

to the extent that we were. The substitution of synthetics made from almost limitless supplies of the materials that go into synthetics is beginning to make us wonder whether the Paley Report of a decade and one-half ago really had sufficient imagination. Not only are we shifting among the raw materials, the sources of industrial products, but we are shifting among the products themselves. Many business organizations are today offering on their sales sheets products that account for as much as 50 percent of their total sales or more, that did not exist 10 years before.

The raw material source and the nature of products rather strongly suggest that we are moving into a period of greater abundance.

This leads to the third of these conspicuous expressions of the changes wrought by technology, a change in the competitive patterns that exist within industries and that exist across industry lines. We are beginning to wonder if we can define a market. Is the building supply market the typical list of building supplies, or is it something that now includes fiberglass, for example.

I was going out to the World's Fair with Harold Beckenstein recently, and I asked him if he had an exhibit out there. He is the head of Owen Corning Fiberglas Corporation. He said, "no, we haven't got an exhibit, but 12 or 13 of the exhibits are made out of fiberglass, including some of the major exhibits." This is going to have a great impact on our thinking with respect to the flexibility that management must develop in connection with its whole program of production and sales.

The fourth area of basic change is in something that you have spent a lot of time thinking about and talking about, namely, information technology. The combination of rapid data processing with more sophisticated mathematics has gone far already to enhance the effectiveness of human effort, and within limits it is changing the nature of the management job. I dare say you have traced the changes that have occurred in the thinking and writing about management from Taylor's "Scientific Management" where we began to program the job of the man on the workbench, to the great emphasis on participative management and the ideas of decentralization, of the allocation of authority as far down the line as you can go. Now we are beginning to wonder whether the greater precision and the more effective tools of analysis that are available to us may not