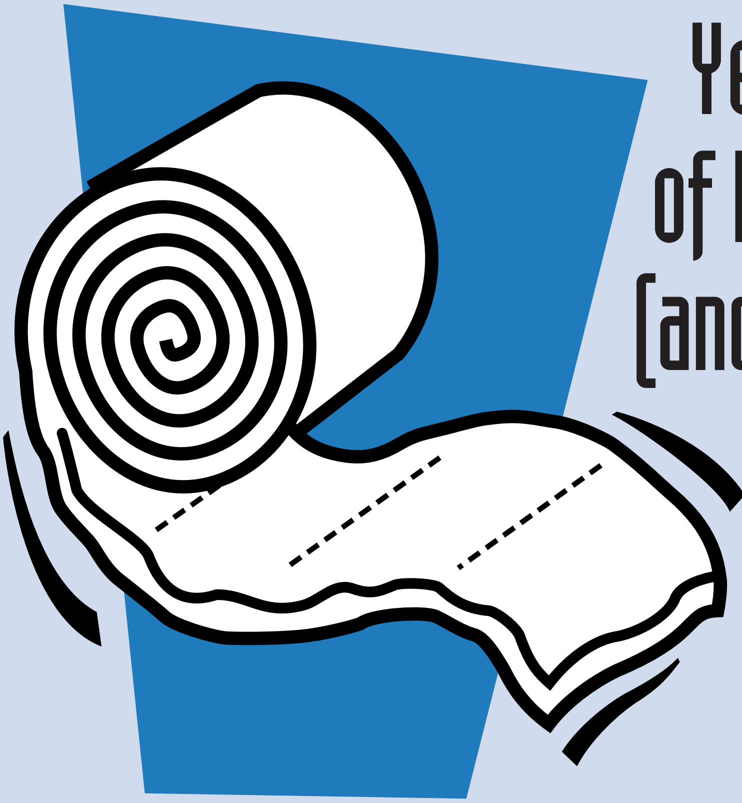

Year 2000 Management of Business Relationships (and Toilet Paper Shortages)

BY LELAND G. FREEMAN

With anticipation, diligence and careful planning, outright disruptions or shortages of critical suppliers may be eliminated or at least managed. Failure to undertake this exercise will increase the chances that your organization will become a victim of the Y2K equivalent of the next Toilet Paper Shortage.

OF all of the Year 2000 scenarios presented, perhaps the most likely, and certainly one of the most disturbing, is this one: Much of the Year 2000 will be spent standing in line.

While there is no historical precedent for Y2K, consider what happened in the 1970s during the Middle East oil crisis. Filling the gas tank suddenly required a logistically sophisticated procurement plan and an hour or two in line.

During the peak of the oil crisis, the American public was so sensitized to the impact of shortages that a casual joke by Johnny Carson caused a run on toilet paper. Overnight, store shelves were — forgive the pun — wiped clean by consumers, concerned that they might have to forego yet another staple.

Perhaps the paper products aisle of grocery stores will be spared by Y2K, but we can be all but certain that suppliers of some key goods and services will be severely affected. If, like gasoline and toilet paper, supplies for which demand is inelastic are affected, long lines and panic buying will result. The Gartner Group of Stamford, Conn., estimates that as many as 5 percent of all organizations will cease to exist because of Year 2000 failures. A much larger percentage will fail to advance their projects far enough to avoid major disruptions. Still others will bring their projects to completion or near completion, but overlook important components, such as recovering and remediating missing source code.

Shortages. Lines. Recession. These are likely outcomes, but the only certainty about Y2K is that we're entering a period of uncertainty. And uncertainty is always bad for business.

It's difficult to say which consumer products will become scarce or where the lines will form. Much depends on the mindset of consumers just before and just after January 1, 2000. Consumers may panic before the Year 2000 and decide to draw their savings accounts down to zero before the Millennium Bug does it for them. Even if a small percentage of consumers panic, bank runs will result. Once lines begin to form, media coverage will get other consumers thinking about withdrawing their funds, which will result in more bank runs, which will result in some banks having insufficient capital to continue to operate. Once a few banks begin to close, the bank runs will spiral out of control.

Financial service companies are, as a whole, farther along in their Y2K efforts than any other industry, according to Gartner Group, but as was the case with the toilet paper shortage, their efforts to prevent problems could be undermined if consumers perceive that their savings will be affected.

OEMs in industries that depend on a large number of suppliers are especially susceptible to potential shortages. The automotive industry, for example, depends on thousands of suppliers. The supply chain is only as strong as its weakest link, so if the supplier of brake pads cannot be relied upon, the automotive manufacturer cannot complete production. Unless there is a backup supplier, the entire assembly line could be shut down.

A single part or detail can have a tremendous impact. General Motors recently recalled a million vehicles because their airbags may accidentally deploy when water seeps into the control module — a simple design error, yet it affected models ranging from Cavaliers to Cadillacs. Even more relevant was the impact of the recent strike on two GM plants. Because other plants relied on parts produced by the two striking plants, production was virtually brought to a halt at all plants, costing GM an estimated $2.6 billion in lost profits and delaying the launch of three new models. A few non-compliant suppliers could have a similar impact.

Supply chain compliance is a potentially huge problem because a single supplier's non-compliance could create a domino effect, harming a whole string of companies that rely on its parts. But non-compliance by suppliers is just one of the many external problems that all organizations should worry about.

Business relationships, particularly in today's global economy, create a tangled web of potential problems. In addition to suppliers and vendors, the organization may be impacted by non-compliant customers, financial service providers, insurance carriers, government agencies, utilities, telecommunications networks, and even competitors. Less troubling, but also in need of consideration is the organization's dependence on heating and ventilation systems, security systems, PBX systems, LANs, and other infrastructure components. If the performance of even one of these components falters, the survival of the company could be at risk. For example, what will happen to cash flow if the overnight lock-box system fails? What will happen to a retailer if embedded chips in point-of-sale terminals fail to operate or the VAN's EDI network crashes?

While many industries need to be concerned about shortages, others could be affected by low demand. Fear of flying could leave many airplanes with an insufficient amount of passengers for the airlines to turn a profit, while a Y2K-inspired recession could affect spending on a wide range of non-essential consumer goods. Given that the current economic expansion is showing signs of weakness, the odds of a Y2K recession are growing steadily.

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MANAGING UNCERTAINTY

Given this state of uncertainty, management needs to launch some preemptive initiatives. The objective should be to reduce the risk of a calamitous event resulting in a severe business interruption, whether the event is real or perceived. The following steps should be taken now and throughout the next year to mitigate risk caused by external forces.

> **Given the unpredictability of Y2K, it is a significant challenge to determine what to include in the contingency plan. The best approach may be to determine what consequences are unacceptable to the organization, to define scenarios that would lead to those consequences and to take action to prevent those scenarios.**

1. **Determine who's who.** The first step to take is to determine what business partners or outside processes are critical to the company's continuing operation. Include suppliers and vendors, customers and distributors. Of the hundreds, perhaps thousands, of business-to-business relationships a firm has, there will be a much smaller number of suppliers and customers that, if eliminated, would jeopardize the firm's existence. The cafeteria vendor is important, but the plant won't shut down if the food service is idled. If a critical manufacturing part is unavailable, though, an assembly line will quickly shut down.

2. **Create a dependency model.** Business relationships can be complex. A well-developed dependency model can create order even in the most complex business environment, helping to identify the risks associated with other companies' Y2K failures. A dependency model can simultaneously be built from the top down and from the bottom up. Any company that has completed enterprise business process reengineering (BPR) already has much of what is needed for a top-down analysis.

Once data is collected in a modeling tool, detailed "what-if" scenarios can be used to determine the likely outcome of individual failures as well as combinations of failures. This will help determine the best ways to mitigate identified risks. Once the model is functioning, trade-off analyses can be used to examine the effects of different strategies. The model can also be used to play out and measure the second-order effects and potentially disastrous consequences of discrete failures before they occur.

An active model can also help the enterprise stay nimble enough to adjust for unforeseen events. Suppose an application vendor announces that its Y2K project is suddenly falling behind schedule. If the dependency model is date-driven, the vendor's new completion date could be plugged in to determine what problems the delay would create. Strategies for dealing with the delay could be input to determine their potential impact.

A dependency model can also identify where early-warning detection is needed to identify impending failures in risk-prone dependencies. For example, rather than letting non-Y2K-compliant data from an allegedly compliant system corrupt the company's systems, data filters can be installed at key points to identify bad data so that it can be kept out.

Even when dependency modeling is used, human decision making is still important. For example, the question of whether a supplier is Y2K compliant does not always have a yes or no answer. A detailed analysis may be necessary to factor in information such as the importance of the supplier to your company, whether your company has audited the supplier and what percentage of your business the supplier affects.

3. **Ask the obvious.** The next step is to ask vendors and customers the status of their Year 2000 projects. However, be prepared for a content-free answer, such as: "We have our project under control …" If the answer sounds too good to be true, ask when the project

was completed (or when it will be completed), how many employees and consultants are working on the project, what remediation tools were used, what level of testing is being performed and what contingency plans are in place. Ask your business partners whether they have contacted their business partners, recovered any missing source code, inventoried all software and hardware assets, inspected changed code for unintended defects, anticipated leap year processing consequences, dealt with distributed systems and end-user applications, located all embedded processors, replaced errant chips or whole pieces of equipment where necessary, developed contingency plans to handle the unexpected and developed communications strategies for keeping stakeholders informed.

If they answer in techno-mumble, be cautious, but not surprised. Y2K has created a legal conundrum. Your attorneys are requiring you to write to your business partners asking them to tell you, in writing, the status of your Y2K project. At the same time, their attorneys are telling them not to put anything in writing. If a company tells its customers in writing that it is Y2K compliant, but it later has a Y2K-related problem, legal trouble is practically guaranteed.

4. **Pay a visit.** If written correspondence is insufficient for determining the health of a critical business partner, make a visit and perform an audit. It is harder to hide problems when an important customer shows up for a site visit. Be prepared to ask the probing, relevant questions that need to be answered to determine the status of your partner's Y2K project.

5. **Use triage.** Most Y2K methodologies advocate the use of triage. As time ticks down, it is more important than ever not to waste effort on non-essential systems or systems that are beyond repair. A similar approach is needed for critical business partners. If your firm depends on a supplier or customer, and there is some doubt about that business partner's post-Y2K reliability, this is the time for change.

You may be reluctant to disrupt a long-standing relationship, but consider the potential consequences. During the 1997 UPS strike, shipping clerks discovered that their loading docks were either overflowing with shipments not picked up or empty because parcels were not being received. UPS' shutdown resulted in tremendous distribution channel turmoil.

If an important business partner is knocked out of service by Y2K, it could have the same impact on your business. If you believe, based on due diligence, that a supplier may be non-compliant, either replace the supplier with a reliable alternative or shore up the weakness by adding new suppliers to the mix. If you wait too long, any problems that result will likely be sorted out by lawyers.

6. **Lend a hand.** You may discover that your firm is too dependent on a single supplier or customer and that alternatives are unavailable. To avoid disruptions, it may be prudent to assist the partner with its Y2K project. If necessary, offer technical expertise, financial support, project management or other resources that will ensure the partner's successful Y2K project completion. This is a strategy of last resort, and can become complicated because of anti-trust, non-compete restrictions. It may, however, be the only way to guarantee that the supply chain remains unbroken.

7. **Review business policies.** When business conditions change, some policies that are sacrosanct may also need to change. The right thing to do may become the wrong thing to do. For example, production managers and controllers advocate keeping inventories lean. But with the uncertainties of Y2K, "Just-In-Time" inventory procedures may need to be replaced with "Just-In-Case" stockpiling policies. If there is any doubt that a supplier will keep the product flowing, establish short-term warehousing to keep inventory on the shelf. Likewise, your customers may appreciate advanced shipping of goods from your company.

8. **Create a contingency plan.** Perhaps the most important activity to undertake in the year that remains until 2000 is to develop a workable contingency plan. Management needs to be prepared for the worst to minimize damages and keep crises under control.

Given the unpredictability of Y2K, it is a significant challenge to determine what to include in the contingency plan. The best approach may be to determine what consequences are unacceptable to the organization, to define scenarios that would lead to those consequences and to take action to prevent those scenarios.

One unacceptable consequence, for example, may be running out of a certain part because the railroad company that delivers the part is non-compliant. The contingency plan could consider stockpiling parts, finding another rail freight handler, or identifying other distribution methods.

It is important to ensure that any contingency plan is workable. Take the time to test it. Refine the plan where there are weaknesses, and be certain that all employees understand and accept their intended responsibilities.

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