HARVARD | BUSINESS | SCHOOL

9-300-001
REV: JULY 25, 2001

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Microsoft: Competing on Talent (A)

In the summer of 1999, a front page *Wall Street Journal* article was attracting attention on the Redmond campus. Under the headline "As Microsoft Matures, Some Top Talent Chooses to Go Off Line," the article reported: "Tired of grueling deadlines, frustrated by the bureaucracy that has accompanied Microsoft's explosive growth, or lured away by the boom in high-tech start-ups, dozens of the company's most capable leaders, all around 40, have opted out—at least temporarily . . ."[i] (See **Exhibit 1** for the article's list of senior level departures.)

Steve Ballmer, the company's recently appointed president and COO, was quoted as saying that some of the departures were voluntary and some were not, opening opportunities for fresher, smarter replacements. "We have a bench that is very deep," he said. "We have people who are fired up—driven—to lead the next generation."[ii] Yet despite the positive outlook, Ballmer clearly recognized that Microsoft had to change or adapt some of the human resource practices that had allowed it to assemble and retain what CEO Bill Gates proudly called "the best team of software professionals the world has ever seen." Just six weeks before the *WSJ* article was published, Ballmer had announced a package of changes that sweetened salaries, allowed more frequent promotions, and softened some of the pressures that had long been part of the "hard-core" Microsoft culture.

Still, there were some who wondered if the rumblings in the senior management ranks reported by the *WSJ* were not the signs of larger looming problems for Microsoft. It was a question taken very seriously by Gates and Ballmer who understood very well that the company's enormous success was largely due to its ability to recruit, motivate, and retain extraordinary talent.

In the first part of this case, we will explore the foundations of Microsoft's human resource philosophies, policies, and practices as developed primarily in the 1980s. We will then examine how the company's growth led to changes in the way such policies were managed in the 1990s—and sometimes to changes in the policies themselves. (See **Exhibit 2** for Microsoft's growth profile.)

Recruiting: Attracting the Best and Brightest

Gates had long recognized that it took exceptional people to write outstanding software. His preference for hiring extremely intelligent, not necessarily experienced, new college graduates dated from Microsoft's start-up days, when he and co-founder Paul Allen recruited the brightest people they knew from school—their "smart friends." In subsequent years, the importance of recruiting well

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Professor Christopoher A. Bartlett and Research Associate Meg Wozny prepared this case. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management. Some data are disguised.

was constantly reinforced by Gates, who considered helping his managers hire the best of all possible candidates as his greatest accomplishment. "We're in the intellectual property business," he told them. "It's the effectiveness of our developers that determines our success." Underlining the importance of hiring and retaining superior talent, in 1992 Gates acknowledged: "Take our 20 best people away, and I will tell you that Microsoft will become an unimportant company."[iii]

For Gates, acquired knowledge was less important than "smarts"—the ability to think creatively; and experience was less important than ambition—the drive to get things done. Above all, however, he wanted to use recruiting to continually raise the bar. "I'd have to say my best business decisions have had to do with picking people," he said. "Deciding to go into business with Paul Allen is probably at the top of the list, and subsequently, hiring a friend—Steve Ballmer—who has been my primary business partner ever since." As *Fortune* magazine once observed, "Microsoft has been led by a man widely recognized as a genius in his own right, who has had the foresight to recognize the genius in others."[iv]

Almost from the day he was hired as assistant to the president in 1980, one of Steve Ballmer's primary responsibilities was to act as recruiting coordinator. It was an assignment he particularly relished. According to one senior manager, "Steve's mantra was, 'We want people who are smart, who work hard, and who get things done.' That simple mantra is something that people still talk about today." And once the smartest, most driven were identified, Ballmer and his team were relentless in getting them on board. "There's a standing policy here," said Ballmer, "whenever you meet a kick-ass guy, get him. . . . There are some people you meet only once in a lifetime. So why screw around?" In *Fortune's* assessment, "The deliberate way in which [Gates] has fashioned an organization that prizes smart people is the single most important, and the most consistently overlooked aspect of Microsoft's success."[v]

Although the need for experienced managers led the company to recruit some key people from other companies, in the early days Microsoft's favorite recruiting grounds were elite educational institutions, particularly Harvard, Yale, MIT, Carnegie-Melon, Stanford, and a few highly targeted others. As growth increased recruiting needs, the net spread wider, eventually targeting 15 universities in the United States, four in Canada, and six in Japan. Microsoft recruiters made visits to each of these schools in search of the most brilliant, driven students—"once-in-a-lifetime" people—paying little attention to prior experience. Indeed the company preferred people who didn't have to unlearn different company values, work habits, or technological approaches.

Before being hired, however, every candidate had to survive an intense interview process that many found quite harrowing. Each candidate was interviewed by at least 3, and sometimes up to 10, Microsoft employees. During the interview, the candidates were tested more on their thought processes, problem-solving abilities, and work habits than on specific knowledge or experience. And because developers played such an important role in Microsoft—writing the lines of code that were Microsoft products—their recruiting process was particularly rigorous.

Technical interviews typically focused on programming problems that candidates were expected to answer by writing code. Some managers posed scenarios with key information missing to see if the candidate would ask for data or just move straight to a solution. Then they might throw in an oddball question like, "How many times does the average person use the word 'the' in a day?" meant to test the candidate's deductive reasoning, creative problem solving, and composure. If a candidate gave such questions 30 seconds of thought and said they didn't know, the interview was effectively over. If they were incapable of creative problem solving, they were not an appropriate candidate. Next, an unfamiliar but practical problem—for example, describe the perfect TV remote control—might be thrown in to see how the candidates broke down the problem, how simple or complex they made the solution, and if that solution solved customer needs.

As soon as the interview was over, each interviewer would send e-mail to all other interviewers, starting with the words "Hire" or "No Hire," followed by specific feedback and suggestions for follow-up. There was no "gray area"—a good candidate who just cleared the bar was a "No Hire." Based on earlier e-mails, people interviewing later in the afternoon would refine their questions to drill down in areas where the earlier interviewers thought the candidate was weak. The purpose of the interviews was to push the candidates until they failed, to get a full understanding of both their strengths and their limitations. (See **Exhibit 3** for an interview feedback email.)

After all the input was in, the hiring decision had to pass two screens. If the reviews were favorable overall, a final, end-of-the-day interview with the candidate's prospective manager was scheduled. Based on his or her own impressions and the comments from other people in the group, the prospective manager then made the hire/no hire recommendation. But to assure that only top candidates were hired, a so-called "as appropriate" interviewer was also involved in the interviewing process. A senior manager explained:

> Very often, the "as appropriate" interviewer is a person who is outside the hiring group, a person really solidly grounded in Microsoft culture and committed to making sure that we hire only those who are going to be good Microsoft people, not just good people for specific jobs. That person has veto power, which puts a system of checks and balances in, because the hiring manager may feel a lot of pressure to fill a job, while the "as appropriate" interviewer doesn't.

Microsoft's tight control on headcount further reinforced the pressure to resist settling for the merely satisfactory candidate. Even in the early days, when the company was growing extremely rapidly, Gates and Ballmer insisted on hiring fewer employees than were actually required to carry out the work. The internal code for this philosophy was "*n minus 1*," where *n* was the number of people really needed. Said one senior HR manager:

> [Beyond hiring smart, driven people] the second principle Steve Ballmer was preaching was that the default decision on a candidate is "no-hire." In other words, unless you can identify a clear reason why we should hire this person, we should not hire him or her. . . . That principle has been really important in keeping the bar high and our selection ratio very low.

The company's credo was that an adequate but not outstanding new employee was worse than a disastrous appointment. "If you have somebody who's mediocre, who just sort of gets by on the job," Gates explained to Microsoft managers, "then we're in big trouble." The "big trouble" Gates saw was that, while poor performers were quickly weeded out, a mediocre employee might continue to occupy a place that could be filled by someone brilliant.

Microsoft's Work Environment: The Caffeine Culture

Microsoft's cultural norms could be traced back to the company's start-up days when Gates, Allen, and four programmers created a hot-house of innovation and hard work. They kept strange hours, consumed cases of Coke (delivered twice a week at company expense), and occasionally slept on the office floor. Software developers dominated the company, and in the early years Gates knew their names, faces, and telephone extensions by heart. Said one programmer, hired from MIT in the early 1980s: "It was about the only company where you could get your own office at that stage in your career. There was a lot of respect for a young kid right out of college."

By 1986, Microsoft had nearly 1,200 employees and moved into new offices in a 29-acre property (referred to as a campus, not a corporate park) in Redmond, 10 miles east of Seattle. To ensure social interaction, the campus included numerous cafeterias, which provided food at prices subsidized by the company. It was calculated that Microsoft spent more than $8,000 per employee each year on nonmandated benefits, with more than $715 of that going for beverages and food subsidies. As one employee explained, "Anything with caffeine is free." A former director of human resources described the campus environment:

> How do you make young kids who had never been away from home—or only as far as college—comfortable? We wanted to keep the atmosphere at work one they were somewhat familiar with, and also make sure it gave them a sense of social belonging.

Because Gates felt solitude and privacy were necessary to allow people to "sit and think," each employee had a fully enclosed 9′ x 12′ office with a door. People were encouraged to decorate their offices however they wanted. ("It's kind of like their dorm room," said one manager.) Given the long hours and fanatical pace, having a comfortable work environment was recognized as being essential to morale and mental health. (See **Exhibit 4** for campus and office pictures.)

While the move to the Redmond campus in some ways symbolized Microsoft's shift from start-up to successful company, the early values of frugality remained remarkably unchanged: salaries were modest, employees traveled coach class, and there were no status symbols such as executive dining rooms or fancy office furniture. Long-time managers reminded newcomers that the company's success had to be earned one day at a time, and "eating weenies instead of shrimp" was the philosophy for success. That philosophy extended to resource allocation. For example, the "*n minus 1*" employment philosophy not only ensured that work would focus on the core, priority issues, but also that everyone would be stretched and challenged.

The culture attracted those comfortable with 14-hour days and working weekends, working toward Gates's vision of "a computer on every desk in every home, running on Microsoft software." One Microsoft employee described a typical day this way: "Wake up, go to work, do some work. 'Oh, I'm hungry.' Go down and eat some breakfast. Do some work. 'Oh, I'm hungry.' Eat some lunch. Work until you drop. Drive home. Sleep." Yet despite the fast pace and heavy workload, motivation and morale were high. ("Our efforts are significant to millions of people—it's the old change-the-world thing," one explained.) But some eventually became worn down by the demanding pace, and burnout was a continual concern. As one employee noted, "One year here is like three years elsewhere."

Through all the growth, Gates worked hard to keep alive the feeling of a small company. He continually restructured the organization into small units—typically with 30 to 200 people—further dividing these into work groups with responsibility for a product, project, or program. In this highly charged but informal environment—a collection of small groups rather than an integrated entity—it was not uncommon to run across a team of developers playing volleyball in swimsuits, or fencing with rubber swords. People spoke in a techie-sounding slang, much of which was derived from Gates's personal idiom. (For example, "bandwidth" referred to the breadth of one's intellectual powers, great ideas were "cool" while those that were less than enlightened were "random.")

To those from more traditional organizations, this frenetic-paced, developer-driven, resource-constrained management model seemed chaotic. An ex-Xerox technical manager who joined Microsoft in 1983 found the lack of professional management surprising:

> There were a lot of managers at that time who lacked the necessary skills to manage people. It was the Peter Principle: very successful technical people would get promoted to management roles. You'd get 30 people reporting to one guy who was not on speaking terms with two-thirds of the group, which is inconceivable.

A software programmer from a large competitor had a similar reaction after he toured the company in the mid-1980s. His surprise stemmed from the limited cross-unit coordination:

> They had a model where they just totally forgot about being efficient. That blew our minds. We came out of a mainframe world, and there we were at Microsoft watching all of these software tools that were supposed to work together being built by totally independent units, and nobody was talking to each other. They didn't use any of each other's code and they didn't share anything. But over the years, that probably turned out to be in the PC world one of the most effective models.

Through the 1980s and into the 1990s, much of the direction setting, coordination, and control was managed by Gates personally. His legendary intellect, high-energy involvement, and intensely competitive nature led him to adopt a very "hands on" style. During this time, he monitored around 100 bi-weekly (later monthly) status reports from project and program teams. He saw his role as assessing the fit and competitiveness of the entire product portfolio and making the tough technology versus commercial tradeoffs. His reviews and interventions could be brutal ("Do you want me to write the code for you?" he asked one lagging team. "I could do it over the weekend."), but developers found them stimulating and even motivating. "The objective became to get Bill to like your product," said one.

One ex-Microsoft employee summed up the programmers' feelings despite working under constant pressure this way, "We were literally changing the world. You felt you were at the center of the universe. It was an invigorating feeling—and all this pounding by Steve Ballmer and yanking by Bill was just the price you paid to be there." Another said that Gates and his top managers "created a culture where everyone felt that their excellence was material to the bottom line."[vi] Yet another former senior software developer summed up his view of the culture:

> In a highly competitive, success-oriented environment such as Microsoft, how do you succeed? Knocking yourself out doing a damn good job won't cut it. Everyone around you is doing at least that. And every one of those people around you is at least as good as you, or better. . . . The only way to achieve here is to push the envelope of what you can do. Every day try to do better. Work smarter. Work harder. Innovate more. People are focused 100% on performing their job as successfully as possible.

Development Through Stretch and Challenge

The commitment to build Microsoft on the foundation of smart, driven people—"hard core" in Microsoft-speak—was supported by an equally strong belief that such individuals were best developed through challenging and engaging work assignments. The company's rapid growth combined with its "*n minus 1*" staffing philosophy ensured that people were thrown into stretching assignments very early—often before they were ready, according to many insiders. Consequently, although Microsoft offered several formalized training programs for managers, none was mandatory. The head of the company's Executive and Management Development group, explained:

> We have very limited educational and training opportunities for our managers. But I think that we have absolutely developed leaders. . . . We get people having to move from managing 10 people to managing 200 people overnight. That kind of stretch in the job will either create growth or death. Fortunately, we have such great people that most of them have just grown by leaps and bounds.

Because the company primarily recruited technical experts, it learned very early that some would not be effective managers. Therefore people could progress as individual contributors (as a developer for instance) and obtain the same recognition, compensation, and promotion opportunities as those who advanced on the management track (as a product manager, for example).

In 1983 and 1984, "ladder levels" were established to assist managers in recruiting developers and in offering salaries based on skill level. Later, other functions created a ladder system parallel to the one built for developers. There were 12 levels on the nonexecutive ladder, from clerical positions to senior manager or technical expert. To bring some comparability to this dual-track process, each employee's ladder level was determined by the nature of his or her job as well as the individual's experience, skill, and performance in the company. (See **Exhibit 5** for examples of ladder levels.) For example, a new developer hired from college at Level 30 would typically spend 6 to 18 months before moving up a notch, while someone with a master's degree might enter at Level 31.[1] To move from Level 30 to Level 31 required the ability to write production code without a lot of supervision. On average, developers stayed at Level 31 from 2 to 2½ years, since Level 32 reviews were much more intense. Moving to Level 33 was a major step, not unlike making partner in a law firm, and typically required that the manager describe the candidate's contributions and potential to a group vice president. Promotions to levels 34 and 35 required Gates's approval.

Development also occurred by encouraging horizontal transfers, and employees were encouraged to develop themselves by switching jobs—typically every 2 or 2½ years. Indeed, the personal growth such job changes created had become a major source of motivation. Prior success was not necessarily the key criterion, and Microsoft had a long tradition of promoting people who were in charge of failed projects. (The often-quoted sentiment was, "If you fire the person who failed, you're throwing away the learning.") While the company was rigorous about studying the source of failure when a product or project did not meet its goals, personal mistakes were more likely to be examined for their learning than punished. A classic illustration was provided by Vice President Russ Siegelman when he described his career as a series of such "learning experiences":

> I worked on the marketing for LAN Manager. It was a flop. They promoted me to be in charge of marketing of Windows for Workgroups—it got off to a rocky start. I was promoted to be Bill's assistant and was put in charge of creating Microsoft's on-line services. That got off to a rocky start too and they made me a vice president. Imagine if I had been on successful products!

Along with experiential learning, Microsoft put great faith in development through personal mentoring. From their first days at Microsoft, new hires understood it was their responsibility to learn from a whole range of experienced people including team leads, experts, and particularly their formally appointed mentors—often equally young, but more experienced colleagues—who took on the primary teaching responsibility in addition to doing their work. Coaching and mentoring were deeply embedded in Microsoft's values, and while not all managers were skilled at doing it, most recognized it as an important part of their responsibility. As Doug McKenna reflected, "There's some really good coaching that goes on at Microsoft and there's some that could be much better. It's not something that comes easily, particularly to highly technical people. It takes a very disciplined manager with good people-insight to do it well."

Gates himself also played a vital role in the development process of thousands of employees. Throughout the year, project teams, from billion-dollar businesses to start-up ideas, presented their progress to date, current status, and future plans to the CEO in Microsoft's legendary "Bill Meetings."

[1] Level numbers disguised.

Teams went to great lengths to prepare for such reviews and a common practice was to rehearse the presentation, with someone in the role of Gates. While Gates challenged and probed, he also respected pushback—as long as it was backed by data. "Exploration of issues could be brutal—a knife fight" according to a former employee. But as many acknowledged, the true value of the meetings was in the knowledge and commitment the team gained from their preparation.

Gates also added oversight to what was essentially a free-market process of allocating scarce talent by moving key people from one project to another, not only to influence the project's outcome, but also to accelerate the training and development process. He explained:

> At my level, what do I really control? If a project really appears to be broken, then you want an independent review of the code. Very early in the company I'd say, "Hey, give me the source code. I'll take it home." I can't do that now. So I take somebody, a D34 [Developer Level 34] or D35 and say, "Go dig into this thing and let me know," or "Help them out in terms of getting more personnel assigned."

Review and Reward: The Options-Driven Engine

Reflecting Gates's belief that employee ownership raised motivation and retention, even in Microsoft's earliest days, key employees were given equity in lieu of high salaries—a strategy that also conserved cash for growth. (For example, to attract Steve Ballmer in 1980 as employee number 24, Gates offered him a $50,000 salary and a 6% stake.) In 1986, as the privately held company approached 500 shareholders, Gates realized he would have to take Microsoft public, not just to raise $61 million in capital but also so he could keep making new employees owners.

Equally well established was the linkage between individual performance and reward. When tied to Gates's style of providing frequent and typically brutally honest feedback, this norm became institutionalized in a process of direct, clear semi-annual performance reviews tied to pay increases, bonus awards, and stock option grants. Gates's style of setting specific quantifiable objectives was reflected in the norm of committing in writing to measurable performance objectives every six months. For example, a developer might agree to complete three modules of code or reduce the number of bugs from 1,000 to 50. Eventually, the acronym SMART was applied to performance objectives—Specific, Measurable, Attainable, Results-based, and Time-bound.

The semi-annual reviews also reflected Gates's passion about learning from mistakes—referred to as "the disease model of management." Sessions were routinely punctuated with questions such as, "What did we learn?" or "What could we have done better?" Performance review interactions were soon recognized as one of Microsoft's best employee development forums.

Paul Maritz, a senior manager who joined Microsoft in 1986, introduced a forced evaluation curve tied to a 1-to-5 performance scale based on his experience at Intel. Over time, the shape of the curve evolved to a distribution, in which 25% of employees received an evaluation of 3.0 or lower, 40% 3.5, and 35% 4.0 or higher. As one senior HR executive explained, "The beauty of this rigorous review system is that it has become part of the fabric of Microsoft. People gripe and complain, but our surveys show that employees really appreciate that opportunity to reset goals and get a view of how they are doing."

In addition to the formal semi-annual evaluation and feedback process, most managers reviewed objectives every month or so with each individual. This practice helped Microsoft employees avoid performance-review surprises and big deviations from the agreed goals. "When an employee goes into a review saying, 'I have no idea what my score is going to be,' it means their manager is doing a poor job," said one Microsoft executive.

Each February and August, all employees filled out performance review forms describing what they achieved in the previous six months and rating themselves on a 1-to-5 scale. This went via email to the employee's manager who then developed his or her own evaluation. Special software allowed the manager to link the final rating to a suggested merit increase range (typically 4% to 6% for a 3.5 rating). In keeping with its historical roots, salaries at all ladder levels were set at the 50th percentile—lower than half of its major competitors. A similar process led to recommendations for bonuses from zero to 15% of salary. At Microsoft, merit increases were awarded on the basis of one's present skills while bonuses rewarded achievements in the immediate past period.

After analyzing all these inputs, the manager then scheduled the review session, at the end of which the employee received his or her rating and increase. (If there were bad news to deliver, an HR generalist would meet with the manager in advance to coach him or her on how to handle the discussion.) Because a score of 3.0 or lower was reserved for the lowest 25%, it was regarded as undesirable, and a 2.5 rating usually meant the employee was on the way out the door. On the other hand, a score of 4.0 or above was good news; there were very few 4.5 and only two or three 5.0 scores companywide each year—an honor that warranted a personal visit from Gates. (See **Exhibit 6** for sample performance review form.)

In August, managers also rated their subordinates for their eligibility for stock options. "This is the forward-looking element of our compensation package," explained Chris Williams, VP of Human Resources. "Options are awarded on your future value to and potential at Microsoft." After a manager evaluated the employee on a scale of A to D (those rated A were viewed as important long-term company assets), a manager one level above reviewed the proposed option allocation and submitted it for a VP's approval. Each ladder level had a specified option allocation "maximum" against which evaluations were applied. Although actual option data were confidential, the casewriters' estimate of the possible allocation range was 70%-100% of the maximum for an A rating, 40%-70% for a B rating, and 0%-40% for a C rating. (See **Exhibit 7** for compensation data.)

Public recognition and awards were not widely employed, at least at the higher levels. A few attempts to institutionalize employee recognition in a more formal way simply did not take in Microsoft's individualistic culture. (For example, when a product was shipped, the employees who had worked to build it received identical plaques inscribed, "Every time a product ships, it takes us one step closer to the vision: a computer on every desk and in every home. Thanks for the lasting contribution you have made to Microsoft history." While some employees cherished those "ship-it" awards, many used them as doorstops.) At yearly division level meetings, a few people who did an outstanding job might be given awards—usually additional grants of stock. And those who clearly went above and beyond or achieved major breakthroughs received congratulatory e-mails from Bill Gates. (Some employees had them framed.). But as he readily acknowledged, "We tend to be very parsimonious with praise around here."

Microsoft Through the 1990s

As Microsoft entered the 1990s, sales exceeded $1 billion and the number of employees moved over the 5,000 mark. It was no longer the small, personal start-up company for which its original personnel policies and practices had been developed, and some of them had to be modified, adapted, or even radically overhauled. But there was still a strong desire to hold on to the underlying people philosophies that many felt were at the heart of Microsoft's success.

Recruiting in the 90s

Although Microsoft's size and growth rate forced many of the early practices of attracting exceptional people to become more structured and formalized, Gates and Ballmer wanted to preserve their general recruiting principles. For example, they tried to retain the personal management involvement that dated from the days when Bill Gates and Paul Allen would interview every candidate. While a full-time team of 35 now managed recruiting activities on over 100 college campuses, recruiting was still viewed as a prime responsibility of everyone in the organization. Microsoft managers and executives regularly returned to the schools from which they had graduated to establish relationships with the rising stars. And during the 1990s, the company's expanding international operations were increasingly viewed as sources of scarce talent.

Gates constantly reminded his managers that Microsoft's past success was inseparable from its success in hiring and retaining the best brains. As the company's recruiting and screening techniques became more sophisticated, the hiring managers still followed the rigorous interviewing practices established initially for hiring developers: the candidate's "smarts" remained the most important selection criterion. As they continued to target the top 5% of success-driven, Type-A personalities, managers typically told their groups: "Is the person you're interviewing smarter than half our group? They need to be: we want to raise the median." Despite the company's huge financial resources, the "*n minus 1*" rule remained in place not only to constrain costs, but also to ensure that managers hired only the best. (In a rare exception to the "*n minus 1 rule*," in the mid 1990s Microsoft Research head Nathan Myhrvold announced that Microsoft "had all the budget in the world" to triple its research staff.)

By the mid-1990s, Microsoft recruiters were scanning CVs of the entire population of about 25,000 computer science graduates in the United States to create a shortlist of 8,000. (Similar efforts were ongoing overseas, albeit on a smaller scale.) These were reviewed in detail to identify approximately 2,600 targeted for campus interviews. Following these, about 800 candidates were invited to visit Microsoft's Redmond campus near Seattle. The final round of interviews resulted in approximately 500 receiving offers of whom almost 400 accepted. In fact, the yield rate in recent years had been increasing despite the growing competition for graduates. (See **Exhibit 8**.)

However, Microsoft's rapid growth had long since outpaced its ability to recruit primarily from college campuses. In 1998, for example, the company created 4,823 new positions, and adding replacements for the 6% to 7% attrition rate, the actual number of jobs to be filled was closer to 7,000. Increasingly, recruiters had to rely on attracting experienced hands from within the industry, and by the mid -1990s this had become the source of over 75% of new hires. (Evidence of this could be seen in the average age of Microsoft employees, which by 1999 was 34.5 years, with 20% now over 40.)

To identify and track these potential experienced recruits, Microsoft maintained a full-time team of more than 300 recruiting experts whose job was to identify the industry's most talented people, build a relationship with them, and eventually attract them to Microsoft—no matter if, on the first contact, they expressed satisfaction with their existing jobs or even a total disdain for Microsoft. Once someone had been identified as "hard core"—Microsoft's euphemism for the kind of highly talented and driven people they sought—the pursuit was relentless, if subtle. Regular telephone calls at discreet intervals, conversations at industry conventions, invitations to informal dinners—recruiting team members employed every means to keep the lines of communication open with the potential candidate. Said one senior HR executive, "One day he will be ticked off with his current organization for whatever reason. That day, he will call us."

The company also responded more opportunistically. For example, industry recruiters were formed into "strike teams" to take advantage of breaking opportunities. "We may send a team to recruit in Bucharest or set up shop near a company about to announce layoffs," explained human resource VP Williams. "Just recently when we heard AOL was downsizing Netscape's operations in the Valley, we assembled a team to identify the best talent and go knocking on doors." Like most activities in Microsoft, the performance of the recruiters was closely monitored—not only on the number of "contacts" they maintained, but also on the percentage of conversion to staff, and even the performance of their recruits once they joined Microsoft.

Attracting the best talent to the company was a preoccupation of all Microsoft managers, starting with the CEO. Gates saw no activity as more important than meeting superior candidates to convince them to sign on. He even targeted the summer interns, inviting all 600 in groups to evenings at his $60 million home. Gates also regularly telephoned wavering star prospects, even at entry levels. "He still calls up college kids who are key people that we want to hire," said David Pritchard, recruiting director. "That blows them out of the water. They never believe it's him."

In 1999, amidst an intense global war on talent, Microsoft earned a place on *Fortune's* elite list of *World's Most Admired Companies*, and specifically as the company with the highest rating for its ability to attract, develop, and retain talented employees. Bob Herbold, the company's executive vice president and chief operating officer, declared, "Recruiting is Microsoft 's No. 1 core competency. We are after smart folks who are fired up about improving people's lives via software, no matter where they live." But there was some unease with the company's increasing dependence on experienced hires. Believing that "young people are more willing to learn and come up with new ideas," Gates had expressed a wish to return to the days when most employees were hired directly from college. (See **Exhibit 9** for employment headcount.)

Managing Culture in the 1990s

In the 1990s, as the company passed the 10,000- then 20,000-employee level, Gates became concerned that it was losing some of the values and spirit that had made it successful. In the late 1980s and early 1990s, Mike Maples, an executive VP who had joined Microsoft after a 23-year career at IBM, had begun using employee surveys in his product group to quantify employee attitudes. In 1993, corporate HR hired several experts qualified in designing, conducting, and interpreting data on organizational climate and employee satisfaction. In Microsoft's macho environment of drive and achievement, the initial response to the first company-wide survey measuring and managing employee attitude was far from universal acceptance. While some managers embraced the results and started using the information to work with employees and improve the work environment, others took little or no follow-up action. Indeed, with job satisfaction levels consistently recorded around 80% (compared to 73% in other information technology companies and 64% in Fortune 500 companies), many did not see this as a problem.

In the late 1990s, however, after the HR group began highlighting attrition rates and employee job satisfaction, the tool gained wider acceptance. (Attrition measured voluntary separation—by far the largest part of turnover in a company where dismissal was rare, since most who could not meet performance standards or operate under stress chose to seek out alternative opportunities.) Historically, Microsoft had never experienced big retention problems—in 1997 its annualized attrition rate was 7.6%, and in 1998 it dropped below 7%, which was extremely low when compared to ITAA data showing that industry-wide turnover was 15.3%. However, when its Human Resources group delved deeper, they found that among employees who had been with the company for seven or more years and who were in senior positions, the attrition rate came close to the industry average. Although absolute numbers were relatively small, concern about this level of attrition soon became widespread, and in 1997 HR put in place the "Terminator Study" which had the A. C. Nielsen organization interview ex-employees to find out why they left the company. (See **Exhibit 10** for attrition rates.)

Armed with data from the Terminator Study and prior employee surveys, internal experts developed an "Organizational Health Index"(OHI), which could be administered as part of the annual employee survey. "With control over compensation largely outsourced to NASDAQ [the stock exchange on which Microsoft was listed], the work environment became the biggest retention tool we had to manage," said Chris Williams. He went on to explain, however, that the objective went well beyond retention: "It's about keeping alive our entrepreneurial spirit, ability for individual action, and the opportunity to make a difference." Fortuitously, the conclusion of the OHI initiative coincided with Steve Ballmer's appointment as Microsoft's president in July 1998. With almost 30,000 employees, 180 products and five layers of management, it was a very different company than the one he and Gates were running even a decade earlier.

One of Ballmer's first priorities was to embark on a series of one-on-one interviews with a cross-section of 100 employees. At the end of this process, he concluded that Microsoft needed two things: a greater sense of clarity and excitement about the company's direction and more freedom to act without bureaucracy or red tape. The first of these led Ballmer to take the bold step of proposing to Gates that Microsoft change it's long-time vision of creating a world with "a computer on every desk and in every home running on Microsoft software" to Vision Version 2—"to empower people to do anything they want, any place they want, and on any device."

Ballmer's second priority was to develop leaders capable of clearing the obstacles, making decisions quickly, and defining clear goals. To achieve this, he and other senior managers would have to dismantle many of the company's old approaches and even change their management style. "I'm used to diving in deeply," commented Ballmer. "Now I'm trying to let other people dive in before I do." Ballmer's conclusion that top management would have to push authority down and replace it's traditional hands-on control with coaching—what he termed "turning over the keys"—was congruous with the HR group's OHI research findings.

Composed of 19 carefully selected employee-survey questions designed to correlate directly to a person's intent to stay at Microsoft, the first OHI survey was implemented in the fall of 1998. Unsurprisingly, those scoring 4 or 5 on statements like "I work towards clear goals," "I am appropriately involved in decisions," "I have resources I need," and "I feel respected and valued at Microsoft," were significantly more likely to respond positively to a question about intent to stay with the company than those scoring 3 or lower on those statements. The responses from several thousand employees in the senior ranks were tabulated and the index was created with a composite score for each VP. Microsoft's 39 first-level VPs were stack-ranked from the highest to the lowest scoring. The VP at the top of the list received a rating of 78, which meant that 78% employees in his or her organization gave a favorable response—4 or 5 on a 5-point scale—across the 19 items of the OHI.[2] Said one senior HR manager, "We've given this highly data-driven culture a way to create an index through which they can talk about leadership qualities. And it's working because it links into our internal competitiveness and our need for quantified scores or grades." (See **Exhibit 11** for sample survey questions.)

The new OHI measure was given teeth by feeding back to each VP his detailed score by item as well as his ranking and by giving the full ranking details to Bill Gates and Steve Ballmer. Ballmer also insisted that all VPs make OHI the focus of their first slide in their annual business review meeting. "And he doesn't let them off the hook easily," explained Chris Williams. "He asks them to

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[2] There were 54 VPs at Microsoft in 1998—30 first-level VPs and 15 VPs above the first-level VPs. Only the 39 that had their own organizations were reported in the OHI survey.

explain why individual items are high or low, and more important, what specific action they are going to take to improve."

Development in the 1990s

As Microsoft's growth continued, one of the greatest constraints the company felt was a lack of sufficient capable managers and leaders. As Chris Williams explained, "Like most technical companies, we recruit brilliant technical people who are not necessarily great managers or people developers. We decided we had to put more effort on leadership and management development."

One of the earliest initiatives was the "Bench Program," created in 1994 "to identify our future leaders, then try to find specific ways to help them grow," according to co-developer Doug McKenna. In the first year, about 90 leaders or potential leaders were identified across the company. But like many new processes and programs that the HR professionals were trying to introduce, this one received a mixed response from Microsoft's managers, most of whom simply did not implement it. "We had a particularly hard time selling this approach in our product development organizations, where a Darwinian approach to leadership development prevailed," said McKenna. "That approach tends to produce a few great leaders, but not nearly enough to run a large organization."

Things began to turn around soon after Robert Herbold joined Microsoft as chief operating officer in 1995. After 26 years with Procter & Gamble, where leadership development was taken very seriously, he convinced top executives to review Microsoft's key people more systematically. "At first, the level of commitment was really uneven," said McKenna. "The review meeting would happen once a year but there was not a lot of follow-up. But at least a seed was planted."

With the support of Herbold, the Executive and Management Group began to develop a more formal approach—the so-called "key people review,"—as a combination career-planning, early-identification, and job-slotting program. VPs were asked to identify their high-potential people annually, and the data was consolidated into a confidential companywide inventory. This list was then reviewed by Bill Gates, Steve Ballmer, and other top executives, but the HR group saw the preparation and distribution of the list as important as its use by top management.

The program received an important boost in mid-1998 when Steve Ballmer became president and made leadership development one of his top priorities. Ballmer started carrying the high-potential people list with him, and executives began to invest a lot more time in identifying potential leaders. As one senior HR executive explained, "He's not interested in HR. He's interested in 'Do I have the right people in the right places making the right decisions for the company?'"

In 1998, the high potential list was segmented into three "waves": Wave 1 (100 employees worldwide) was super-selective and comprised those with near-term VP potential. This list was carefully reviewed by Gates and his 16-person Business Leadership Team (BLT) with each VP presenting high-potential candidates and describing development plans. Wave 2 (about 200 in number) included employees who had exhibited strong leadership potential and were near-term candidates for key general management or functional leadership jobs. Wave 3 (300 to 400) included younger, more-junior employees who had been identified as early-career, high potentials for bigger jobs than they currently held. Waves 2 and 3 were reviewed in individual business review meetings. (There was also a separate category for "individual contributors" who were playing key technical or functional leadership roles, but who were not responsible for or likely to manage large groups).

Microsoft's HR staff concluded from research that about 70% of a person's development came from the job they were currently in; 20% came from mentoring relationships with other people, particularly their manager; and 10% from formal training. "We're continuing to create more arrows in our management development quiver," said Williams. "We're introducing new training programs, increasing mentorship, and looking at more job transfers—to international assignments, for example—to broaden our people."

Review and Reward in the '90s

"Microsofties wear golden handcuffs," said one manager. "They are the stock options that vest each year." In 1999, one analyst estimated that at least 10,000 current Microsoft employees had options worth more than $1 million. "Old timers" around since the 1986 public offering had seen the stock appreciate more than 750-fold (see **Exhibit 12** for stock price chart). The 22 top executives and directors owned 31% of the stock worth $138 billion in mid 1999. What surprised many was the number of employees who continued to work at Microsoft even when they were financially secure beyond their wildest dreams. "Sometimes I feel like I'm running a volunteer organization," said one vice president. In fact, when people did leave, Microsoft's research suggested, it was usually because they were burned out or the challenge had run out.

As Microsoft grew, management felt the need for more structure in the review and feedback process that was tied to the reward system. They felt this process played a key role in ensuring open, honest communication, individual and organizational learning, and the diffusion of core norms and values. One major concern was the noticeable decrease in the understanding of what it took to succeed at Microsoft. As a result, around 1994 Doug McKenna, head of Executive and Management Development, set out to identify the core skills, capabilities, and values that were clear to old-timers and those at the top, but less visible to newcomers or those deeper in the organization.

To develop what became known as the Microsoft "competency model," HR specialists asked 50 long-time senior executives to describe what made Microsoft successful. About 110 value ideas were identified, which McKenna arrayed on a deck of cards. McKenna then asked Bill Gates to take the cards and group and rank them in terms of their importance to Microsoft. From this process emerged six "success factors": taking a long-term approach to people and technology; getting results; individual excellence; a passion for products and technology; customer feedback; and teamwork. Some, like a passion for products and technology, or individual excellence, were already widely understood and deeply embedded; others, like teamwork or customer feedback, were more recently emphasized values and tended to be more aspirational.

From these six core values McKenna and his team developed 29 individual competencies required for their successful implementation, with each one described behaviorally at four different levels of performance. (See **Exhibit 13** for examples.) To allow managers to bring these concepts into the review process or recruiting interviews, HR created 29 cards with each desired competency printed on one side and questions helpful in detecting or defining that competency on the opposite side. In addition, managers were given a "tool kit" on how to use the competencies in different sorts of situations—in an interview, a performance review, or in a career-development session, for example. Commented Doug McKenna:

> It's the quality of conversation between the manager and the employee that counts. We wanted to create a flexible tool that managers could use to get better words or to think more clearly about what it is they want to talk to the employee about. We resisted creating a list that we would hand over to front-line managers and say, "There's the answers to your questions. This is what you have to be good at." We don't want to provide our managers with answers, with a canned deal.

The competency model became widely used across the company to bring greater clarity and consistency to many of its people processes, ranging from job skill requirements, to recruiting interviews, to coaching and development processes, to six-month performance reviews. Approximately 15,000 card decks had to be printed and the demand continued at the rate of several hundred requests a month.

Another big change to Microsoft's traditional HR reward practice occurred in May 1999 when intense competition for highly trained technical talent led the company to increase the target level for base pay from the 50th percentile to the 65th percentile. Chris Williams explained:

> Our offer acceptance rate remains extremely high—90% for industry hires and 72% for campus offers. But in a market that is increasingly competitive it's hard to ask a great candidate to take a salary cut . . . We still believe in asking people to make an investment in Microsoft by working to increase the value of their stock; we just want to make cash a more important part of the mix.

At the same time, Microsoft announced almost a doubling of the number of nonexecutive ladder levels from 12 to 22 in order to reward its highest performers more frequently with promotions. "Now those who are doing well are likely to be promoted every 18 months to 2 years, compared to every 3 or 4 years," explained Williams. "It's a visible reward and a major motivation."

Protecting the Past, Building the Future

These significant changes to Microsoft's well-established ladder levels and compensation philosophy was simply the latest manifestation of the dilemma facing top management: how to protect the human resource policies and practices that had made the company so successful while adapting them to the new business realities. As management wrestled with an increase in its upper level attrition rate—the problem *The Wall Street Journal* described as "senior management going off-line"—they were even beginning to modify some aspects of the company's legendary "hard core" culture. Chris Williams described the efforts of Steve Ballmer:

> Steve has been telling people to find a balance in their lives that works for them. And as a recently reformed workaholic , he preaches the message louder than anyone and sets a strong example. You send mail to Steve on Friday and I bet you won't get a response until Monday. He just doesn't work weekends anymore.

The proposed changes were creating some problems and concerns, however. First, many people who were hired for their drive and passion didn't easily rebalance their lives. ("Sometimes we have to tap them on the shoulder at 10 p.m. and tell them it's time to go home," said Williams.) Secondly, the reality of the business was that there would always be pressures, deadlines, and demands that required extraordinary effort. ("For example, we will never eliminate the pressure-cooker environment that builds up in the weeks before a ship date," Williams explained.) But finally, there were some who questioned whether any significant softening of Microsoft's hard-core macho culture would not compromise the very heart of its competitive advantage. ("It's a very delicate balance," conceded Williams.)

Accepting that stress was part of the Microsoft culture, many senior managers argued that the campus's pressure-cooker atmosphere was vital both to the company's survival and to the development of staff. Said one senior human resource executive: "There are no bars on the door or locks on the windows, with people inside pleading, 'Let me out, let me out.'" In fact, turnover was running at half industry norms and the company received 15,000 job applications a month. To some, this indicated the system was not broken and should not be tinkered with.

Exhibit 1 A List of Senior-Level Departures

Name and Age	Title	Status
Moshe Dunie, 49	VP, Windows	Leave of absence
Pete Higgins, 41	Group VP	Leave of absence
John Ludwig, 38	VP, Consumer and Commerce Group	Leave of absence; subsequently resigned
Mike Murray, 43	VP, Human Resources	Resigned to do volunteer work with children and families
Cameron Myhrvold, 38	VP	Resigned
Nathan Myhrvold, 39	Chief Technology Officer	Leave of absence to dig dinosaur bones and go fly-fishing
Peter Neupert, 43	VP, Interactive Media Group	Resigned to become CEO of Drugstore.com
Steve Perlman, 38	President, Microsoft Web TV	Resigned
Chris Peters, 41	VP, Microsoft Office Division	Leave of absence to bowl professionally; returned half time as a consultant
Brad Silverberg, 45	Senior VP	Leave of absence since 1997, returned in 1999 as a part-time consultant

Source: *Wall Street Journal*, June 16, 1999.

Exhibit 2 Summary Microsoft Financial Data: 1986-1999

($ millions)	1986	1990	1995	1999
Net Revenues	$197	$1,183	$5,937	$19,747
Operating Income	61	393	2,038	10,010
Net Income	39	279	1,453	7,785
Number of Employees	1,442	5,635	17,801	31,575

Exhibit 3 A Sample Interview Feedback Email with Hire/No Hire

Candidate's CONFIRMED Interview Schedule

NAME: Drew Thompson
POSITION: Software Design Engineer
DATE: Tuesday, October 19, 1999

TIME	INTERVIEWER
8:30 a.m.	Mary Seybold
9:30 a.m.	Keith Miller
10:30 a.m.	Gary Morgan
11:30 a.m.	Gyan Prakash[a]
1:00 p.m.	Leslie Means
2:00 p.m.	Ben Allen[b]

[a]Lunch
[b]As Appropriate Manager

From: Gary Morgan
Sent: Tuesday, October 19, 1999 12:20 PM
To: Mary Seybold; Keith Miller; Gyan Prakash; Leslie Means; Ben Allen
Cc: Nancy Ciregna; Mike Snead
Subject: RE: 10/19 Drew Thompson CONFIRMED Interview Schedule

HIRE.

First we tried a riddle. He was calm and poised and was able to analyze the problem in a structured way. Responded well to hints.

Then I asked him to code itoa. He spent a few moments thinking, and then described some of the approaches available, including recursion, and the tradeoffs he expected to hit for each. He did very well here.

He then coded up an itoa solution. It took him longer than I expected (35 minutes), but his initial solution was quite good. Although he did think to handle negatives, he had one bug that broke his negative handling. After I pointed out that he had a problem, he fixed that, and had a nearly textbook example of itoa.

As far as coding, I would rate him above entry level but below what I would have expected after two years. I attribute this to the type of work he was doing at his previous employer.

When I talked to him, he sounded highly motivated and very interested in improving his coding abilities. He also understands the big picture well and where he would fit in. I think he would be a good addition at an entry level and would expect him to advance fairly quickly.

Source: Microsoft Corp. (Disguised Data)

Exhibit 4 Microsoft Campus Pictures

Lake Bill

Lunch outside Red W.

Source: Microsoft Corp.

Exhibit 4 (continued) A Typical Microsoft Office

Exhibit 5 Non-Executive Ladder Levels (job titles for representative positions on the managerial and technical tracks)

Typical Job Title	Ladder Level
Software Design Engineer (SDE)	29-35
Development Manager	31-34
Software Test Engineer (STE)	31-33
STE Manager	31-33
Program Manager	29-33
Group Program Manager	32-34
Product Manager	31-34
Group Product Manager	31-34

Source: Microsoft Corp. (Disguised Data)

Exhibit 6 Microsoft Performance Review Form: Key Content Sections*

PART 1. PERFORMANCE REVIEW AND PLANNING

A. Evaluate Performance Against Objectives

- List each performance objective in priority order
- Beneath each performance objective summarize and rate results for this Review period
- Discuss specific reasons for the level of performance achieved on each objective, for example:
  - Personal factors that helped or hindered performance
  - Situational factors (e.g., resources, people, events) that helped or hindered performance
- Give constructive suggestions for how performance could be improved

B. Identify Performance Plan for Next Review Period

- List 5-7 specific, measurable performance objectives in priority order for the next Review period
- Identify keys to success for achieving each objective, for example:
  - Resources, tools, or other kinds of support
  - Training or development needs
- Performance objectives should be mutually agreed upon by employee and manager
- If you are a manager, objectives should cover your contribution to your group or organization, as well as your individual contribution
- If you are a senior manager, include steps you are taking to understand and value diversity in your organization

PART 2. COMPETENCY AND CAREER DEVELOPMENT

At Microsoft, each employee is responsible for owning and driving his/her own development. The employee's manager is responsible for providing appropriate mentoring and guidance. This section of the Performance Review process provides a framework for a useful employee-manager discussion. Ratings are not used in this part of the Review.

A. Identify and Discuss Strengths and Weaknesses

- In this section, the employee should briefly evaluate his/her competencies:
  - Strengths or personal assets (e.g., attributes, skills, knowledge, experience) that can be leveraged for career development
  - Current weaknesses or personal liabilities (e.g., attributes, skills, knowledge, experience) that may limit career development
- The Microsoft Competencies can be very helpful in identifying and articulating strengths and weaknesses.

B. Identify Development Plan for Next Review Period

- Identify 1-2 development objectives for the next Review period—strengths to be leveraged, weaknesses to be addressed
- Identify keys to success for achieving each objective, for example:
  - Resources, tools, or other kinds of support
  - Training or personal development needs
- Information provided for each of the Microsoft Competencies can be helpful in developing objectives.

C. Discuss Career Interests and Goals

- This section is for discussion only. Written comments are not required.
  - In the Review meeting, it is important to have a brief discussion of the employee's longer-term interests, goals, and concerns. This discussion could cover a variety of issues such as: things that are motivating or de-motivating to the employee about his/her job and working at Microsoft; perceived opportunities for learning, growth, and contribution; jobs or assignments of interest to the employee; support or assistance the manager can provide.

PART 3. GENERAL COMMENTS

A. Employee Comments:

- Feel free to comment on work assignment, the Review process, or the company as a whole.

B. Reviewer Comments:

- Note any additional comments regarding employee's accomplishments and/or performance trends.

*Both the reviewer and the employee were required to complete the review form which became the basis of at least two one-on-one feedback sessions. The on-line form was also linked to other resources and help such as Microsoft Success Factors/Competencies, Giving and Receiving Effective Feedback, and Managing Employee Performance.

PART 4. OVERALL RATING AND SIGNATURES

Rating	Definition
5.0	Exceptional performance rarely achieved. Marked by precedent-setting results beyond the scope of the position. Demonstrates the highest standards of performance excellence relative to individuals with comparable levels of responsibility.
4.5	Consistently exceeds all position requirements and expectations. Accomplishments are highly valued and may be well beyond the scope of the position. Demonstrates higher standards of performance excellence relative to individuals with comparable levels of responsibility.
4.0	Consistently exceeds most position requirements and expectations. Accomplishments are often noteworthy. Overall performance is consistently above levels of quality and quantity relative to individuals with comparable levels of responsibility.
3.5	Exceeds some position requirements and expectations. Successfully accomplishes all objectives. Overall performance consistently matches levels of quality and quantity relative to individuals with comparable levels of responsibility.
3.0	Meets position requirements and expectations. Accomplishes most or all objectives. Some aspects of overall performance may require additional development or improvement to match levels of quality and quantity relative to individuals with comparable levels of responsibility.
2.5	Falls below performance standards and expectations of the job. Demonstrates one or more performance deficiencies that hinder acceptable performance relative to individuals with comparable levels of responsibility.
1.0-2.0	Does not meet minimum requirements in critical aspects of the job and has numerous performance deficiencies that prevent success at Microsoft.

Employee Overall Rating (employee's opinion of the overall rating)**:** _______________
Reviewer Overall Rating _______________
Signatures

Source: Microsoft Corp. (Disguised Data)

Exhibit 7 Salary Ranges and Options Ceilings, by Level

Job Level	1998 Base Salary Range (Set on 50th Percentile)	Stock Option Application Maximum
29	42-53,000	1,000
30	50-62,000	2,000
31	60-75,000	2,500
32	72-90,000	3,100
33	85-110,000	3,800
34	100-135,000	4,600
35	125-180,000	5,500

Source: Microsoft Corp. (Disguised Data)

Exhibit 8 Microsoft Recruiting and Yield Data—U.S. and Worldwide

	1998	1999
United States	3,319	4,264
Worldwide	6,660	6,848

Acceptance Rates—United States Only

	1996	1997	1998	1999
Campus	61%	68%	70%	72%
Non-campus	88%	89%	88%	90%

Source: Microsoft Corp.

Exhibit 9 Employment Headcount: By Geography, Age, and Gender

Year	Worldwide Headcount	USA Headcount	Average Age (years)	Male	Female
1975	3	3			
1980	40	40	29.2		
1985	1,016	870	30.4		
1990	5,635	4331	30.5		
1995	17,801	12,193	33.5		
1999	31,575	21,667	34.5[a]	15,952	5,715

Source: Microsoft Corp.

[a]Year	Under 20	20-29	30-39	40+	Average Age
1999	10 (< 1%)	6,121 (28.3%)	11,194 (51.7%)	4,432 (20.0%)	34.5 years

Exhibit 10 Attrition Rates

Microsoft Worldwide

1994	1995	1996	1997	1998	1999
9.3%	8.5%	7.5%	7.6%	6.9%	7.4%

Software and IT Services Industry

1995	1996	1997	1998	1999
13.7%	16.4%	17.2%	15.3%	16.4%

Source: Saratoga Institute—Software and IT Services

Exhibit 11 Sample Survey Questions

Your Job

1. I work toward clear goals.
2. I am appropriately involved in decisions that affect my work.
3. I have the resources I need (e.g., tools access to information, people, etc.) to do my job effectively.

Your Immediate Manager

1. My manager helps me determine priorities for my work.
2. My manager sets high but achievable standards of performance.
3. My manager is good at planning.

Your Professional Development

1. I have significantly enhanced my skills in the past year at Microsoft.
2. I pursue opportunities to take on new, challenging assignments.
3. I know what skills I will need in the future to be a valuable contributor at Microsoft.

Your Work Group

1. My work group works toward clear goals.
2. The atmosphere in my work group helps me to be productive.
3. The people I work with cooperate to get the job done.

Cooperation Between Groups

1. Other groups keep my work group informed about decisions and actions that will affect our group.
2. When my group interacts with other groups, every group has a clear understanding of its unique roles and responsibilities.
3. There is good coordination between my work group and other groups with related goals.

Rewards

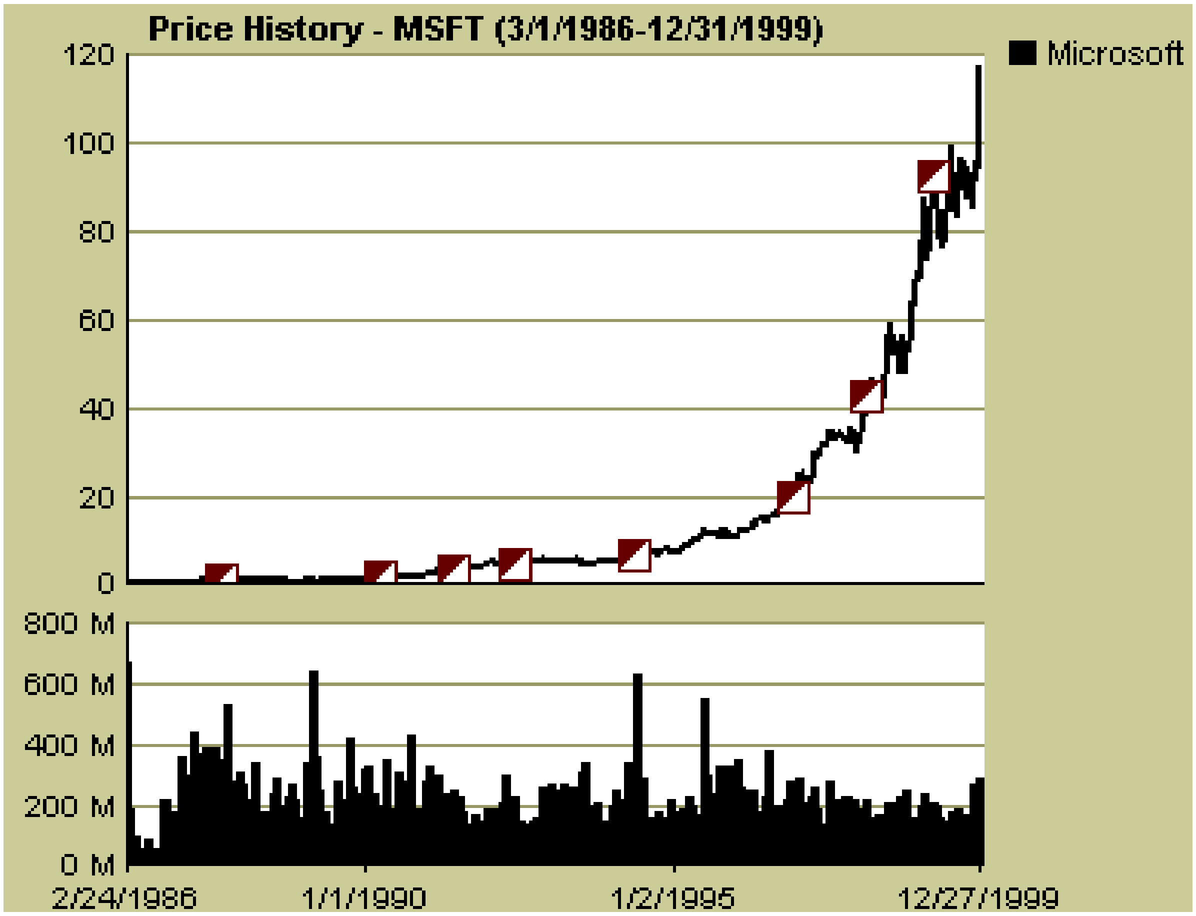
1. How do you rate your total compensation (base pay, bonus, stock) on your job?
2. How would you rate the total cash compensation (pay/bonus) on your job?
3. How do you rate the amount of bonus opportunity and/or other incentive pay on your job?

Business Strategy

1. I can see a clear link between my work and Microsoft's objectives.
2. I have a clear understanding of how my division contributes to Microsoft's overall success.
3. I believe we are heading in the right direction as a company.

Source: Microsoft Corp.

Exhibit 12 Microsoft Stock History: 1986-1999



Source: MSN Money Central

Stock price summary data

IPO 3/31/1986 at $21

Eight splits 1986-1999

$10,000 invested in the IPO worth $7,780,000 at end 1999.

Exhibit 13 Microsoft Competency Toolkit (examples)

Success Factor: Individual Excellence
Competency: Intellectual Horsepower (is bright, intellectually sharp, and learns quickly)

Level 1	Level 2	Level 3	Level 4
• Structures basic information accurately and draws informed conclusions. • With guidance, learns quickly on the job. • Picks up new skills and understands ideas when presented in a structured format. • Learns effectively from experience.	• Analyzes and organizes complex information from a specific content area, identifying key issues, assessing impact, and drawing reasonable conclusions. • Leans new skills and ideas rapidly. • Quickly adjusts his/her thinking to assimilate new information or ideas. • Is able to apply and explain logic related to problems or opportunities.	• Analyzes, explains, and draws logical conclusions based on complex data from multiple content areas. • Rapidly learns and assimilates complex information involving unfamiliar situations and circumstances.	• Rapidly identifies the significance of information and insightfully determines strategic action. • Rapidly learns new concepts and ideas, and integrates and assimilates highly complex information across broad, multifunctional context areas.

Sample interview questions:

- Tell me about your most intellectually challenging or difficult problem. Why was it difficult? How did you work through it? How did it turn out?

- Tell me how you went about learning the business at your last job. What would you do to learn the business at Microsoft?

Success Factor: Long-Term Approach
Competency: Developing People (provides job-relevant learning, developmental experiences, and feedback to enhance individual performance)

Level 1	Level 2	Level 3	Level 4
• Assigns challenging tasks and assignments that will help people develop their skills. • Provides direction in correct performance of tasks and assignments.	• Takes time to learn about and understand direct reports' career goals. • Provides stretch jobs and assignments for direct reports to help them develop their skills.	• Actively coaches direct reports how to get the most learning from their current assignment. • Gives direct report candid, thoughtful feedback on their strengths and weaknesses.	• Holds managers accountable for developing people in their group/organization. • Identifies key people in his/her organization to assume high-level management responsibilities, and is an advocate for them when opportunities for advancement occur.

Sample interview questions:

- Tell me about one of the most high-potential people you've had an opportunity to work with. What did you do to support that person's development?
- Tell me how you have identified and developed high-potential people within your organization?
- Tell me about a time you had to discipline an employee. What was your approach to the conversation? What was your strategy? What was the outcome?

Source: Microsoft Corp.

Endnotes

[i] David Bank, "As Microsoft Matures, Some Top Talent Chooses to Go Off Line," *Wall Street Journal*, June 16, 1999.

[ii] Op. cit.

[iii] Randall E. Stross, *The Microsoft Way* (Reading: Addison Wesley, 1996), p. 44.

[iv] Randall E. Stross, "Mr. Gates Builds His Brain Trust," *Fortune*, December 8, 1997.

[v] Randall E. Stross, "Microsoft's Big Advantage—Hiring Only the Supersmart," *Fortune*, November 25, 1996.

[vi] Elizabeth Corcoran, "Starting Seedlings, But Close to the Tree; Microsoft Is the Model for Ex-Employees," *The Washington Post*, July 7, 1996.