it and trusted that we had the best interests of the people and the organization at heart.

Another important lesson I learned during this period was that when it comes to leading in a crisis, good instincts are a lot more important than good planning. The problem with chaotic situations like war is not so much that you can't anticipate everything—it's that you really can't anticipate *anything*. All you can do is trust your instincts, embrace the chaos, and then deal with the consequences as they emerge.

One issue, for instance, that I completely underestimated was the impact of my decision on our employees' families. To her credit, my head of human resources had raised the issue early on. The only woman on the crisis task force, and a mother, she was sensitive

to the implications of our decision for our female workforce (about half of the employees at the Jerusalem fab were women). I remember her asking, at the task-force meeting when we decided to remain open, “Can we really ask mothers to be separated from their children during the threat of missile attacks?”

At the time I didn’t exactly dismiss her question. But in the total scheme of things, dealing with the family fallout was not my highest priority. I felt that such separations were inevitable in a situation in which the “front” was potentially everywhere.

Her concerns, however, turned out to be prescient. A few days into the attacks, a manager at the Jerusalem fab reported that the lobby was crawling with young children. Some of our employees, especially women, were bringing their kids to work. After all, the schools were still closed and, just as my HR head had predicted, people didn’t want to be separated from their children in case of an attack.

But here is the great thing about embracing the chaos. Faced with this unanticipated development, the organization responded, almost automatically, by temporarily entering the child-care business. Local managers in Jerusalem set up a day-care center in a support building of the fab. It had never occurred to anybody on the task force (including my HR head) that establishing a temporary day-care center for employees’ children might be a good thing to do. But once faced with the fact that concerned parents were bringing their children to work, it was an obvious step to take. Throughout the Scud attacks, on any given day as many as fifty children were in the center.

Throughout the war, there were a lot of examples at Intel Israel of this kind of improvisational everyday heroism. For me, one story best captures the way the organization rose to the occasion. A team from the Haifa design center was on a conference call with its U.S. counterparts when the alarm signaling a Scud attack began to sound. To the amazement of their U.S. colleagues, they calmly asked for a brief interruption in the meeting so they could move to the site’s sealed room, located in the computer

center, then resumed the call a few minutes later as if nothing had happened.

### **Delivering—No Matter What**

The last Scud attack took place on February 25, not quite six weeks after the bombardment of Iraq had begun and one day after the start of the ground war. On Thursday, February 28, the Israeli state of emergency officially ended. All told, some thirty-nine Scuds in eighteen separate attacks landed on Israeli territory during the five and a half weeks, none carrying chemical warheads. Although only one person was killed directly by an attack, seventy-four people died of indirect causes—for example, from heart attacks brought on by the missile strikes or by suffocation due to improper use of protective gear. More than two hundred were wounded by blasts, flying glass, and shrapnel. Property damage to some 4,000 buildings was in the millions of dollars. And some 1,600 families had to be evacuated.<sup>1</sup>

The war had indirect economic costs as well. According to the Israeli Ministry of Finance, industrial output during the war was at about 75 percent of its normal level. The costs to the Israeli economy in lost output totaled approximately \$3 billion.

At Intel Israel, we were extremely fortunate. None of the Scuds landed in the Jerusalem area where most of our people worked. No Intel employee or family member was injured or rendered homeless by the attacks. And in terms of the economic impact, both the Jerusalem fab and the Haifa design center were able to meet all of their manufacturing and product development commitments.

The thing about chaos is that there is no good information. We had spent a lot of time and energy during the crisis trying to anticipate the legal ramifications of disobeying the government's instruction to close down. Imagine my surprise when I learned, weeks after the attacks began, that the civil defense directive to stay home from work had the status of only a recommendation, not a legally binding order. At the time, most people, ourselves

included, had assumed exactly the opposite. So our decision to keep operations open was, from a legal point of view, not so risky after all.

To this day, I'm convinced that meeting our commitments to Intel during the First Gulf War was critical to the future evolution of Intel Israel—and, indeed, of the entire Israeli high-tech economy. A few years later, in 1995, Intel invested in its second semiconductor plant in Israel, at Qiryat Gat. In 1999, the Haifa design center won the assignment to develop Intel's Centrino mobile computing technology, which was launched in 2003. And in subsequent years, whenever we got any push-back about doing major projects in Israel, it was always helpful to remind our colleagues that, as the experience during the war had demonstrated, "Intel Israel delivers, no matter what."

What's more, the culture of survival that we created during the First Gulf War has shaped Intel Israel down to the present day. After the initial version of this chapter appeared in the *Harvard Business Review* in December 2006,<sup>2</sup> I received an email from Shuky Erlich, a former Intel Israel colleague and general manager of the Haifa design center during the conflict between Israel and Hezbollah in the summer of 2006. (By the way, Erlich is that software engineer who quit Intel in protest over my no-transfer policy, only to return a few years later.) The war with Hezbollah was especially costly in terms of loss of life and economic disruption to the area along the Lebanese border, including Haifa. And the challenge Erlich faced to keep the business going in the midst of that disruption was similar to the challenge we faced during the First Gulf War. "I found myself looking back more than once to the 1991 crisis and trying to find answers based on what was done in those days," Erlich wrote me. "Even just to set the path for future generations, it was important and dramatic to make the decisions you made at that time. You were my role model during the [recent] crisis."

On the one hand, I was gratified to hear that the leadership lessons we learned during the First Gulf War had taken root in the

Intel Israel culture—so much so that they were still operative after I had retired. On the other, I was sad that due to longstanding failures of political leadership on both sides of the Israeli-Arab conflict, my colleagues still had to confront the challenges of doing business in the middle of a war.

The situation I faced during the First Gulf War was extreme. I sincerely hope that you will never have to face the equivalent in your career. That said, the principles of leadership that the story illustrates are relevant even in more ordinary and less dramatic situations of turbulence. The job of the leader is to insist on survival, act against the current, and leverage random opportunities. In the concluding chapters of this book, I'll discuss some of the supports you need to put in place in order to do so.