AN INTERACTION APPROACH TO THE
MANAGEMENT OF A PORTFOLIO OF
CUSTOMER OPPORTUNITIES

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ABSTRACT

Portfolio theory has its roots in financial investment and in the desire to balance the often conflicting objectives of high yield and low risk. It has also found applications in product management, corporate strategy and more recently in attempting to develop a range of customer opportunities. It is possible that, in all the applications except the last-named, the control of the portfolio rests principally with the "portfolio manager". In the case of customers, recent work in demonstrating the interactive nature of supplier/customer relationships, particularly in industrial markets, may mean that the portfolio concept has to be modified if it is to find application there. The challenge to marketing management is the planned deployment of resources between different customer opportunities and the adoption of a portfolio approach implies that a company is seeking a balance of customers in an attempt to achieve its objectives, both in the short and longer term. It is the question of how this should be achieved to which this paper is addressed, firstly, by tracing the development and application of portfolio theory, secondly by applying it to the industrial market using a three dimensional approach to identifying customer groups and, finally, by presenting the data obtained from an empirical study of a supplier and a range of customers in the telecommunications industry, demonstrating that the supplier should adopt an interaction approach to the selection of target customer opportunities.

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1. INTRODUCTION

"Growing competition, with the resultant increase in the ability of customers to discriminate amongst suppliers, together with the necessity to seek more efficient uses of available resources has resulted in an upsurge of interest into the desirability of adopting some form of portfolio or selective approach to markets and customers by potential suppliers. Companies operating both domestically and/or internationally are exploring the possibility and desirability of adopting a portfolio perspective with respect to their customers/markets. Such an approach claims, as a major advantage, the adoption of the discipline of forcing resource allocation among the components of the portfolio - an allocation which takes explicitly into consideration the projected results of each course of action on the objectives established by management" (Wind and Douglas, 1983)

2. PORTFOLIO THEORY

(a) Objectives and Origins

Objectives may be based on seemingly simple management decisions - where to allocate resources and how much? However, finding the "best" combination is by no means straightforward. Given a set of opportunities, there are many combinations which will produce "efficient" portfolios and ideally management would like to explore most, if not all, the available efficient portfolios. Such thinking is based largely on portfolio theory as developed for use in financial investment decisions during the 1950's and 1960's, where the main inputs for portfolio evaluation were postulated as being "expected return" and the "degree of risk" incurred in achieving it. Thus, two fundamental approaches towards investment in assets were seen as:-

(a) the minimum expected risk consistent with a given level of return, and

(b) the maximum expected return for a given level of risk.

(Markowitz, 1952)

- both of which maximise the pay off for a given input, thus satisfying the criterion for an "efficient" portfolio.

Such strategies are based on a number of assumptions by the investor:-

(a) all investors maximise on period of expected utility and exhibit diminishing marginal utility of wealth.
(b) risk estimates are proportional to the variability of returns.

(c) there must be a willingness to base decisions solely in terms of expected returns and risks

(d) for any given level of risk, investors prefer higher returns to lower returns, and for any given rate of return, they prefer less to more risk.

In addition, it is also assumed that:-

(a) there is an active and efficient market

(b) there are no transfer costs of assets

(c) there are no time lags in acquiring or disposing of assets.

Further developments from Markowitz's theory gave rise to what is known as the Modern Portfolio Theory (Sharpe, 1963). Its essence is the quantification of the relationship between risk and return and that risks attached to individual securities should not be viewed by the investor in isolation, but in terms of their contributions to the overall risk level of the portfolio. The risk of investment can be broken down into two separate components: market related and non-market related. As the diversification of the securities held in a portfolio increases, the overall risk decreases and, from this, it follows, in theory, that non-market related risks can be totally eliminated by holding a well-diversified selection of securities.

Thus, work in finance has attempted to refine the relationship between risk and return in investment decisions and techniques such as Sensitivity Analysis and Mean-Variance Analysis have been developed to assist in the decision making process.

(b) Further Applications of Portfolio Theory

The first area of application, other than finance, was in auditing product programs (Marvin 1972). Each product goes through a number of phases in its life and a company's objective should be to develop a soundly planned and well balanced range of products which, at any one time, is making both a high contribution to current profitability and also looking to the future. Individual products or groups may be analysed in terms of their current (and future) market share, sales volume, costs and investment requirements.
The Product Review and Evaluation Sub-system Model - PRESS - (Hamelman and Mazze 1972) views the total product line as a set of interrelated elements each of which places varying demands on the company's resources. Inputs to the model consist of standard cost accounting and market information data, both of which are essential for making decisions on product abandonment. This last named feature is probably the greatest limitation of the model as product deletion must be matched by a compatible programme of product development and introduction.

A matrix approach (Wind and Claycamp, 1976) used four inputs - industry sales, company sales, market shares and profitability - in evaluating every individual product. It is a dynamic model which suggests five future strategies:

1. Do not change the product or its marketing strategy
2. Do not change the product but change the marketing mix
3. Change the product and hence the mix
4. Discontinue the product/line
5. Introduce a new product/line

Secondly, a portfolio perspective has received increasing attention from corporate strategists (Ansoff and Leontiades, 1976; Hedley, 1977; Hofer and Schendell, 1978; Wind and Douglas, 1981) all of whom have been primarily concerned with the classification of products and/or businesses on certain key dimensions to assist in the achievement of overall strategic objectives. Key dimensions have included market share, market growth, market attractiveness and competitive position depending upon which model has been offered. Their principal field of application has been in large and often diversified companies which have attempted a rational, value maximising process with respect to the allocation of resources. Regardless of the dimensions used, the basic idea is that the position on the grid should determine the "Mission" around which the strategy for the business unit or product is developed.

Some advantages claimed are:

(a) it results in differential treatment of businesses/products
(b) it enhances and promotes planning and communication
(c) it aids in monitoring competition
(d) it nurtures an entrepreneurial spirit

Problems identified have been:-

(a) ineffective implementation, particularly in the choice of key dimensions

(b) monitoring by competitors

(c) an inability to divide companies into discrete units or to identify specific products

(d) an inability to build into the models such quantitative data as social, political and economic pressures.

(c) Portfolio Theory and Marketing

More recently there have been proponents of the application of portfolio theory to channels of distribution (i.e. customers) and to end-user markets (Fiocca 1982). Distributor portfolio analysis has combined the concept with key customer account profitability analysis applying the costs of supplying customers in the channel of distribution to the sales achieved and monitoring the share obtained in relation to those of competitors. Decisions may then be taken on such issues as where to apply more or fewer resources (Campbell and Cunningham 1983).

The management of exporting has also received approaches from proponents of portfolio theory. Here the issue is one of selecting target markets as competition for world market share intensifies, hence making strategic entry decisions (and the resources to be committed) more crucial. Resources would include marketing, finance, products and personnel and its major advantage is that it focuses on the interdependence between markets together with enforcing a disciplined approach to resource allocation. (Wind and Douglas 1981).

(d) Limitations

Portfolio theory, as outlined, is essentially concerned with the collective returns from the use of assets together with their possible redistribution over various options at the discretion of management. How "returns", "assets" and "options" are defined depends upon the area in which the theory is being applied and, perhaps, more importantly, there is an implied assumption in most cases that "management" is able to control all the variables on each side of the equation, or, if not, that it is possible to assume that some variables are static.
However, in reality, the relative power held by different parties and the interdependence (or otherwise) which it brings to supplier/customer relationships has become a feature of markets in the last two decades as a result of the changing structure of many channels of distribution, particularly fast moving consumer goods. The Channel Dependence Matrix (Dickson, 1983) examines such interdependence between supplier and customer, in terms of the share of each other's sales held and the reasons which lie behind them. It identifies, notably, the existence of relative power as the prime indicator of share achieved.

Strangely, it might be argued that such a situation has been present for some time in industrial markets and that the relatively simple philosophy of trying to meet customer needs profitably has been complicated by the existence of various additional factors which preclude such a supplier-dominated strategy.

3. **INDUSTRIAL MARKETS**

(a) **Characteristics**

Industrial markets cover many types of products and services ranging from the supply of simple consumables to products of current interest referred to as High Technology (Hi-Tech) and the marketing strategies being implemented for their development. Typically, in consumer markets, the consumer or end-user is divorced from the manufacturer and is not, therefore, a direct customer, whereas in industrial or institutional markets, by definition, the consumer is more likely to be the same as the direct customer.

Such markets often have features which distinguish them from consumer markets. Purchasing is often infrequent, of high value and of high risk. Customer companies may be highly concentrated in terms of purchasing power. More importantly, in order to minimise the effects of these features, the decision making process may be extremely complex, involving many individuals and different stages.

Thus, for suppliers operating in such markets, a technique to assist in the planning, implementation and control of a strategy for initiating and developing sound and profitable relationships might be very valuable indeed. Such a technique might be used in the cost-effective management of these relationships and of the resources committed to them in the light of possible risks (financial or otherwise) to be accepted in the achievement of the desired objective return.
(b) The Application of Portfolio Theory

The application of portfolio theory in attacking and developing a "market" involves a number of steps:-

(a) classification of market segments using various criteria

(b) the definition and the grouping of customers into such segments for purpose of marketing planning.

(c) the allocation of resources to specific segments/customers to achieve the objectives set out in the marketing plan

It is argued that the range of markets and customers to be attacked should fulfill different supplier needs in both the short and the long term, whilst better understanding and satisfying the customer in the process. Before implementing a portfolio approach, it is, therefore, essential that the supplier's objectives with respect to each market segment/customer are stated and at what cost each objective is to be achieved.

Supplier needs (i.e. the returns which are desired) may be:-

- increased sales (in a defined period of time)
- increased profitability
- the development of technologically advanced products
- increased cash flow
- long-term relationships
- increased awareness or credibility
- market entry points etc.

However, customer or user needs may well not be consistent with these. Indeed, they may be radically different from them. Examples might be:-

- product and service package
- availability of a standard product
- value for money
- extended credit
quick delivery

the acquisition of technologically advanced products

little on-going contact with suppliers

supplier commitment, etc.

A quick glance at the above two lists will reveal many differences and few similarities - indeed, the only obvious similarity is "the development/acquisition of technologically advanced products" and the many differences are highlighted often by objectives which are completely polarised.

The ability of the supplier to dominate the situation will depend in part on the relationship or perceived relationship which he has with each individual customer, not only in terms of the customer's needs, as outlined above, but also in terms of the power or influence each has on the other. This is fundamentally a question of size, not only in absolute terms but also, as already discussed, in relation to the share which each holds of the other's business.

Thus, in many cases, there exists a situation where both partners in the relationship will be carrying out an on-going appraisal of each other in terms of the costs involved in relation to the benefits to be achieved. Both may need to understand each other better in the light of their obvious interdependence.

The logical conclusion which should, therefore, be drawn from the above analysis is that a supplier is not in complete control of his strategy when attempting to pursue a customer portfolio approach - he must take account of the market position of his customers and the degree of mutual interdependence which may exist between them. In many cases, suppliers and customers are carrying on a two-way process of interaction which involves the exchange and commitment (often continuous) of human, technical and financial resources by both parties. The degree of commitment by each party is a function of the influence and power which each has on the other, notwithstanding the effect of other external influences such as government, financial institutions and agencies of one form or another. This contrasts sharply with the application of portfolio theory to financial, business and product strategies where there is not such an obvious existence of another party and the factor of interaction is not the same.

Markets should still be subject to the concept of segmentation where sub-groups should be identified, but the emphasis on the criteria to be used for the purposes of segmentation should be based more on the current or potential relationship in terms of
mutually dependent needs between the supplier and his customers (taking the customer's perspective of the supplier into account) and less on the traditional and simplistic approaches, such as geographical location, type of industry, etc., usually adopted. A supplier, it is argued, is then in a much more favourable position to direct his marketing and other resources to satisfy customer "needs" in attempting to meet his own objectives.

(c) An Interaction Approach

The traditional approach to market segmentation uses a number of bases or dimensions in an attempt to define target customer gaps. Mathematically, any number of bases might be identified and combined but, in this analysis it is proposed to adopt three, firstly because three gives sufficient scope for outlining the approach and, secondly, because using more than three inevitably begins to produce small cell sizes.

Thus, a supplier when attempting to define target customer groups may represent the total market as follows:

The supplier thus perceives a total number of 30 target groups, each of which differs from another in at least one respect. The labels attached to the bases may be in line with any three of a supplier's objectives e.g. sales volume, profitability (short and/or longer term), cash flow, a desire to work with technologically innovative customers, a minimisation of financial risk, an avoidance of excessive dependence on certain types of customer or a means of market entry. The weights attached to each base may change over time as a result of changing market circumstances and an overall balance of customers in each segment would be sought in line with the objectives of the portfolio for each given future time period.
However, the preceding analytical technique is based upon the perceptions of supplier management with respect to conditions operating chiefly within the company and takes little or no consideration of factors operating within the market in general or the objectives and/or perceptions of individual customers. Circumstances may be such that a supplier has to take such objectives into account.

Thus, in order to assess the role of customers in the development of a portfolio, a survey should be undertaken amongst them. Further, but hitherto, unsuspected bases may then be revealed which should be substituted on one or more of the dimensions perceived by the supplier. The supplier should then be truly customer-oriented in developing his desirable portfolio as a basis for a strategic assault on the total market. Recognition and realisation of the interactive nature of the market will be satisfied and the supplier's ability to control his markets will have been modified.

Inevitably, problems will arise. Firstly, the compilation of such a portfolio is founded upon the construction and maintenance of a sound data base of customers and also of the forces in the environment in which both suppliers and customers are operating and which are likely to influence relationships. Such a base needs to be constantly updated, thus contributing to the ideal or "efficient" portfolios desired by the supplier.

Secondly, acceptance by the supplier's own management. "Market and customer orientation" is a term frequently used by management, but, perhaps, less frequently practised. It is suggested that many managers pay lip service to the concept but steadfastly refuse to accept that the supplier may not be in a position to dominate the marketplace. Foreseeing and understanding the point of view of individual customers, particularly 'key' customers, in terms of their objectives and needs, is not easily accomplished.

Nevertheless, the advantages to be gained by such an approach, namely, more control over the allocation of resources, a more rigorous and definitive approach to the analysis and selection of target customer groups and a more flexible approach to the pursuit of objectives would seem to outweigh the problems involved in the implementation. In an industrial market, particularly one which is becoming increasingly competitive, it may indeed be the basis of sound and profitable growth.

4. AN EMPIRICAL INVESTIGATION

(a) In order to test the above claims, research was undertaken in one particular industrial market, that of telecommunications, and, in particular, the market for Private Automatic Branch Exchanges (PABX's) - a high technology product which is currently
undergoing rapid change and which is increasingly being seen, both by suppliers and customers, as an integral part of the future operation of an efficient organisation. The 'market' is also becoming more international, thus forcing major structural changes amongst suppliers.

(b) Characteristics of the PABX Market

The PABX is essentially a switching device which operates between a national communication network and the various terminal points at which information may be sent and received. "Information" is a wide term and its transmission may be grouped, simplistically into three media: data, voice and image. However, currently a fundamental feature of the information transmission market is that the technologies of data, voice and image transmission are rapidly converging as the use of digital (as opposed to analogue) methods increases. Ultimately, all three may be transmitted within the same network by using the appropriate modems and, as a result, the role of the traditional telephone switchboard (the PABX) may be seen to be changing in order to accommodate the need to switch the various forms of communication both within and into or out of an organisation. Companies concerned with the transmission of data (including those concerned with computers and peripheral equipment) such as ICL and Ferranti have not been slow to comprehend the significance of the converging technologies and are moving into the total information transfer market in a big way, competing with the more traditionally based telephone or voice transmission suppliers.

Secondly, recent UK government policies to 'liberalise' the total telecommunications industry, by attempting to create a 'free' market for communications equipment (including the entry of imports) has had and will have a profound effect on the structure of "suppliers" in the market. In most countries (except the USA) the role of the national PTT (postal, telephone and telegraph company) has been that of a monopoly supplier (or more correctly a distributor) for many, if not all, of the items of equipment (switches and terminals) for connection to its own network. The manufacturers of such equipment have, therefore, largely been faced with one customer and national, political forces have largely dictated how the manufacture and supply of products has been divided up. The 'liberalisation' of the UK market has now, theoretically, made it possible for manufacturers from any country to supply end-users directly, although, in practice, British Telecom in the UK remains the sole distributor for the first line into an end-user's premises.

Thirdly, the purchase of major or core items of communications equipment is an infrequent event for all types of organisation. Nevertheless, there often exists a strong market for the extension of the system to meet new requirements or for the replacement of technologically outdated items of peripheral or terminal equipment as new possibilities present themselves.
Fourthly, the decision-making process and unit may often be infrequently constituted in many user organisations. Many large users of communications equipment (e.g. banks, insurance companies and other multi-site operators) have several members of staff permanently responsible for monitoring product offerings and for making recommendations on purchases and consequently, their knowledge and awareness of both suppliers and their range of products is high. However, many organisations (not merely small ones) do not have such an on-going activity, but on the occasions when a purchase is felt to be necessary, abstract a member or members of staff from their usual role and charge them with the responsibility of some sort of search process (supplier and product range) with a view to recommending a purchase.

(c) Hypotheses

It is hypothesised that, as a result of the foregoing characteristics, in the UK, at least, suppliers are being forced to adopt a much more user oriented approach than hitherto and knowledge of user needs, in terms of both products and service, has become paramount. In addition, 'domestic' manufacturers now have to "defend" their traditional home markets against foreign suppliers, necessitating a much more detailed knowledge of their competitors' market offerings and also the perception or image which users have of each possible supplier.

There may well exist, also, a need for suppliers to nurture relationships on a continuous basis to help in the efficient maintenance of the existing system, to help in the development and improvement of the system, to remain compatible with the growth and increasing complexity of the user's business and to prevent competitors from acquiring it. On the other hand, it may be hypothesised that, only in the less well educated organisation is such a relationship necessary. In the larger organisation where technological change is being constantly monitored, a continuous relationship with a supplier may not be an integral part of the purchasing strategy as the necessity to have more modern, technologically superior equipment than competitors may lead to much "shopping around" for the latest designs.

(d) Methodology

Data sources are, thus, two in number - the supplier and the customers or users. Data, both quantitative and qualitative, was obtained from a major UK supplier of telecommunications equipment. The qualitative data aimed at establishing those bases which the supplier management perceived as being of greatest importance in trying to segment the potential market for PABX's and the quantitative data was elicited to substantiate (or otherwise) these perceptions.
A sample of 20 existing customers from the supplier's own list covered, as far as possible, within resource constraints, a representative sample by size, type of installation and end-user industry and to these were paired 20 others, which, as far as was known, had little or no contact with the supplier interviewed by the researcher. Data were gathered on the users' perceptions of their current and future needs for PABX equipment, together with the nature of the purchasing process for this type of product and finally on their perceptions of which criteria were used in evaluating potential suppliers.

(e) Results

The three bases, as perceived by the supplier management, as being important in their segmentation of the market were:-

(i) type of end user industry  
(ii) type of installation  
(iii) gestation period

and may be illustrated three dimensionally thus:

<table>
<thead>
<tr>
<th>Type of end-user industry</th>
<th>Gestation period</th>
<th>Type of Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal and Professional</td>
<td></td>
<td></td>
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<tr>
<td>High Technology</td>
<td></td>
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<tr>
<td>Heavy Engineering</td>
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<td>Construction and Property</td>
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<td>Food and Drink</td>
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<td>Petrochemicals</td>
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<tr>
<td>Banks and Finance</td>
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<tr>
<td>Hotels and Services</td>
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<tr>
<td>The Public Sector (local authorities, hospitals, police etc.)</td>
<td></td>
<td></td>
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<tr>
<td>Others</td>
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</tbody>
</table>
Type of installation included:

- Multi-site high technology networks
- Multi-site lower technology networks
- Large single site operations
- Small/medium single site operations

Gestation periods (which meant the period of time from receipt of enquiry to payment - i.e. a measure of cash-flow) were considered as:

- Less than 3 months
- 3 to 12 months
- Over 12 months

An analysis, using the above three bases, of the percentage of orders taken over a period of about one year revealed an interesting distribution, both by volume (number of orders) and by value. This is illustrated in Tables 1 and 2.

<table>
<thead>
<tr>
<th>End-user Industry</th>
<th>High Technology Multi-site</th>
<th>Lower Technology Multi-site</th>
<th>Large Single Site</th>
<th>Small Single Site</th>
<th>% Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Short</td>
<td>Medium</td>
<td>Long</td>
<td>Short</td>
<td>Medium</td>
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<tr>
<td>1</td>
<td>2.9</td>
<td>1.8</td>
<td>0.3</td>
<td>4.5</td>
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<tr>
<td>2</td>
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<td>2.1</td>
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<tr>
<td>3</td>
<td>2.1</td>
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<td>0.3</td>
<td>0.3</td>
<td>2.4</td>
</tr>
<tr>
<td>4</td>
<td>0.3</td>
<td>0.3</td>
<td>1.5</td>
<td>0.3</td>
<td>2.4</td>
</tr>
<tr>
<td>5</td>
<td>1.2</td>
<td>0.5</td>
<td>0.3</td>
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<tr>
<td>6</td>
<td>2.1</td>
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<tr>
<td>10</td>
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<td>0.6</td>
<td>1.2</td>
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<tr>
<td>TOTAL</td>
<td>0.8</td>
<td>16.4</td>
<td>7.7</td>
<td>2.1</td>
<td>10.9</td>
</tr>
<tr>
<td>End-user Industry</td>
<td>High Technology Multi-site</td>
<td>Lower Technology Multi-site</td>
<td>Large Single Site</td>
<td>Small Single Site</td>
<td>% Total</td>
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<tr>
<td></td>
<td>Short</td>
<td>Medium</td>
<td>Long</td>
<td>Short</td>
<td>Medium</td>
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<td>1</td>
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<td>3.1</td>
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<tr>
<td>10</td>
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<td>0.06</td>
<td>1.1</td>
<td>0.6</td>
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<tr>
<td>% TOTAL</td>
<td>1.43</td>
<td>16.62</td>
<td>8.69</td>
<td>0.61</td>
<td>18.34</td>
</tr>
</tbody>
</table>

Costs of obtaining orders from particular segments or customers were not revealed, and therefore, the objective of profitability cannot be evaluated from these data. However, if sales volume is the objective for a supplier, a combination (or portfolio) of the following segments would seem to be desirable:—

High technology multi-site companies in end-user industry 8

Lower technology multi-site companies in end-user industries 1, 2 and 8.

Lower single site companies in end-user industries 2 and 8.

Small single site companies in end-user industries 1 and 8.

If, however, rapid cash flow is a desirable objective, the following segments might be pursued:—

Large and small single site companies in end-user industry 1.

High technology multi-site companies in end-user industry 8 and (to a lesser extent) other companies in end-user industries 6 & 8.

Finally, if for the future, the long-term generation of high-tech. innovative products is an important objective, success could, theoretically, be achieved by concentrating on customers in the following segments:—

End-user industries 1, 2, 3, 7 and 8.
The "balance" of segment, using the above three criteria and weighting them to reflect their respective priorities, would then be made and individual customers selected for approach in accordance with the stated objectives of the portfolio.

Data was then gathered from the users or customers. Results would seem to indicate that the three bases used for developing a possible portfolio strategy by the supplier are not all relevant to the needs of the customers in the marketplace. Type of PABX installation remains vitally important as this usually reflects the future communication needs of different types or sizes of customer. Gestation period is of little or no consequence to customers - the product is purchased infrequently and the development of long-term relationships is not seem as a vital element in this particular market, except perhaps for the element of service. The hypothesis that suppliers should consider a more market-oriented approach to their identification of market segments would, therefore, seem to be accepted. The principal question to be posed (and answered) is, on what criteria should such a segmented approach be based?

What emerged were major differences in the purchase initiation and procedure. In this rapidly growing technology, only the very large customers are able to keep abreast of developments and this is often achieved by the appointment of a permanent "Communications Manager" whose principal role is to monitor the changing technology and to recommend its introduction or implementation to senior management. Customers, other than these, are less aware of and, consequently less well educated in, the existence of new and improved products. Often, the role of initiating enquiries into the purchase of a new PABX is given on an 'ad hoc' basis to someone seconded purely for that purpose and who is unlikely to command much expertise. An alternative might be to appoint a consultant to advise on purchase.

The former may be said to have and to understand the 'need' for a purchase, and seek to evaluate either potential suppliers or products or both - this may be termed a "technology pull" situation. The latter are more likely to address themselves to suppliers or consultants who may either recommend a product which satisfies an identified need, or who perhaps may initiate research into the customer's activities which reveals "needs" far more diverse than the customer expected. This may be termed a "technology-push" situation.

The four processes may be illustrated as follows:-
This, which could be termed "The Direction of Decision Flow", would seem to represent a far more meaningful analysis of the marketplace in order for a supplier to construct a possible portfolio of segments or customers. It may be combined with "end-user industry" and "type of installation" on the three dimensional grid as follows:-

Assuming sales volume and profitability (short and longer term) to be the principal objectives of the supplier portfolio, the supplier would then seek to identify a hierarchy or priority of segments for attack and to commit resources to specific customers within each segment chosen. Other relatively less important objectives such as the maintenance of an adequate cash flow or the longer term development of innovative products may be satisfied by reference to "technology push" or "technology pull" situations respectively.

Such analysis relates to the UK market. Further research will reveal any differences which exist amongst customers in two other European markets - France and West Germany and whether the above dimensions are more or less important than that of geography, or national boundaries.
CONCLUSIONS:

The above analysis has attempted to show that, in developing a portfolio of customer types or opportunities, a supplier in this type of product market should have recourse to the activities and perceptions of potential customers. If objectives are to be met in both the short and longer term, dimensions for a strategic portfolio should be market or customer oriented and not based solely on the perceptions of the supplier's own management thinking even though it claims to be outward looking to the marketplace.
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