

Licensing Blues

No system of regulation can safely be substituted for the operation of individual liberty as expressed in competition.

—LOUIS BRANDEIS

In the spring of 1981, I was thirty-eight years old and managing director of Richardson Hindustan. We had recently returned after five years in the Spanish-speaking world, in Mexico and Spain. I had gone to Mexico soon after the Emergency to run our food and nutritional business. Now, I was thrilled to be back, as head of the company where I had started at the bottom seventeen years ago. Our children were ten and eight and we thought it was time they began to learn to become young Indians.

My homecoming was spoiled, however, because our Indian business was in serious trouble. Profits had plunged because of rigid, poorly administered price controls. Labor relations had become adversarial. The quality of our products had suffered, partly because of an obsession with volumes in a price-controlled environment. The company had no cash, the morale was poor, labor was hostile, and one-third of the managers had left the company in the past year.

On a busy day in March, I got a call from Orville Freeman inviting me to participate in “a three-day industry and government roundtable.” The former U.S. secretary of agriculture was now running a business that had the laudable objective of improving the relationship between business and government. I told him that my company was in trouble and I did not think I could spare the time. He persuaded me easily, saying that it was the opportunity of a lifetime to dialogue with ministers and civil servants in a unique atmosphere. The icing on the cake, he promised, was a breakfast with Indira Gandhi, who had returned to power in the 1980 general elections.

At the roundtable, I was surrounded by the “greats” from both the industry and the government. After the first day I said to myself that this is hardly a dialogue—the government speaks and industry listens. The captains of industry were a meek flock. Pranab Mukherjee, the finance minister, was totally closed to any new idea and embarrassingly arrogant when he answered questions. L. K. Jha, adviser to the Prime Minister, on the other hand, was remarkably open as he confessed that the government had made some mistakes in the past and it was time to change and open up.

The next day was a ringing spring morning—one of Delhi’s best. We were ushered into the PM’s garden. Mrs. Gandhi looked charming, surrounded by spring flowers. She wore a white Bengal cotton saree with a narrow red border and looked cultivated, aloof, and imperious. She was not a particularly good speaker, although she had the instinctive ability to come up with the right phrase. Looking at her, it was hard to believe that this unimposing woman was the astute politician who had single-handedly destroyed the old Congress bosses and emerged the new messiah of the poor in the 1971 elections. She had dismembered Pakistan after a victorious fourteen-day war and given birth to the new country of Bangladesh. She had stood up to President Nixon of the United States; she had

been unimpressed by his diversion of the Seventh Fleet with its nuclear-powered aircraft carrier to the Bay of Bengal. Finally, she had declared an Emergency and become a dictator for twenty-two months.

After a brief speech, she opened the forum to questions. A few sycophants from the industry got up and eulogized her for her achievements. Then there was silence. Not a single person was willing to risk a hard question. This is embarrassing, I thought. Surely someone will get up. Just as she was about to close the forum, I got up and decided to take my chances. “Madam Prime Minister,” I said. “May I have your views on two subjects that have been troubling me? The first concerns a friend of mine who cannot introduce a new product into the market because he does not have a license. Meanwhile, his competitor has preempted all the licensed capacity. What should he do?”

Mrs. Gandhi turned to one of her advisers and then artfully defended licensing. “We are a poor country, you see; we have limited resources, which we ration through the licensing system. If we let anyone produce what he wants, we will have no foreign exchange left for the country’s necessities.” All very plausible, I thought, but very bad economics all the same.

“It is a brilliant new product, madam,” I persisted. “What do you think he should do?”

“Has he made a proposal?” she asked.

“Yes, it was rejected because of ‘excess capacity in the industry.’”

“Send me the proposal,” she said. Surely it was wrong for the Prime Minister of the country, I thought, to get into such matters. “I was wondering, Madam Prime Minister, shouldn’t the market decide what should be produced?”

“Does the market always make the right decision?” she asked.

“Not always, madam, but always better than bureaucrats,” I said.

“Ah, we have a market-wallah, do we?” She smiled and gave me a look as though I belonged to the school for the mentally disabled that she had opened the previous day. Others laughed as well and the tension eased.

My second question related to the high cost of our products. I suggested that if we brought down our exorbitant excise taxes and import duties, costs would come down, goods would become cheaper, markets would begin to grow, and government revenues would boom. Mrs. Gandhi shook her head and gave me the same indulgent look. Patiently she explained, “I don’t think industrialists will pass on lower taxes to consumers; lower import duties will fritter away our foreign exchange reserves and businessmen will again clamor for protection because they won’t be able to compete against imports. As for income taxes, if we lower them, who will pay our salaries?” She smiled charmingly. The audience laughed again. I was unconvinced. She had a static view of the economy, which ignored the power of competition and growth. She also had a poor opinion of businessmen.

My questions emboldened an American businessman to get up. He said, “My issue, Madam Prime Minister, is with the government’s insistence on limiting foreign ownership in companies to 40 percent. Consequently, multinational companies have lost interest in India. And your country is neither getting investment nor technology.”

Mrs. Gandhi sniffed the air. Her advisers began to get impatient. “We want to be self-reliant,” she said. “Our foreign investment laws have parliamentary sanctity. We want multinationals to bring

technology and we permit them 51 percent foreign equity. We don't want multinationals to sell Vicks VapoRub, like our young friend here." She looked at me and there was more laughter.

With great charm, on the spring morning, amidst shining marigolds, Mrs. Gandhi had attempted to preserve three myths of the ancien régime—the value of licensing, the importance of high taxes, and the need to limit foreign investment. As I was leaving the PM's house, an elder statesman of industry nudged me and whispered, "Watch it, young man!" I turned around, but he was gone. Since it was a nice morning, I decided to walk. I walked along the wide, tree-lined avenue towards Raisina Hill and past what André Malraux had called the "colossal vistas of red sandstone with Sikh guards presenting arms in the solitude." Malraux was right. It was only the departure of the British that had given this soulless architecture some sort of soul. It seemed to become great only when it became a tomb of the Raj in a city that had a surfeit of tombs. It seemed right that it was Mrs. Gandhi with her old myths who presided over these tombs like a grand priestess.

I asked myself why she could not see what I saw. The sheer number and diversity of enterprises in India backed by vast human energy and talent was so impressive. From the largest, Tata Steel, to the millions of artisans, wholesalers, and street vendors, I saw a deep source of strength not available to many other economies. We had the sophisticated underpinning of trained managers and professionals and a capital market, with ready availability of specialists in advertising, audit, and legal services. Linked to it was a formidable diaspora of nonresident Indians who could mobilize capital and knowledge of overseas customers and markets. Yet India failed to perform. Alas, it was precisely because of the attitudes I had observed that morning. We were shackled by the excessive regulation of a heavy-handed state which was suspicious of profit yet happy to seek rent; this, combined with protection and fear of foreigners, had left a weighty legacy of uncommercial habits. How long would we stand and watch our talents and our strengths consistently undermined?

The economic reforms came in 1991 and exploded Mrs. Gandhi's myths of the License Raj. With the scrapping of licensing our foreign exchange reserves did not decline. The Indian entrepreneur, freed from control, responded with new investment. Lower taxes did not destroy government revenues. Competition ensured that lower import and excise duties were passed on to consumers. Demand rose and markets grew. Lower income taxes brought greater compliance and more revenues for the treasury. Direct taxes in 1995-96 accounted for 29 percent of revenues, compared to 19 percent in 1990—91. Foreign investment rose thirtyfold, but we did not lose our sovereignty. A senior bureaucrat, looking back, admitted to me in a fit of candor, "How could I have administered such lunatic policies?"

After the interlude in Delhi, I plunged into the serious business of turning around my company. First, I dealt with the labor problem, which I concluded was a management problem. To begin with, I had to replace the personnel manager, who believed in "sticking it to the workers." And the workers, I am sure, would happily have reciprocated. I got a new personnel manager, Ginil Shirodkar, who felt that we needed to change attitudes on both sides. Both of us agreed that we ought to be transparent with the union and the workers, sharing our troubles and our triumphs. The workers were shocked that we were not making money; it took months before they believed us. A year of patient and constant dialogue succeeded in winning their trust, attitudes changed, and we signed a three-year productivity-

linked contract.

I held the belief that every employee in the company could grow. To help people grow, we needed to invest in training and developing them. I was also convinced that a consultative and participative style was more effective than an authoritarian or paternalistic one. My premise was that achievement was the best form of motivation. Shirodkar shared these beliefs and helped me in creating an open, people-oriented workplace. As a result, motivation rose rapidly and executives stopped leaving us.

Meanwhile, the government relaxed the Drug Price Control Order in 1982. We were able to raise prices and we became profitable. As productivity improved in the factory and motivation improved among managers, profits rose. So did the price of our shares on the Bombay Stock Exchange. As our surplus grew, we got the opportunity to offer bonus shares. I wanted our employees to share in this prosperity. However, government rules did not permit it. We put up a fight with the government's controller of capital issues. I argued that our performance would improve if employees were to behave like "owners" of the company. The controller thought that this might be a fraud by the employees to steal money from the company. He could not believe that "participative" management might work. In the end, I made such a nuisance of myself that he got tired of saying no and after nine months reluctantly allowed us to offer 5 percent of the bonus shares to employees. Our investment bankers helped Shirodkar devise a formula to distribute the shares fairly, depending on performance and seniority. Everyone got shares. I had hoped that they would hold on to them for at least three years, but as the share price rose from \$2 to \$20, the majority sold out after three months. Many employees eventually built homes from their capital gains.



My father worked hard all his life and retired with a meager pension. His only savings after a lifetime of work was our house in Chandigarh. All of us loved the house, especially my youngest brother and sister, who had spent their happiest years in it. It sprawled on a quarter of an acre, facing the lower Himalayas and Kasauli, which nestled seven thousand feet above. Chandigarh was an attractive town with wide boulevards, parks, and trees, with the bonus of Le Corbusier's brilliant sculpture-like buildings.

One morning my father was in a hurry. He was late for an important meeting when our young neighbor came around and asked him to sign an innocuous-looking paper. "It is a simple procedural matter," he said. My father signed the paper in a neighborly spirit. It turned out that my father had signed his house away. Our neighbor and his vivacious and statuesque wife had moved in the previous year. After working for a company in Bombay, they had decided to become entrepreneurs. They planned to set up a malt factory to supply the rapidly growing beer industry. They were young and energetic, and their excitement infected the neighborhood. My father's signature got them a small loan of Rs 200,000 from the local bank. Other loans followed.

When people realized that our neighbors had money, they began to make demands. The bank manager who had advanced the loan wanted his share. The factory inspector came as the equipment was being installed and he would not give them a clearance without being paid. The engineer of the State Electricity Board was unwilling to give their factory power if he was not compensated. The

boiler inspector had to be paid. The labor inspector wanted his cut. The excise inspector told them they could not hope to start production without an excise number, for which they had to pay his fee. Meanwhile, the minister did not want to be left out. He threatened to change the rules, which would prevent them from supplying the breweries. Our neighbors were not deterred and they struck a deal with the politician. They agreed to give him a share in the company, and he rescinded his order.

Over the year, we noticed that our neighbors' standard of living rose visibly. He got a new car. She began to sport expensive jewelry and sarees. One day they borrowed the papers of our house "for a few hours," saying that the bank needed to verify them (in support of the letter that my father had given). That was the last that my father saw of his house papers. He did not know that the bank had called back the loan. We did not know that our neighbors had run out of money and were yet to produce a single kilo of malt. They were bankrupt, and our house was lost to the bank.

It is a harsh life for an entrepreneur. He has to bribe from twenty to forty functionaries if he is serious about doing business. The nationalized banks are encouraged to give loans to entrepreneurs, but the bank managers often want a cut. Our neighbors were also crooked for they spent the bank's money on themselves. In another place, they would have had to either return it or go to jail. This does not happen in India. Hence, hundreds of thousands of small enterprises have become officially "sick." The entrepreneurs are able to walk away as freely as our neighbors did. The bank auctioned their factory, it is true, and recovered part of its dues. But our neighbors did not do too badly in the end. The bank did move the courts to recover the remaining dues, but the Indian legal system is so slow that it is unable to catch any crooks. For this reason, we did not physically lose our house.

Soon after retiring, my father shifted to the ashram of his Radhasoami guru on the banks of the Beas and spent the rest of his life in quest of the spirit. My mother accompanied him and they set up a middle-class home with modern conveniences—hot and cold running water, a modern kitchen with a refrigerator and gadgets, and even air-conditioning. My father took charge of a vigorous building program initiated by the guru. He built roads, prayer halls, dormitories for the devotees, and a large hospital. For the next twenty-five years, he meditated two hours a day and lived an enormously busy and fruitful life.

I visited my parents often, and on each visit the quiet efficiency, the organization, and the easy use of technology struck me in their clean spiritual haven. Science seemed to combine well with the spirit. Everything worked. It was a dramatic contrast to the world outside—especially the soiled world of the public sector. The Radhasoami faith fused an ascetic form of spirituality that went back to ancient Vedanta with an international managerial style that reflected the modern, casteless outlook of its devotees. The community had expanded rapidly over the decades, across India and to many parts of the world, and numbered more than a million initiates.

Skeptical of religion and shy of certainties, I was impressed by the scientific temper of the guru. Our purpose in life, he said, was to connect with the spirit. We could do this by conducting a series of experiments with our consciousness through the practice of meditation. Religion was an uncertain, searching path and not an exclusive institution. There were no ready-made solutions—only hints, suggestions—and one had to seek out the answer for oneself.

In the evenings I used to walk along the river in silence. Along the banks grew giant reeds and

bulrushes whose stems had been bleached by the sun. I breathed drafts of pure river air and gazed at the evening sky filled with silence. I looked down the river into the horizon and I thought of our ancestors who had lived on these lands and recorded their primordial experiences in man's first book, the Rig Veda. From these riverbanks, Vedic civilization had flowed into the valleys of the Ganges and spread across the rest of India. Occasionally I felt the pull of the old culture, but I was unable to resist the seductive charms of the other, more virile one of the West that had become the dominant culture of the world.



In the autumn of 1982, I began a series of visits to New Delhi. Our manager in Delhi, Virender Khaneja, would set up the meetings in advance and together we would trudge the corridors of power to kowtow before civil servants and politicians. We were supplicants—seeking price increases, approvals to introduce new products or expand our production capacity, defending our foreign ownership, and dozens of things which needed government sanction. Often our finance director, Sumit Bhattacharya, would accompany us. He was a quiet man; he listened well, and he commanded respect when he gently interjected his point of view. In contrast, I was passionate and obsessed. It was difficult to make me stop when I started in on the regime of controls. Khaneja constantly worried that I did not give the officials sufficient respect. The bureaucrats and politicians would usually brush us off but sometimes they would surprise us and actually listen.

I flunked my biggest test when I failed to retain majority ownership for my parent company. Since the late 1970s, the government had been pressuring foreign companies to lower their foreign equity to 40-percent. Some foreign companies had left India rather than dilute ownership, including IBM and Coca-Cola, and new foreign investment had come to a halt. Executives at our U.S. headquarters were afraid that the company might lose control if it reduced its holding. The exception to this 40 percent rule was foreign companies engaged in “high technology.” My company put up a strong defense based on our technological contributions in agriculture. I brought in agricultural experts to argue that our R&D station in Uttar Pradesh had adapted the *Mentha arvensis* plant to Indian soil conditions, raising its yields and making it disease-resistant. I explained that we had pioneered a new crop in India, provided employment to sixty thousand farmers and farm labor, and made the country self-sufficient in menthol. We made three major presentations. But it was to no avail and we were ordered to dilute our foreign ownership in thirty days.

I flew to Wilton, Connecticut, where the international management of Richardson Vicks was in an angry mood. I defended the importance of sticking it out in India. I explained that there was no risk of losing control because they still owned the trademarks. Without the trademarks, the company was worthless and a hostile takeover impossible. I said that our company was doing well and growing, and we should keep building the business and one day majority ownership would be restored. Reluctantly they agreed, but only after roundly cursing the Indian government.

Since there was nothing to lose now, I decided to go public. I wrote a series of articles in the *Times of India* and the *Economic Times* on the harmful effects of the Foreign Exchange and Regulation Act of 1974. I talked about India's desperate need for foreign investment and technology. I

showed that countries open to foreign investment were outperforming the closed ones and none had lost their sovereignty. I called our xenophobia the symptom of an inferiority complex and ultimately suicidal. After the articles appeared, I got many congratulatory phone calls and letters, but I also became unwelcome in some government offices.

My visits to Delhi now became more painful. My lowest moment came when I was summoned to meet a joint secretary in connection with our application for a new product. He insisted that I rush to Delhi immediately. Indian Airlines, the government monopoly carrier, used to run only three flights a day to Delhi, and seats would get booked weeks in advance. So it was not surprising that I was 182 on the waiting list. (Ten years later, after the reforms, there are twenty-two flights daily run by three airlines on the same route.) We asked if the appointment could be postponed and the answer was negative.

Despite the hopeless situation, I decided to take a chance on the six o'clock flight the following morning. I arrived at the airport at 4:30 a.m. Our administration manager and travel agent came to assist me. We begged and pleaded with the duty manager for a seat. By extraordinary luck, a foreign travel group did not show up—their flight from Aurangabad was canceled the previous night—and I was able to get a coveted seat. The flight, however, was five hours late, which was not unusual for Indian Airlines. While I hung around the airport waiting listlessly, my office was able to shift my appointment to 2 p.m. On arriving in Delhi I went directly to the ministry from the airport, just in time for my appointment. I was told that the joint secretary was away on a long lunch but I should wait. He came back after an hour but got busy “on an urgent matter.” I swallowed my pride and waited for another two hours outside his smelly office. I had been warned that the officer was hostile to multinational companies and enjoyed making executives wait. Finally, at five o'clock I was led into his paper-strewn office. He sat smugly in his chair reading the afternoon paper. After five minutes he put down the paper and looked up at me.

“What is it you wanted?” he asked.

“It is you who wanted to see me,” I said politely, but without inserting “sir” in my reply. Having spent so much time in the United States, I could not get used to saying “sir” to people in authority. He rang for his secretary and asked for our file. Since the file took time to locate, he decided to lecture me on foreign “devils.” “They are all CIA spies, you know.” He asked me about the car I drove and the foreign trips I took. “Real perks, eh!” he said. I began to feel ridiculous. At last the file came. He glanced at it and said, “Can’t do anything about it, I’m afraid.”

“Can’t do what?” I asked.

“What is it you want?” he said, impatience showing in his voice. I explained that we were seeking approval to introduce a new product. He replied that he needed time to study it. “It is not a straightforward thing.” I asked why had he wanted me to rush to Delhi, especially when he knew that there were no seats available. “Why, so that we could get to know each other.” He smiled malevolently. He started to talk about capitalism. He said that the market might work in other countries, but that in India it could not because Indian businessmen were dishonest. I tried to convince him that the market took no notice of the character of the player. Competition between two dishonest businessmen was better any day than the monopolies created by the alliance between politicians and

businessmen. He was unmoved. I asked him when we could expect a decision on our file. “Can’t say. It’s complicated business.” With that, he noisily pushed back his chair, which was the bureaucrat’s signal that the interview was over.

It was the end of a long and tiring day, and a feeling of defeat and futility overtook me. I felt like Sisyphus, condemned to push a rock up the hill, only to see it come tumbling down just as it reached the top. I looked out at the evening sky and understood how Sisyphus must have felt. I also knew that I had no choice but to start afresh the following day. I wandered about aimlessly until it was dark. Soon I spotted a empty taxi and got in.

By the time we reached India Gate it was pitch-dark. Like animals possessed by a strange uneasiness, a few poor men were prowling along the pavements, sometimes in shadow, sometimes lit by the headlights of the passing cars. The streetlamps threw a pallid light in the compact darkness. I told the driver to go to the Yamuna near Nizamuddin. There I got out and walked over the stones onto the dry bed of the stream. It was not an easy walk over the stones between brambles and stagnant pools. Nearby a stream of dirty water was flowing quietly. I wandered about the rubbish dump of the slum colony. The air was black and smelled of smoke in patches. Scattered among the refuse were packing cases with plastic roofs that bore witness to the presence of human life. Amidst the poverty in the gutter, the feeling overcame me that it was the License Raj that frustrated the attempts of the poor to rise.



Sam Pitroda was one of our few bright spots in the 1980s. I met Sam on one of my visits to Delhi. I discovered that we were born in the same year. Unlike me, he came from a poor village in Orissa, where there was no electricity, no telephones, no running water. He was of lowly carpenter caste, and his early education took place in one-room schools where most of his classmates had no shoes or books. By the time I took over as head of Richardson Hindustan, he had become a self-made telecommunications millionaire in America. By then he had brought his parents and his eight brothers and sisters to the States, and they were living the middle-class suburban dream.

All his life Sam had dreamt of wealth and success, and when they came, he suddenly felt guilty. The huge gap between his luxurious life and the struggling poverty of his Indian village bothered him. Sam was a technology buff. He had done his best work at GTE in Chicago with analogue—digital conversion technology and had nearly thirty patents to his credit. Sam believed that technology had profound effects, and that a modern telephone system could revolutionize India. It could bring about “openness, accessibility, accountability, connectivity, democracy, decentralization—all the ‘soft’ qualities so essential to effective social economic and political development,” he said. “It was not so much wealth that created telephone density as telephone density that created wealth.” Here was a man who believed that telephones were as important to nation building as other necessities.

Filled with these thoughts, Sam Pitroda returned to India. Here he found the opposite mind-set. Indians, and Gandhians in particular, believed that telephones were a luxury and that it was wrong to supply state-of-the-art technology to villages; they needed “appropriate technology” (the buzzword of the 1980s). A poor farmer did not need a telephone but water, literacy, and basic health care. As a

result, India had only 2.5 million telephones in 1980 and most of them were in the big cities. It had only 12,000 public telephones for 700 million people. Managing this system was a rigid bureaucracy of a quarter million employees. Millions of people were waiting in line to get a telephone. Those who had one needed to know someone in the telephone department to get any service. The telephones that existed were not dependable—it was rare to get a number on the first attempt. The employees of the telephone department were arrogant and corrupt. If the line went down, it could take months to fix unless one bribed the linesman. When an MP complained in Parliament of these breakdowns, C. M. Stephens, Mrs. Gandhi's communications minister, replied that telephones were a luxury, not a right, and that anyone who was dissatisfied could return the telephone, because there was an eight-year waiting list for this “broken-down product.”

Sam was going to change all this. He decided to start at the top, with Mrs. Gandhi. After waiting five months to get an appointment, he met her and impressed her. He also met her son Rajiv Gandhi, with whom he struck a chord. He told them he could bring telephones to villages, improve customer service, change to digital switching, and that he could do all this for very little. To everyone's surprise, the government bought his dream. He began with a core group of young R&D engineers to develop the hardware and software which would set India on the path of universal telephone accessibility. It was a private nonprofit society funded by the government with a \$36 million corpus to develop a digital switching system suited to the Indian network. “We found five rooms on rent in a government hotel and we went to work using beds as desks.” Sam earned one rupee a year, inspired by Roosevelt's dollar-a-year men of the New Deal. It was an unusual arrangement for Indians and his motives were the subject of constant speculation in Delhi.

Soon Sam Pitroda had built an organization of 420 young scientists and technicians whose average age was twenty-six. They worked in an open American style, with optimism, teamwork, flexibility, and simplicity. In three years, they delivered a 128-line rural exchange; they created a private automatic branch exchange for businesses; they developed a small central exchange with the capacity of 512 lines. They licensed some forty public and private companies to manufacture and market their products. Based on his success and his personal equation with Rajiv Gandhi, who was by now Prime Minister, Sam was promoted to head the Telecom Commission and given the status of minister of state. As head of telecom, he began to implement his dream. He got the thirty-seven telecom unions to agree to quadruple the number of lines without adding to the workforce. He replaced existing electromechanical equipment with indigenous digital equipment. He set up two factories to manufacture fiber optics and he began to build a high-speed fiber-optic highway to connect the large cities. He connected the four hundred district headquarters with automatic dialing and introduced international direct dialing to more than 120 countries. By 1990, there were five million telephones and a million new ones being installed every year, which went up to two million in a few years. By the end of 1998, there were twenty million telephones and the waiting lists had practically disappeared.

However, Sam's idea had gone much further. He had realized that if more telephones could be put in the bazaars, millions could be brought within reach. The coin-operated public phone was not a good idea because it was expensive and it quickly deteriorated in the heat and dust of India. He and

his team came up with a simple idea: equip ordinary telephones with small meters; put these into the hands of thousands of entrepreneurs, who would set them on a table in the bazaar. He himself would go back to America, but his scheme unleashed a revolution. By 1998, there were half a million Public Call Offices in bazaars across the nation, most of them offering long-distance phone calls, and they had created 1.5 million new jobs. By 1995, 100,000 villages had telephone service through the rural exchanges. By 2000, three-quarters of India's half a million villages had telephone service.

Sam Pitroda's story ended badly. Rajiv Gandhi was defeated in the elections at the end of 1989. Sam came under political attack from the minister in the new government, who accused him of corruption. Although many people came forward in Sam's support, the strain was great and he had a heart attack. His family moved back to the United States and he was a broken man. Rajiv Gandhi was assassinated in May 1991, and with that Sam's connection with India virtually ended. Thanks to his revolution, however, I can now dial my mother in a village in Punjab from our farm in coastal Maharashtra. Apple farmers in the Himalayas take harvesting decisions based on a call to the wholesale market in Bombay. The improvement in our phone services has made it possible for India to participate in the information technology revolution. India is becoming a major exporter of software and information technology services. The improved connectivity is enabling dozens of Internet start-ups and e-commerce ventures. All of them owe a small debt to Sam Pitroda.

Sometimes I think that if Sam had not been sacked, he would have ushered India quickly into the new era of telecom privatization, technology convergence, and the Internet. Unfortunately, the government has made a mess of bringing competition in both basic and long-distance services, as is being done around the world. With all its improvements, India's telecom is still unresponsive and below par. Because of their monopoly, the employees of the Department of Telecommunications are still arrogant and corrupt. They remain the ugliest face of the License Raj.