Technology Transfer in Ireland

Industrial Development Authority is key to successful dealing with Irish companies

BY TOM DOWLING*

The image many people have of Ireland is of a rural agricultural country. We have a population of 3.5 million and compared with most other EEC countries, Ireland is still comparatively uncrowded. Behind the rural image, however, there has been considerable change in recent years. Employment in agriculture, for example, has fallen in the last 30 years from 41% to 16% of total employment.

There has been a corresponding increase of employment in service and manufacture.

This change has been associated with policies to promote the development of industry. The Industrial Development Authority (IDA), has been one of the main instruments of successive Irish governments in promoting industry. It is from the perspective of this experience that I want to talk about how we view technology transfer and how this has led to our current activities in this field.

The present structure of the IDA was established in 1970, three years before Ireland joined the EEC.

The Authority has "national responsibility for the implementation of industrial development policies." In practice, this means that the industrialist deals mainly with one body that is free from bureaucratic interference.

As the lead agency for Industrial Development, the IDA offers a comprehensive package of incentives and services to encourage industry to Ireland. Part of this package is a series of programs of financial incentives aimed at transferring technology to or from identified target groups.

Sources of Technology

New foreign companies or mobile foreign investment has been and remains, one of the principal sources of technology and industrial employment.

We have been able to attract new foreign investment for several reasons:

1. The availability of young well-educated, highly-skilled people.
2. Duty-free access to EEC market.
3. Ireland, as an industrial location, offers a very good return on investment. For U.S. companies, this has been shown to be as high as 29%.
4. The tax structure is very favorable to manufacturing industry. We have a uniform maximum of 10% for the manufacturing sector.

Allied to this foreign investment, have been small business development programs that provide generous encouragement to Irish entrepreneurs starting up companies. They also encourage linkage between established small firms and new foreign industry. Our experience has been that these small firms require much more involvement by agency staff in the starting years but are then more dynamic both in terms of developing products in the new growth sectors and meeting the challenge of changing market conditions.

Associated with Ireland's entry into the EEC, the IDA administered a major program of re-equipment and adaption. This program, which was terminated in 1982, encouraged domestic companies to update their manufacturing equipment. It was an effective scheme for rapidly increasing productivity. In the long term, however, our view was that acquiring new technology through machinery purchase could only be a temporary measure. (We now make it a condition of assistance that companies have a development plan.)

Research and development has been encouraged through a special program introduced in 1970. Companies that carry out planned R&D not only improve their own commercial position but in our experience, are the best candidates to license-in new technology. This is because they have the discipline to assess it, assimilate it, and build on it.

These programs were the backbone of our industrial development strategy until the early 1980s.

Total Development

In recent years, we have placed great stress on the total development of companies rather than simply deciding if a particular object is likely to be viable on its own. The discontinuance of re-equipment grants was one indication of that change in 1982.

We have also aimed to get a greater internal transfer of technology from large foreign companies to smaller companies by:

1. Encouraging, by a special package of incentives, qualified managers, many of them trained by multinational companies, to set up their own ventures.
2. Helping small firms achieve the position of "approved suppliers" to the multinationals.

This new strategy was formally spelled out in a White

*Manager, Development Division, Irish Industrial Development Authority; paper presented at the International Conference of LES Britain/Ireland, Dublin, Ireland, June 1986.

Paper on Industrial Policy published in 1984. The policy involves a deliberate shift of investment from capital grants into direct investment in the less tangible forms of technology, namely, know-how and intellectual property.

From the point of view of the IDA, we have responded by establishing a new program for technology transfer that involved reassignment and retraining of a number of people in our overseas offices, and the establishment of a specialized Technology Transfer Unit here at home.

In practical terms, the role the IDA has adopted is to act as a broker for companies seeking new products or joint ventures.

On the one hand, we work with suitable, committed Irish companies to help them make overseas contacts using our overseas office network. On the other hand, we help foreign clients identify suitable Irish partners.

The strengths we can add to the process are first, our overseas experience and contacts. We have 25 offices abroad in 12 countries. We also have, through our domestic network, a very good knowledge of the capabilities of the Irish companies.

Our philosophy is that, once the contacts are made, we play a neutral role in the negotiations between the prospective partners.

However, personality factors are so important in licensing and joint-venture arrangements that we will always try to arrange several contacts for a client rather than operate on a one-to-one basis.

Two Approaches

There are two main approaches we use under this program:

1. The Company-Led Approach.
2. The Product-Led Approach.

The Company-Led approach is the most developed. In this we work with established domestic companies through a series of steps.

A typical case would be a company in the electronics field that seeks new products. First, we meet the management of the Irish company to gauge their commitment and decide whether we can help them. Second, if this meeting is positive, we agree on an action program that will enable the company to set out what it can offer to a foreign partner and identify the product areas it wants to get into.

The third step is for the IDA, guided by the company, to identify potential foreign partners or licensors. Finally, we arrange an itinerary of visits and help the Irish company prepare for its meetings with the foreign firms.

The second approach, the Product-Led Approach, goes like this:

In the normal course of their work, our overseas staff members meet companies offering new products for license or seeking a joint-venture partner. What we have done is to institute a scheme for handling these opportunities in a systematic way and bringing them to the attention of suitable domestic companies. We communicate these opportunities to an average of five companies and from these, we would expect at least two responses.

If a small company needs help assessing the feasibility of a particular project, we can help it with up to 50% of its travel and consultancy costs. This consultancy may include the use of a patent agent to advise on intellectual property and the license arrangement.

Case Examples include Mitel Delta, Waterford Co-op, and Plastronix. Although only one of these projects involves a U.S. company, you will not be surprised if I tell you that we see the U.S.A. as the principal source of joint venture and license opportunities for Irish firms. We promote Irish companies in the U.S. as "Your Partner in Europe." At the same time, we draw attention to our young and well-educated population.

A key theme in our current thinking is to eliminate the distinction between R&D and licensing as a means of acquiring new products. We will shortly be introducing a program of financial assistance for the purchase of licenses that will compliment the present practice, which simply helps companies with their R&D costs.

An important objective in the new program will be to help reduce the up-front costs and ease the high costs for the earlier years of the license agreement.

Technology transfer is really an exercise in communication and all too often, the people at the center constitute a bottleneck rather than a free-flowing channel. We hope to avoid this fate by drawing on our past experience, by making the optimum use of our natural advantages, and by committing our limited resources in a planned and innovative way, to achieve the maximum benefit for the Irish economy.