



**> Endnote** | RON WILSON, *Executive Editor*

# It's time for innovation to go beyond the technical

Our group was making money—how did I get laid off? It's a question a lot of engineers have to be asking right now. All over the industry, we see giant companies, such as IBM and Microsoft, announce great fourth-quarter and annual results and then follow up with a layoff announcement. We see smaller companies in the fabless world staying on track on product development, successfully offering samples to key customers and ramping revenue products—doing everything right—then suddenly making significant cutbacks, either laying off people or cutting back on projects that lead to layoffs elsewhere. And we see, if we look carefully, start-ups that are on track and meeting milestones just shutting their doors. What gives?

In part, it's because this recession is unlike any other in previous memory. This one started not with a sudden drop in demand, but with a global credit crisis. And, in many cases, the reason companies are laying off in the face of reasonably good operating results is not that they think demand will fall over a cliff—though the inability to deny that scenario is certainly a factor—but the fact that the credit crisis has continued to deepen and spread to the industrial economy. Lack of credit is no longer just the province of investment banks, insurance companies, and hedge funds; it's a fact in the world of real business.

Part of a chief financial officer's job is to make sure there is enough money to fund operations every month. In normal times, a company's business is cyclic. In some months, revenue more

than covers operating-cash outflows. In other months, it doesn't, and the chief financial officer turns to cash reserves, short-term investments, or the company's credit lines. In the cases of companies with a limited range of products and long development cycles, these credit-funded shortfalls can last for a year or more.

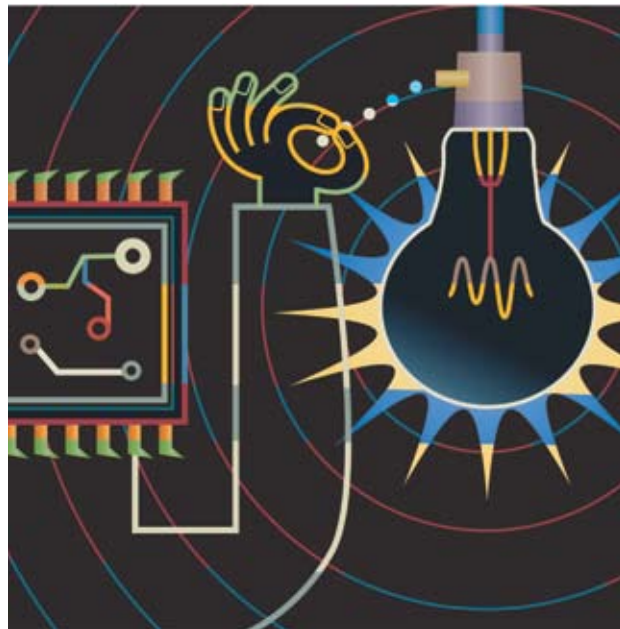
Today, many companies have had their credit lines frozen, leaving the chief

only degree of freedom left is to cancel discretionary expenditures, delay the delayable, and reduce fixed expenses. That last part includes you and me. So, we see companies that are operating at a profit cutting costs like crazy—making a dead zone in the local economy around them—and even laying off critical employees.

So, what to do? The most important thing is to understand your company's cash-flow scenarios and its alternatives. The next most important thing is for all the executives, including the chief financial officer, to consider nontraditional sources of funding. Some people have scored help from obscure contacts in the Middle East or China. But more likely sources are key customers. Sufficient bridge funding to keep cash flow above zero may be an insurmountable obstacle for a little fabless-semiconductor company but a small risk for the huge system OEMs to which the company is important. In fact, from the system OEM's point of view, ensuring survival of the supplier of a key component in a promising new product may be a good short-term investment

in its own cash flow. And, in some cases, you can build a similar scenario for key suppliers: They may be richer and have an interest in your survival much larger than the cost of ensuring it.

Now is the time for lateral thinking, not for reflexive conservatism. But lateral thinking means unprecedented sharing of information among engineering, financial, and corporate management. And it means resisting that reflex to pull back when the unknown yawns before us. ■



financial officer facing a grim situation. Absent the alternative of borrowing money, the company must have enough cash on hand to see it through a bad period. Because that requirement is much more conservative than it was just last year, most companies do not have enough short-term assets on hand to see them through at their current levels of fixed expenses. And, with forecasts falling, they are not likely to accumulate piles of cash this quarter, either. So, the