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Entering New Businesses:
Selecting Strategies for Success*

Edward B. Roberts+
Charles A. Berry‡

November 1984
WP# 1492-3-84

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and Pilkington Brothers Limited

*We express our deep appreciation to an anonymous reviewer who assisted in clarifying a number of aspects of this paper.

ABSTRACT

Selection from the alternative strategies available for entering new businesses is a key issue for diversifying corporations. Alternative approaches include internal development, acquisition, licensing, joint ventures, and minority venture capital investments. An intensive literature review is used to devise a matrix of company "familiarity" with relevant market and technological experiences and to demonstrate the conceptual utility of the matrix for entry strategy choice. Performance data on 14 business development episodes by one successful diversified technological firm are used to support the selection concepts embodied in the "familiarity matrix".

INTRODUCTION

Entry into new product-markets, representing diversification for the existing firm, may provide an important source of future growth and profitability. Typically, such new businesses are initiated with low market share in high growth markets and require large cash inflows to finance growth. Furthermore, many new product-market entries fail, draining additional cash resources and incurring high opportunity costs to the firm.

Two basic strategic questions are thus posed:

Which product-markets should a corporation enter?

How should the company enter these product-markets to avoid failure and maximize gain?

Although these questions are fundamentally different, they should not be answered independently of one another. Entering a new business may be achieved by means of a variety of mechanisms such as internal development, acquisition, joint ventures and minority investments of venture capital. As Roberts²⁴ has indicated, each of these mechanisms makes different demands upon the corporation. Some, such as internal development, require a high level of commitment and involvement. Others, such as venture capital investment, require much lower levels of involvement. What are the relative benefits and costs of each of these entry mechanisms? When should each be used?

This article attempts to analyze and answer these questions, first by proposing a framework for considering entry issues, second by a review of relevant literature, third by application of this literature to the creation of a matrix that suggests optimum entry strategies, and finally by a test of the matrix through a case analysis of business development decisions by a successful diversified corporation.

ENTRY STRATEGY: A NEW SELECTION FRAMEWORK

New business development may address new markets, new products or both. In addition, these new areas may be ones that are familiar or unfamiliar to a company. Let us first define "newness" and "familiarity":

"NEWNESS OF A TECHNOLOGY OR SERVICE"

- The degree to which that technology or service has not formerly been embodied within the products of the company.

"NEWNESS OF A MARKET"

- The degree to which the products of the company have not formerly been targeted at that particular market.

"FAMILIARITY WITH A TECHNOLOGY"

- The degree to which knowledge of the technology exists within the company, not necessarily embodied in products.

"FAMILIARITY WITH A MARKET"

- The degree to which the characteristics and business patterns of a market are understood within the company, not necessarily as a result of participation in the market.

If the businesses in which a company presently competes are its BASE businesses, then market factors associated with the new business area may be characterized as BASE, NEW FAMILIAR, or NEW UNFAMILIAR. Here, "market factors" refers not only to particular characteristics of the market and the participating competitors, but also includes the appropriate pattern of doing business that may lead to competitive advantage. Two alternative patterns are performance/premium price and lowest cost producer. Similarly, the technologies or service embodied in the product for the new business area may be characterized on the same basis. EXHIBIT 1 illustrates some tests that may be used to distinguish between "base" and "new" areas.

EXHIBIT 1
TESTS OF "NEWNESS"

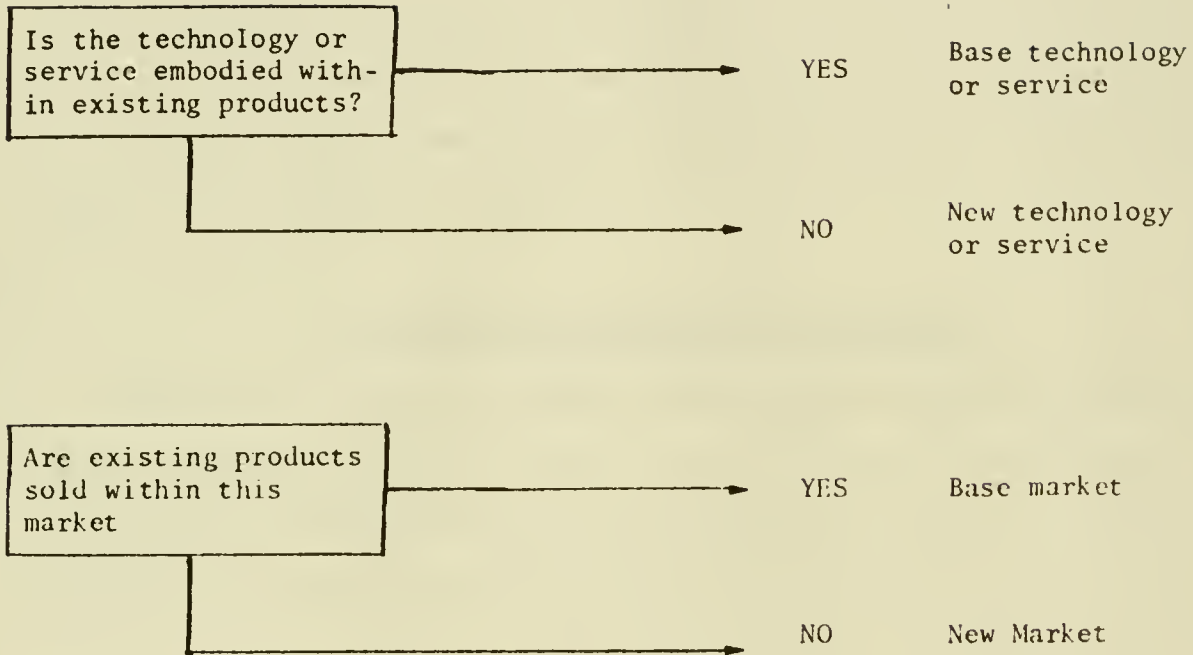


EXHIBIT 2 lists questions that may be used to distinguish between familiar and unfamiliar technologies. (Equivalent tests may be applied to services.) Questions to distinguish between familiar and unfamiliar markets are given in EXHIBIT 3.

The application of these tests to any new business development opportunity enables it to be located conceptually on a 3x3 technology/market FAMILIARITY MATRIX as illustrated in EXHIBIT 4. The nine sectors of this matrix may be grouped into three regions, with the three sectors comprising any one region having broadly similar levels of familiarity. These three regions are illustrated in EXHIBIT 4.

LITERATURE REVIEW--ALTERNATIVE STRATEGIES

Extensive writings have focused on new business development and the various mechanisms by which it may be achieved. Much of this literature concentrates on diversification, the most demanding approach to new business development, in which both the product and market dimensions of the business area may be new to a company. Our review supports and provides details for the framework shown in EXHIBIT 4, finding that familiarity of a company with the technology and market being addressed is the critical variable that explains much of the success or failure in new business development approaches.

Rumelt's²⁶ oft-cited pioneering 1974 study of diversification analyzed company performance against a measure of the relatedness of the various businesses forming the company. Rumelt identified nine types of diversified companies, clustered into three categories: Dominant Business Companies, Related Business Companies and Unrelated Business Companies. From extensive analysis Rumelt concluded that Related Business Companies

EXHIBIT 2...
and given in EXHIBIT 2

The application of this...
opportunities enables...
FAMILIARLY KNOWN...
matrix may be grouped...
any one region having...
regions are illustrated...

FAMILIARLY KNOWN

Executive writings have...
various estimates by...
concentrated on...
development, in which...
area may be new to...
the franchise...
the technology and...
explains much of the...
approaches.

Rumelt's 26

analyzed company performance...
various businesses...
diversified companies...
Companies, Related Business...
From extensive analysis...

EXHIBIT 2
TESTS OF TECHNOLOGICAL FAMILIARITY

DECREASING
FAMILIARITY

- 1) Is the technological capability used within the corporation without being embodied in products, e.g., required for component manufacture (incorporated in processes rather than products)?
- 2) Do the main features of the new technology relate to or overlap with existing corporate technological skills or knowledge, e.g., coating of optical lenses and aluminizing semiconductor substrates?
- 3) Do technological skills or knowledge exist within the corporation without being embodied in products or processes, e.g., at a central R&D facility?
- 4) Has the technology been systematically monitored from within the corporation in anticipation of future utilization, e.g., by a technology assessment group?
- 5) Is relevant and reliable advice available from external consultants?



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TESTS OF TECHNOLOGICAL FAMILIARITY

DEPARTMENT OF
COMMERCE

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- 4) Has the technology been systematically monitored from within the corporation in anticipation of future utilization, e.g., by a technology assessment group?
- 5) Is relevant and reliable advice available from external consultants?

EXHIBIT 3
TESTS OF MARKET FAMILIARITY

DECREASING
FAMILIARITY

- 1) Do the main features of the new market relate to or overlap existing product markets, e.g., base and new products are both consumer products?
- 2) Does the company presently participate in the market as a buyer (relevant to backward integration strategies)?
- 3) Has the market been monitored systematically from within the corporation with a view to future entry?
- 4) Does knowledge of the market exist within the corporation without direct participation in the market, e.g., as a result of previous experience of credible staff?
- 5) Is relevant and reliable advice available from external consultants?



EXHIBIT 4

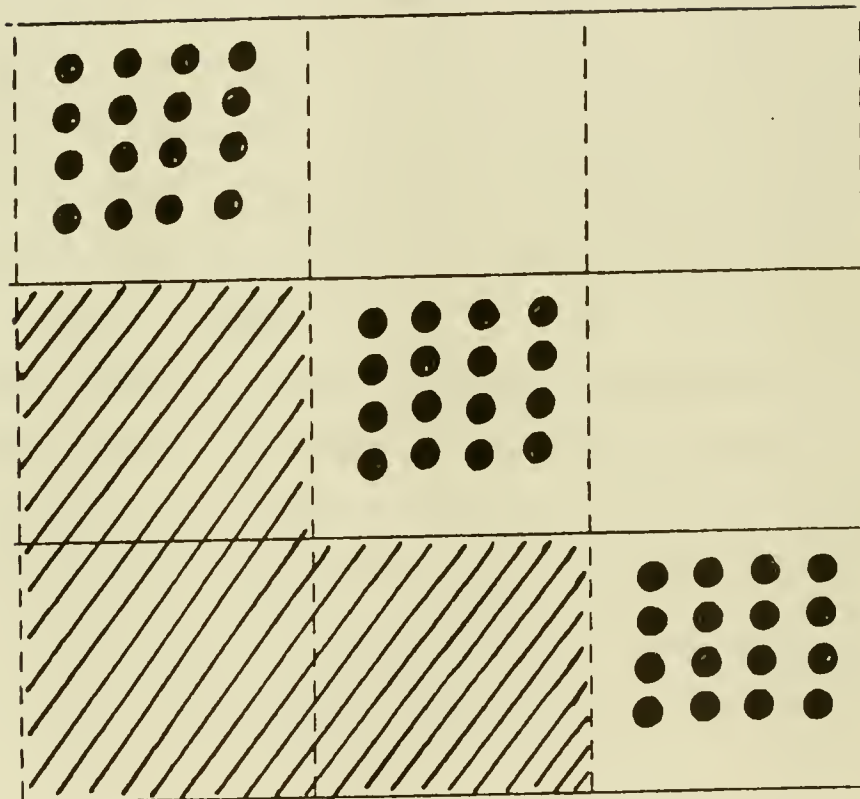
THE FAMILIARITY MATRIX

MARKET FACTORS

NEW UNFAMILIAR

NEW FAMILIAR

BASE



BASE

NEW FAMILIAR

NEW UNFAMILIAR

TECHNOLOGIES OR SERVICES EMBODIED IN THE PRODUCT

KEY:



← INCREASING CORPORATE FAMILIARITY

Figure 1



Figure 1. (Caption text, mostly illegible)

outperformed the averages on five accounting-based performance measures over the period 1949 to 1969.

Rumelt²⁵ more recently updated his analysis to include Fortune 500 company performance through 1974 and drew similar conclusions: the related constrained group of companies was the most profitable, building on single strengths or resources associated with their original businesses. Rumelt, as well as Christensen and Montgomery⁷, also found, however, that the performance in part reflected effects of concentrations in certain categories of industrial market clusters. While some (e.g., Bettis and Hall²) have questioned Rumelt's earlier conclusions, still others (e.g., Holzmann, Copeland and Hayya¹³) have supported the findings of lower returns by unrelated business firms and highest profitability for the related constrained group of firms.

Peters²⁰ supports Rumelt's general conclusions on the superior performance of related business companies. In his study of 37 "well managed" organizations he found that they had all been able to define their strengths and build upon them. They had not moved into potentially attractive new business areas which required skills that they did not have. In their recent book Peters and Waterman²¹ classed this as "sticking to the knitting".

Even in small high technology firms similar effects can be noted. Recent research by Meyer and Roberts¹⁷ on ten such firms revealed that the most successful firms in terms of growth had concentrated on one key technological area and introduced product enhancements related to that area. In contrast, the poorest performers had tackled "unrelated" new technologies in attempts to enter new product-market areas.

The research work discussed above indicates that in order to ensure highest performance, new business development should be constrained within areas related to a company's base business - a very limiting constraint. However, no account was taken of how new businesses were in fact entered and the effect that the entry mechanism had on subsequent corporate performance. As summarized in EXHIBIT 5 the literature identifies a wide range of approaches that are available for entering new business areas, highlighting various advantages and disadvantages.

Internal Development. Companies have traditionally approached new business development via two routes: internal development or acquisition. Internal development exploits internal resources as a basis for establishing a business new to the company. Biggadike³ studied Fortune 500 companies that had used this approach in corporate diversification. He found that typically eight years were needed to generate a positive return on investment, and performance did not match that of a mature business until a period of 10 to 12 years had elapsed. However, Weiss²⁹ asserts that this need not be the case. He compared the performance of internal corporate development with comparable businesses newly started by individuals and found that the new independent businesses reached profitability in half the time of corporate effort - approximately four years versus eight years. Although Weiss attributes this to the more ambitious targets established by independent operations, indeed the opposite may be true. Large companies' overhead allocation charges or their attempts at large-scale entry or objectives that preclude early profitability may be more correct explanations for delayed profitability of these ventures.

EXHIBIT 5

ENTRY MECHANISMS: ADVANTAGES AND DISADVANTAGES

NEW BUSINESS DEVELOPMENT MECHANISM	MAJOR ADVANTAGES	MAJOR DISADVANTAGES
INTERNAL DEVELOPMENT	Using existing resources	Time lag to break even tends to be long (on average 8 years) Unfamiliarity with new markets may lead to errors
ACQUISITION	Rapid market entry	New business area may be unfamiliar to parent
LICENSE	Rapid access to proven technology Reduced financial exposure	Not a substitute for internal technical competence Not proprietary technology Dependence upon licensor
INTERNAL VENTURE	Uses existing resources May enable company to hold a talented entrepreneur	Mixed record of success Corporation's internal climate often unsuitable
JOINT VENTURE OR ALLIANCE	Technological/marketing unions can exploit small/large company synergies Distribute risk	Potential for conflict between partners
VENTURE CAPITAL	Can provide window on new technology or market	Unlikely alone to be a major stimulus of corporate growth
EDUCATIONAL ACQUISITION	Provides window and initial staff	Higher initial financial commitment than venture capital Risk of departure of entrepreneurs

Miller¹⁸ indicates that forcing established attitudes and procedures upon a new business may severely handicap it, and suggests that success finally may not come until the technology has been adapted, new facilities have been established or familiarity with the new markets has developed. Miller himself stresses that this last factor is very important. Gilmore and Coddington⁹ also believe that lack of familiarity with new markets often leads to major errors.

Acquisition. In contrast to internal development, acquisition can take weeks rather than years to execute. This approach may be attractive not only because of its speed, but it may also offer much lower initial cost of entry into a new business or industry. Salter and Weinhold²⁷ point out that this is particularly true if the key parameters for success in the new business field are intangibles such as patents, product image or R&D skills which may be difficult to duplicate via internal developments within reasonable costs and timescales.

Miller¹⁸ believes that a diversifying company cannot step in immediately after acquisition to manage a business it knows nothing about. It must set up a communication system that will permit it gradually to understand the new business. Before this understanding has developed, incompatibility may exist between the managerial judgment appropriate for the parent and that required for the new subsidiary.

Licensing. Acquiring technology through licensing represents an alternative to acquiring a complete company. J.P. Killing¹⁵ has pointed out that licensing avoids the risks of product development by exploiting the experience of firms who have already developed and marketed the product.

Internal Ventures. Roberts²⁴ indicates that many corporations are now adopting new venture strategies in order to meet ambitious plans for diversification and growth. Internal ventures have some similarities to internal development, which has already been discussed. In this venture strategy, a firm attempts to enter different markets or develop substantially different products from those of its existing base business by setting up a separate entity within the existing corporate body. Overall the strategy has had a mixed record, but some companies such as 3M have exploited it in the past with considerable success. This was due to a large extent to their ability to harness and nurture entrepreneurial behavior within the corporation. More recently, IBM's Independent Business Units (IBUs), especially its PC venture, and DuPont's new electronic materials division evidence effectiveness of internal ventures for market expansion and/or diversification. Burgelman⁴ has suggested that corporations need to "develop greater flexibility between new venture projects and the corporation", using external as well as internal ventures.

The difficulty in successfully diversifying via internal ventures is not a new one. Citing Chandler⁶, Morecroft¹⁹ comments on DuPont's failure in moving from explosive powders into varnishes and paints in 1917. "...competing firms, though much smaller and therefore lacking large economies of scale and production, were nonetheless profitable... Their sole advantage lay in the fact that they specialized in the manufacture, distribution, and sale of varnishes and paints. This focus provided them with clearer responsibilities and clearer standards for administering sales and distribution."

Joint Ventures. Despite the great potential for conflict, many companies successfully diversify and grow via joint ventures. As Killing¹⁶ points out, when projects get larger, technology more expensive and the cost of

failure too large to be borne alone, joint venturing may become increasingly important. Shifts in national policy in the United States are now encouraging the formation of several large research-based joint ventures involving many companies. But the traditional forms of joint ventures, involving creation of third corporations, seem to have limited life and/or growth potential.

Hlavacek et al.¹² and Roberts²⁴ believe one class of joint venture to be of particular interest -- "new style" joint ventures in which large and small companies join forces to create a new entry in the market place. In these efforts of "mutual pursuit", usually without the formality of a joint venture company, primarily the small company provides the technology, the large company provides marketing capability and the venture is synergistic for both parties. Recent articles^{5,14} have indicated how these large company/small company "alliances", forged frequently through the creative use of corporate venture capital, are growing in strategic importance.

Venture Capital and Nurturing. The venture strategy which permits some degree of entry, but the lowest level of required corporate commitment, is that associated with external venture capital investment. Major corporations have exploited this approach in order to become involved with the growth and development of small companies as investors, participants or even eventual acquirers. Roberts²⁴ points out that this approach was popular as early as the mid-to-late 1960s with many large corporations such as DuPont, Exxon, Ford, General Electric, Singer and Union Carbide. Their motivation was the so-called "window on technology", the opportunity to secure closeness to and possibly later entry into new technologies by making

failure too large to be borne alone, joint venturing may be desirable. This is particularly important in the United States and in encouraging the formation of joint venture research and development involving many companies. The organizational forms of joint venturing involving creation of wholly owned subsidiaries, seem to have great growth potential.

Havassy et al.¹³ and Roberts¹⁴ believe one class of joint venture to be of particular interest - "low entry" joint ventures. Large and small companies join forces to create a new entry in the market. In these efforts of "mutual pursuit", usually without the formation of a joint venture company, primarily the small company provides the large company provides marketing capability and the venture is synergistic for both parties. Recent articles^{13,14} have indicated that these large company/small company "alliances", forged independently, creative use of corporate venture capital, are growing in importance.

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minority investments in young and growing high-technology enterprises. However, few companies in the '60s were able to make this approach by itself an important stimulus of corporate growth or profitability. Despite this, ever increasing numbers of companies today are experimenting with venture capital, many showing important financial and informational benefits.

Studies carried out by Greenthal and Larson¹⁰ show that venture capital investments can indeed provide satisfactory and perhaps highly attractive returns, if they are properly managed, although Hardyman et al.¹¹ essentially disagree. Rind²³ distinguishes between direct venture investments and investment into pooled funds of venture capital partnerships. He points out that although direct venture investments can be carried out from within a corporation by appropriate planning and organization, difficulties are often encountered due to a lack of appropriately skilled people, contradictory rationales between the investee company and parent, legal problems, and an inadequate time horizon. Investment in a partnership may remove some of these problems but if the investor's motives are other than simply maximizing financial return, it may be important to select a partnership concentrating investments in areas of interest. Increasingly corporations are trying to use pooled funds to provide the "windows" on new technologies and new markets that are more readily afforded by direct investment, but special linkages with the investment fund managers are needed to implement a "window" strategy. Fast⁸ cites 3M and Corning who have invested as limited partners in venture capital partnerships. This involvement in business development financing can keep the company in touch with new technologies and emerging industries as well as provide the guidance and understanding of the venture development process necessary for more effective internal corporate venturing.

In situations where the investing company provides managerial assistance to the recipient of the venture capital, the strategy is classed as "venture nurturing" rather than pure venture capital. This seems to be a more sensible entry toward diversification objectives than a simple provision of funds, but it also needs to be tied to other company diversification efforts.

"Educational" Acquisitions. Although not discussed in the management literature, targeted small acquisitions can fulfill a similar role to a venture capital minority investment and, in some circumstances, may offer significant advantages. In an acquisition of this type, the acquiring firm immediately obtains people familiar with the new business area, whereas in a minority investment, the parent relies upon its existing staff building familiarity by interacting with the investee. Acquisitions for educational purposes may therefore represent a faster route to familiarity than the venture capital "window" approach. Staff acquired in this manner may even be used by the parent as a basis for redirecting a corporation's primary product-market thrust. Harris Corporation (formerly Harris-Intertype) entered the computer and communication systems industry using precisely this mechanism to acquire internal skills and knowledge through its acquisition of Radiation Dynamics Inc. Procter and Gamble recently indicated its similar behavior in citing its acquisition of the Tender Leaf Tea brand as providing "an initial learning opportunity in a growing category of the beverage business."²²

One potential drawback in this "educational acquisition" approach is that it usually requires a higher level of financial commitment than minority investment and therefore increases risk. In addition, it is necessary to ensure that key people do not leave soon after the acquisition

due to the removal of entrepreneurial incentives. A carefully designed acquisition deal may be necessary to ensure that incentives remain. When Xerox acquired Versatec, for example, the founder and key employees were given the opportunity to double their "sellout" price by meeting performance targets over the next five years.

Summary. Though not without controversy, major prior research work on large U.S. corporations has indicated that highest performers had diversified to some extent but had constrained the development of new business within areas related to the company's base business. The range of mechanisms employed for entering new businesses, previously displayed in EXHIBIT 5, is divided in EXHIBIT 6 into three regions, each requiring a different level of corporate involvement and commitment. No one mechanism is ideal for all new business development. It may therefore be possible that selective use of entry mechanisms can yield substantial benefits over concentration on one particular approach. If this presumption is valid, then careful strategy selection can reduce the risk associated with new business development in unrelated areas.

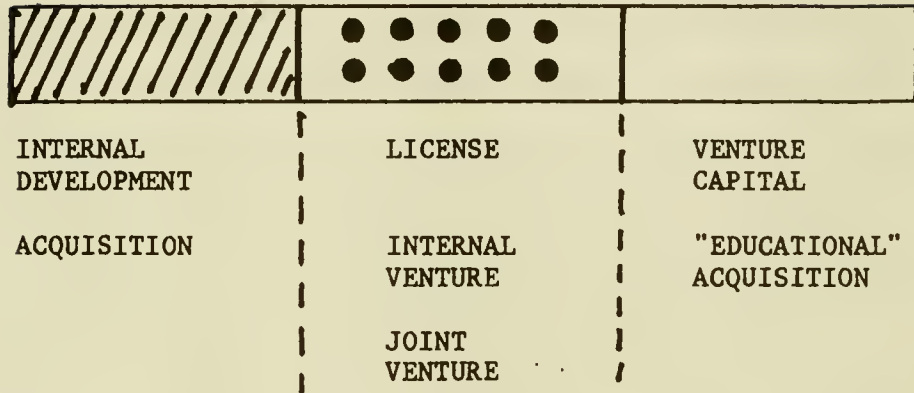
DETERMINING OPTIMUM ENTRY STRATEGIES

How can the entry strategies of EXHIBIT 6 be combined with the conceptual framework of EXHIBIT 4? Which entry strategies are appropriate in the various regions of the familiarity matrix? The literature provides some useful guides.

In his discussion of the management problems of diversification, Miller¹⁸ proposes that acquisitive diversifiers are frequently required to participate in the strategic and operating decisions of the new subsidiary

EXHIBIT 6
SPECTRUM OF ENTRY STRATEGIES

INCREASING CORPORATE INVOLVEMENT REQUIRED



before they are properly oriented towards the new business. In this situation the parent is "unfamiliar" with the new business area. It is logical to conclude that if the new business is unfamiliar after acquisition, it must also have been unfamiliar before acquisition. How then can the parent have carried out comprehensive screening of the new company before executing the acquisition? In a situation in which familiarity was low or absent, preacquisition screening most probably overlooked many factors, turning the acquisition into something of a gamble from a business portfolio standpoint. Similar arguments can be applied to internal development in unfamiliar areas and Gilmore and Coddington⁹ specifically stress the dangers associated with entry into unfamiliar markets.

This leads to the rather logical conclusion that entry strategies requiring high corporate involvement should be reserved for new businesses with familiar market and technological characteristics. Similarly, entry mechanisms requiring low corporate input seem best for unfamiliar sectors. A recent discussion meeting with a number of Chief Executive Officers suggested that at most perhaps 50 percent of major U.S. corporations practice even this simple advice.

The three sections of the ENTRY STRATEGY SPECTRUM of EXHIBIT 6 can now be aligned with the three regions of the FAMILIARITY MATRIX, EXHIBIT 4. Let us now analyze this alignment for each region of the matrix, with particular regard to the main factors identified in the literature.

Region 1: Base/Familiar Sectors

Within the base/familiar sector combinations illustrated in EXHIBIT 7, a corporation is fully equipped to undertake all aspects of new business development. Consequently, the full range of entry strategies may be considered, including internal development, joint venturing, licensing,

acquisition or minority investment of venture capital. However, although all these are valid from a corporate familiarity standpoint other factors suggest what may be the optimum entry approaches.

The potential of conflict between partners may reduce the appeal of a joint venture, and minority investments offer little benefit since the investee would do nothing that could not be done internally.

The most attractive entry mechanisms in these sectors probably include internal development, licensing and acquisition. Internal development may be appropriate in each of these sectors, since the required expertise already exists within the corporation. Licensing may be a useful alternative in the base market/new familiar technology sector since it offers fast access to proven products. Acquisition may be attractive in each sector but, as indicated by Shanklin²⁸, may be infeasible for some companies in the base/base sector as a result of antitrust legislation. For example, although IBM was permitted to acquire ROLM Corporation, the Justice Department did require that IBM divest ROLM's MIL-SPECS Division due to concern for concentration in the area of military computers.

It may therefore be concluded that in these base/familiar sectors, the optimum entry strategy range may be limited to internal development, licensing and acquisition as illustrated in EXHIBIT 7. In all cases a new business developed in each of these sectors is immediately required to fulfill a conventional sales/profit role within the corporate business portfolio.

Finally, since new businesses within the base market/new familiar technology and new familiar market/base technology sectors immediately enter the portfolio of ongoing business activities, they transfer rapidly into the base/base sector. These expected transitions are illustrated by the arrows in EXHIBIT 7.

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EXHIBIT 7

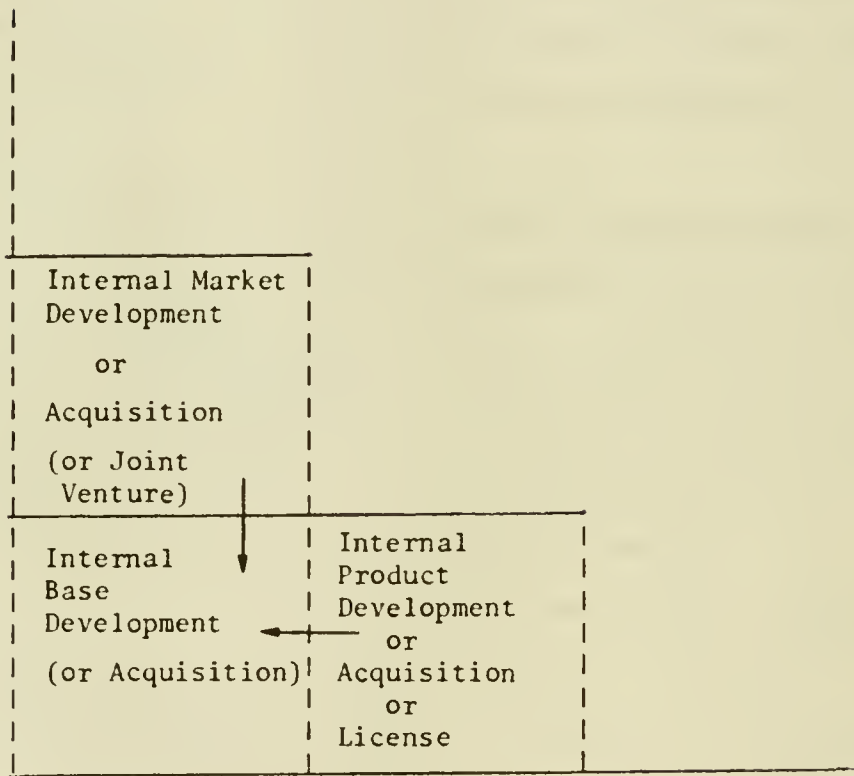
PREFERRED ENTRY MECHANISMS
IN BASE/FAMILIAR SECTORS

MARKET
FACTORS

NEW
UNFAMILIAR

NEW
FAMILIAR

BASE



BASE

NEW
FAMILIAR

NEW
UNFAMILIAR

TECHNOLOGIES OR SERVICES
EMBODIED IN THE PRODUCT

KEY:



= TRANSITIONS OVER TIME

Region 2: Familiar/Unfamiliar Sectors

EXHIBIT 8 illustrates the sectors of lowest familiarity from a corporate standpoint. It has already been proposed that a company is potentially competent to carry out totally appropriate analyses only on those new business opportunities which lie within its own sphere of familiarity. Large scale entry decisions outside this sphere are liable to miss important characteristics of the technology or market, reducing the probability of success. This situation frequently generates unhappy and costly surprises. Furthermore, if the unfamiliar parent attempts to exert strong influence on the new business, the probability of success will be reduced still further.

These factors suggest that a two-stage approach may be best when a company desires to enter unfamiliar new business areas. The first stage should be devoted to building corporate familiarity with the new area. Once this has been achieved, the parent is then in a position to decide whether to allocate more substantial resources to the opportunity and, if appropriate, to select a mechanism for developing the business.

As indicated earlier venture capital provides one possible vehicle for building corporate familiarity with an unfamiliar area. Especially by active nurturing of a venture capital minority investment the corporation can monitor, at first hand, new technologies and markets. It is clearly essential that if the investment is to be worthwhile, the investee must be totally familiar with the technology/market. These must be his base business. Over time active involvement with the new investment can help the investor to move into a more familiar market/technology region, as illustrated in EXHIBIT 8, from which the parent can now exercise appropriate judgment on the commitment of more substantial resources.

EXHIBIT 8

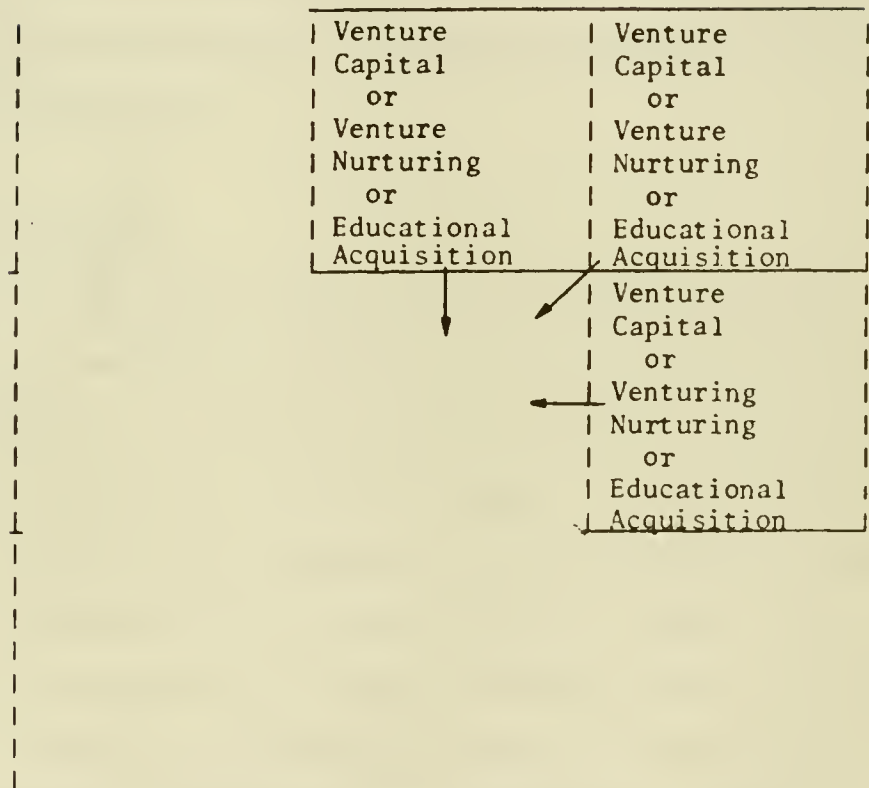
PREFERRED ENTRY MECHANISMS
IN FAMILIAR/UNFAMILIAR SECTORS

MARKET
FACTORS

NEW
UNFAMILIAR

NEW
FAMILIAR

BASE



BASE

NEW
FAMILIAR

NEW
UNFAMILIAR

TECHNOLOGIES OR SERVICES
EMBODIED IN THE PRODUCT

KEY:



= TRANSITION OVER TIME

Similarly, "educational" acquisitions of small young firms may provide a more transparent window on a new technology or market, and even the initial key employees to assist the transition toward higher familiarity. It is important, however, that the performance of acquisitions of this type be measured according to criteria different from those used to assess the "portfolio" acquisitions discussed earlier. These "educational" acquisitions should be measured initially on their ability to provide increased corporate familiarity with a new technology or market, and not on their ability to perform immediately a conventional business unit role of sales and profits contributions.

Region 3: Marginal Sectors

The marginal sectors of the matrix are the two base/new unfamiliar combinations plus the new familiar market/new familiar technology area, as illustrated in EXHIBIT 9. In each of the base/new unfamiliar sectors, the company has a strong familiarity with either markets or technologies, but is totally unfamiliar with the other dimension of the new business. In these situations joint venturing may be very attractive to the company and prospective partners can see that the company may have something to offer. However, in the new familiar technology/market region the company's base business strengths do not communicate obvious familiarity with that new technology or market. Hence, prospective partners may not perceive that a joint venture relationship would yield any benefit to them.

In the base market/new unfamiliar technology sector the "new style" joint venture or alliance seems appropriate. The large firm provides the marketing channels and a small company provides the technological capability in a union that can result in a very powerful team.^{5,12,14} The complement

EXHIBIT 9

PREFERRED ENTRY MECHANISMS
IN MARGINAL SECTORS

MARKET
FACTORS

NEW
UNFAMILIAR

Joint
Venture

NEW
FAMILIAR

Internal
Venture
or
Acquisition
or
License

BASE

"New Style"
Joint
Venture

BASE

NEW
FAMILIAR

NEW
UNFAMILIAR

TECHNOLOGIES OR SERVICES
EMBODIED IN THE PRODUCT

KEY:



= TRANSITION OVER TIME

of this situation may be equally attractive in the new unfamiliar market/base technology sector, although small companies less frequently have strong marketing/distribution capabilities to offer to a larger ally.

The various forms of joint ventures such as these not only provide a means of fast entry into a new business sector, but also offer increased corporate familiarity over time as illustrated in EXHIBIT 9. Consequently, although a joint venture may be the optimum entry mechanism into the new business area, future development of that business may be best achieved by internal development or acquisition as discussed in the earlier Base/Familiar Sectors section.

In the new familiar market/new familiar technology sector, the company may be ideally placed to undertake an internal venture. Alternatively, licensing may provide a useful means of obtaining rapid access to a proven product embodying the new technology. Minority investments can also succeed in this sector but, since familiarity already exists, a higher level of corporate involvement and control may be justifiable.

Acquisitions may be potentially attractive in all marginal sectors. However, in the base/new unfamiliar areas this is dangerous since the company's lack of familiarity with the technology or market prevents it from carrying out comprehensive screening of candidates. In contrast, the region of new familiar market/new familiar technologies does provide adequate familiarity to ensure that screening of candidates covers most significant factors. In this instance an acquisitive strategy is reasonable.

Sector Integration: Optimum Entry Strategies

The foregoing discussion has proposed optimum entry strategies for attractive new business opportunities based on their position in the

FAMILIARITY MATRIX. EXHIBIT 10 integrates these proposals to form a tool for selecting entry strategies based on corporate familiarity.

TESTING THE PROPOSALS

In testing the proposed entry strategies, Berry¹ studied 14 new business development episodes that had been undertaken within one highly successful diversified technological corporation. These episodes were all initiated within the period 1971 to 1977, thus representing relatively recent activity while still ensuring that sufficient time had elapsed for performance to be measurable.

The sample comprised 6 internal developments (3 successful, 3 unsuccessful), 6 acquisitions (3 successful, 3 incompatible) and 2 successful minority investments of venture capital. These were analyzed in order to identify factors which differentiated successful from unsuccessful episodes, measured in terms of meeting very high corporate standards of growth, profitability and return on investment. Failures had not achieved these standards and had been discontinued or divested. The scatter of these episodes on the familiarity matrix is illustrated in EXHIBIT 11. Internal developments are represented by symbols A to F, acquisitions by G to L, with M and N showing the location of the minority investments.

The distribution of success and failure on the matrix gives support to the entry strategy proposals that have been made in this article. All high corporate involvement mechanisms (internal development and regular "portfolio" acquisitions) in familiar sectors were successful. However, in unfamiliar areas, only one of this category of entry mechanism, acquisition G, succeeded. This acquisition was a thirty year old private company with about 1000 employees, producing components for the electronics and computer

EXHIBIT 10
OPTIMUM ENTRY STRATEGIES

MARKET FACTORS

NEW UNFAMILIAR	Joint Venture	Venture Capital or Venture Nurturing or Educational Acquisition	Venture Capital or Venture Nurturing or Educational Acquisition
	Internal Market Development or Acquisition (or Joint Venture)	Internal Venture or Acquisition or License	Venture Capital or Venture Nurturing or Educational Acquisition
BASE	Internal Base Development (or Acquisition)	Internal Product Development or Acquisition or License	"New Style" Joint Venture

BASE

NEW FAMILIAR

NEW UNFAMILIAR

TECHNOLOGIES OR SERVICES EMBODIED IN THE PRODUCT

EXHIBIT 11

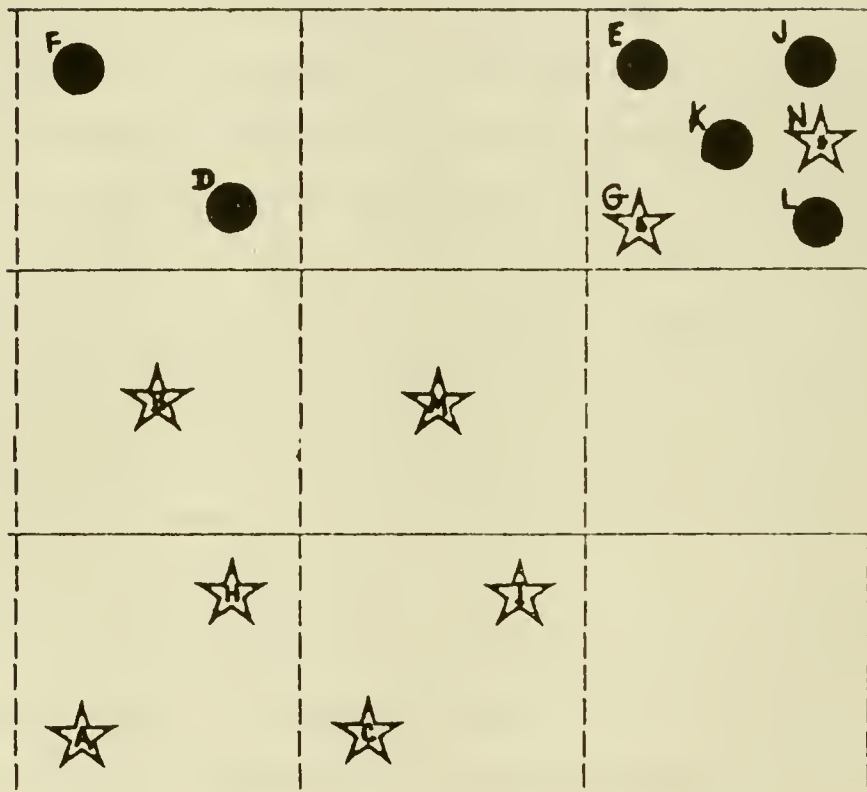
EPISODE SCATTER ON THE FAMILIARITY MATRIX

MARKET FACTORS

NEW UNFAMILIAR

NEW FAMILIAR

BASE



BASE

NEW FAMILIAR

NEW UNFAMILIAR

TECHNOLOGIES OR SERVICES EMBODIED IN THE PRODUCT

KEY:



= SUCCESS



= FAILURE

industries. It was believed to offer opportunities for high growth although it was unrelated to any of the parent's existing business. The deal was completed after an unusually long period of two years of candidate evaluation carried out from within the parent. The only constraint imposed upon Company G following acquisition was the parent's planning and control system, and in fact the acquired company was highly receptive to the introduction of this system. This indicated that Company G was not tightly integrated with the parent and that any constraints imposed did not severely disrupt the established operating procedures of the company.

All factors surrounding the acquisition of Company G - its size, growth market, low level of constraints and low disruption by the parent - suggest that Company G may have continued to be successful even if it had not been acquired. Representatives of the parent agreed that this might be the case although they pointed out that the levels of performance obtained following acquisition might not have occurred if Company G had remained independent. Hence, if an acquired company is big enough to stand alone and is not tightly integrated with the parent, its degree of operational success is probably independently determined by itself.

It is important to point out that despite the success which occurred in instance G, an acquisition of this type in unfamiliar areas must carry risk. The parent is liable to overlook many subtle details while screening candidates. Furthermore, when an established company is acquired and continues to operate with a high degree of independence, identification of synergy becomes difficult. Synergy must exist in any acquisitive development if economic value is to be created by the move.²⁷ Consequently, an acquisition of this type not only carries risk but may also be of questionable benefit to shareholders, especially if a high price was required due to the earlier good performance record.

The other success in an unfamiliar area, episode N, is a minority investment of venture capital. By the very nature of minority investments, corporate involvement is limited to a low level. Although some influence may be exerted via participation on the Board of Directors of the investee, again the investee is not tightly bound to the parent. Consequently, the success of the investee tends once again to be determined to a large extent by itself.

Detailed examination of episodes G and N has therefore suggested good reasons for the subject companies' success despite their location in unfamiliar sectors -- the companies didn't require a significant input to decision making from the unfamiliar parent. This suggests that new business development success rate in unfamiliar areas may be increased by limiting corporate input to the decision making process to low levels until corporate familiarity with the new area has developed. These experiences support the entry proposals already outlined in this article.

Some companies have already adopted entry strategies that seem to fit the proposals of this article, and Monsanto represents one of the best examples. Monsanto is now committed to significant corporate venturing in the emerging field of biotechnology. Its first involvement in this field was achieved with the aid of its venture capital partnership Innoven which invested in several small biotechnology firms, including Genentech. During this phase Monsanto interacted closely with the investees, inviting them in-house to give seminars to senior management on their biotechnology research and opportunities. Once some internal familiarity with the emerging field had developed, the decision was then taken to commit substantial resources to internal research-based ventures. Monsanto used venture capital to move from an unfamiliar region to an area of more familiar technology and market, and continues those venture capital



activities to seek out new opportunities in Europe. Joint ventures with Harvard Medical School and Washington University of St. Louis are further enhancing its familiarity with biotechnology, while producing technologies that Monsanto hopes to market. Contract research leading to licenses from small companies, primarily with those in which it holds minority investments, is another strategy Monsanto is employing. Although the outcome is far from determined, Monsanto seems effectively to be entering biotechnology by moving from top right to bottom left across the familiarity matrix of EXHIBIT 10.

CONCLUSIONS

A spectrum of entry strategies was presented in this article, ranging from those requiring high corporate involvement, such as internal development or acquisition, to those requiring only low involvement, such as venture capital. This was incorporated into a new conceptual framework designed to assist in selecting entry strategies into potentially attractive new business areas. The framework concentrates on the concept of the corporation's "familiarity" with the technology and market aspects of a new business area, and a matrix was used to relate familiarity to optimum entry strategy.

In this concept, no one strategy is ideal for all new business development situations. Within familiar sectors virtually any strategy may be adopted and internal development or acquisition is probably most appropriate. However, in unfamiliar areas these two "high involvement" approaches are very risky and greater familiarity should be built before they are attempted. Minority investments and small targeted "educational" acquisitions form ideal vehicles for building familiarity and are therefore the preferred entry strategies in unfamiliar sectors.



Early in this article, research results from the literature were outlined which had indicated that in order to ensure highest performance, new business development should be constrained within areas related to a company's base business. However, this research had not accounted for alternative entry mechanisms. This article proposes that a multi-faceted approach, encompassing internal development, acquisitions, joint ventures and venture capital minority investments, can make available a much broader range of business development opportunities at lower risk than would otherwise be possible.

REFERENCES

1. Berry, C.A. "New Business Development in a Diversified Technological Corporation", MIT Sloan School/Engineering School Master of Science Thesis, 1983.
2. Bettis, R.A. and Hall, W.K. "Risks and Industry Effects in Large Diversified Firms", Academy of Management Proceedings '81, 17-20.
3. Biggadike, H.R. "The Risky Business of Diversification", Harvard Business Review, May/June 1978.
4. Burgelman, R.A. "Managing the Internal Corporate Venturing Process", Sloan Management Review, Winter 1984.
5. Business Week. "Acquiring the Expertise But Not the Company", June 25, 1984, 142B-142F.
6. Chandler, A.D. Strategy and Structure, MIT Press, Cambridge, 1962.
7. Christensen, H.R. and Montgomery, C.A. "Corporate Economic Performance: Diversification Strategy Versus Market Structure", Strategic Management Journal, Vol. 2, No. 4, October-December 1981, 327-344.
8. Fast, N.D. "Pitfalls of Corporate Venturing", Research Management, March 1981.
9. Gilmore, J.S. and Coddington, D.C. "Diversification Guides for Defense Firms", Harvard Business Review, May/June 1966.
10. Greenthal, R.P. and Larson, J.A. "Venturing into Venture Capital", Business Horizons, September/October 1982.
11. Hardyman, G.F., Denvino, M.J., and Salter, M.S. "When Corporate Venture Capital Doesn't Work", Harvard Business Review, May/June 1983.
12. Hlavacek, J.D., Dovey, B.H. and Biondo, J.J. "Tie Small Business Technology to Marketing Power", Harvard Business Review, January/February 1977.
13. Holzmann, O.J., Copeland, R.M. and Hayya, J. "Income Measures of Conglomerate Performance", Quarterly Review of Economics and Business, Vol. 15, 1975, 67-77.
14. Inc. "The Age of Alliances", February 1984.
15. Killing, J.P. "Diversification through Licensing", R&D Management, Vol. 8, No. 3, 1979.
16. Killing, J.P. "How to Make a Global Joint Venture Work", Harvard Business Review, May/June 1982.



17. Meyer, M.H. and Roberts, E.B. "New Product Strategy in Small High Technology Firms: A Pilot Study", MIT Sloan School of Management Working Paper # 1428-1-84, May 1984.
18. Miller, S.S. The Management Problems of Diversification, John Wiley, 1963.
19. Morecroft, J.D.W. "The Feedback Viewpoint in Business Strategy for the 1980s", MIT Sloan School of Management, Systems Dynamics Memorandum D-3560, April 1984.
20. Peters, T. "Putting Excellence into Management", Business Week, July 21, 1980.
21. Peters, T.J. and Waterman, R.H. In Search of Excellence, Harper and Row, New York, 1982.
22. Procter and Gamble Company. 1983 Annual Report, Cincinnati, 1984, p. 5.
23. Rind, K.W. "The Role of Venture Capital in Corporate Development", Strategic Management Journal, Vol. 2, No. 2, April/June 1981, 169-180.
24. Roberts, E.B. "New Ventures for Corporate Growth", Harvard Business Review, July/August 1980.
25. Rumelt, R.P. "Diversification Strategy and Profitability", Strategic Management Journal, Vol. 3, No. 4, October/December 1982, 359-369.
26. Rumelt, R.P. Strategy, Structure and Economic Performance, Harvard Business School, Division of Research, 1974.
27. Salter, M.S. and Weinhold, W.A. "Diversification via Acquisition: Creating Value", Harvard Business Review, July/August 1978.
28. Shanklin, W.L. "Strategic Business Planning: Yesterday, Today and Tomorrow", Business Horizons, October 1979.
29. Weiss, L.A. "Start-up Businesses: A Comparison of Performance", Sloan Management Review, Fall 1981.

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