

## Lucent Technologies<sup>1</sup>

Lucent Technologies, Inc., was created in 1994 by the tri-vestiture of AT&T. The new company consists of the former Bell Labs and AT&T's network systems development and manufacturing business. Lucent designs, manufactures, and services public and private networks, communications systems, communication software, data networking systems, business telephone systems, and micro-electronic equipment. Bell Labs provides the company's research and development function.

Lucent's growth over its first four years has been impressive. At the time of AT&T's decision to spin-off Lucent, the subsidiary employed a staff of 138,000. When the spin-off occurred, AT&T announced its intention to downsize 40,000 workers, including approximately 23,000 from the operations that were to become part of Lucent. The belief was that the stock market would react positively to this announcement; however, to the surprise of all, a strong negative public reaction was indicated, including a critical cover story of the decision in *Newsweek*. The downsizing did not, in fact, occur. By 1998, Lucent employed 140,000 people worldwide, 100,000 in the U.S. (45,000 unionized) with worldwide revenues in excess of \$26 billion.

Lucent is also the successor to two AT&T bargaining units: the Communications Workers of America (CWA) represents 25,000 sales, installation, and repair workers; and the International Brotherhood of Electrical Workers (IBEW) represents 19,000 manufacturing employees. As part of the tri-vestiture agreement, a labor-management consultative structure negotiated and implemented at AT&T in 1989—called "Workplace of the Future"—was carried over into Lucent's contract.

### Critical Events and Issues

Three developments dominate Lucent's history to date, as well as its future: (1) the creation of the new company and the values and legacies inherited from AT&T, along with the values and strategies favored by the new leadership team; (2) the reorganization of the company into 11 business units and the roll-out and communication of a new business strategy under the acronym "GROWS"; and (3) the favorable overall employment relations experienced by the company to date, particularly among its professional and managerial ranks, along with some significant future challenges that the company and its hourly workers and their unions face.

#### *Lucent's Formation*

Henry Schacht was appointed as Lucent's first CEO. His vision was not to make piecemeal changes to shed the AT&T legacy and culture but to realize a wholesale shift from a manufacturing-driven to a technology-driven, high-performance enterprise. According to one Lucent executive,

AT&T was a lumbering bureaucracy. It missed a whole generation of technological change in our business. We are still feeling our way in changing

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<sup>1</sup> This case is contained in, "Rebuilding the Social Contract at Work: Lessons from Leading Cases," Thomas A. Kochan, Institute for Work and Employment Research, MIT Sloan School of Management, Task Force Working Paper #WP09, May 1, 1999. The longer article, including bibliographic references and footnotes omitted from this version of the case, can be found in the CasePlace.org References section.

the culture from the bureaucratic, process and procedural and hierarchical nature of AT&T to a quicker to respond type of company.

A decision by Schacht and his fellow senior managers not to participate in the IPO (initial public offering) until all employees were eligible to buy stock in the new company was noted by the workforce as a symbolic indication of the values that the company's leadership wanted to instill in the organization. One employee expressed this sentiment in his response to a survey question asking what people or events in Lucent's history had made the biggest impact on its culture and the treatment of employees:

[It was] Henry Schacht announcing that the leadership team would not take any stock from the initial IPO, but would instead wait until stock could be made available to all employees. The leadership team left a lot of money on the table to make a statement that we were all in this together.

Richard McGinn succeeded Schacht as CEO and Chairman in 1998. McGinn ran network systems at AT&T; he shares Schacht's vision for the company and continues to follow the first CEO's strategy.

The greatest technological challenge facing the company is a movement from voice-based to data-based switching technologies. Lucent's 5E switch currently dominates voice-based switching technologies and provides a major source of cash flow. Yet, voice-based switching may be obsolete in five or ten years. Cisco Systems is Lucent's primary competitor, focusing on data-based switches, and is perceived by most experts inside and outside of the company to be far ahead in the development of this technology.

Thus far, Lucent's strategy for catching up to competitors like Cisco has been to acquire companies that have strengths in different areas of the emerging technology. In its first three years, the company purchased several small high-technology firms such as Prominet, Agile, and Yuri, while selling other units such as its defense-related Advanced Technology Systems unit. More and larger acquisitions may come in the future since, after Oct. 1, 1998, certain accounting restrictions that Lucent inherited from tri-vestiture have expired. This development will lower the cost of acquiring other firms, since Lucent was formerly required to include goodwill on its current expense and income statement.

Lucent's human resource (HR) professionals are consulted before and after the decision to make a major acquisitions purchase. Prior to the purchase, HR staff are asked to assess the firm's compensation system to determine the true cost of buying the business. After the purchase, HR's major task lies in integrating the company and its compensation system into Lucent's, without losing the key technological talent embodied by the firm. An HR executive characterized this issue in the following way:

When we buy these firms, we are buying the technology and the people, and we have to make sure we don't lose the key people. How to do it? They don't want to work for a big bureaucratic company. They don't expect to stay with one company for 30 years so a pension is meaningless. They want 401(k)s and equity-stock options.

Thus, Lucent is very focused on the need to attract and retain the key "knowledge workers" needed to develop the technologies that are critical to its future. In fact, the emphasis on innovation and growth are evident in numerous comments

employees offer on the various bulletin boards and other intranet communications outlets available to them.

### *Reorganization to the Business Unit Structure*

In September of 1997, Lucent reorganized the company by creating 11 business units from the four it had previously. Accompanying the reorganization was a major strategic initiative that uses the acronym of “GROWS” to convey the key elements in the company’s strategy for the future. GROWS stands for the following strategies:

- Global: 70 percent of the company’s future growth is expected to come from outside the U.S.
- Results: Customers are demanding different, customized products to meet their different needs. This translates into the need for improved productivity, especially relative to the benchmarks set by newer, smaller, and more flexible firms in the industry.
- Obsessed: Obsessed with a focus on customers and new competitors.
- Workplace: The goal is to promote an open, supportive, diverse workplace.
- Speed: The bureaucratic traditions of the company need to be replaced with a technology and innovation-driven culture.

The reorganization decision was made in October of 1997 and then announced two months later to industry analysts at a December meeting. The announcement was followed by a series of employee meetings, but the restructuring itself was not guided by direct input from HR executives. Instead, the need to increase the autonomy of different businesses and their responsiveness to changing markets drove the decision. So too did the desire to change “systems and processes”—moving from being a high-cost producer to implementing a new business model that focuses on developing technology and delivering it to customers, not on manufacturing. As one executive put it,

We don’t think of employees when making these decisions. These decisions are driven by ‘processes and structures.’ Once the decision is made, then HR is asked what to do about the people issues.

We went through a big educational effort after the reorganization was announced. PR created a package that became known as the “meeting in a box” for managers to use in talking with employees that discussed all the issues—why we made the changes, the business issues we face, etc. But this communication was not really effective. It didn’t create a revolution. McGinn made some factory visits that culminated in April in an all-employee video.

The video created a problem for labor relations because it celebrated all of the company’s accomplishments. It pointed up a classic dilemma—for the analysts we need to emphasize all the positive accomplishments and paint a bright picture. Then we go into labor negotiations and ask for changes and the employees say but the company is doing just fine so why should they agree to what they see as concessions or to items on the company’s agenda. All the

employees heard from the video is that that we are doing great.

### *Current Employment Relations and Future Challenges*

Lucent is enjoying a very high and improving level of employee morale among professional and managerial employees. These good feelings are likely a product of the strong growth experienced since the formation of the company; its emerging image as a leader in technology; the values embodied in the leadership of Schacht and McGinn; the very comprehensive set of human resources and labor relations policies and benefits inherited from AT&T; and the offering of stock options to all employees, which grew in value as the company's stock increased over 500 percent from the time of the benefit's implementation. The company was confident enough in its policies and employee relations climate to apply for inclusion in the competition for the "100 Best Companies to Work for in America."

Lucent also enjoys a particularly strong reputation and success record in recruiting, promoting, and retaining minorities and women, as well as in maintaining its commitment and successful approaches to managing the diversity of its labor force. HR staff place managing diversity as one of its highest strategic priorities and, through the Senior Vice President for HR, has been successful in making diversity a top priority in the company. Supporting this high-level commitment are seven "Employee Business Partner" groups that serve as community-building networks for different race, gender, or identity groups. These groups hold annual meetings and form regional chapters; have their own websites; support efforts to recruit, educate, and train the workforce; and foster a sense of community among their members.

However, for labor relations involving hourly employees, the future is full of challenges and uncertainty. The primary threat lies in the fact that most of Lucent's competitors outsource their manufacturing operations to smaller firms with significantly lower cost structures, thereby placing similar outsourcing pressures on Lucent. The average age of Lucent's unionized workforce is 49, with 25 years of service. Employment in manufacturing has been stable in recent years. Whether these employment levels remain stable or decline will depend on how the company and unions deal with the following interrelated factors: opportunities and pressures to outsource commodity components and installation work now available from lower-cost suppliers; competition within the company between R&D and manufacturing units for scarce capital dollars; the rate of growth in market demand for Lucent's products; and the changing skills needed to perform high value-added manufacturing work.

Costs are also part of the equation, but do not serve as the primary driver for deciding the future of Lucent's manufacturing operations. The company estimates that it has a 15 percent wage and 20 percent benefits premium over its manufacturing competitors. In addition, it has a large pool of retirees whose health costs must be charged against current income—while many of its competitors do not yet have any retirees to support. Thus, labor costs are one variable affecting sourcing decisions. However, since labor costs represent only roughly 10 to 15 percent of total costs, closing the 20 percent difference would produce only a 2 to 3 percent reduction in total costs.

The need to allocate scarce capital to research and development (R&D) is likely to be a more important factor. Some of the company's products have a very short half-life—less than one year, in some cases. As a result, R&D must be a high priority for capital investment decisions. When Lucent was formed, it promised the investment community that it would focus on five metrics: improving gross margins, growing sales, reducing its tax burden, reducing overhead, and continuing to invest at least 11 percent

in R&D. One Lucent executive described the reluctance to invest scarce capital dollars into an expansion of manufacturing capacity:

We've been growing by 20 percent a year and we project the continued growth at this rate for the next several years. But we know that this type of growth rate is not sustainable indefinitely and so we are reluctant to continue to add manufacturing capacity that someday we may not need. So to meet this growing market demand for our products, we need to allocate and focus existing manufacturing space on core competency activities where we are adding value.

Let me give you an example. For many years, we manufactured "circuit backs" because these were part of our core technology. More recently, surface mount technologies have made circuit backs a commodity that can be purchased from any number of suppliers—our processes are no longer unique. So it makes sense to outsource this work. By outsourcing commodity work like surface mounts, we can make room for the high value-added work needed to support our current rate of growth. If we do this well, when we net it all out, we may not see a decline in the number of manufacturing workers, but a change in what they do.

This is why continuous learning and training is so important. We have to make sure our workforce can do the high value-added work and is prepared to take on the new work as it comes along.

Next week our CEO and Strategic Management Group will meet with union leaders to discuss this and go over this approach.

This is the key labor relations challenge we face and this is why we wanted five years in the new agreement [negotiated in the summer of 1998] to work on this. If we don't solve this problem we will be in the exact same place in five years that GM and the UAW found themselves in this summer—fighting in negotiations a fruitless battle over how to deal with pressures to outsource because we are by far and away the high-cost producer in our industry.

So our legacy of labor relations and how we solve problems has to change. We must involve everybody—from the grassroots up—this is what we have to change in our culture. We have to turn our unions and employees into a positive contributor to our business performance.

The Workplace of the Future structure we inherited from AT&T hasn't worked. The unions treat it as just another forum for bargaining—we tell them about plans to expand in Venezuela and they respond that they therefore need to get more jobs in the U.S. And our executives treat it just as a contractual obligation—they give it lip service and go through the motions but see labor as a constraint on their actions and an interference in their businesses.

The basic problem is that nobody connected the GROWS strategy to Workplace of the Future—there is lots of anxiety over GROWS, not knowing what to do with it and how to bring it to the factory level.

Our senior managers have been reluctant to get involved in labor relations. Their attitude is: 'You handle that.' Moreover, very few of the business unit managers

have ever had any experience in dealing with or managing with a union—little factory floor experience.

Both union and company representatives realized that the Workplace of the Future structure needed to be rejuvenated and agreed to discuss how in their 1998 negotiations. Out of these deliberations came an agreement to take more of a bottoms-up approach to the process. A labor relations executive for the company described the new approach:

We need to start at the locality—go where the problems are and put more emphasis on employee involvement and training supervisors and go from there. We have to do so recognizing that there is not a lot of room in our contracts for improving productivity—our contracts are pretty good. If we are to improve productivity we have to do it through employee involvement. Management and the unions agree on this and we are all behind this effort.

Union leaders, however, are skeptical and in some cases feel betrayed by management decisions to outsource work without prior discussion. Several repeated instances of outsourcing led CWA local and national representatives to meet to discuss how to address what they saw as a clear deterioration in their relationship with the company—what some viewed as a “betrayal” of the principles required to sustain any form of a labor-management partnership. The top CWA leader responsible for relations with Lucent described the situation in the following way:

The participatory effort is just about to snap apart. Within the past three months, the company did three things without prior consultation with us that indicates they are not serious about a partnership.

In September they subcontracted work done by our installations technicians—high-tech work involving the 5E switching machinery—done for Bell System companies. We have hand-billed Southwestern Bell (SBC) asking them why they are paying top dollar for service that is sub-standard. We intend to do more of this.

In October they informed us of their intent to franchise out more work done for Bell companies.

In November, they informed us they intend to outsource a lot of manufacturing work—there will be no layoffs because there is 17 percent attrition per year, but this will mean a reeducation of this many CWA jobs. Again, no discussion—just notification.

All this flies in the face of what we agreed to work on in negotiations—we agreed to address how to make something of Workplace of the Future offline, outside of the negotiations.

Our members are really angry. I just came from a week of meetings with them about this in Miami and they feel there is no loyalty left with Lucent. They have not loyalty to us so we shouldn't give any to them. Workers feel betrayed, especially because the company is doing well and they see the top people at Lucent doing very well. The inequity really gets to them.

At the time this case was written, the labor-management relationship was to be determined by whether Lucent's top executives chose to revive and reinforce the Workplace of the Future partnership and limit the flexibility of business unit executives to reduce costs by contracting out manufacturing and installation work that would otherwise have been done by bargaining unit employees or whether to continue pressuring business unit leaders to lower costs and give them the flexibility to make whatever sourcing decisions were necessary to do so. If the latter option was chosen, the corporate labor relations professionals would have been placed in an untenable position of not having the ability to share information and find solutions to potential outsourcing problems before they occurred. Instead, they would have become the messengers of bad news after the fact, in ways that would have demonstrated their lack of real power in corporate decision-making. To sustain the partnership, top executives would have had to choose between these two alternatives.

## **Summary and Implications**

Lucent is a technology-driven company that competes with new and smaller firms that focus on developing and packaging new technologies and outsourcing manufacturing to low-cost, non-union producers. It is behind its key competitor in the emerging data networking technologies that will dominate domestic markets in the future but continues to sell large quantities of the voice networking switches (5E switch), which have served as the company's biggest source of cash flow. Lucent also inherits a bureaucratic culture and is trying to shift to a technology-driven, innovative culture.

HR has not been centrally involved in the company's key strategic decisions, with the exception of technical issues associated with costing and merging compensation and benefit programs of potential and realized acquisitions. However, the need to attract and retain the "knowledge workers" who are critical to the development and use of emerging technologies serves as a strong incentive for the company to build and maintain a culture and comprehensive set of HR practices that respond to the needs and interests of this segment of the workforce.

Seventy percent of the future growth in the markets for the company's products is projected to come from international—not domestic—markets. Competition for capital investment resources will be intense, with strong incentives for focusing spending on global opportunities and developing new technologies, as well as for strategic acquisitions of companies that have the technological, human capital, or customer assets critical to leapfrogging Lucent's competition. Few incentives exist to invest in the company's manufacturing capacity, given market uncertainties, the need to allocate capital to R&D, and the availability of lower-cost manufacturers to which commodity components can be outsourced.

Lucent has an aged unionized workforce focused in manufacturing (IBEW) and in installation and service (CWA). Union membership has been stable since the tri-vestiture, but future trends are uncertain and could be on the decline, particularly as pressures to outsource manufacturing intensify. How employment trends eventually play out is likely to be a function of the net effects of efforts to grow the business, outsource commodity components, and focus on high value-added work and technologies.

The company and the unions have a structure for consultation around strategic issues—the Workplace of the Future—that was inherited from AT&T, but that structure is not working well. In fact, its future depends on the success or failure of the newly agreed-upon strategy for emphasizing a more bottoms-up approach, based on a

foundation of employee involvement and an articulation of the relationship of the company's GROWS strategy to specific units.

The CWA national leadership is open to discussing new approaches to union-management relations that reflect the company's efforts to move toward more of a network structure. The IBEW is still more reluctant to do so. Local leaders, however, are less open to or ready for a change. In addition, top executives are not motivated to grapple with labor relations issues or relationships and have little experience working or dealing with union representatives.

The respective parties have five years before their most recent contracts expire. What occurs during this window is critical to avoid being backed into a corner, similar to the GM-UAW problem of being the high-cost and most integrated producer in an industry that is following a business strategy of outsourcing manufacturing and forming alliances or joint ventures with other firms.

Given these dynamics, I draw the following lessons from this case:

1. There are two worlds of employee relations at Lucent—one for professional, technical, and managerial workers with the knowledge and skills needed for the company to grow, develop new technologies, and succeed in the expanding international markets the company projects; and another for the hourly labor force, particularly those in manufacturing, who are facing employment security threats from lower-cost competition.
2. Structural forums for consultation and representation are not enough; Workplace of the Future was designed to deal with exactly these types of issues but has not been able to do so. Both a vision and strategy for such structures and processes must be shared by line managers, senior executives, labor relations managers, and union representatives at both the corporate and business unit levels.
3. Unless the basic business plan changes or there is a change in the relative costs/productivity of internal and outsourcing alternatives, hourly employment and union membership are likely to decline. One scenario for the future is that the company will gradually wind down union membership through attrition. If this path is followed, an important question is whether the deterioration in the labor-management relations that is bound to occur will lead to further conflict or cost problems, since the unions representing Lucent employees will lose substantial membership under this scenario.
4. A second alternative is that the restructuring of manufacturing around high value-added work that reflects the company's core competencies, along with market growth, will make up for the jobs lost by outsourcing lower skilled work to outside manufacturers.
5. Another alternative is for the unions to change from a company to a network strategy—developing a way to organize and represent workers across all the firms that participate in the value chain. To do this, however, would require a different union model, one that follows individual workers and work as well as overcomes the strong resistance toward supplier firms.

For the network strategy to succeed, unions must train and supply the skilled workers needed to install and maintain the data-based technologies of the future, in the



same way that a craft or professional union not tied to a single firm would do. This strategy would allow the firms themselves to compete, while the union provides the workforce to whomever emerges with the dominant market share. To accomplish this goal, however, requires a new approach to training and development of workers' skills, the portability of benefit and pension packages and more individualized services, and an industry/occupational strategy that crosses firm boundaries.