

Exploiting Your Synergy Potential: Promoting Collaboration Between Business Units

Andrej Vizjak

SYNERGY POTENTIAL IS THE potential benefit that can be realized by exploiting interrelationships between business units. It has long been present in many diversified firms. But as uncontrolled decentralization has occurred in an attempt to overcome increasing corporate complexity, analysis of synergies was often employed as a justification for acquisition only.

Many companies preferred to trade off synergy in order to give their business units greater independence. Business unit managers were given exclusive authority and responsibility for creating value. Functional synergies, excluding finance and administration, were seldom realized beyond the organizational boundaries of independent business units.

In most cases this failure to realize synergy stemmed from the inability of companies to understand the benefits of interrelationships. Little attention has been paid to analysing and implementing them systematically and many have remained untapped.

Exploiting interrelationships involves far more than simple recognition. This article will help companies to realize their synergies. It will show how to look systematically at all the interrelationships within the firm and facilitate organizational mechanisms that can work in tandem with a decentralized corporate structure. First, it will emphasize the significance of synergy management as a strategic alternative to portfolio management; next the major barriers to synergy realization will be listed; and

Synergy as a concept of corporate strategy has become widely regarded as passé. But compelling forces are currently at work, leading firms to re-examine their attitudes. Synergy potential can be realized through interrelationships between business units with high product or market affinities.

This article proposes a systematic approach. It enables senior executives of diversified companies to identify affinities, to determine critical interrelationships, and to evaluate and realize synergy potential.

finally a systematic five-step approach to synergy management will be described.

Creating Value Through Synergy Management

Portfolio management, currently the most common concept of corporate strategy, is based primarily on diversification through acquisition. The acquired units are autonomous, with unit heads compensated according to unit results. The corporation categorizes units by potential and transfers resources from units that generate cash to those with high potential and cash needs. The realization of synergies between the independent units is usually limited to shared finance, legal, accounting and human resource management.



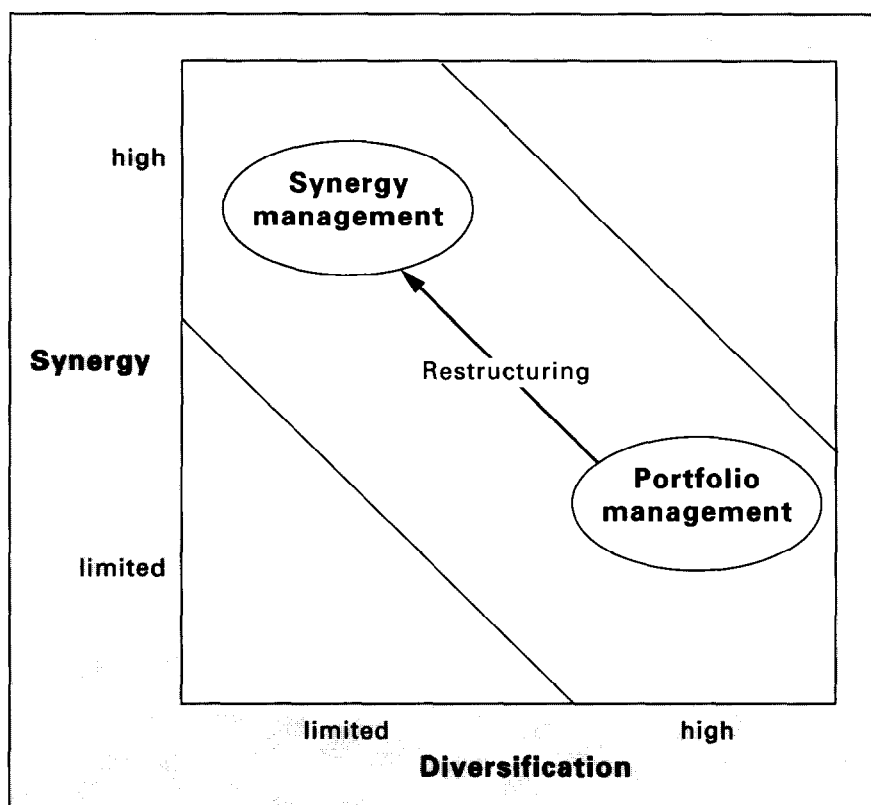


FIGURE 1. Basic options of corporate strategy.

Due to recent economic, technological, and competitive developments more opportunity exists to add value by identifying and realizing synergies between distinct but related businesses. Corporate management has to take an active role, restructuring diversified corporations and applying successful synergy management (see Figure 1).

Problems with Portfolio Management

Portfolio management cannot succeed as a corporate strategy unless it truly adds value to business units:

- ❑ Increasingly well-developed capital markets have reduced the value of simple capital contribution.
- ❑ As business units become more integrated through the broadening of distribution channels the benefits of providing complete autonomy for business units becomes questionable.
- ❑ The effect of sharing only administrative functions is not significant because they represent only a

small proportion of corporate cost and have little impact on differentiation.

The aim of corporate strategy is to create shareholder value. If portfolio management is unable to achieve this, the shareholders can readily diversify themselves.¹

Growing Importance of Synergy Management

Opportunities for the realization of synergies have greatly increased due to recent industry developments² such as:

- ❑ Flexible automation in production, assembly, design and testing making interrelationships achievable;
- ❑ Growing sophistication of information systems allowing the development of shared automated order processing and materials handling systems;
- ❑ Increasingly sophisticated purchasing forcing suppliers to integrate sales forces and distribution

systems for those business units serving the same buyers;

- ❑ Technology driving some industries together by changing the functions of products and making them parts of larger systems.

The diversification philosophy is changing. Many companies have already sold off unrelated and marginally related business units. Canon and Vickers for example are analysing their businesses at corporate level for core products and core competences as a basis around which to organize their business units.³

Uncontrolled Decentralization Hinders Synergy Realization

Theoretically the benefits of exploiting interrelationships are evident. However, there are significant obstacles to the implementation of synergy concepts. For example the restructuring of a diversified wood processing company faced the following major barriers:

- ❑ Bottom-up strategic planning;
- ❑ Predominant vertical organization structures;
- ❑ Lack of motivation.

Bottom-up Strategic Planning

This company has established the strategic planning process on a bottom-up basis from business units. Little or no attention was devoted to co-ordinating business unit strategies. The autonomous business units undervalued benefits that accrued not to them but to the firm as a whole.

Left to formulate strategies independently, they proceeded in inconsistent directions, making interrelationships more difficult to achieve. Many opportunities have therefore been ignored.

Predominant Vertical Organization Structures

The analysed company had a predominant vertical organization structure, through which top management directed the activities of the business units. Organizational sub-units in between were designed primarily to oversee this vertical process and reduce the span of control of top management. The problem of this organization was that information, decisions and resources tended to flow only vertically. There

was little of the horizontal flow which would enable interrelationships between distinct units.

Furthermore, vertical organizational boundaries led to strong identities in different business units, laying the ground for the development of different cultures within the same corporation. Differences in management styles and procedures arose and therefore became a major barrier to synergy realization.

Lack of Motivation

The major barrier for implementation of the proposed synergy concept were unco-operative business unit managers. Initially they were afraid to lose decision autonomy. They also feared unfair blame for poor performance when they would not have full control over shared activities. Intensive information was necessary to initiate co-operation between these managers.

It was also difficult to achieve symmetric benefits in interrelationships: due to differences in size and strategy of business units the value added from interrelationships accrued more to one unit than to another. Significant adjustments of corporate incentive systems were implemented to avoid these conflicts.

Most corporate managers are aware of these barriers, so they hesitate to control decentralization. They prefer a consistent organization with clear performance measurement. This allows clear allocation of profit responsibility to business unit managers who are motivated to achieve performance comparable to that of independent entrepreneurs. The fear of dampening entrepreneurial spirit can thus outweigh the uncertain benefits of interrelationships in many cases.

Unless corporate management starts to identify and realize synergy potential systematically, it will not understand the great impact of interrelationships on the firm's costs and performance. Only this understanding can change attitudes towards the risks and rewards of a more complex corporate organization.

A Systematic Approach to Synergy Management

Interrelationships between business units have to be planned thoroughly and must follow a well defined

strategy. It should be based on the following principles:

- ❑ Identification of all the affinities within the firm;
- ❑ Up front quantification of synergy potential;
- ❑ Formulation of a clear horizontal strategy in co-ordination with corporate and business unit strategies;
- ❑ Implementation of organizational mechanisms to eliminate the barriers to synergy realization.

In line with these principles, this article proposes a five-step approach to synergy management. The objective is to achieve added value through exploitation of interrelationships. Figure 2 gives an overview of the steps.

The first step is the definition of affinity groups. These are clusters of business units with product and market affinities indicating synergy potential.

The determination of interrelationships as the second step includes three analytical activities. First value chains are developed for each business unit within an affinity group; the critical interrelationships are then identified by defining common cost or

margin levers; and finally, resource overlaps are analysed in detail.

The third step is dedicated to the evaluation of identified synergy potential. Synergies are balanced against diseconomies.

In the fourth step a clear horizontal strategy is formulated and co-ordinated with corporate and business unit strategies.

Finally, organizational mechanisms are developed to assure the implementation process. Each of the steps in Figure 2 is outlined below.

Step 1: Defining Affinity Groups

Affinity groups are groups of business units with common or similar products and markets. They are planning categories based on broader criteria than those applied in structuring business units.

The basic principle of defining business units is to provide them with all the resources available to define and carry out independent objectives and strategies. The structuring criteria for business units are therefore based on the strategic nature of the market, which leads the company to decide whether the business units are structured according to

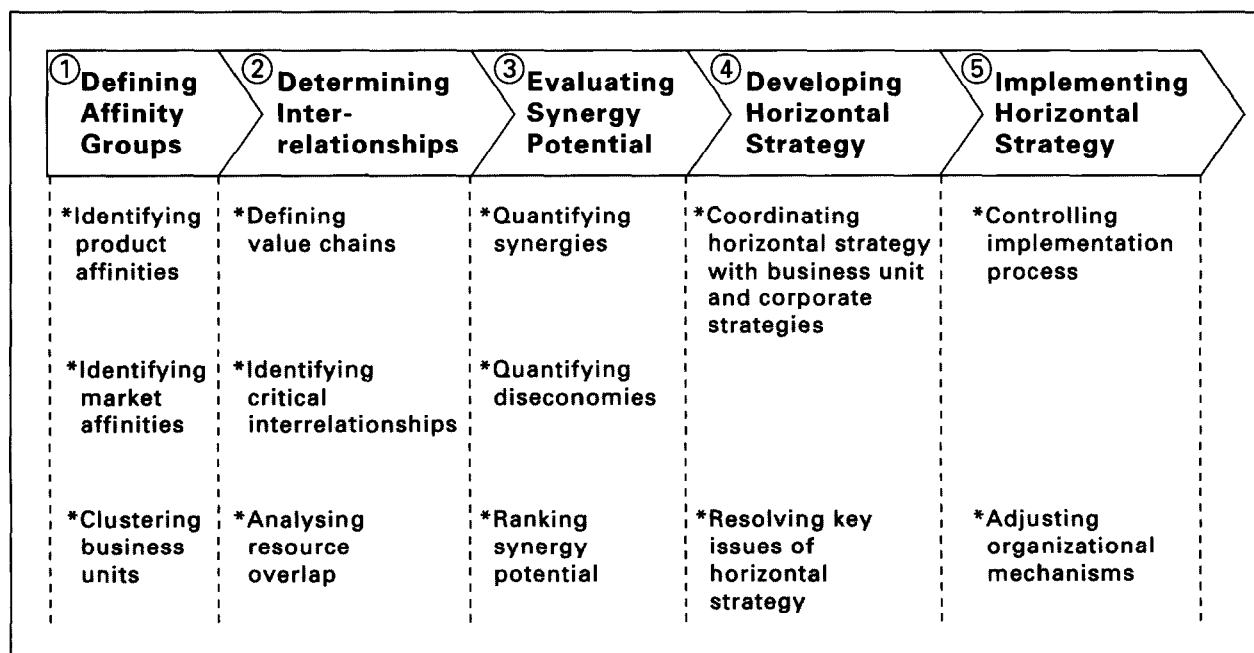


Figure 2. Steps in synergy management.

common products, geographical regions, or other dimensions.

Clustering into affinity groups considers further criteria in the search for sources of interrelationships between business units. Therefore both product and market characteristics need to be considered.

Defining affinity groups requires three analytical activities:

1. Identification of product affinities;
2. Identification of market affinities;
3. Clustering of business units.

Identifying Product Affinities

Product affinities can be analysed according to common materials, components, technology or other criteria.

Figure 3 uses the example of a pharmaceuticals company to demonstrate the product affinities

between the business units. In this case Chemistry (bulk pharmaceuticals); Pharmacy (ethical drugs); OTC (over the counter, or non-prescribed pharmaceuticals); Dental (dental products); Cosmetics (consumer goods); and Veterinary (veterinary products). Highest product affinities can be identified between the business units Pharmacy and OTC due to common product-/process technology and production environment. There are some product affinities between Pharmacy/OTC and Dental, Cosmetics, Veterinary due to common process technology. Chemistry also shows product affinities due to vertical integration with Pharmacy and OTC.

Identifying Market Affinities

Market affinities can be analysed according to common applications, customers, channels, competitors or geographical regions.

As Figure 3 shows, the highest market affinities can be identified between the business units

		Chemistry	Pharmacy	OTC	Dental	Cosmetics	Veterinary
Product Affinities	Product Technology	Synthesis	Final Product Forms	Final Product Forms	—	Final Product Forms	Nutrition
	Process Technology	Chemical Reaction	Mixing, Forming, Packaging	Mixing, Forming, Packaging	Repackaging	Mixing, Forming, Packaging	Mixing
	Production Environment	General Cleanliness	High Sterility	High Sterility	General Cleanliness	General Cleanliness	General Cleanliness
	Sourcing	External	Chemistry	Chemistry	External	External	External
Market Affinities	Final Consumers	Sick Patients	Sick Patients	Sick Patients	Dental Care Patients	Consumers	Animals
	Competitors	Pharmacy Companies	Pharmacy Companies	Pharmacy Companies	Dental Specialists	Cosmetics Companies	Veterinary Specialists
	Customers	Pharmacy Companies	Drug Whole Salers	Drug Whole Salers	Whole Salers, Dentists	Consumer Whole Salers	Feed Whole Salers
	Purchasing Decision	Customer/Physician	Physician	Consumer	Dentist	Consumer	Customer

Figure 3. Product and market affinities of a pharmaceuticals company.

Chemistry and Pharmacy. They have sick patients as consumers and are both competing within the pharmaceuticals industry. The major difference between the market characteristics of OTC and Pharmacy is the different type of purchasing decision. While OTC and Cosmetics have the same type of purchasing decision the business units Dental and Veterinary do not have any market affinities.

Clustering Business Units

On the basis of identified product and market affinities, the business units are positioned in the product/market matrix where they are clustered in affinity groups.

Figure 4 shows the example of the affinity group Chemistry/Pharmacy/OTC. Although there are strategic reasons for organizing these units as separate business units, they must be examined as a group in further analytical steps to evaluate their synergy potential.

Step 2: Determining Interrelationships

Interrelationships can be both tangible and intangible. The sources of tangible interrelationships are high product or market affinities. They enable the sharing of activities between related business units. For example the high product affinities between the business units Pharmacy and OTC enable the sharing of production.

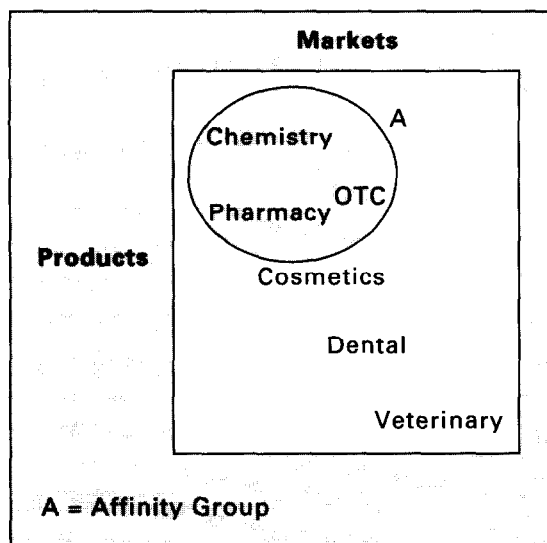


FIGURE 4. Product/market matrix of a pharmaceutical company.

Intangible interrelationships can also be achieved if there are only low affinities among business units. They enable the transfer of know-how between the related business units. For example the identified market affinities between OTC and Cosmetics enable common advertising activities, but they are not high enough to share the distribution channels.

Determining interrelationships requires three analytical activities:

- Developing value chains
- Identifying critical interrelationships
- Analysing resource overlap

Developing Value Chains

The value chain provides the starting point for the analysis of interrelationships.⁴ It has to be developed for the whole affinity group to define the overall impact of interrelationships. But it is even more important to compare separate value chains between business units. As Figure 5 shows, interrelationships can appear in every activity of the value chain.

Product affinities are the source of upstream interrelationships, which include production, purchasing and R & D interrelationships. Production synergies are most often realized in manufacturing, manufacturing overheads, energy and maintenance. They are achieved by sharing experience, cross-specialization, system harmonization and concentration. Significant effects on unit cost reduction are also achieved by purchasing interrelationships. Co-ordination of activities, exchange of information, and concentration of buying power can reduce unit cost by up to 10 per cent.

The third category of upstream interrelationships are interrelationships in research and development. The effects of joint technology development vary from industry to industry. For example good results are achieved with joint development of microelectronics which can be applied not only in data processing but also in telecommunications and many other growing industries.

Market affinities are the source of downstream interrelationships. Business units which are geographically close to each other may share their physical distribution systems, order processing, servicing and sales offices.

Identifying Critical Interrelationships

Since there are a variety of interrelationships, a crucial step in successful synergy management is the

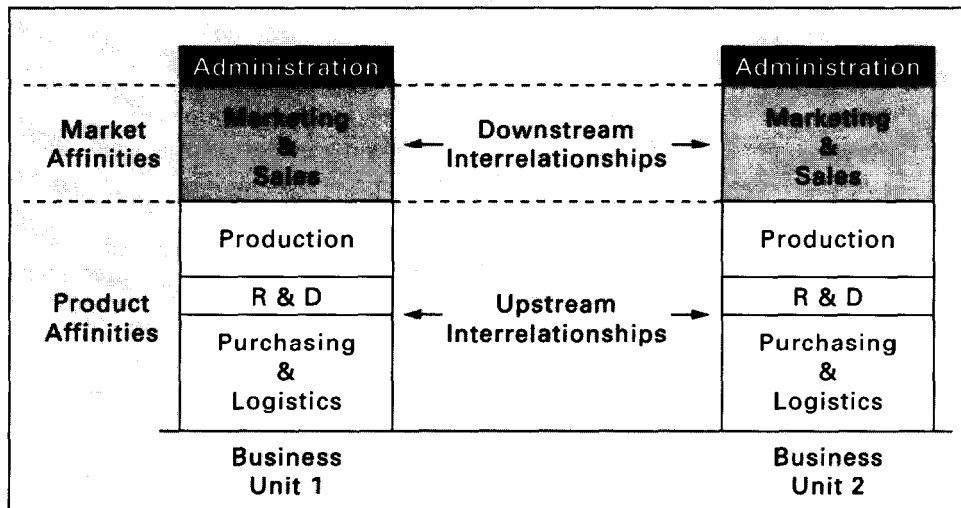


FIGURE 5. Interrelationships between value chains.

determination of strategically important interrelationships. These interrelationships:

- ❑ Involve activities which represent a significant fraction of operating cost;
- ❑ Affect cost or margin drivers.

Interrelationships have high impact on activities where economies of scale and experience curve effects can be achieved from increased volume through sharing resources.

In a company where the identified affinity group encompassed electric cookers and heating appliances, production was identified as the major fraction of operating cost. Scale effects and capacity utilization in sheet metal processing were identified as major cost drivers. Therefore sharing of sheet metal processing among the business units Electric Cookers, Coal Stoves, Gas Cookers and Storage Heaters were identified as a critical interrelationship (see Figure 6).

Analysing Resource Overlap

The exact impact of interrelationships—in this case metal processing interrelationships—can be determined by applying the business/resource matrix.⁵ This matrix shows the resource overlap between different business units within an affinity group and can be quantified by assigning cost of resources by business units. Figure 7 points out the high resource

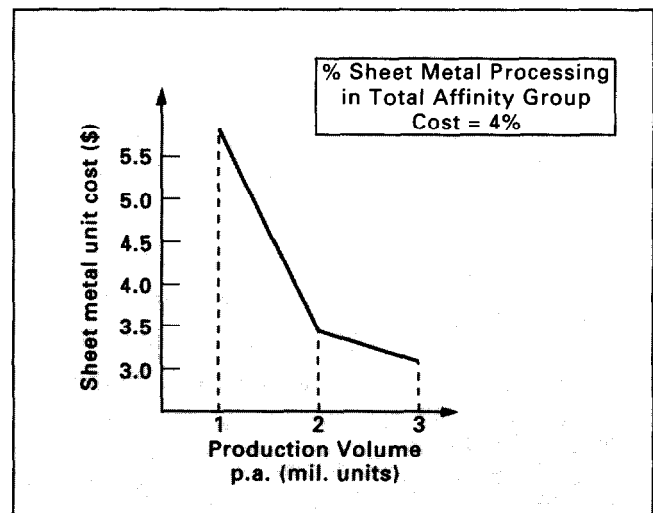


FIGURE 6. Economics of household appliances production.

overlap in sheet metal processing among the business units of the analysed affinity group.

High product affinities were identified between Electric Cookers, Coal Stoves, Gas Cookers and Storage Heaters leading these business units to be identified as one affinity group. We developed value chains for each business unit, which showed production as the highest fraction of operating cost. By

Resources for Sheet Metal Processing	Business-units			
	Electric cookers	Coal burning stoves	Gas cookers	Storage heaters
Sheet-shearing—heavy plate				
Sheet-shearing—thin sheet				
Stamping 30 tons				
Stamping 30–70 tons				
Stamping 70–150 tons				
Roll-stamping				
Edge cutting or trimming				
Nibblin				
A+E-welding				

FIGURE 7. Business/resource matrix of a producer of household appliances.

analysing production cost drivers we identified sharing of metal processing as a critical interrelationship. The analysed resource overlap between the business units enabled an exact measurement of the impact of the interrelationship on the total cost of the affinity group. With the same procedure we could also have analysed margin drivers to identify impacts of interrelationships on differentiation.

Step 3: Evaluating Synergy Potential

One of the basic principles of successful synergy management is to quantify synergy potential up front. Here the benefits of interrelationships have to be balanced against diseconomies.

Value added through interrelationships can be achieved only if the benefits of interrelationships exceed the cost of diseconomies. As was discussed in step 2, synergies can be measured as the impact of interrelationships either on cost or on differentiation.

Diseconomies may appear as a result of additional co-ordination and compromises between business units. The co-ordination process of interrelated business units generates additional cost in areas such as scheduling, setting priorities, or resolving problems. Time, manpower and money have to be invested in an interrelationship.

Diseconomies resulting from compromises may be even more expensive than the cost of co-ordination. Sharing requires consistent activities that may not be optimal for either of the units involved. If, for

example, benefits are expected due to the sharing of a sales force, possible diseconomies have to be considered. A salesperson offering different products may give less attention to or be less knowledgeable about either product than a dedicated salesperson would be.

Similar diseconomies may appear by sharing a logistics system between business units producing products with widely differing sizes, weights, or delivery frequencies. The shared logistics system could become useless because it is inappropriate to the need of either product. Although the synergy potential of production interrelationships is most significant in general, it is possible that synergies become illusory in a particular case. Even though the machines themselves may be generically the same, diseconomies may appear due to differences in business unit needs regarding machine tolerances, lot sizes, or lead times.

Finally, the quantified potential synergies have to be ranked according to net synergy effect. Therefore the benefits of identified interrelationships have to be balanced against their cost. Due to the time lag between synergies and diseconomies it is important to consider both dimensions separately. In the start-up phase of activity sharing, high diseconomies appear which have to be balanced against limited benefits, while in the operating stages of the synergy realization process most companies face growing benefits.⁶ Thus the quantification of net present value

of expected cash flow from synergy realization is an important criterion for the ranking of potential synergies.

Although the evaluation of potential synergies is case specific, many companies have had successfully realized synergies from intangible relationships and from the sharing of indirect activities due to lower cost of compromise. High potentials are also expected in sharing R & D and sourcing activities. For example, joint sourcing requires only periodic communication to determine the quantity of input required per period, so the cost of additional co-ordination is limited.

However, production and marketing and sales interrelationships are often critical for achieving competitive advantage. They represent the highest fraction of total cost in many companies, so sharing of these activities can be a potential substitute for market share of the business units involved. But as sharing involves high complexity, it should be implemented only in activities where economies of scale, experience, or capacity utilization are important cost or margin drivers and can be affected significantly by interrelationships.

Step 4: Developing a Horizontal Strategy

Horizontal strategies are dedicated to realizing synergy potential which can be a crucial source of competitive advantage. They are formulated on affinity group level and have to be co-ordinated with business unit and corporate strategies.

It may be necessary to adjust or modify business unit strategies to avoid misfits with horizontal strategy. For example, a repositioning of business unit brands may become necessary to make their marketing more compatible. The co-ordination of horizontal and business unit strategies may also include the development of consistent marketing programmes, investment spending plans and joint planning of product development. Often unit goals have to be reset to reflect the role of distinct business units in an interrelationship.

Horizontal strategy also has to be compatible with programmes of corporate strategy such as major restructuring or investment. Further diversification may become important to strengthen critical interrelationships or to create new affinity groups. On the other hand divestment decisions may be accepted for unrelated business units.

The aim of formulating a horizontal strategy is to pursue interrelationships between business units.

Therefore it concerns the following key strategic issues:

- ❑ Integration
- ❑ Standardization
- ❑ Configuration

The degree of business unit *integration* may vary from know-how transfer to sharing of related activities or business functions. If for example two business units share both of their sales forces, they can cross-sell each other's product. This can result in a cost advantage due to lower selling cost. On the other hand cross selling can also enhance differentiation, because the sales forces can offer bundled products to the buyer.

If the company has decided to share activities among business units, *standardization* of activities is often identified as an important issue. In the example of shared sales forces synergy effects can be increased if the company succeeds in standardizing sales force practices, delivery standards or payment terms.

A further issue of horizontal strategy concerns physical *configuration* of the value chain. In industries such as electronics and pharmaceuticals, economies of scale in R & D or component manufacturing can be achieved if these activities are centralized in one or very few world locations.

Decentralization has been mentioned before as the main barrier to synergy realization. Although horizontal strategies have a strong top-down character, they cannot succeed unless they are accepted by the business unit managers. So an early involvement of different management levels into the horizontal strategy development process is one of the key factors for the success of horizontal strategies.

Step 5: Implementing a Horizontal Strategy

This final step of synergy management is dedicated to ensuring the exploitation of synergy potential. The crucial part of the implementation process is the start-up phase when limited synergies are matched against high diseconomies. If this is accompanied by the resistance of business unit managers toward the synergy concept, implementation requires systematic implementation planning and control. In addition, overlaying synergic mechanisms must be installed to supplement the decentralized business unit structure. Important mechanisms are:

- ❑ Group structure;

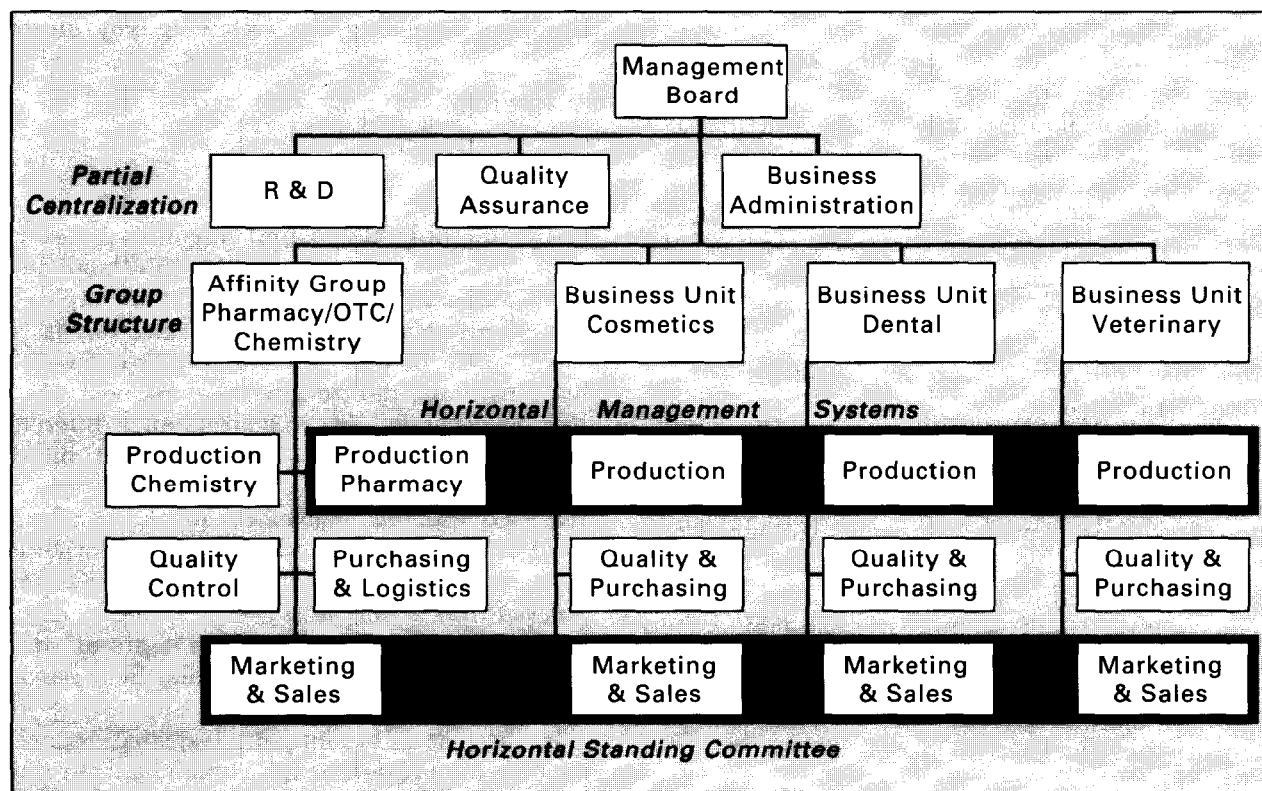


FIGURE 8. The synergy process in a pharmaceutical company.

- ❑ Partial centralization of activities;
- ❑ Horizontal standing committees and task forces;
- ❑ Horizontal management systems.

Figure 8 shows the example of a pharmaceuticals company, where the management has implemented a *group structure* to exploit synergy potentials.

Due to high product and market affinities between Chemistry, Pharmacy and OTC an organizational structure has been developed in which these business units are integrated and report to a single executive. This facilitates co-ordination of shared resources, conflict resolution, transfer of know-how and setting of appropriate objectives and incentives.

To exploit the synergy potential between this affinity group and the remaining business units Cosmetics, Dental and Veterinary, further organizational mechanisms were applied in addition to the group structure.

Partial centralization of R & D and quality assurance was implemented on the corporate level main-

taining the profit responsibility of business units Cosmetics, Dental and Veterinary.

A horizontal marketing and sales *standing committee* integrates the firm's efforts in critical markets. It is supported by temporary *task forces* for the establishment of subsidiaries in new regions or for other projects.

To co-ordinate the strong overlap of production resources, *horizontal management systems* have been developed. They integrate the independent business units through horizontal procedures and incentives. Horizontal procedures give guidelines for cost sharing on joint projects, while horizontal incentives reward joint efforts.

Conclusion

Let us summarize the three key messages of this article.

1. Management has to control decentralization to

realize significant synergy potential between business units.

2. Such synergies can be analysed and quantified as to their potential using a number of techniques to reveal cost and differentiation impacts on cash flow. To do this requires a systematic approach to ensure that apparent synergies can be realized in practice.
3. It is important to apply synergic mechanisms that

support the implementation process by considering that:

- A purely bottom-up approach to synergy management rarely succeeds;
- Interrelationships must be reinforced by a strong set of firm-wide values;
- The implementation process takes time and cannot be expected to occur just because the synergy potential is discovered.

References

- (1) M. Porter, From competitive advantage to corporate strategy, *Harvard Business Review*, May-June, 43-59 (1987).
- (2) A. Vizjak, *Wachstumspotentiale durch Strategische Partnerschaften*, Munich (1990).
- (3) C. K. Prahalad and G. Hamel, The core competence of the corporation, *Harvard Business Review*, May-June, 49-91 (1990).
- (4) M. Porter, *Competitive advantage*, New York (1985).
- (5) C. Clarke, Planned divestment—A five-step approach, *Long Range Planning*, 20 (1), 17-24 (1987).
- (6) M. Leontiades, *Mischkonzerne verändern die Welt*, New York (1987).

Related Reading

- M. Goold and A. Campbell *Strategies & Styles*, Blackwell (1989).
 A. C. Hax and N. S. Majluf, *The Strategy Concept and Process*, Englewood Cliffs (1991).



Dr. Andrej Vizjak is an international management consultant from Munich, Germany.