

## TECHNOLOGY ACQUISITION UPDATE

### Learning from High-Tech Deals

By Kevin A. Frick and Alberto Torres  
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*M&A deals are more likely to destroy value than to create it. But when they are executed strategically and often, as part of the routine of running a business, the odds favor success.*



**M**ergers and acquisitions, divestitures, spin-offs, equity investments, and alliances are a favorite subject and frequent target of business pundits and academics. Numerous studies have shown that M&A destroys value for the acquiring company at least half of the time, while spin-offs and alliances have produced similar results. Some observers characterize the motives behind many of these transactions, particularly the largest and most notorious, as mere financial engineering or ego boosting.

Despite odds that favor failure, the most successful companies in the high-technology industry happen to be active deal makers. To explain this apparent anomaly, we assessed the performance of the 485 largest high-tech companies as reckoned by market capitalization. First we broke them into four groups based on market value created and on the growth of market capitalization; then

we studied the transaction activity of each group—some 5,000 deals in all. Our analysis established that while the average merger or acquisition destroys value for the acquirer, deals carried out by companies that undertake them strategically and often actually do create value. Our analysis of alliances produced similar results. <sup>1</sup>

How then do top performers manage their transactions? For a deeper look at this question, we used 30 case studies and interviews with 30 senior practitioners—including chief executive officers, chief financial officers, business-development executives, senior investment bankers, and academics—to augment our research. Although there is no single best way to carry out these transactions, our study does suggest that there are patterns and principles that separate top performers from the pack.

In high tech, you must be good at transactions.

For two reasons, the stars of high technology consider deal making to be as inevitable and perennial as product development or marketing. First, the pace of technological change in the industry, as seen during both the boom and the recent slowdown, is extraordinary and thus forces companies to manage their assets aggressively. In 1993, for example, the typical company in the high-tech top 100 (as measured by market value) stayed there for seven years; by the end of the decade, the average tenure had dropped to three years. At the peak of the Internet market, in 1998 and 1999, 32 of the top 100 companies fell off the list. A similar turnover in market leadership continues today. In markets that move more rapidly than most companies can, many players—laggards and leaders alike—become fodder for deals. In 1982, for example, few would have imagined that industry leader Digital

Equipment would one day be acquired by Compaq Computer, which was founded that same year.

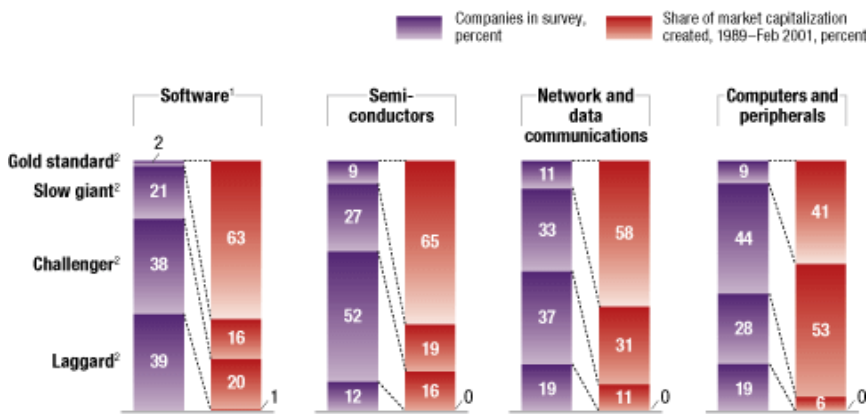
Second, high technology is a "winner-takes-all" industry. Just 2 percent of the companies in the software sector, for instance, have contributed 63 percent of the appreciation in market capitalization since 1989 (Exhibit 1). Transactions and consolidations can often fill holes in a product line, open new markets, and create new capabilities in less time than it would take to build businesses internally. Such moves may be prerequisites to achieving a dominant position—the best assurance of survival.

So it is no coincidence that most "gold-standard" companies in our survey—those averaging more than 39 percent annual growth in total returns to shareholders since 1989—undertake almost twice as many acquisitions and form up to ten times as many alliances as do their competitors (Exhibit 2). The sheer volume of deals gold-standard companies undertake has made them as good as they are at extracting value from these transactions. Like good surgeons, the best are the busiest, and the busiest are often the best.

Despite having different products, services, and customers, the high performers we studied—including Corning, IBM, Intel, Microsoft, Qualcomm, and Sun Microsystems—appear to have mastered four areas essential to success in transactions: they develop clear strategic goals for the company as a whole; they undertake only those transactions

EXHIBIT 1

**In high tech, winner takes all**



<sup>1</sup>Includes related services.

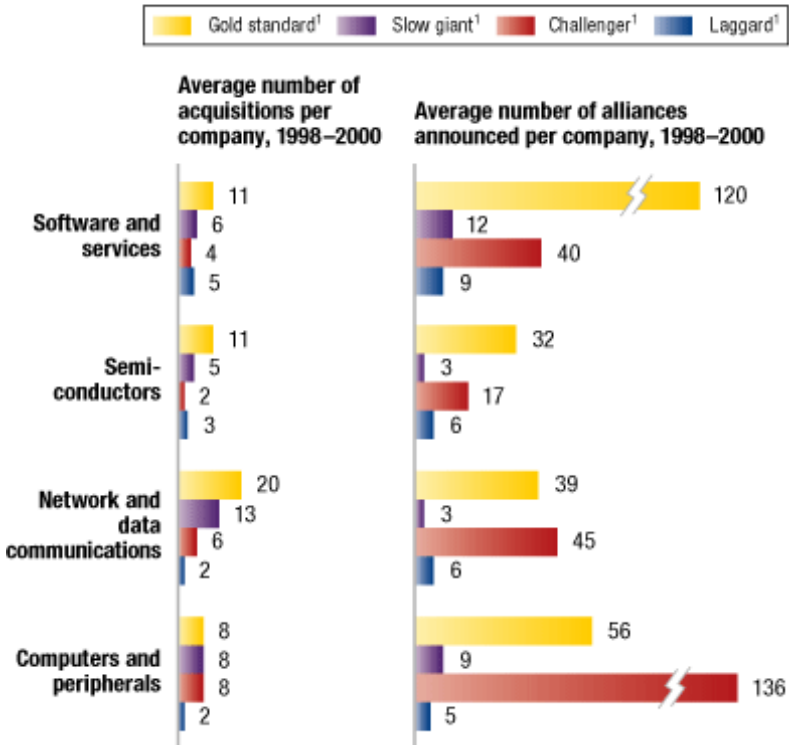
<sup>2</sup>Gold-standard companies had market capitalization increase of >\$30 billion and compound annual growth rate (CAGR) of total returns to shareholders (TRS) of >39% from 1989 to Feb 2001. Over same period, slow-giant companies had >\$30 billion market cap increase and <39% CAGR of TRS; challenger companies had <\$30 billion market cap increase and >39% CAGR of TRS; and laggard companies had <\$30 billion market cap increase and <39% CAGR of TRS.

Source: 2001 McKinsey survey of 485 high-tech companies

that can advance those goals; and they know how to get transactions done quickly, efficiently, and with the least possible stress to their

EXHIBIT 2

**The golden rule**



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Source: 2001 McKinsey survey of 485 high-tech companies

acquisitions or themselves. Finally, they weave these transactional capabilities into their operational fabric.

**Ensuring strategic clarity**

Gold-standard companies don't merely fill a pipeline with transactions; they fill it with transactions that make strategic sense. We found that the strategies these companies selected were

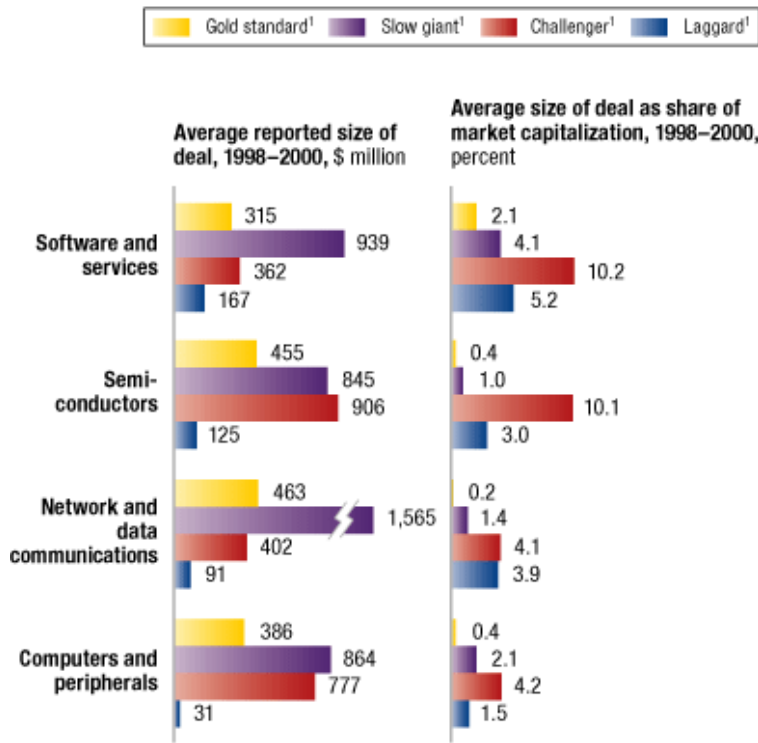
consistent with their position on an S-curve (or growth curve). The S-curve framework can help large multibusiness corporations coordinate the transactions relating to each business unit. It can also help companies know when to enter newer markets and leave older ones.

**A Program of Small Deals**

Most companies manage acquisitions and other transactions as occasional, major events involving one or two obvious targets. By contrast, every gold-standard company we studied takes a programmatic approach. Each maintains a steady flow of deals and has clear management processes to identify and extract value from them. Seldom do these companies try to chase a blockbuster deal. Indeed, the transactions they undertake tend to be small compared with their own market value: on average, gold-standard companies pay less than 1 percent of their market capitalization for an acquisition (Exhibit 3). Most of their acquisition programs included a few larger transactions, but deals in which the purchase price of the target was 50 percent or more of the acquirer's market capitalization were rare. And although gold-standard companies are significantly larger than the average in the high-tech universe, the M&A deals they completed had an average value of \$400 million, well below the \$700 million average for the rest of the industry.

The bias against big deals is well-founded. Smaller transactions lend themselves to simpler, more disciplined structuring and

**Recipe for success: A steady diet of small deals**



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integration, thereby minimizing the negotiations and infighting that, in larger deals, can defeat the logic of the original plan.

Moreover, the companies we studied view deal making much as they do their R&D programs: the risk of failure is never allowed to call into question the essential nature of the enterprise. Likewise, for gold-standard companies and other well-respected companies in the sector, the problem is not whether to transact deals but how to do so in ways that raise the odds of overall success. All of these companies have made mistakes, such as IBM's 1992 Taligent joint venture with Apple

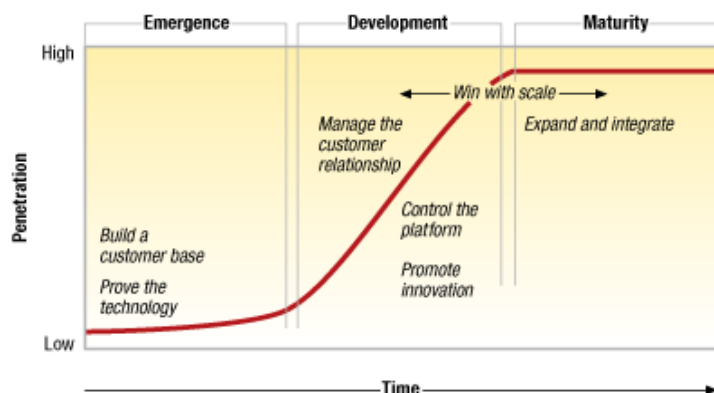
Computer—an effort that failed, unsurprisingly, to dent Microsoft's share of the operating-system market. But by bringing discipline and consistency to each deal, these companies have ultimately outperformed their peers.

**Knowing your place**

The S-curve describes three stages of market evolution: emergence, development, and maturity. Each brings unique challenges and opportunities (Exhibit 4). In the emergent stage, we found, two main strategic issues confront businesses: proving the value of their technologies and quickly building a critical mass of customers. In the development stage that follows (at least for successful acquirers), businesses must decide how to sustain and to profit from rapid growth. Most of the companies we studied at this stage can choose from four broad strategies: increasing their scale of operations, managing the customer relationship more satisfactorily, controlling the market for a technical platform, and promoting product innovation.

Finally, as markets mature and the growth curve flattens, other strategic choices appear: economies of scale become more important, as do the expansion and integration of a company's sales and distribution channels. Even such crucial questions as pricing, asset management, and market segmentation are subordinate to this handful of broad strategic choices. <sup>2</sup> <sup>iii</sup>The choice of strategy will in turn dictate a particular program of transactions.

### The three stages of market evolution



### Linking strategy to transactions

Gold-standard companies understand that if transactions are to support larger strategies, as they must, those transactions should also reflect either the position of a company on the S-curve or the place where it wants to go. Our examination of the transactions of top performers showed precisely such consistency. These companies define a small number of investment themes—one to three in most mid-sized companies, five to ten in very large ones—that move them to or keep them at their desired place on the curve. In emergent markets, companies seek ways to build their customer base or to prove their technology, often by striking deals or forming alliances with more established companies. The deals of companies at later stages of development are intended to build capacity, control the platform, or strengthen customer relationships.

Qualcomm, for example, found itself climbing the growth curve around 1995, ten years after it was founded.

The company decided that wireless infrastructure and handsets, then a large portion of its business, were no longer economically attractive or strategically important to its ultimate goal of profiting from the intellectual property it had built around the CDMA (Code Division Multiple Access) transmission protocols. Adopting a "promoting-innovation" theme, the company therefore sold its handset and infrastructure businesses and concentrated on extracting value from its CDMA intellectual property. This approach drove a patent, alliance, and licensing strategy that enables Qualcomm to realize this value from its semiconductor design operations and from royalty streams generated by wireless-infrastructure and handset manufacturers. As a consequence, CDMA is now the fastest-growing wireless technology and the standard for most third-generation mobile networks.

High-performing companies also revisit their strategies as their position on the growth curve changes. BEA Systems, a maker of applications-server software, did more than 20 deals from 1996 to 2001. It first rolled up a series of small distributors—a "build a customer base" strategy consistent with its entry into new markets. As its initial products took hold, BEA climbed the growth curve with a "manage the customer relationship" strategy, purchasing WebLogic and several other product and technology companies, along with some small training companies and service providers. In the three years ending November 2001, BEA's stock price increased by 424 percent, for a 74

percent compound annual return to shareholders.

Deals gone wrong, by contrast, can often be traced to a disconnection between the transaction and the market's growth curve. The IBM-Apple Taligent venture, it is true, suffered operational and organizational breakdowns, but it basically fell victim to strategic misalignment. Taligent had banked on a "promoting-innovation" strategy in hopes of capturing a share of the desktop operating-system market, which IBM and Apple viewed as still developing. In fact, the market had already grown well beyond that point, and Microsoft was consolidating its gains with a "controlling the platform" strategy for its Windows operating system.

More recently, a telecom-equipment maker was forced to sell, at a steep loss, a customer-service software house it had bought two years earlier. Competing in a mature but still growing market, the hardware company had hoped to use the software house it bought to strengthen its customer relationships. But the hardware company lacked privileged access to the intended customers of the software house's call-center, billing, and related products—and thus never had customer relationships to manage. Soon caught in the downturn of the telecom sector, the hardware company was unable to pursue both the hardware and the software businesses.

### **Coordinating deals from the center**

Every separate business owned by a large diversified corporation lies at a different point on the S-curve. By plotting each of these positions, the corporation can assess the one it as a whole occupies, whether it wants to remain there, and the kinds of strategic acquisitions and divestitures it must make to move it in the desired direction.

Corporate centers want to divest slow-growing, noncore businesses and to invest in or acquire new growth positions on the S-curve. Of course, such decisions can be made only by the corporate center, which is likely to want to divest slow-growing, noncore businesses and to invest in or acquire new growth positions earlier on the curve. Companies such as Corning, IBM, and Intel look to corporate business-development teams to work out transaction programs that not only take into account the maturity of the individual business units but also treat them as assets in a portfolio whose particular mix decides the fate of the parent. It is part of the assessment to view the position on the S-curve of every one of the parent's businesses in relation to all of the others. While each business must be judged on its own terms, it is the combination—how the operations benefit and detract from one another and the company as a whole—that decides the parent's overall position.

Corning, for example, has in recent years jettisoned low-growth consumer businesses approaching the top of the growth curve, made deals to strengthen the company's existing optical-fiber manufacturing

and distribution system, and built a portfolio of photonics products—light-sensitive switches that sit at the end of customers' optical-fiber networks. All three moves were initially orchestrated by the corporate center.

Intel, Microsoft, 3Com, and other companies have pursued similar strategies. IBM, under the leadership of Lou Gerstner, shifted its focus from hardware systems to services, software, and technology building blocks such as infrastructure software, semiconductors, and storage. This repositioning led to a series of acquisitions (of Lotus Development and Tivoli Systems, among others), divestitures (of Celestica and Lexmark, for example), spin-offs, and alliances (such as IBM's broad 1999 technology partnership with Dell Computer). IBM's largely autonomous business units, left to their own devices, might have lacked the perspective to embark on deals that, collectively, helped turn around the company.

### **Managing to deal**

Frequent, focused deal making enhances the transactional skills of a company's managers and thus increases the chance that any given deal will work. It helps managers identify strategically sound deals in the first place and to develop the collaborative skills to implement them. But to realize these benefits, managers must balance two competing imperatives: they have to think and act quickly, on the one hand, and execute exceptionally well, on the other. Gold-standard performers have fast and fluid

decision-making procedures yet attend meticulously to the details of assessing, closing, and, ultimately, integrating transactions.

### **Streamlining decision making**

In today's volatile markets, the ability to move rapidly often determines the viability of a deal. The longer negotiations drag on, the more likely that market moves will render obsolete any agreement on pricing or structuring. Long due-diligence and negotiation processes almost always reduce the likelihood that a deal will be completed, and they drain the goodwill that is necessary if it is. Companies that have already decided what kinds of acquisitions or alliances they need to make and know how these deals will fit into their existing structures can bring transactions to completion more rapidly than companies taking an ad hoc approach. The latter also often fall victim to protracted, bureaucratic decision making. The vice president for business development at one semiconductor manufacturer notes that his competitors' slow decision-making processes give his company "a real advantage in getting a deal done."

In the top-performing companies we studied, the decision to undertake transactions rests in the hands of four or five people, including the CEO, the CFO, and the process owner (usually the executive responsible for business development). In the case of large transactions, the board too is involved. "As we have gained experience, we have moved away from our 20-point screens and relied

more on the collective judgment of five executives," observed the CFO of one telecom company. Yet the people making transaction decisions stay close to the action in the line organizations. To review corporate strategy, assess the needs of business units, and vet possible opportunities, for example, business-development executives at one leading semiconductor company schedule quarterly two-day meetings with the CEO, the CFO, key managers of functional departments, and the general managers of business units.

By moving decisively, companies not only get more deals done but also are likely to be offered the more desirable deals. Potential acquisitions or venture partners prefer to work with companies that have a history of success. Thus some experienced acquirers report winning discounts of up to 15 percent.

### **Transacting in a volatile market**

The market correction of 2000 and 2001 has brought deal making almost to a standstill. After years of strong growth, the number of high-tech transactions fell by 53 percent between September 2000 and February 2001. Buyers and sellers alike are reluctant to move in an uncertain market. On either side of the equation, companies are consumed with improving their internal operations, not with driving growth and waiting (or perhaps hoping) for their valuations to rebound. Yet companies able to move quickly can still profit in such markets.

Successful deal makers recognize that volatility gives them opportunities by affecting their own valuations in relation to the valuations of target companies. A prospective buyer of computing-storage hardware companies saw its market capitalization increase much faster than those of its eight most valuable targets. The difference between its rate of appreciation and that of the poorest performer among the eight was 73 percent.

### **Managing the fundamentals**

Gold-standard companies know that execution is at least as important as strategy in any kind of market environment. Their executives focus on the real value drivers of a deal throughout each stage of evaluation, negotiation, and integration. They are also aware that most of the value of a deal is realized—or lost—during the post-deal integration phase. Sustaining revenue growth as people decide to depart, product delivery schedules slip, and sales force cultures clash is the most difficult challenge managers face.<sup>iii</sup> That is why some of the best companies, far from starting to lay off the sales staff during a transition, actually build it up. The redundancies that may ensue are dealt with only when integration is largely completed and attrition has returned to normal levels.

In addition, the best deal makers nail down as many terms as they can before a deal closes, so as to minimize the haggling that is otherwise bound to distract managers from their fundamental task of creating value without



interruption. To that end, the acquirer also establishes a number of links with the target before a deal closes. But to act with this kind of foresight, managers must be offered incentives tied to their success at advancing the integration process.

How many companies can claim, as one chief executive of a software firm did, that "Transactions are an everyday part of running the business"? In an industry that requires companies to do deals, the most successful companies make transactions almost routine. Indeed, it is the routine nature of the deal making that helps guarantee its success. "Routine" means numerous, frequent, run by experienced hands, and largely free of unpleasant surprises. But skill in execution goes only so far. Before the first telephone call to the target is made, a gold-standard company has figured out how its acquisition will build on earlier ones and serve its longer-term goals.

#### Notes:

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<sup>i</sup> 1 See David Ernst, Tammy Halevy, Jean-Hugues J. Monier, and Hugo Sarrazin, "A future for e-alliances," *The McKinsey Quarterly*, 2001 Number 2 special edition: On-line tactics, pp. 92–102.

<sup>ii</sup> 2 See John Hagel III and Marc Singer, "Unbundling the corporation," *The McKinsey Quarterly*, 2000 Number 3, pp. 148–61.

<sup>iii</sup> 3 See Ira T. Kay and Mike Shelton, "The people problem in mergers," *The McKinsey Quarterly*, 2000 Number 4, pp. 26–37.



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