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"A MODEL OF THE SOURCES OF BENEFITS
IN STRATEGY"

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ABSTRACT

This paper presents a model which interprets organizational behavior in terms of five sources of strategic benefits: environment; attractiveness (profits, sales, growth); size; time; diversity; and relevant strengths. These five sources of strategic benefit are used by organizations in order to pursue both effectiveness and efficiency.

The utility of the model presented in this article lies in its capacity to interpret organizational phenomena such as mergers, joint ventures and licensing; and in its ability to put different types of organizational behavior into perspective, including specialization, opportunity, innovation and synergy. Based on the model it is also possible to see where some major opportunities for future research lie.

I - INTRODUCTION

Society welfare can be divided into two basic components: quality of life and standard of life .

Quality of life is a generic term which includes such desirable variables as freedom from pollution in the environment, low crime rate, high life expectancy and good working conditions. Standard of life regards the per capita disposable income for saving or consumption. (Samuelson, 1986; Baumol and Blinder, 1988).

Organizations can contribute to the quality of life by improving the quality of working conditions. Here, techniques and concepts such as Job enrichment, the style of leadership, organizational development and decentralization can play an important role. Organizations can also use ethical constraints in the marketing methods which they use to address customers and in managing the organizational impact on the environment. Organizations which manage their impacts on the various stakeholders (employees, customers, general public, etc) beyond mere profit seeking are known as "socially responsible" (Schimm, 1958).

A standard of life requires high levels of productivity (Kendrick, 1959). That is, that organizations be capable of offering high value total output to the market place, wisely using the resources at their disposition: raw materials, energy money personnel and machinery (Shepherd, 1979).

That is

$$\Pi = \frac{\sum_{i=1}^n P_i Q_i}{\sum_{j=1}^n P_j Q_j}$$

Where

- Π = Productivity Level

- i = Output

- j = Input

- P_i = Price that the market is willing to pay for the output i

- Q_i = Quantity of output i
- P_j = Cost for the firm of input j
- Q_j = Quantity of output j used in the production process.

In order to attain high levels of productivity, organizations must be effective and efficient. Effective organizations are able first to identify and then enter into environments which are highly attractive in terms of profit margin, market size and growth. Effectiveness allows for large values in the numerator of the productivity ratio above ($P_i \times Q_i$). On the contrary, efficiency is the ability to create high value offers ($P_i \times Q_i$) using the resources at ones disposal wisely. - (Hannan and Freeman, (1977). Efficiency is related to the ability to, create a competitive advantage within a given environment, as shall be discussed below.

II - Organizations Pursuit of Effectiveness

In order to be effective, organizations must opt for attractive/rich task environments which rate highly in terms of sales, growth and profit margins (Aiken and Hage, 1968).

The environment comprises all of the world agents and conditions which have some effect on the outcome of an organization (Pfeffer and Salancik, 1978).

Within the environment, one can distinguish between those factors which directly influence the organization and those which exert their influence in an indirect fashion. Factors which have a direct influence are called specific (Hall et al, 1968), relevant (Dill, 1958), or task (Thompson, 1967) environment. Factors which have an indirect influence are referred to as the general environment (Hall, 1968). Our concern here is primarily with the task (direct) environment, since this is composed of external elements which directly influence an organization (Miles and Snow, 1978).

Attractive task environments can be achieved in two basic ways: environment positioning and environment enactment (Weick, 1969).

Sometimes organizations POSITION themselves by entry into industries and industries segments which are rich, that is, attractive in terms of sales, profits and

growth. Frequently products and services in the early stages of their life cycle have these characteristics (Levitt, 1965).

At other times, by creating a new product or service, organizations ENACT a significant part of the environment (the distributors, the suppliers, the technology used, etc.). One speaks then of environment enactment (Galbroith, 1967, Child, 1972, Abernathy and Utterback, 1978).

In the first case, the organization is a follower. In the second case, it is an innovator (Nystrom, 1972). Both organization positioning and organization innovation seek environment high in profits, sales and growth potential-- see figure one.

[Insert Figure One About Here]

III - Organizations Pursuit of Efficiency

Having identified the task environments in which they wish to position themselves, organizations aim for efficiency.

For such a purpose, organizations may exploit two types of resources. We shall call the first type "VALUE OF RESOURCES", and the second type "NATURE OF RESOURCES".

III.1 - Value of Resources

Organizational resources are generalized means, or facilities, that are potentially controllable by social organizations and that are potentially usable - however indirectly in relationships between the organization and its environment. (Yuchtman and Seashore, 1967).

A given resource is more or less valuable for an organization depending upon how that resource rates compared to competition in terms of quality (being a strength or not) - Stevenson, 1976 - and whether that resource is or is not equal to an environmental key success factor. Key success factors are those resources (distribution, image, service, etc.) which performance is especially dependent upon (Andrews, 1978, Christensen, 1986). They change from one task environment to another. (Rockart, 1979, Jenster, 1987).

Therefore, when an organization has a strength in a resource which is also a key success factor, one says that that resource is of high value or that it is a relevant

strength. A non-relevant strength would be a resource which the organization has a strength in when compared to competition, but which is not a key success factor. (Vasconcellos, 1988) - see figure one.

III.2 - Nature of Resources

According to their nature, resources can be divided into:

Private resources - where the use of a resource by one person or department will necessarily decrease the amount of that resource available to another person or department. Examples are machinery, warehouses, a salesforce, plants, a market research specialist, etc. - Leontiades, 1986.

Half public resources - where the use of the resource by one department will imply spin-offs, or externalities to some other department. An example is image. The image of one division may have a positive or negative impact on the sales of another division. Another example is R&D where a given project can be useful to more than one division. Technological externalities among divisions can occur in the areas of manufacturing, engineering, logistics and procurement. - Teece, 1982.

Public resources - where the resource can be used by one department without effecting the amount available to be used by other departments. Examples are brandnames, copyrights, trademarks, institutional advertising (which benefits several organizational divisions at a time) etc. - Singh and Montgomery, 1987.

Organizational resources can therefore be divided according to their nature as private, half-public or public. Private resources are typically the employee's time and physical goods such as machinery, trucks and buildings. Half-Public resources are the knowledge and experience of the organization's management and employees, and the image of the division of the organization. Public goods are property rights (patents, etc.) and the image and visibility of the organization as a whole.

Private, half-public and public resources have distinct characteristics. Public resources are intangible. Due to their intangible nature, public resources can generate marginal benefits without any increase in cost (e.g. new divisions benefitting from patents and trade marks of the organization).

Half public resources can generate externalities where one division benefits from the know-how, image, etc of another division (Wells, 1984, Lorange, Morton and Goshal, 1986). Private resources are tangible in nature and do not possess this property. However, they do have several properties which also imply that the average cost does not move proportionally to the scale of the use of the resource. There are seven such properties: (1) the law of two thirds; (2) discontinuities; (3) learning; (4) heterogeneity; (5) the law of great numbers; (6) power and (7) interiority versus exteriority.

(1) - THE LAW OF TWO THIRDS states that, within certain limits, as the area of a building, warehouse etc. doubles, its volume increases threefold. Since the output is proportional to volume and the investment to the surface area a benefit occurs here. (Haldi and Whitcomb, 1967, Lau and Tomura, 1972). This law also applies to certain types of machinery used in process industries such as steel, petroleum refining, iron ore reduction, chemical conversion and generation of steam (Levin, 1977; Scherer, 1980).

(2) - DISCONTINUITIES arise in physical resources such as machinery and in personnel (Shepherd, 1979). It follows that frequently only after a certain level of size is it economically compensatory to mechanize some tasks or to hire some specialists (in auditing, market research, taxation, etc). Moreover, larger organizations can use these resources (physical and personnel) at a fuller capacity than smaller ones.

(3) - LEARNING is a characteristic of people. Learning can pertain to the: - factory workers (learning curve - Hirschmann, 1964) ; to managers and supervisors of the manufacturing department (BCG, 1968) ; to engineers of the research department (process innovation) - Heddlly, 1976; or to the marketing staff (better knowledge of how to adapt the product to customer needs) - Henderson, 1980.

(4) - Besides learning, people possess another very important characteristic. They are HETEROGENEOUS, meaning, they are not equally apt to perform all types of tasks. They can perform some tasks better than other. They have strengths and weaknesses (Teece, 1980). This characteristics (which is also a property of physical resources) can be exploited by larger organizations by specializing them where their

strengths exist. On the contrary, in smaller organizations, workers tend to perform a large number of tasks regardless of where their strengths lie (Robinson, 1958).

The fact that resources are heterogeneous, can also be exploited by organizations which have built diversity into their operations, those which have distinct divisions operating in distinct task environments. For instance, diversified organizations can engage in multidisciplinary R&D projects which a specialized organization cannot, (for lack of teams with the various required skills). Still, other times due to the heterogeneity among products, it may occur that the clients see the products not as products "per se" but as parts of a greater whole (equifinality). Indeed, in some situations, for time and compatibility reasons, the clients prefer to make a single purchase of a greater whole instead of several individual purchases for each individual part.

For example, in the automobile and grocery products industries, retailers prefer to deal with suppliers who offer a broader product line. Consequently, this type of supplier has a greater access to distribution channels (Porter, 1980). The same applies to several situations where the final customer perceives the product he or she purchases in broad terms. This has induced organizations to add new items to their product line so that the total offering is as broad as the customer's perception of the product. This is the reason why auditing firms have diversified into taxation, management consulting and management recruiting. The client sees him/herself as buying specialized professional services and not taxation, auditing, etc, per se - Miles and Snow, 1980.

Another important consequence of the existence of heterogeneity among resources, is that heterogeneity can be used to decrease organizational risk. By pulling distinct products under the same organizational umbrella (with distinct task environments), the variance of sales (and consequently of profits) and the level of critical contingencies faced by an organization can decrease.

(5) - Another way of achieving low risk is through THE LAW OF LARGE NUMBERS. From this law benefits can follow in the areas of inventory, personnel, finance and R&D.

As the number of buyers increases their variance in terms of idiosyncracies and special characteristics diminishes. Lower variance among buyers means lower variance of sales. From here follow several consequences. First, the probability of stockout is lower, implying that costs of holding inventory will increase less than

proportionally to sales (Whitin and Peston, 1954). Larger organizations will therefore reap a benefit here.

Second, the lower variance of sales associated with great numbers can also imply lower personnel costs when employees are transferred from one division to another, instead of being hired and fired as each division's sales go up and down (Mechlin, 1980). Third, lower capital costs may occur since risk averse investors demand lower interest from less risky organizations (Williamson, 1975, Chatterjee, 1986). Fourth, benefits can arise in R&D where the failure and success of projects will tend to offset each other, enabling the organization to engage in higher risk projects, - Terry, 1981; Pitts, and Snow, 1985.

(6) - Another important characteristic of resources is that they can be a source of POWER when assembled in great numbers, and in some instances, where the organization has built diversity into its operations.(Shepherd, 1970) Large organizations can influence their political environment (lower probability of bankruptcy -Dooley, 1969) and their economic environment to a greater extent, pushing the final product strongly into the market and charging higher prices for it (Cooper, 1979). Larger organizations can also obtain lower input prices due to buying power and the feasibility of shopping around when large quantities are involved. Diversified organizations can also sometimes impose reciprocal purchase where one division of the organization buys from a given supplier if and only if the supplier buys from another division of the same organization (Singh and Montgomery, 1987).

(7) - Finally, when the resources are INTERIOR (they belong to an organization, as opposed to being exterior to the organization). Savings can occur due to lower transportation and distribution costs, lower coordination costs, savings in energy, etc. These are benefits usually associated with vertical, not horizontal diversity (vertical integration) - Teece, 1981; Buzzell, 1983; Harrigan, 1985.

The interiorization of resources also increases the capacity of part of the organization to understand the needs of other parts. This understanding and tolerance is important both when physical resources (raw materials, etc) are exchanged among different parts of organization (vertical integration) and when financial resources are exchanged..

Indeed, when cross-subsidization among divisions occurs the receiving division has greater freedom in financing long term market share growth as compared to a situation where funds are supplied by external sources. This means that internal financing enables the organization to be less restrained by short term considerations

in the pursuit of its long run welfare (Pitts and Snow, 1986). Figure two summarizes section III-2.

IV - STRATEGIES FOR ACHIEVING EFFICIENCY

To obtain efficiency (a large ratio between the value of outputs and the value of inputs), organizations pursue two broad categories of strategy:

- TO INCREASE THE VALUE OF THEIR RESOURCES e.g. by matching organization strengths to the key success factors and long range programming - Ansoff, 1967; Andrews, 1978; Christensen et al 1986.
- TO EXPLOIT THE INTRINSIC CHARACTERISTICS associated with the nature of the resources, namely; the intangibility of the public resources; the externalities of the half public resources; and the characteristics of the private resources: the two thirds rule, discontinuities, learning, heterogeneity, law of great numbers, power and interiority (Rumel, 1977; Porter 1985; Singh and Montgomery, 1987).

We shall next analyze the implications of each of these two main types of strategies.

IV-1 - Achieving Efficiency by Increasing the Value of the Resources

As was mentioned in figure one, two basic avenues are available to organizations to increase the value of their resources: TO MATCH STRENGTHS WITH KEY SUCCESS FACTORS and LONG RANGE PROGRAMMING.

IV-1.1 - Matching Strengths with Key Success Factors

Since the value of a resource depends on its being a relevant strength, that is, being of superior quality to the competitors' and matching the environmental key success factors; and since competition and key success factors change from one task environment to (Rockart, 1979; Vasconcellos, 1988); by changing from one task environment to another, organizations can increase the value of their resources. In

other words, in order to increase the value of their resources and consequently achieve greater levels of efficiency, organizations should select environments where the organizational strengths match the key success factors. This is the model first enunciated in the sixties at Harvard by E. P. Learned et al (1965).

A necessary consequence of organizations matching their strengths to key success factors, (changing irrelevant strengths into relevant strengths), is that when they do so, they also change their relevant weaknesses into irrelevant weaknesses (in the new environment their weaknesses are not critical success factors).

This means that environment selection allows organizations to move from cell A' to cell A'' and from cell A^{iv} to cell A''' in figure 3A. These movements are represented by arrows number one and two in figure 3A.

IV.1.2. Long Range Programming

Another avenue open to organizations to increase the value of their resources is the development of programs, that is, long range activities, which will improve their weaknesses and change them into strengths (e.g. developing a better sales force, improving the distribution system, reorganizing the R&D department, etc.)- Steiner, 1985; Anthony and Dearden, 1988.

These activities typically take considerable time in achieving their aims and require significant amounts of the organization's budget and management's time.

Arrow nº 3 in figure 3A illustrates the aim of long range planning: to change relevant weaknesses into relevant strengths.

IV.1.3. Efficiency Through High Value of Resources

Be it through matching strengths with key success factors or through long range programming, the efficient organization is the one which has relevant strengths and irrelevant weaknesses (Salter and Weinhold, 1979). It has few, if any, relevant weaknesses (weaknesses in resources which are critical success factors) and few, if any, irrelevant strengths, since the existence of irrelevant strengths means that money, time and effort was wasted in improving resources which are not critical for performance in the organization's task environment. The existence of irrelevant strengths also represents a waste of the potential of the resources to contribute to

high levels of organizational efficiency, since the organization has not searched for an environment where its strengths match the critical success factors (Fahey and Noreyanan, 1986).

Figures 3B , 3C and 3D show a high efficiency medium efficiency and a low efficiency organization.

In figure 3B the organization has only two types of resource. Relevant strengths and irrelevant weaknesses. This efficiency optimum situation, was achieved by the organization's matching of its strengths to key success factors or/and long range programming. In figure 3C the organization is not in an efficiency optimal situation since it has both relevant weaknesses and irrelevant strengths. Because some of its resources are in cell C', the organization experiences weaknesses in critical areas. Because it has strengths in noncritical areas (cell CIV), either the investment of time and money in these areas can be decreased or alternatively, the organization could enter into a new environment where these strengths are sources of increased efficiency (they match the key success factors)

Figure 3D shows the worst of all possible scenarios where an organization has only two types of resources: relevant weaknesses (D') and irrelevant strengths (DIV). In reality, most organizations will not be at either extreme of the continuum of improved efficiency but inbetween the situations represented by tables 3B and 3D.

IV.2. ACHIEVING EFFICIENCY BY EXPLOITING THE NATURE AND RELATED CHARACTERISTICS OF THE RESOURCES

Besides focusing on improving the value of their resources, another main strategy open to organizations in order to achieve efficiency is TO EXPLOIT THE INTRINSIC CHARACTERISTICS OF RESOURCES (their discontinuities, the law of 2/3, etc.).

For such a purpose, organizations manage three of their dimensions: their SIZE, DIVERSITY AND TIME.

By increasing their SIZE (sales per year, market share), organizations are able to exploit the fact that their public resources (image of the firm as a whole, patents, brand names, etc) are intangible and therefore are invariable to the level of the organizations operations. That is, their marginal cost is zero.

Larger size also enables organizations to profit from several characteristics of private resources: their discontinuities; the law of 2/3 in warehouses and buildings; the ability of people to learn; the benefits of specializing their resources (machinery, personnel, etc) in what they do best (where their strengths are); and the power and lower risk which may come from assembling high volume resources.- Singh and Montgomery, 1987.

As TIME goes by, employees (in manufacturing, engineering, marketing, etc) learn, thereby increasing the efficiency level of the organization. An organization cannot control the passage of time. It can, however, position itself with low diversity among its product lines and increase its size per unit of time (measured by sales or market share). By narrowing the field of its operations (less diversity) and by increasing the amount of learning per unit of time (higher size), an organization can affect its overall learning rate - Hirschmann, 1964; BCG, 1968.

As a consequence, the efficiency level of its workers (learning curve), of managers and supervisors (in managing the department and in the use of equipment), of engineers (in the R&D department) and of marketers (in how to adapt the product to customer wants), will increase - Heddlery, 1976; Henderson, 1980.

Although high levels of DIVERSITY in the product line of an organization decreases the capability of the organization to collect size and time (experience) benefits, diversity can, in its turn, exploit some resource characteristics and therefore bring some benefits. The fact that half public resources generate externalities can make one division benefit from the activities and resources of another division (its image, its technical know-how, its knowledge of the psychology of the client, etc.) Diversity may also decrease the overall risk level experience by the organization in terms of variance of sales and profits) or in terms of critical contingencies the organization faces, if distinct products (with distinct task environments) are pulled together under the same organizational umbrella - Williamson, 1979; Teece, 1982; Therefore, size, time and diversity are three dimensions that organization's manage to achieve high levels of efficiency.

Four points are worth noting here:

A - Not all dimensions (size, time/experience and diversity) exploit the resource characteristics equally well (learning, increase the organization's power, decrease risk, etc). Some dimensions are better suited to exploit some characteristics; other dimensions, other characteristics.

Size can be used by organizations to profit from discontinuities but not from externalities. Diversity can exploit externalities but not learning. Time/experience can benefit from the resources ability to learn but not from the law of great numbers, and so on - Heddley, 1976, Sherherd, 1979;

B - The type of resources required to manufacture a product or offer a service differs from one task environment to another. In some task environments, the use of machinery is more extensive than in others. Distribution organizations use more warehouses than service organizations. Some industries are more labor intensive, others are less labor intensive.

Moreover, due to differences in technology, the machinery required to manufacture one type of product may have more discontinuities than the machinery used to manufactured another type of product. The slope (in absolute terms) of the learning curve can be greater or smaller, and so on - Carmon and Langeard, 1980.

C - The benefits which can be extracted from increasing in size, time and diversity are subject to the law of diminishing returns. This means that, after a certain level of experience, the learning curve flattens. After a certain level of size, the specialization benefits decrease. After a certain level of diversity, externalities become rarer since divisional image and know-how becomes less transferable to other divisions, and so on (Robinson, 1954; Bain, 1956; Scherer, 1980)

D - Finally, very high levels of size, diversity and experience/time can bring not only decreasing returns but also negative returns. The reasons are four: organizational complexity, organizational aging lower proximity of the resources and lower motivation.

Very high levels of size or /and diversity make organizations complex, both in terms of internal politicing and in terms of interrelations among the tasks to be performed. From complexity emerge two consequences: the need for more sophisticated management systems (information systems,

control systems, structure, etc.); and problems with decision making. Because decision makers are farther away from the task environment, decision making becomes slower and of poorer quality (Williamson, 1967; Honnan and Freeman, 1977).

Second, over time, organizations age, which decreases the capacity of organizations to adapt to new conditions and increases the organization's tendency to develop stricter routines and be more attached to hierarchical relations - (Blair, 1972; Albernathy and Wayne, 1974). As a consequence, efficiency suffers.

Organizations feed upon the environment to obtain the resources (personnel, raw materials, etc.) they need. After a certain level of organizational size, the capacity of the neighboring environment to supply the organization with resources is exhausted, requiring the organization to go farther away to obtain employees, raw materials etc. This increases transportation costs and the price (wage, etc.) that they must pay for those resources. As a consequence, large size can have a negative impact on the proximity of the sources of resources and therefore, increase the cost of obtaining them. (Scherer, et al. 1975).

Finally, there is empirical evidence that people are less motivated in larger organizations, than in smaller ones. Since the threat of bankruptcy is lower and people identify less with larger units than with smaller ones.- Porter and Lawler, 1965.

E - The fact that

- A - some dimensions (size, diversity, time/experience) are better suited to exploit some resources characteristics (discontinuities, law of 2/3, etc.) than others;
- B - the type and characteristics of resources change from one task environment to another;
- C - the benefits which can be obtained by exploiting the resource characteristics are subject to the law of diminishing returns; and
- D - (after a certain level), size, diversity and time/experience can bring negative returns;

implies that the optimal positioning in terms of size, diversity and time for an organization to maximize efficiency depends upon the task environment (s) it is in.

In other words, when trying to exploit the nature and related characteristics of its resources, any organization can be seen in the three dimensional axis shown in figure four. The optimal position for an organization in terms of the three axes is contingent upon the task environment.

In some task environments, it pays off to rate high on the size axis; in others (because discontinuities are small, etc.) the optimal position for an organization in terms of efficiency will be lower on the size axis. Some task environments have a great potential for generating externalities based on (e.g.) technical knowledge. Other task environments are more technologically specific. In the former, it may pay off to increase organizational diversity, in the latter, not. When experience benefits are high, organizations tend to lower diversity in their operations since diversity has a negative effect on the possibility of reaping experience benefits.

In short, the organization which first of all analyzes the characteristics of its task environment (s), and then opts for a certain level of size, experience and diversity, will maximize efficiency.

V. - UTILITY OF THE ABOVE PRESENTED MODEL

The model presented above can be used to relate different types of organizational strategies and research streams, as well as to interpret the rationale for organizational phenomena such as mergers, joint ventures, licensing, etc.

V.1 - A Framework of Organizational Strategies

The model developed in this article permits us to distinguish three basic types of strategies: (1) strategies which focus on effectiveness; (2) strategies aiming at efficiency by increasing the value of the resources; (3) strategies aiming at efficiency by exploiting the resources' characteristics.

Strategies focused on effectiveness can be of two types: environment enactment and environment selection strategies. Both aim at positioning the

organization in highly attractive environments, in terms of sales volume, sales growth and profit margin.

Efficiency strategies seek to obtain high levels of efficiency and therefore competitive advantage for the organization (Pfeffer and Salancik, 1978). They differ, however, on how they do it. Efficiency can be obtained by exploiting resources characteristics (such as their intangibility; the law of 2/3, discontinuities), through size, diversity and time/experience; or by increasing the value of the resources, that is, to have, in the critical resources (key success factors), superiority over the competition. This means having a better sales force, a better distribution system, more sophisticated and technologically up-to-date machinery, and so on.

Therefore, in spite of being of high value (a relevant strength), a resource can be impossible to use in terms of size, time and diversity in obtaining greater efficiency. That is the case if it cannot generate externalities, if it has low discontinuities, almost no learning capability, etc.. Conversely, one can have a resource characterized by large discontinuities (for example) and therefore able of generating great benefits when the organization increases its size, but which is not a relevant strength, either because it is not a key the success factor, or because it is not of better quality than the same resource of competition.

Depending upon the organization's use of one or another type of strategy, it is possible to divide their behavior into four broad categories: INNOVATIVE BEHAVIOR OPPORTUNISTIC BEHAVIOR; SPECIALIZED BEHAVIOR; AND SYNERGISTIC BEHAVIOR.

Both INNOVATIVE and OPPORTUNISTIC organizations focus on the environment as their primary source of strategic benefits. They differ however in the fact that while innovative organizations enact - and therefore to a certain extent create - their own task environment (s)(Child, 1972), opportunistic organizations are followers which seek to position themselves in highly attractive environments (in terms of rate of market growth and profit potential). Opportunistic organizations are also called conglomerate or holdings Miles and Snow (1978) designated both innovative and opportunistic organizations as "Prospectors".

SPECIALIZED organizations are organizations which opt for growing in only one or insimilar task environments in order to reap size and experience benefits. The selected environment should also allow for a match between its key success factors and the organization's strengths. Miles and Snow (1978) called this type of organization "defenders".

SYNERGISTIC behavior is the fourth type of behavior that organizations may follow. One speaks of synergy when two divisions operating in different industries perform differently under the same organization than if they were independent businesses - Salter and Weinhold, 1979; Hilland & Hoskisson, 1987). Synergistic organizations base their behavior to a large extent on the diversity dimension. They use this dimension to harvest technological externalities, image externalities, etc. As long as the industries which the organization is in are similar, it will also be possible to share some physical and human resources among divisions; and by using them in greater scale, collect some size and experience benefits (discontinuities, law of 2/3, learning, etc.) - Montgomery, 1979; Bettis, 1981; Rumelt, 1982. Similar industries also tend to have similar key success factors facilitating the match of the organizations strengths with them, compared to a situation where the organization faces very distinct task environments, each with its own set of success factors. (Vasconcellos, 1988).

In short an organization achieves synergy when, by diversifying into related task environments, it is able to share some resources (machinery, plant, sales force, etc.) and therefore collect size and experience benefits, or the task environments exchange externalities among them, or at least some of the key success factors are common among environments facilitating the match of the organization's strengths with them (enabling the organization to have relevant strengths). This type of organization was referred as "analyzer" by Miles and Snow (1978).

In figure four, organizations A and C are both specialized organizations, although organization C is considerably more experienced (older) than organization A.

Organization B shows synergistic behavior since it has built some diversity (but not very great) into its operations. Organization D has so much diversity among its divisions' task environments that very few resources can be shared among them (and consequently few size and experience benefits can be collected). Moreover, because the divisions' task environments are very distinct, few externalities can be exchanged, and their key success factors tend to be very distinct, increasing the difficulty for the organization in obtaining relevant strengths.

As a consequence, the sole rationale for a strategic positioning such as that of organization D, is the attractiveness of the environments the organization is in. Organization D is a conglomerate or a holding.

In order to implement specialization, synergistic and opportunistic behavior, organizations recur to PHENOMENA SUCH AS MERGERS, AQUISITIONS, JOINT

VENTURES, LICENSING AND MARKETING AGREEMENTS (DUAL MARKETING) agreements (dual marketing). - Allen, Oliver and Schwallie, 1981; Harrigan, 1986; Lubatkin, 1987.

Mergers, acquisitions and joint ventures can aim at acquiring relevant strengths, increase the scale of the operations and therefore reap size and experience benefits or access to highly attractive environments which otherwise (for legal or cultural reasons) would remain closed.

Marketing agreements usually involve the host organization taking the sales management of products or services from a company which is new to a given market. It differs from a license agreement since the host organization is not given rights to potential know-how. Both licensing and marketing agreements are means by which organizations exploit the attractiveness of task environments, that is, of specific markets of specific countries. Figure five summarizes sections 5.1. and 5.2.

V. 2 - The Relationship Among Different Research Streams

Using the model developed in this article, it is possible to put into perspective DIFFERENT RESEARCH STREAMS in the literature.

A first group of literature streams can be seen as focusing on environment enactment, that is, on how to enact attractive environments and how to manage the process. They are: Innovation literature; literature on environmental scanning techniques such as environment oriented management information systems and organizational systems to analyze clients/consumers; entrepreneurship literature; segmentation literature; and organization sociology literature which focus on the characteristics of environments (such as richness, turbulence and complexity) - Abernathy and Utterback, 1978; Tushman, 1979; Burgelman, 1983; Wind and Cardozo, 1974; Daniel, 1961; Rockart, 1979; Lawrence and Lorsch, 1967; Emery and Trist, 1965; Aldrich, 1979.

The literature around BCG, shell and other matrices; and the structural analysis of industries, which has its roots at industrial economics and predicts the degree of competition (and therefore of monopolistic power) based on entry and exit barriers, etc), can be seen as concentrating on the characteristics and how to select attractive environments in terms of growth; profit potential; and sales volume - Henderson, 1979; Rotschild, 1980, Strategic Planning Associates, 1984; Shepherd, 1979; Porter, 1980; Scherer, 1980.

PIMS and market share literature enhance size and experience benefits. - Heddley, 1976; Henderson, 1980; Buzzel and Wiersemia, 1981; Doy and Montgomery, 1983. A stream of sociological literature epitomized by the works - Stinchcombe, McCoill and Walker, 1968; McNeil and Thompson, 1971; Pfeffer, 1981 - has also focused on the consequences of organizational aging.

Diversity benefits have been studied by industrial economists as well as by the strategic research streams which have stressed synergy, diversification (market or technology based) and the relationship between relatedness and performance (Baumol, Panzer and Willig, 1982; Bettis, 1981; Rumelt, 1977 and 1982; Chatterjee, 1987; Porter 1985 and 1987; Willig, 1987).

The concept of relevant strength was first introduced in the sixties by a group of authors from Harvard: E. P. Learned, C.R. Christensen, K.M. Andrews and W.D. Guth (1965). From this model evolved a research stream which tried to empirically assess the validity of the model, elaborated on the concept of strengths and success factors and developed techniques to find key success factors in different types of environments. - Daniel (1961); Rockart (1979); Stevenson (1976); Bullen and Rockart (1981) Jenster (1987); Vasconcellos (1988).

The model presented in this article suggests some opportunities for FUTURE RESEARCH. Two are especially noteworthy. First there is the need for better models to detect the critical success factors in different types of tasks environments. These models should start with the characteristics of the task environment and then extract implications regarding what the key success factors are. Second, the role of the environment as a moderator of size, experience and diversity benefits should also be investigated. It can be hypothesized that depending upon the characteristics of the environment (complexity, heterogeneity, turbulence, etc.) the potential of size, experience and diversity dimensions in generating positive and negative consequences will vary. This is also a task for future research.

VI. - CONCLUSION

This article presented a model which states that ultimately all organizational behavior must be interpreted in terms of organizations trying to exploit five sources of strategic benefits: the environment attractiveness (profits, sales, growth), size, time/experience, diversity and relevant strengths.

Depending upon which sources of strategic benefits organizations choose to concentrate on, it is possible to distinguish between effectiveness and efficiency strategies. Effectiveness strategies focus on the environment dimension. Efficiency strategies focus on the other four sources of strategic benefits and aim for competitive advantage.

To achieve efficiency (competitive advantage) two main avenues are open to organizations: to exploit the nature and characteristics of their resources by correctly positioning the organization in terms of size, experience/time and diversity; or to increase the value of their resources, that is, to acquire relevant strengths.

The utility of the model presented in this article lies in its capacity for interpreting organizational phenomena such as mergers, joint ventures and licensing; for its ability to put different types of organizational behavior into perspective: (synergistic, specialized; opportunistic and innovative) and for its ability to relate various research streams (market share literature, industrial analysis literature, etc.). Based on the model developed in this article it is also possible to identify some major opportunities for future research.

Figure One

ORGANIZATIONS' ACTIONS

- 1 - Pollution
- Ethics in marketing (consumerism, etc.)

EXTERNAL CONSTITUENCIES

- 2 - Job enrichment
- Decentralization
- Style of leadership
- Organizational Development

INTERNAL Constituencies (organization members)

3. Environment Selection

4. Environment Enactment (Innovation)

ENVIRONMENTAL ATTRACTIVENESS

Organizational Effectiveness

5. Match of organizational strengths with key success factors

6. Long Range Programming

Development high VALUE resources (development of relevant strengths)

7. Positioning the organization in terms of:
A - Size
B - Experience/Time
C - Diversity

Exploitation of the NATURE AND CHARACTERISTICS of resources (intangibility, externalities discontinuities, etc.)

Organizational Efficiency

Quality of Life

Society Welfare

Standard of Life

NOTE: —> means implies.

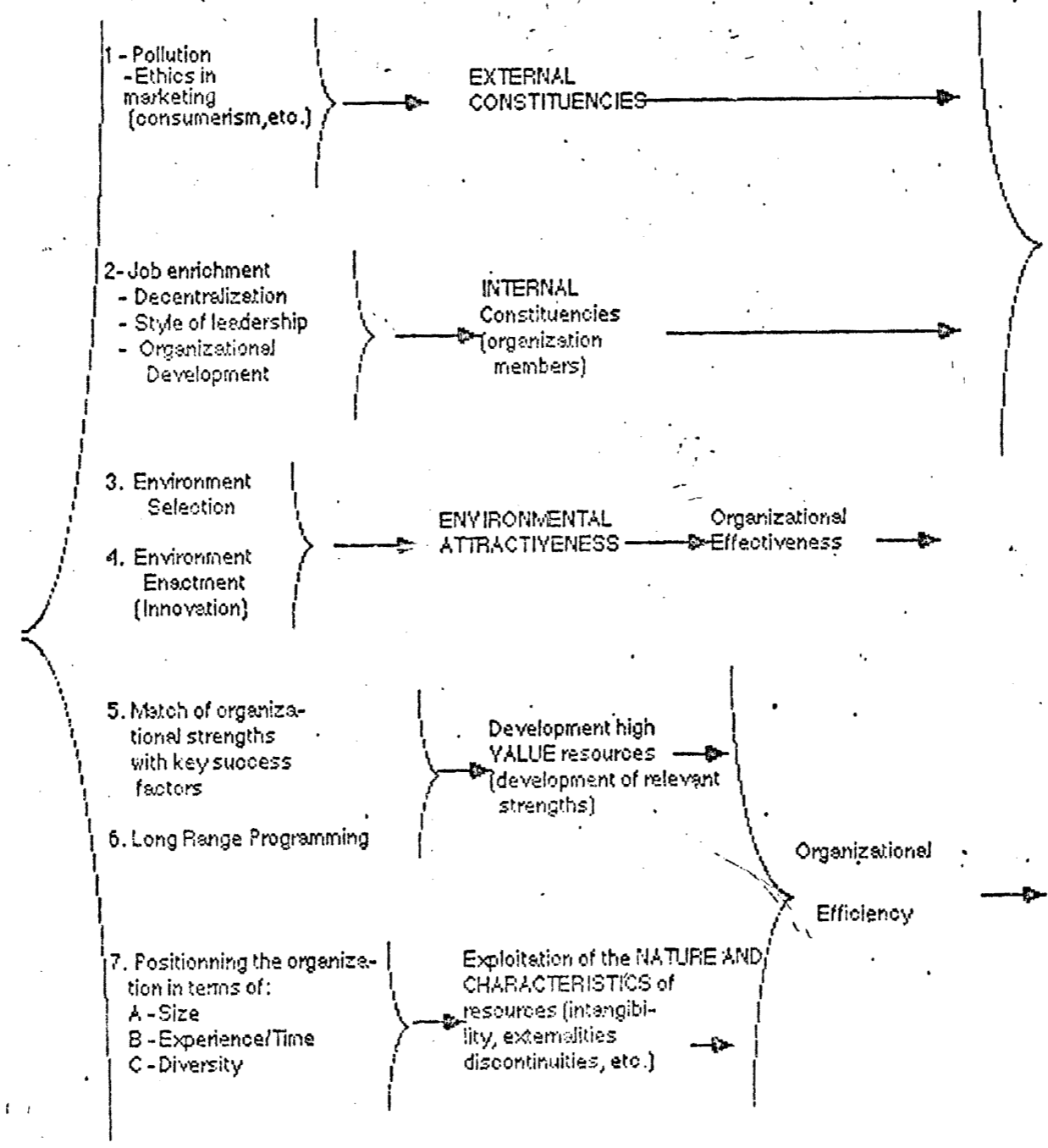
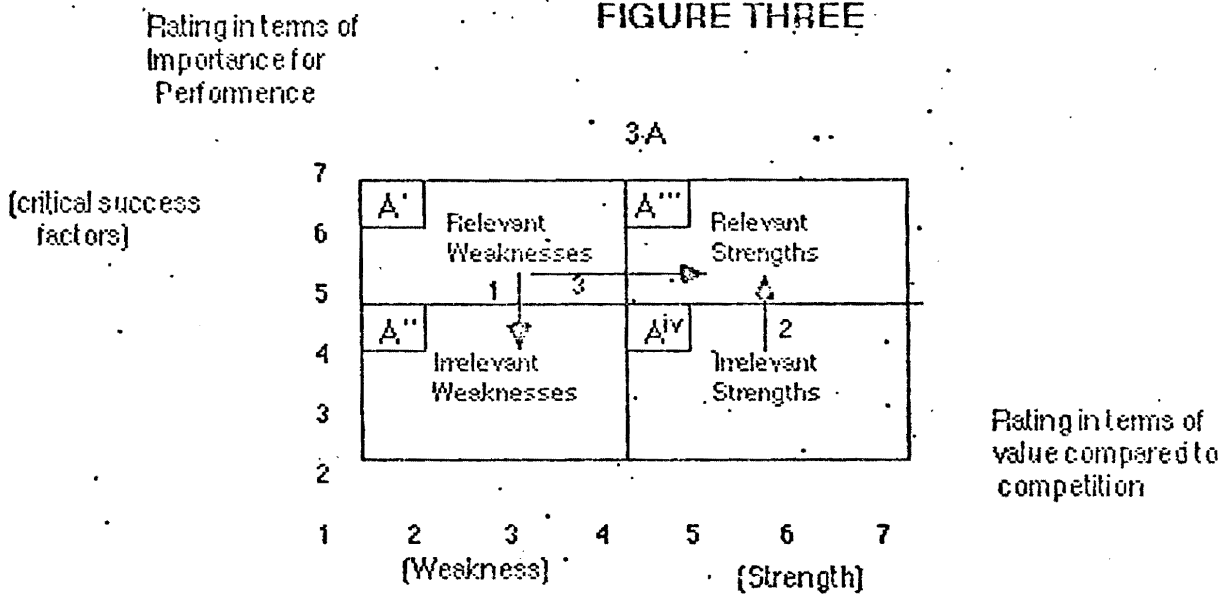


FIGURE TWO

Nature and characteristics of the resources		Organizational Dimensions		Size	Experiential/ Time	Diversity	
Public resources (Intangible)				✓			
Half-public resources (generators of externalities)						✓	
PRIVATE RESOURCES	Law of 2/3			✓			
	Discontinuities			✓			
	Learning			✓	✓		
	HETEROGENEITY	Resources have different strengths and weaknesses			✓		✓
		Equifinality (When properly assembled the resources complement each other making a total whole which the client prefers to buy for compatibility and time reasons vis a vis the separate purchase of the individual parts)					✓
		Risk degradation			✓		✓
	POWER	Political			✓		
		Market			✓		
		Reciprocal Purchase					✓
	Interiority						✓

✓ - Indicates which dimensions exploit the various resources characteristics.

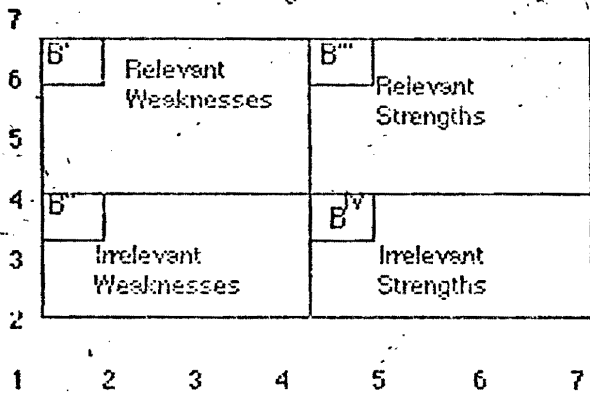
FIGURE THREE



Rating in terms of Importance for Performance

3B

High efficiency organization

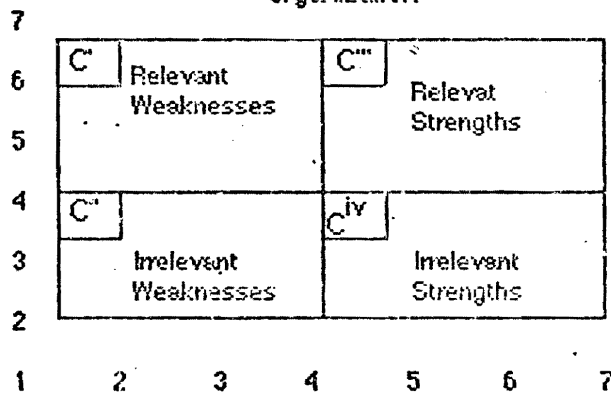


Rating in terms of value compared to competition

Rating in terms of Importance for Performance

3C

Medium efficiency organization

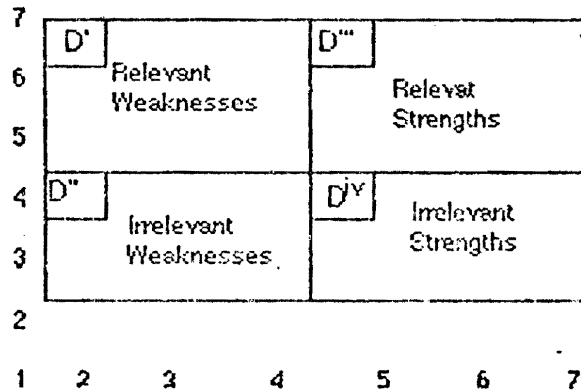


Rating in terms of value compared to competition

Rating in terms of Importance for Performance

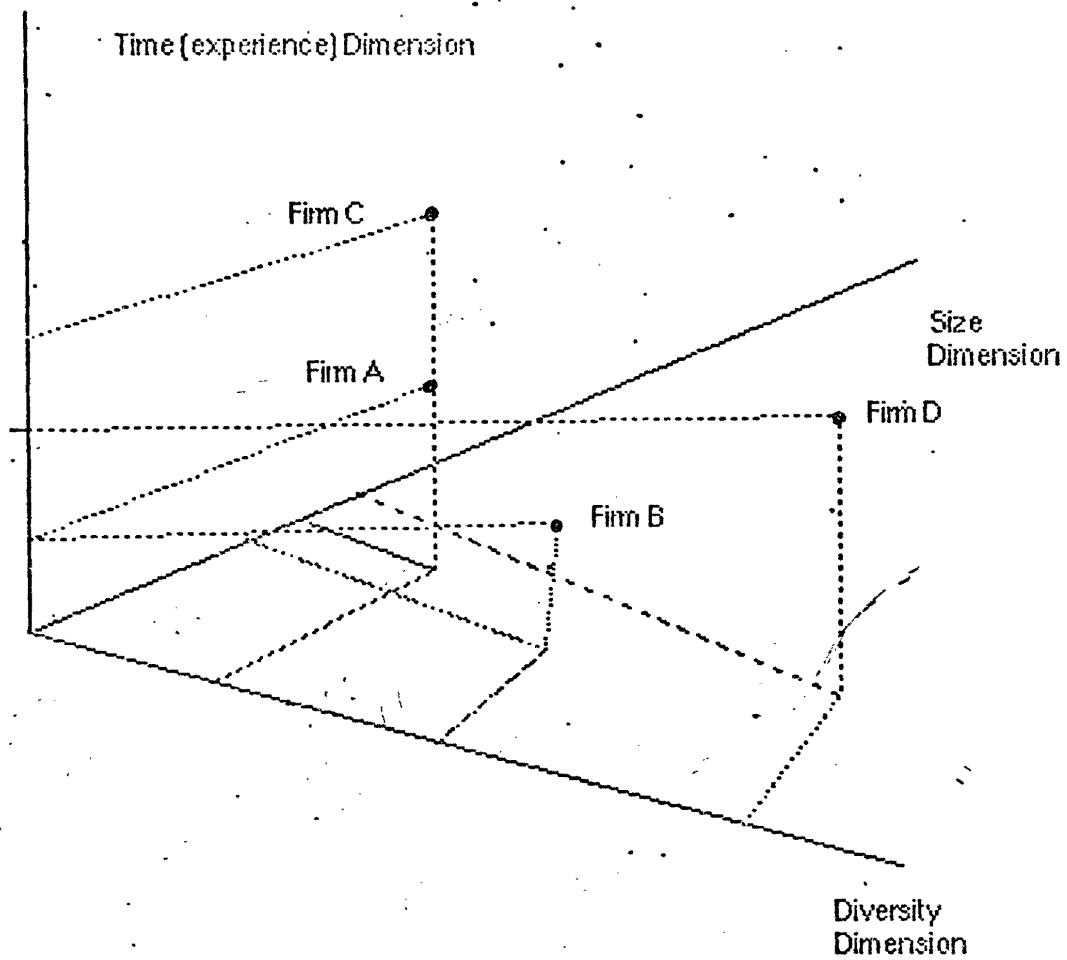
3D

Low efficiency organization



Rating in terms of value compared to

FIGURE FOUR

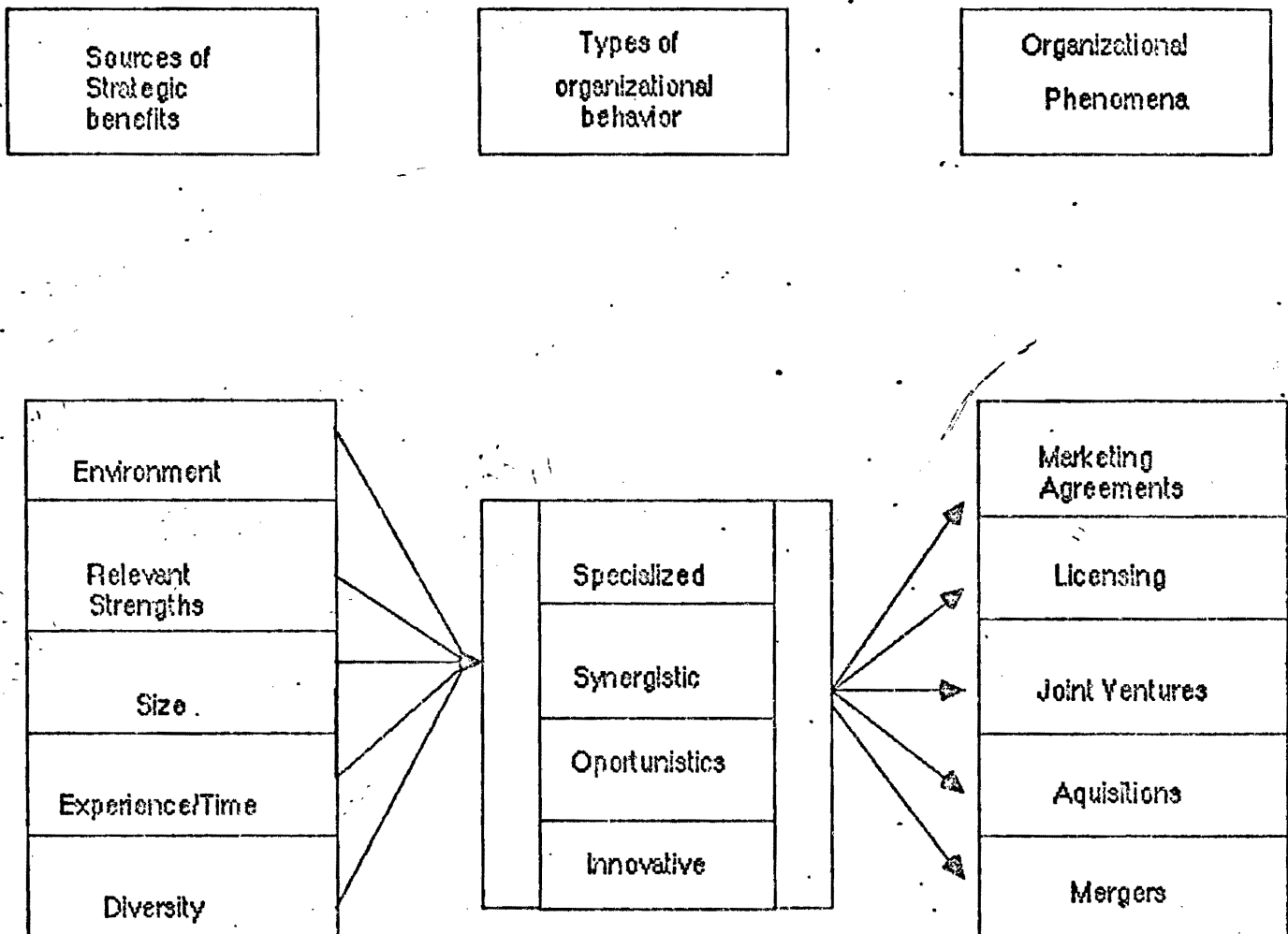


Note: - Firm C has the same degree of specialization as firm A but is considerably more experienced.

- Firm B has the same experience as firm A but opted for more diversity (it is more diversified).

- Firm D rates highest in the diversity dimension.

FIGURE FIVE



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