

see if we can emerge with an overview that will give us an insight into the kinds of problems that will interest management perhaps during the next decade. Some of them I submit have not been fully apprehended, much less explored.

I will not attempt to provide answers to some of the problems that I will talk about, for the very good reason that I do not know the answers, but there is a tremendous challenge ahead of us. It is not altogether an optimistic picture in some of its aspects. In other of its phases it is highly optimistic, it seems to me.

I would like to start with a premise. The most conspicuous feature of our contemporary time is the fantastic expansion of our research and development work. I am not going to try to cite the data you have all heard on the number of scientists alive today in comparison to the number that existed for the first several thousand years of man's recorded history; the amount of money going into research and development today relative to earlier decades. The figures are highly explosive.

A second premise flows from this first, that perhaps we are on the threshold, in the early stages of a revolution in the technological basis of life.

This is not the first time something of this kind has happened. I suppose it happened in very early times with the discovery of fire, or the wheel, or explosives, the printing press, or the harnessing of steam. All of these technological changes did ultimately result in what we have all come to know as the industrial revolution.

The clustering of these early technologies in the 16th, 17th and 18th centuries created a new basis for life. Now, this did not occur without tremendous strains and stresses. The social pressures and the political changes accompanying those were traumatic, and in a sense they can be thought of, I think, as a measure of the kinds of things that we may be faced with in the next several decades.

Let me back up for just a moment. Since the last war a whole new vocabulary has come into our awareness. We were all talking about the vacuum tube before the war, but the development of the vacuum tube has been dramatic since the war. The transistor is a postwar development. Radar was developed during the war. The