

THE INDUSTRIAL AUTOMATION SUBSECTOR

Until Mexico's economy re-stabilizes, low-cost solutions that employ high-end PC hardware and show fast results will be the best prospects for industrial automation.

The market for industrial automation has grown rapidly over the past few years, as Mexican companies struggle to modernize and maintain their competitive position. Traditionally, low labour costs and protected markets led to a labour-intensive approach to design and production control. Recently, however, the influx of foreign competition and the need to export has added product quality and consistency to increased efficiency as reasons for automating. The high cost of capital is driving efforts to minimize inventory and streamline distribution. As the technology has evolved, it has become less expensive, more powerful and, therefore, more competitive.

For all of these reasons, industry experts predict that the market will continue to grow at a healthy rate in the medium term, even though the economic crisis has drastically cut into the very rapid expansion of the past few years. They note that it is mainly the larger firms that are buying advanced systems. Small companies are not investing and many will not survive the current economic crisis.

The devaluation of the peso in December 1994 has dramatically increased the cost of capital, which was scarce even before the crisis. This has forced many companies to look for quick solutions. Normally, the automation of a plant is a long-term investment. But in today's economic environment, companies are worried about survival. Consequently, they have much shorter planning horizons.

Typically Mexican firms begin to automate by purchasing financial or communications functions and then gradually move towards manufacturing elements. Mexican companies have generally been slow to understand the competitive advantage to be gained from automating the manufacturing process itself. Before the economic restructuring of the late 1980s, new technology was applied mainly at the sales, distribution and administrative levels. As one observer put it, this happens because top managers are usually most interested in financial solutions.

In many cases, advanced automation systems are implemented at the request of a manufacturer's customers. Ford, for example, requires suppliers to have computerized design systems because it allows the electronic exchange of designs. Advanced systems are also necessary for just-in-time (JIT) delivery, which is increasingly demanded by customers. For example, Vanity Fair Mills and Xerox have both recently implemented JIT in Mexico. According to