It’s both fun and dangerous to sit back and try and forecast the future. The fun part is letting your mind wander and imagining what will happen in the months and years to come. The dangerous part is when people want to hold you to your predictions three or four years later. In any case, here is my look at the 1980s.

To properly set the stage, let’s take a very brief look at what has happened in the past decade. The actual cost of computing has been reduced. Advances in new technology and production techniques have come together to bring about a tremendous decrease in the cost of computing power. Whole new markets were developed as companies, other than the Fortune 100, could begin to afford Data Processing equipment. Just one step behind, was our ever-present government. They could suddenly ask for and receive new quantities of data and statistics in which we could all potentially drown. (It is one of my strongest feelings that without computers we would have much less government intervention into businesses today.)

On the other side of the coin, the cost of developing systems to run on the computer were increasing. It is important to note that software expense increased but not necessarily the cost of software. The advent of packages provided the means for reducing the bottom line cost to the end user community.

People became scarce as a result of this new availability of computing power. The cost for good people went sky high. The advent of the Super
Minis provided additional heat on the job market situation.

Also, in the seventies were a bunch of brand new ideas. One with the most affect on our part of the industry, was that programming became more than just an art. Form became almost as important as code which would provide the right process. People finally started to worry about maintenance and ease of use. The large company MIS department became more businesslike. Small users with no MIS departments began to emerge. New respect for the industry and the professionals in it developed at all levels.

More Competition . . .

What does this mean to the 1980s? To begin with, competition for the better people in the industry will continue to be high. As in any free market society, we will see an influx of new, younger programmers and analysts. But, even with their additional training, ours is a field where experience counts. Any intelligent person can learn to program in a week, but it takes years of work to become truly good.

We will also see greater moves towards standardization. As the cost of developing software continually increases, it will be more important to assure the maximum return on that investment. This means that software must be portable and must be able to migrate between machines.

If we could have utopia, I would foresee standardized “SYSTEM LANGUAGES.” Decision Support Systems, Artificial Intelligence and Fourth Generation Languages may be the beginnings.

In the industry itself, we will have to work hard at making professionalism happen. Without it there is potential for a backlash from this new marketplace that has opened up. Change always has the potential of being very disruptive to the organizations where it takes place. If the advent of computers in small and medium sized companies becomes destructive, a great brake may be placed on growth in our industry. The progress that has been
made in integrating the computer into the various fabrics of our society will take a giant step backward.

It will be necessary to build understanding among those persons who utilize the computers. We must make the public understand that a computer is not like a copier. One cannot just plug it in and expect results. There must be a management commitment to good computing, just as there must be to good business. The average businessman must be made aware that the computer is no more than a tool, one which may be used properly for good results. If used improperly it may lead to disaster.

Survival in the late 1980s will require software companies to learn more about “hand-holding.” As profit margins on hardware continue to shrink, the satisfaction of the users will depend on the relationships with consultants and software companies. A heavy burden is being transferred to our shoulders from the hardware industry. It is up to us to perfect our art and turn it into a true profession. This is the challenge of the 1980s.