

# Advantages of New-Product Search

Three common areas for corporate growth are compared; product, technology licensing most advantageous

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Throughout the world, industry faces a two-sided problem in terms of achieving corporate growth. Corporate growth can quite simply be thought of as an increase in sales and profits. The two most often-used tools for achieving corporate growth are becoming more difficult to use and less efficient.

Increasing research and development costs and a poor track record for mergers and acquisitions seem to threaten industry's continued corporate growth.

Fortunately, there is one other corporate growth tool available which is seldom used or considered by most companies. That tool is acquiring new products and technology through licensing, joint ventures and other technology transfer arrangements: in short *new product search*.

In 1970, a best-selling business management book was published titled, *Planning Corporate Growth and Diversification*. The author was the late Peter Hilton. Hilton was one of the founders of the Licensing Executives Society and was very active in the field of new product search and licensing through his consulting firm, Corporate Diversification Ltd. In his book, Hilton broke down corporate growth into three major areas. These areas have been generally agreed upon in other books, and they are:

1. Internal growth from corporate research and development programs.
2. External growth through mergers and acquisitions.
3. External growth through product and technology acquisition; usually through license agreements, joint ventures and other forms of technology transfers.

When properly used, all three of these corporate growth tools result in new products, product line extensions, diversification and improvements to existing products.

However, external growth through licensing has several unique advantages over both research and development and mergers and acquisitions.

Table I helps visualize the advantages of a new product search program over the other two corporate growth tools.

Considering the current state of business around the world, a brief examination of these three growth vehicles may be enlightening.

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## THE COMPARATIVE ADVANTAGES OF THE THREE PRIMARY CORPORATE GROWTH STRATEGIES

	Internal Research & Development	Corporate Mergers & Acquisitions	New Product Search
Selection of New Product Opportunities	limited	large	very large
Probability of Getting What You Want	low	high	very high
Time Required to Enter New Market	long	existing	short
Predictability of Cost of Action	low	very high	high
When Cost of New Product Acquisition Is Paid	long before product is marketed	just before product is marketed	mostly after product is marketed
Cost of Withdrawal or Failure	high	very high	low

Table I

### RESEARCH AND DEVELOPMENT

R&D spending is increasing steadily in most industrialized countries. However, some experts estimate that as recently as 1979 companies were actually spending less on R&D than in 1969, after expenditures were adjusted for inflation. To compound the situation, R&D expenditures today are directed in a less efficient manner than they were over a decade ago. Overall, a greater percentage of R&D spending is for projects related to compliance with government regulations.

As technology becomes more sophisticated, well-educated and trained researchers are harder to find and their salaries are rising faster than those of other corporate employees. Personnel costs, therefore, claim a larger share of today's R&D expenditures.

Still another problem of growing technological sophistication is that equipment requirements have become more elaborate and R&D projects overall have become more complex and thus more costly.

Furthermore, inflation in many countries has been constantly robbing their currencies of their buying power, while increasing still further the cost of capital equipment used in R&D programs.

### Less for More

Therefore, companies are faced with the situation of spending more for R&D programs which are buying them less in real terms, on top of spending less ef-

ficiently than in the past.

It should also be noted that a Booz, Allen & Hamilton study almost 10 years ago estimated that an average of four out of every five hours devoted by scientists and engineers to technical development of new products were spent on projects that never achieved commercial success.

This is not to suggest that companies may be wasting money on R&D programs, but rather to point out that internal research and development can be an extremely costly corporate growth vehicle.

### Mergers and Acquisitions

George Bernard Shaw once encountered a young woman who said, "You have the greatest brain in the world and I have the most beautiful body; so we ought to produce the most perfect child." Thinking over this proposition, the Irish playwright countered with, "What if the child inherits my body and your brains?"

The foregoing helps to illustrate the fact that the old synergy theory of one plus one totalling up to three, in practice, has been found more likely to equal only two and many times even less.

A recent *Wall Street Journal* article noted that, "Experts estimate that because of poor planning, high prices, mismanaged consolidation or bad luck, one-third of all acquisitions ultimately are failures."

The same article quoted merger consultant John Arnold, "As many as seven out of ten acquisitions don't meet the expectations of the acquiring parties."

In a recent *Fortune* article, merger specialist Arthur Burck agreed with such figures and noted that the thousands of divestitures in the past 15 years tend to support this. These represent rather dismal results for the corporate merger and acquisition growth route, particularly when you consider the relatively high costs of such acquisitions today.

Because immense merger activity over the last 10 years has drastically reduced the number of viable merger and acquisition candidates available, those that remain are relatively high-priced; even more so in terms of inflation and high borrowing costs.

There are certainly mergers and acquisitions that prove to be excellent marriages for both parties. However, such a vehicle can no longer be looked upon as a "quick fix" for corporate growth and diversification.

In his 1970 book, Hilton noted that, "Of all the primary growth activities, none has made better reading, country club telling or economic history than the proliferation of mergers and acquisitions . . ." That statement still holds true.

However, the third primary growth activity is one that has received relatively little attention in corporate planning and development throughout the world.

### LICENSING AND TECHNOLOGY EXCHANGE

The third primary means of corporate growth is the acquisition of rights to products and technology, as opposed to the acquisition of corporate entities who control those rights. This process is generally known as licensing or technology exchange.

In essence, a company "licenses" another to make

use of the products or technology of the first company. The license agreement would normally give the user of the products or technology (licensee) the right to manufacture and sell in an agreed-upon market area. For this privilege, the licensee would compensate the owner of the rights (licensor) by means of a royalty fee, generally in the range of 2-10% of the licensee's sales of the licensed goods. The royalty is sometimes preceded by a down payment to cover the licensor's costs of transferring the rights and know-how and to represent a sign of good faith and determination on the part of the licensee. In some cases, this down payment is credited against future earned royalties.

Licensing is one of the more important aspects of technology transfer. The term "technology transfer" became popular in the late 1960s and early 1970s as the result of the U.S. Government's efforts to apply developments fostered in the various military and space programs to civilian scientific and industrial use.

Historically, there has been an increase in the rate of technology transfer between nations. Richard N. Cooper, at the 1970 Symposium of Technology and International Trade sponsored by the U.S. National Academy of Engineering, presented a paper entitled, "Technology and U.S. Trade: An Historical Review." In that paper, he formulated an index of the rate of technology transfer. This was accomplished by analyzing the average number of years between first production of an industrial innovation in the innovating country and the appearance of that same innovation in the production of selected countries. Cooper concluded that in the nineteenth century it took approximately 20 years for technology to transfer from one country to another; in the period 1925-1950, the pace quickened to less than 10 years; and it jumped to less than three years in the 1960s. Today, that pace is probably measured in months, rather than years, primarily because of the popularity of licensing.

Some sources have called products manufactured under license the coming revolution in new product development. Licensing allows a company to bypass its relatively slow research and development department, which had traditionally been the almost sole source of new products.

Companies decide to acquire products and technology under license for a number of reasons. Among them are the following:

1. Product life is becoming increasingly shorter. Licensing can insure a steady flow of new products.
2. The cost of acquiring fully-developed new products through license is estimated to be as little as 2-10% of the cost of developing comparable products internally.
3. The lead time for introducing new products is reduced dramatically through licensing.
4. A company can easily and accurately predict its developmental and front-end costs for new products acquired through license.
5. If a licensed product does not become successful in the marketplace, downside risk is minimal.
6. Products manufactured under license increase cash flow because development costs are paid for after the products are sold (via royalties) rather than before entering the market.

The foregoing are only a few of the reasons companies are increasingly looking to external sources for new

products and technology.

Just how do you go about finding profitable new products available for license from companies in the U.S.? Until now, the search for licensing opportunities is a discipline that has only been practiced by the largest of manufacturers and a handful of specialized consultants.

Of course, companies with established and well-known reputations in their fields are regularly approached by potential licensors of new technology. However, the astute company will have organized an ongoing new

product search program in order to *systematically* find opportunities on a *continuous* basis. Rather than waiting for the opportunities to find them (which is a remote possibility), they take an active position in reference to new product search.

With the increasing costs of R&D, the narrowing universe of acquisition candidates, and a less-than-inspiring track record in making acquisitions work, the 1980s will no doubt see an increase in international license agreements.