The Dance Steps Get Trickier All the Time

BY THOMAS A. STEWART

In a business simulation game called Tango!, Price Waterhouse consultants learn that it takes a keen sense of rhythm to manage a 21st-century company.

The game was already afoot when I arrived at the Price Waterhouse office in Dallas. Brent Snow, the facilitator, came over to bring me up to speed: "We had a practice year to warm up, and just finished the first real year. These guys"—he nodded across the room at the Alpha team—"haven't got their act together yet. They're very aggressive, but management isn't well organized. Beta, over here, invested heavily in R&D and image; their revenue suffered, but they could kill 'em in the next couple of years. Delta looks solid. Epsilon's a bit shaky: They understaffed, sold more than they could handle, and then lost some customers in the first year. But a lot can change."

As Snow talked, my eyes followed where he indicated. Four teams, each with four or five members, clustered at game boards on tables around the room; a big table occupied the center. They were all Price Waterhouse consultants playing Tango!, a business simulation devised by a Swede named Karl-Erik Sveiby, currently a research fellow at Queensland University of Technology in Australia, and offered by Celemi, a training and consulting firm based in Malmö, Sweden, with a U.S. office in Simsbury, Connecticut.

Sveiby, one of the first and best thinkers about intellectual capital, devised Tango! to dramatize the challenges of managing knowledge-intensive companies. The object: to compete with similar companies to build the highest market value. The game runs four or five "years," each of which takes a couple of hours to play. Each company starts with a small staff and a few customers, for which they do projects—some easy, some challenging—every year. At the start of a new year the companies can hire new recruits who enter the labor market, represented by little cards; each year they can go after the new customers who appear from another stack. In later stages of the game companies can headhunt from one another or try to steal customers.

The teams get paid by completing projects. Success depends on matching the customer with the right talent—staffers whose skill and "chemistry" meet the customer's needs. The money—a generic currency named M—eventually turns into equity. But the companies also build intangible assets. In Tango! the intangibles are image—reputation earned by completing challenging projects—and know-how. You build know-how by increasing the competence of individual staffers (through demanding projects or training) or by building shared knowledge through R&D. M values are assigned to these too. In real life, the value of knowledge-intensive companies is based at least as much on talent as on tangibles. Similarly, market value in Tango! is defined as the sum of financial and intellectual assets.

WHEN THE COMPANY INVESTED HEAVILY IN R&D AND IMAGE, REVENUES BEGAN TO SUFFER.

It's a fiendish game. As in life, your best employees may leave—some because they don't get enough challenging work, others for money or to go to a more prestigious employer. Customers defect for similar reasons. Projects run into snags of unforeseeable difficulty. Solving them is expensive but enhances competence and image. Nastiest of all and most real, resources aren't unlimited. You've got salaries (including raises and bonuses) and taxes to pay, overhead to cover, loans to repay, depreciation (of both equipment and R&D) to book. At the same time, if you don't invest in intangibles, you can't win the most lucrative customers, who tend to demand the most skill.

The Alpha team was juggling the tradeoffs when I joined them. "Our strategy is long term," said Elizabeth Bryant, who works out of Baltimore and is designing models of organizational learning for Price Waterhouse. The year before, Alpha spent big on R&D and training, losing nearly a third of its financial equity but increasing intellectual capital by about the same amount. Across the room, Epsilon—a team that included Art Siegal, former head of the firm's audit practice, and Art Bustamante, a risk management specialist—was taking the opposite tack, conserving cash and building intangibles slowly.

As the year began, Alpha went after three new recruits, two foot soldiers and one pricey highflier—and got them all, though they had to pay a bonus to the highflier to beat out the Delta team. The bidding for customers followed, and Alpha got two of the three it sought—one,

ILLUSTRATION BY JULIA GRAN

unhappily, at a discounted fee. A third of the way through the year, fast growth and heavy investments suddenly boomeranged: When time came to collect accounts receivable and pay fees and salaries, Alpha was 3M short. Brent Snow strode over; in Tango! the facilitator is also the banker. "I'll loan you money against your receivables," he said after studying the books. "You're lucky we're playing in a country with a strong legal system—in some places a bank won't accept collateral the borrower doesn't yet have in hand."

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The year went on, and so did the cash crunch as Alpha juggled staff, projects, and cash. A key staffer would float his résumé if he didn't get training—so the company ponied up. A project ran into a difficult snag—great for the image when it was solved, but it cost 4M. Back came the banker, sterner but still willing to lend.

When the books closed for the year, Alpha's costs had so far outrun income that, though it had the highest revenues in the room, the company was down to just 1M in equity, from 19 two years earlier; Alpha also had by far the highest intangible value, but could their people eat? Charlie Goldwasser, an organizational change expert from Los Angeles, reassured his teammates: "We're going to be fine, guys. We need to think about our cash position, but we'll be fine." Alpha's Bryant was less sanguine: "I don't feel comfortable."

I didn't know it till everyone's results went up on the wall, but Beta was in worse shape. They'd followed the same strategy as Alpha—heavy spending to build for the future—but hadn't got the customers they wanted, and lost 33M, finishing the year heavily leveraged, with equity of –13.

"We'll buy you," Epsilon's Siegal joked, "for 20 cents on the dollar." Epsilon was the only team that had made a profit each year, and the team was feeling cocky. The strong cash position disguised problems, however: They risked being unable to attract and keep employees and customers if they didn't start building image and skill. Said Bustamante, the Price Waterhouse risk manager: "This isn't easy. We don't have a lot of experience managing the balancing act between money and know-how." Still, two of Epsilon's three rivals were beggaring themselves; the third, Delta, was only a tad stronger in intangibles and had mediocre financials. "We're going to devour them tomorrow," one Epsiloner said.

"How'd you get into this?" someone asked facilitator Brent Snow at dinner that night. While I tucked into an exotic mixed grill of ostrich fillet, buffalo, and pheasant—low in fat, high in intangibles—Snow described doing organizational development work at equipment maker Goulds Pumps and, earlier, leading Outward Bound expeditions for several years, including some hairy ones guiding juvenile delinquents on 30-day trips through trackless Florida swamps. "Whenever we came to a road," Snow said, "there was the chance that one of them would try to cut and run." I understood the feeling: The suits were quashing the creatives, and it killed me.

I sat with Epsilon in the morning as the next "year" began. This was the year they'd hire hotshots—headhunting if necessary—and build intangibles. Said Siegal: "We've already got the revenues, so we're going to run a small loss and invest." This time the bidding began with customers, and something strange happened. Overnight Beta had decided to leave the high road and go for volume to save their skins. They bid for half a dozen customers who didn't demand much know-how and got them all, because everyone else wanted challenging, high-revenue clients. Epsilon pursued a couple of high-end customers but was spurned for competitors with deeper skills. "I'm nervous," Siegal said, as the bidding for personnel began.

He was right to be. To attract the best customers, they had to hire staffers who valued know-how and prestige more than money, and therefore ended up costing a total of 9M in bonuses. R&D projects, which were also needed to make up for miserly investment in previous years, cost 6M. Suddenly the cash was gone, and Epsilon was a borrower. "We're in big trouble," Siegal said as they began closing the books. Not only had costs soared, but gross revenue dropped as well. Only some fiddling—an interest payment made January 2 instead of December 31—kept the company in the black, but the skilled auditors at Epsilon knew that next year Itzhak Perlman couldn't fiddle enough to keep the company alive.

Over at Delta—the team that was only a little stronger in intangibles than Epsilon, and financially weaker—things had gone from fair to bad: Costs spiraled out of control when, in an attempt to break away from the pack, the company let aggressive hiring outstrip its book of projects. Like a shotgun-toting hillbilly father, banker Snow suggested the two companies merge. Said Delta's Steve Redwood, a partner in the London office: "It could work. Historically Epsilon's financially prudent, whereas we have, shall we say, flair."

Beta's bottom fishing paid off big. With no rivals in the low end of the market and a management team that ruthlessly overworked its staff, the company tripled revenues, racking up a 16M profit. As for Alpha, their eyes shone with gratitude as they looked at their benevolent banker, who had agreed—barely—to one more loan, using the value of the company's R&D as collateral. That did it: Two-thirds of the way through the year, the tide turned, and when the numbers went up, Alpha—despite hefty interest payments—was profitable again and had reached a level of know-how where it had a competitive advantage that could prove decisive in landing accounts and personnel the next year. Snow mused: "I've led 50 of these simulations, and every time I've had to do creative financing. Capital markets really don't know how to do the things knowledge companies ask of them. If Alpha hadn't come through I'd have been fired. I put the bank at great risk."

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The next year was the last in the simulation. I joined Beta, which was relishing its mass-production model. "Throughput, throughput!" one chanted. When it was time to prepare invoices, team members rubbed their hands and laughed; when a pile of chips moved from receivables into revenues, they applauded, occasionally (and a bit contemptuously) likening themselves to a Price Waterhouse competitor. Matt Thornton, a principal consultant from Dallas, noted, "If we had competition, this would be unsustainable; it would degenerate into a price war." But rival had they none, and as the cash rolled in, Beta's

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body-shop millionaires had an idea. To assuage their guilt, they called in the mayor—Snow—and negotiated an increase in the company's image in return for setting up a foundation.

The merged Delta and Epsilon teams—rechristened NOK, for "Naked Over Knackered," which described the two companies pre-merger—came through too, but only after painful triage of both staff and customers: If team members hadn't been able to agree on who should go and who should stay, the merger would have failed. And Alpha, which in this final year reaped the fruit of its investments in know-how, pulled in a solid 12% return on sales. All three ended in the black, with NOK declared the winner, its market value 93M, vs. 82 for Alpha and 65 for Beta.

As the game ended, the consultants began swapping war stories—tales of clients who had run into problems similar to the ones they'd just seen, memories of triumphs and near disasters in the firm's own history. When Beta was at its lowest ebb, one team member said, "It felt like a small firm I worked for in Cambridge, Massachusetts. It was so scary that when I interviewed at Price Waterhouse, I literally asked, 'Do you guys make payroll?' " If there were lessons I took away, they were these: First, competition in knowledge-based businesses is a game for the gutsy. Differences that started small and seemingly insignificant abruptly turned into boom or bust. Second: If knowledge is king, it rules only with the consent of cash. Said Alpha's Goldwasser: "We underestimated the cost of competitive advantage through know-how. We were like a million startups in Silicon Valley—great ideas and people, and run out of cash."

If—to wax Hegelian—knowledge is the thesis and cash the antithesis, what's the synthesis? It seemed to lie in challenging projects, which built knowledge faster than training or R&D. Though the skills thus created could, and did, walk out the door, demanding work also helped to keep people by lifting image and morale—not to mention income. As Snow pointed out, the game is aptly named. It takes two to tango: customers and employees, tangibles and intangibles, short term and long term, profitability and investment. If one tries to bend the other to its will, both end up in a heap on the floor. F

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