


Foreword

Analyzers — Unsung Dependable Performers



Dr. Masao Horiba
HORIBA, Ltd.
Chairman

A handwritten signature in black ink that reads "Masao Horiba" with a stylized flourish at the end.

The end of World War II in 1945 was a turning point for many countries. It was the trigger which revolutionized countries that were directly or indirectly concerned with the war. The biggest revolution was surely brought about in Japan, a country that had experienced overwhelming defeat. With a devastated economy, millions of Japanese people were on the breadline.

The first salvation from this situation was achieved through agricultural innovation. More specifically, through technical innovations in agriculture in such areas as synthetic fertilizers, agricultural chemicals, and cultivation technology. The Japanese people were relieved from starvation by these revolutionary improvements.

The second wave of innovation appeared in the home, with electrical appliances completely changing lifestyles. Housework - cooking, cleaning and washing - has changed tremendously, and the change in daily lifestyle has contributed greatly to the social advancement and empowerment of Japanese women.

Then computers came online. Metaphorically speaking, most of the ‘memory’ and ‘calculation’ that had been the fruit of enormous human effort and labor were now the task of the computer’s CPU. People started to find other jobs, leaving to computers what had long been thought to be only human skills.

In the meantime, transport has improved greatly: for example two-wheeled and four-wheeled vehicles, trains, aircraft, and even conveyor belts. These have facilitated human transportation and played an important role in the exchange of information as well as in stimulating economic activity.

We must not forget expansion in the field of communications. Internet, e-business, and mobile phones have initiated unprecedented reforms in every area of human society, and they are still expanding unabated.

As we have seen, the advancements of science and technology are no longer limited to selected fields. They are now impacting every field of human activity, relating to each other to such an extent that it is almost impossible for anybody to foresee the sequence of innovations beforehand.

The areas mentioned so far are those with a strong influence on human activity. Meanwhile there are fields directly relating to human life, such as medical science and pharmaceutical science, which should be observed in a slightly different light. The speed of innovation accomplished in these fields has been even more extraordinary. It is clear for everybody, even for someone with no medical knowledge, just by comparing human life expectancy at two points in Japanese history. Just half a century ago, life expectancy in Japan was generally considered to be 50 years, whereas at present no one doubts it to be closer to 80 years. Although this also owes much to the direct and indirect impact of many other technologies and sciences, the drive to succeed when taking up medical and pharmaceutical ventures has been quite remarkable.

How many people have been saved by innovations in medical and pharmaceutical science, by clarifying the cause of and curing many intractable or rare illnesses? Moreover, the cures themselves have evolved into much less painful treatments. Looking back at my own experience, I felt far less pain in my recent prostatectomy operation than the appendectomy I had in my younger years: dazzling technological progress indeed.

Daring to blow my own trumpet, it is the instrumental and analytical technology that has always supported the research and development of the above-mentioned technologies—especially in the medical and pharmaceutical sciences. I have had many experiences supporting the view that if the performance and usability of the analysis instrument fully meet the requirements of R&D, the results of the endeavor can be smoothly and rapidly obtained.

Inevitably, this is one of the most motivating factors for us HORIBA engineers, for further innovative research and development. As one such ambitious engineer, I cannot help feeling sad that R&D or the feats of measuring instruments or principles are getting comparatively less attention. A remarkable innovation for us can be a mere finding for others, gaining only little recognition. Accordingly, market volume is limited. To actually start R&D, however, the highest levels of expertise in every scientific field are always required. This is why we barely cover R&D costs. R&D in our field should be guided by a sense of duty and pride in contributing to society. In this sense our products, as the crowning element of such a spirit, could well be compared to a capable but modest backstage player. My wish is to bring this humble hero center-stage and introduce him to many customers to allow them to fully enjoy his excellent performance. With this partnership, I believe that even more meaningful achievements will follow.