

# Has IBM spoiled the computer business for others?

**B**ELIEVE some of the things you hear about the computer industry today and you might conclude that IBM has sapped the health of the industry and monopolized it.

As some would have you see it, the industry has been stifled in its growth. They would have you believe that competition has been inhibited, that the doors have been closed to newcomers to the industry, that no one other than IBM can make money in it, that innovation is sluggish, that technological advancement in the industry has been held back.

This would indeed be dangerous—if the charges were true. The facts tell another story. They make it clear that the computer industry—one of the fastest growing in the United States—is one of the nation's healthiest, most open-ended, competitive industries, one of the most innovative and progressive. They make it clear that IBM has not hindered the growth of competition in the industry.

Some hang their charges of "monopoly power" on what they call IBM's excessive share of the market. That market share is substantial; it is the product of IBM's emphasis on excellence in all the years it has been in the business. It is the product of customer response to the investments we have made, and to the quality of our people, our products, our service.

But monopoly power is not a numbers game based merely on what has occurred in a market in the past. Rather, common characteristics of monopoly, as the economists define it, exist when newcomers are unable to break into an industry, when competition is suppressed, when innovation is throttled, when there is no price competition, when the interests of the customer are subordinated to those who monopolize the industry.

These are hardly the characteristics of the computer industry that is alleged to be a "monopoly" of IBM. But let the facts of the industry speak for themselves. They tell it better than we could.

## Limited opportunities for growth?

### Let's look at the record

**The multi-billion dollar computer industry, just a raw idea 20 years ago, today has attracted more than 60 manufacturers of systems, another 4,000 companies dealing in related equipment, support and services.**

Between 1960 and 1968, computer installations increased twelvefold, from 5,000 to

over 60,000. During that period, some 40 or more newcomers to the industry have invested hundreds of millions of dollars and are competing successfully in the manufacture of computers. There are more than twice as many manufacturers today as there were in 1960.

A number of today's major manufacturers did not enter the market until after the arrival of second generation, transistorized equipment in the 1950's. They were able to do this because they brought innovation, improved performance and lower prices.

Increasing competition, as still more companies enter the industry, has brought with it enormous improvements in machine capacity and speed, sharp reductions in cost and a rapid growth in applications. All help to demonstrate the extraordinary vitality of an industry which has attracted scores of entrepreneurs.

## No room for competition?

### Let's look at the record

**The industry has attracted large companies, small companies, established companies, new companies—and the numbers are increasing. Many have scored spectacular successes, some in just a few years. It is an industry that favors not size, but innovation. A company makes it on new ideas.**

The manufacture of computers has attracted three kinds of companies: (1) those with a demonstrated competence in electronics, (2) those who foresaw computers as a natural extension of their lines of business machines, and (3) inventors who undertook to form new companies to exploit their new ideas.

Among those with competence in electronics are blue-chip competitors like RCA, GE, and Honeywell.

In addition, leaders in other industries are crossing over into the computer industry, as they gain experience and competence in computer technology. One example is the aerospace industry. Companies like Lockheed and McDonnell-Douglas have seen and seized the opportunity computers offer them to broaden their sales base. They have now successfully entered the data processing industry.

Among the business machines manufacturers are Burroughs, NCR, Sperry Rand and IBM.

Among the organizers of new companies are Scientific Data Systems, Digital Equipment Corporation, and Control Data Corporation.

More companies from many different industries can be expected to continue crossing over into the computer industry. Few other industries face so much powerful existing competition and so much potential new competition.

Computer manufacturing is highly competitive, but producers take heart in predictions of 20 percent per year growth for the industry and are making plans for expansion. Increasing sales are commonplace for oldtimers and newcomers alike.

Rapid growth in the use of peripheral equipment has brought 60 or more peripheral manufacturers into direct competition with computer manufacturers who produce their own. This additional competition has sped the pace of technological advancement and kept the cost of computation moving downward.

## Difficult to make a go of it in other segments of the computer industry?

### Let's look at the record

**With 60,000 computer installations, manufacturers have made possible the formation of hundreds of new enterprises in computer support services, programming, and leasing. Many have been outstandingly successful. Some have parlayed modest beginnings into companies valued at hundreds of millions in only a few years. And add to these entrepreneurial newcomers the tens of thousands of industry suppliers from nearly every state in the Union—the great majority of them small business enterprises. Growth in computer manufacture has led to a huge array of separate data processing services.**

There are more than 700 independent service bureaus. Service bureau sales for 1968 were estimated at \$765 million. The outlook is for sales of \$1 billion in 1970 or 1971.

More than 70 firms offer time-sharing on central computers. Sales for 1968 were estimated at \$100 million. Some foresee a ninefold increase by 1972.

Many hundreds of software houses have entered the industry. They range from two-man shops to relatively large organizations. A founder of one such firm built a part-time beginning into a full-time business valued by investors at over \$600 million in less than five years.

Computer leasing companies are one of the newest and fastest growing factors in the