Mr. DeYoung:

Machines are in... People out... Net: Massive social disorientation

Approximately 58-million additional jobs were created, while some 50-million jobs were eliminated, leaving a net gain of 8-million positions.

Significantly, technology in a large measure prompted the job gain, but was not the major cause of job losses. Rather this resulted more from increased wage rates occasioned by statute and agreements negotiated with unions, and for the most part affected unskilled jobs, as might be expected.

The displacement, or redeployment, of workers resulting from automation certainly is no cause for alarm. Quite frequently, people are released from lower-paying jobs and advance to better-paying positions, all brought about by automation. Most firms applying newly available technologies retrain and place their employees in new positions, and invariably experience the need for additional personnel as well. For the most part this means an upgrading of skills along with an increased income-earning potential, and expanded employment.

Compare the significant increase in the total work force of over 70-million, with average earnings of $2.50 per hour, to that of 53-million in 1955 whose hourly earnings averaged $2.00 (equivalent to 1965 dollars). In other words, wage rates and employment both rose during a decade that witnessed considerable automated innovations.

Aside from these bare-bones statistical facts, the impact of automation is measurable in other terms: namely, the increasing release of man from dawn-to-dusk drudgery. Through the utilization of machines in lieu of brute force to increase productivity, significantly greater numbers have been able to shift to exciting new occupations that mean for them larger incomes and fuller lives. A vast spectrum of new activities through increasing applications of automation is profoundly affecting our whole mode of life. The future potential is as great as man's imaginative intelligence can develop.

Sincerely,

Russell DeYoung
Chairman, The Goodyear Tire & Rubber Company

Dear Mr. Bookspan:

The fear that human beings will be made obsolete by machines, and that the prospect of a resulting massive social disorientation, has prompted cries of alarm since the harnessing of steam power and the invention of the mechanical loom.

These traditional forebodings have become increasingly vocal in some quarters with the continuously wider applications of automation. As the literary goes: Automated machines controlled by computers are self-adjusting, repairing, and programming without human labor... can outperform any worker at the task undertaken, and likely outthink him as well. Inevitably more and more workers will be replaced with each progressively more sophisticated generation of computer complexes, and unemployment will rise to crisis proportions.

Historically these fears have proven groundless, and there is no evidence to conclude any catastrophic developments in the future with increased automation.

There is no end to the needs of human beings as they have more disposal income and more leisure time. Without automation, we would not have had the capacity to fulfill the demands of a constantly increasing standard of living.

As a matter of fact, while automation does cause displacement, it does not cause significant unemployment. Quite to the contrary, automation has created more jobs than it has destroyed. The development of the computer is a good example. Actually, there is greater employment now than would have been the case if the technological advances brought about by automation had not occurred.

This is illustrated by industry's experience during the ten-year period ending in 1965.

Mr. Bookspan:

Dear Mr. DeYoung:

There is evidence that we of the mid-twentieth century are engaged in a social and economic revolution equal in magnitude and impact to the industrial revolution of the mid-eighteenth century. Instead of hand tools giving way to power-driven machines, though, man-run machines are giving way to computer-run machines. Many phases of business and industry which once depended exclusively on human effort (e.g., accounting, quality control, purchase ordering, and even sales) are already showing the intrusion of computers. Someday, machine-computer—computer-machine complexes may eliminate most human participation in industry.

Such change will produce several significant results (they've already started):

1. The rapid decrease in need for unskilled and semi-skilled labor.
2. The ever accelerating need to retrain personnel to move from obsolete jobs to newly created ones.
3. The requirement that those frequent technological readjustments be with full pay (i.e., elimination of a job should not produce unemployment).
4. The need for economic stability with nearly 100% of our labor force employed. (The need for 3%—5% unemployment is not directly evident.)
5. The increasing emphasis on service industries. As proportionately more people are involved in research, teaching, counseling, etc., our society will lose its production-consumption basis.

What are you, an American businessman, doing to avoid massive social disorientation, such as was experienced in nineteenth century England in the wave of the industrial revolution, as we shift to a service society? How will the excluded millions start to feel and to become a beneficiary part of the changing society?

Yours truly,

Mark Bookspan
Pre-Med, Ohio State

In the course of the full Dialogue Program, David G. Clark, a Master of Arts candidate at Stanford University, also will explore issues with Mr. DeYoung, as will David M. Butler, Electrical Engineering, Michigan State, and Stan Chrest, Journalism, Cornell, with Mr. DeYoung; similarly, Arthur M. Klevanoff, Government, Yale, and Arnold Shelby, Latin American Studies, Tulane, with Mr. Galvin.

These Dialogues will appear in this publication, and other campus newspapers across the country, throughout this academic year. Campus comments are invited, and should be forwarded to Mr. DeYoung, Goodyear, Akron, Ohio; Mr. DeYoung, Goodyear, Akron, Ohio; Mr. DeYoung, Goodyear, Akron, Ohio; Mr. Galvin, Motorola, Hawthorne Park, Illinois. • as appropriate.

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