Foreword

Message from the President



I am proud to announce the publication of Fujitsu TEN Technical Journal, the overseas English-language edition of Fujitsu TEN Technical Report. The Report has been published since 1983, and has earned wide acclaim in Japan. I am pleased that its readership will expand with the overseas edition.

Today we are witnessing changes across the entire political, economic, and social spectrums. These changes take place at startling speed and on a global scale. The world of technology is no exception. An intense R&D race is on worldwide, involving both the academic and industrial worlds. The pace of advance in electronics-related technologies is especially spectacular, and has been aptly described as a breakthrough every minute, and progress every second. In particular, the semiconductor - the source of most new developments in electronics - has been improved by leaps and bounds, with density doubling every year. Superconductors, although not a new discovery, took off recently when the introduction of ceramics brought an explosive start to a race to attain superconductivity at higher temperatures.

A business corporation must constantly grow and develop to make its contribution to society. Human beings have always sought growth through creative activity. I believe that life itself is a perennial challenge to give a dream tangible form, and that risks involved are closely related to the extent of growth. Experience may be mostly a history of errors, but fear of failure will only stifle creativity. We plan to move ahead, to develop new technologies without fear of failure. The fruits of the lifelong labor of many engineers will become an invaluable asset, first to their companies and ultimately to all people. To accumulate this wealth and to hand it down to later generations is vitally

important. It is to further this effort that, I believe, corporate culture is born and develops.

A corporate culture grows more from the attitudes of management than from historical givens such as ethnicity. Essential to a corporate culture is the spirit of challenge. A person's constant drive to create is what improves and transforms a company, an idea that finds expression in the saying "the company is a person." Fujitsu TEN, like a person, will always strive to create new technologies.

Another major theme of corporate culture is how it builds and preserves intellectual property. I consider the publication of Fujitsu TEN Technical Journal part of our response to this theme. Defining the concept of intellectual property is an issue that is prominent in relation to industrial property rights, especially software copyrights.

If intellectual property is considered a tertiary product, it has come to have a higher value than primary (agricultural) and secondary (industrial) products. World needs are diversifying more than ever, as people become better able to express their own respective sets of values. How quickly businesses can adapt to the change and meet these needs will be the key to success for every company. In such a world, the accumulation and preservation of intellectual property is likely to become an indispensable requirement in business.

As technology grows ever more sophisticated and varied, the development of products that meet the full range of needs is not a task that can be completed by one or two persons, but a project that requires teamwork by a large number of engineers. As intellectual property becomes systematized and is shared among engineers, their efficiency grows dramatically.

Japan is going through an economic upheaval today. Since 1986, the exchange rate of the yen

against the dollar has risen steeply, by 40 percent in a matter of 20 months. This is twice the 20-percent pace that the yen surged in a 20-month period beginning in 1971. Such drastic change are related to technological progress. Without adapting marketing, design, development, and production technologies to the times, business growth is not possible. In Japan today, one often hears about the structural change of the economy. Around the globe as well, economic and social changes forewarn of structural change.

It has traditionally been believed that a corporation's life lasts thirty years. It is true that a number of once-great industries have waned, but new industries and new products have emerged one after another. Corporate diversification is also a trend, and product life cycles are becoming increasingly short. We plan to challenge that traditional belief with the conviction that we are able not only to survive changing times but to spearhead them.

It is said that the more available information is, the more dynamic society is. I look forward to the presentation of useful information to as wide an audience as possible and to the greater growth that I hope the publication of Fujitsu TEN Technical Journal will occasion.

H. Jshii

Heihachiro Ishii President