

Managing the IT whiz-bang bandwagon

Linking procurement to the overall strategic objectives of the organization is now more commonplace. Public or private, the purchase of high technology products still presents a range of unique problems in meeting this responsibility.

by Steve Bauld and Kevin McGuinness

THERE IS NO DOUBT that technology has done much to improve the world in which we live. For instance, in 1985, the combination of the Apple Macintosh, LaserWriter printer, and software like Aldus PageMaker made the desktop publishing industry possible. In construction, CAD and virtual reality have greatly reduced the costs of construction. Lotus-1-2-3 improved financial control and financial forecasting across almost the whole of commerce. However, when buying new technology, a purchasing manager has a responsibility to keep a firm grip on reality.

Consider some of the risks that technology presents. First, technology changes so rapidly that many customers find it difficult to make an informed decision. Technological variation complicates any meaningful cost benefit analysis of competing alternative sources of supply. Second, we often place unrealistic expectations on the ability of technology to solve our problems. Third, the glitz and glamour of hi-tech can undermine sensible decision making. A comparative study of the whiz-bang technology

features distracts attention away from the critical issue of how well an offered product will improve efficiency. Fourth, since emerging technology is often seen first only in the advanced prototype stage, there may be a serious tradeoff between state-of-the-art and reliability.

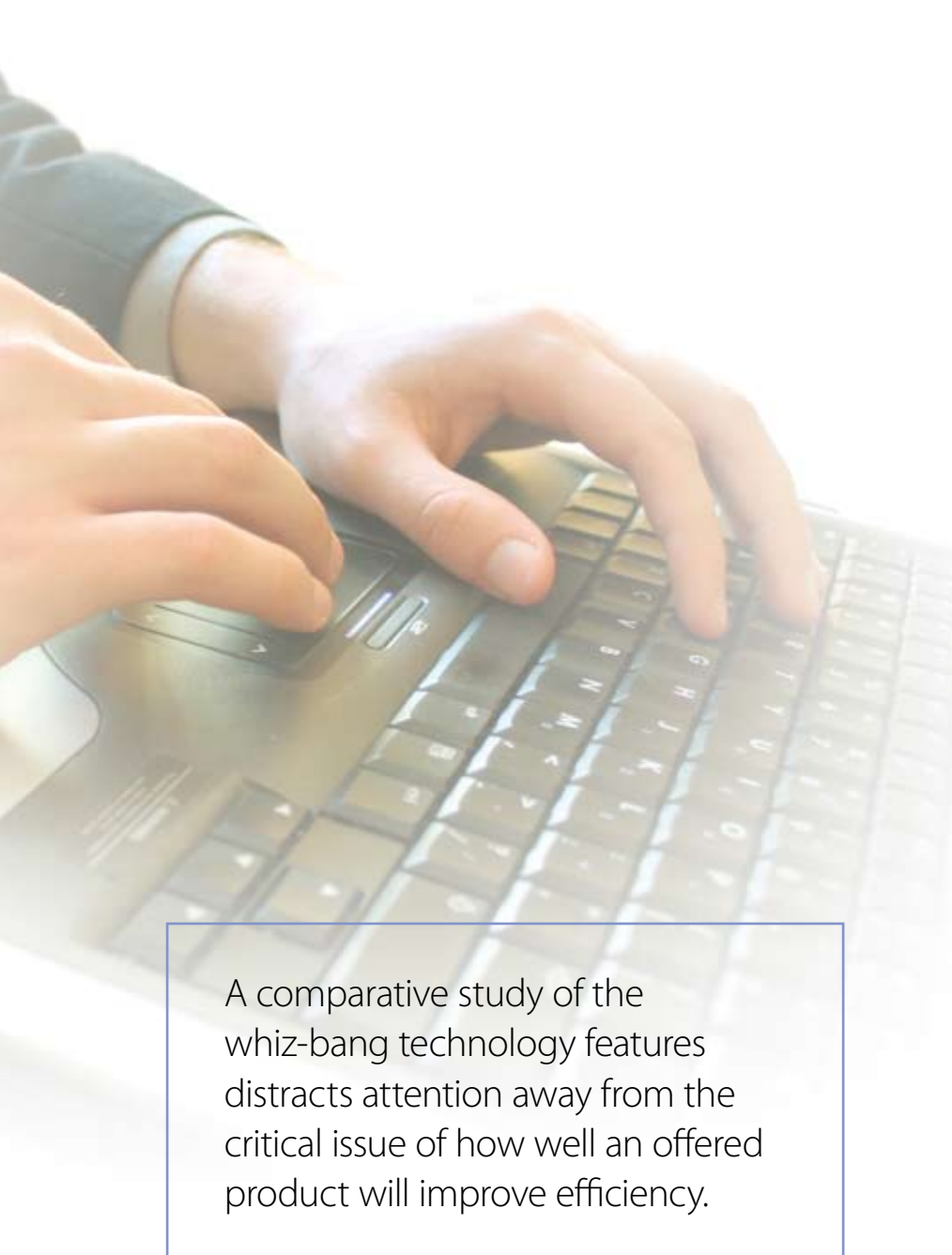
From a purchasing management perspective, one of the most serious risks presented by advanced technology is that it often becomes orphan technology. Toshiba's abandonment of its HD DVD format in advanced DVD players in February 2008 is a good reminder of this risk. Moreover, for organizations that have invested heavily in office technology over the past 30 years, the process has been one of continually attempting to migrate documents from technologies that have rapidly become obsolete, to technologies that are likely to become equally obsolete within a short time frame. Money thus invested is simply money thrown away.

Almost within a single lifespan, the world has moved from technology advancing little over a lifetime, to a time when a technology's lifespan is measured

in a few short years or even months. For example, televisions improved so much since the 1950s that few children today would recognize early models as televisions at all. Rapid development of technology brought rising expectations and many people now equate technological advances with the solution to every problem. Energy crisis? No problem: new nuclear, solar and wind technology will take care of that. Global warming? Use technology to reduce our carbon footprint. Land-fill sites running out? Technology will find ways of recycling everything.

But these expectations are often not realistic at all. For example, recycling always seems like a good idea in principle, but many studies cast doubt on whether it produces any net environmental benefit – and it certainly does not rival the low tech (and often more cost effective) solution of simply trying to use less.

Hi-tech solutions do make sense in certain circumstances – all of which are implicit in the basic premise that procurement activity should focus on addressing a genuine, clearly identified and properly



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understood need. Critical questions include: Do the technological features offered by a proposed hi-tech product purchase reduce the cost of production or improve the work experience sufficiently to justify the price of acquiring the technology? Will the technology allow us to make better products faster? Is it realistic to expect that the technology will allow us to serve our customer's needs better than before? Will it meet the user needs of our customers?

A recent article in the UK newspaper *The Observer* warns us that "Hi-tech is turning us all into time-wasters." It points out that mobile phones and e-mails distract employees from work. One study discussed in the article noted that

an estimated 15-20 percent of workers are chronic procrastinators.

However, such distraction is only the tip of time wastage problem resulting from technology. Often hi-tech products are installed in a workplace with little training for the workers. Even when training is offered, workers often do not have the time to take advantage of it. Walk around offices in different organizations (and different types of organizations) and you tend to see a similar picture – workers standing bewildered by the office photocopier, unsure how to work it; project completion delayed because the e-mail system is not working; workers scratching their heads in frustration trying to work out

how to correct formatting errors in word processed documents or spreadsheets; and sometimes software crashes write-off the work of an entire morning, or day.

It is not possible to provide an exhaustive list of things to avoid and things to do when buying hi-tech, but the following ideas may serve as a useful guide.

Avoid state of the art products unless you are really familiar with the field.

As a general rule of business, no one should deal in a market that they do not understand. People need experience to make informed decisions, and this is especially true when dealing with innovative new products. Buying highly innovative technology should not be ruled out, but it is a good idea to do a lot of upfront investigation before doing so.

Make sure that the technology has been developed.

The term "phantom-ware" describes a well-hyped product that is delayed or never released. The hype often leads to orders (sometimes accompanied by deposits). The delay or the failure to supply can cost millions. Vapour-ware is technology that takes so long to develop, that by the time it is ready for market, it is already obsolete. It is easy to confirm that products are available for shipment. Very little reliance should be placed upon promises that a new product is in final product testing and almost ready for market.

Never buy unproven technology.

Get reviews of new products from existing customers at arm's length to the supplier. Check how competing products are compared in trade journals.

Make sure that state-of-the-art is state-of-the-art.

As previously stated, it is best to avoid markets that you don't understand. Virtually all suppliers claim to be technology leaders. However, in any given market, there is only one that is. If you pay a premium for hi-tech, make sure you get hi-tech.

Beware of consultants.

Never assume that you can buy-in the expertise that you need. Some con-

sultants know what they are talking about. Others simply take your money to provide the kind of advice that you could have found for yourself with a little research. And make sure your “independent” consultant is actually independent.

Avoid businesses that “push the envelope.”

Businesses that try to bring to market truly ground-breaking products have a high failure rate. Science and technology advance incrementally – not by leaps and bounds.

Avoid hi-tech businesses that go it alone.

Although some emerging technology pioneered by a single company will work out, very often it does not. Going with the pack reduces the risk of investing in possible technology orphans. In the 18 months following January 2007, Apple Inc. increased its share of the US enterprise market for personal computers from 1.2 to 4.5 percent. In part, that is because of its technological leadership. However, Apple also wed itself to industry leader Intel and has a reputation for high levels of quality control.

Take a close look at the financial strength of any hi-tech supplier.

Technical innovation is expensive, and the time required to bring new products on-stream only rarely meets the original expectations. Any business that commits to a strategy of being the technical leader of the pack has to be very solidly capitalized.

Never sacrifice quality control for technological innovation.

Be careful when dealing with a business that invests heavily in product development, and puts little effort into quality control.

Make sure that test results are valid.

Nothing is easier than rigging bogus tests to demonstrate product quality. Make sure that performance results were independently tested by a recognized government agency, standards organization, academic institution or similar body. Even then exercise care; businesses have exerted so much pressure on

government regulators, for instance, that testing programs are emasculated.

Technology is only part of the total value package.

The market as a whole rarely takes to the most technologically innovative product. Generally, markets prefer products that offer the best value for money.

Balance cost and benefit.

State-of-the-art always carries a price premium. Does the benefit acquired off-set the additional cost? As noted above, this concern is perhaps most pressing in the environmental area.

This year’s state-of-the-art is next year’s bargain-basement product line.

These days, whatever you buy – and no matter how much you pay for it – will be quickly obsolete. If you really want something that is hi-tech, why not wait until the price comes down. Few purchases are really all that urgent.

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