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SWP 22/90 TECHNIQUE INTERRELATIONSHIPS AND THE PURSUIT OF RELEVANCE IN MARKETING THEORY

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Abstract

This paper provides evidence to show that the standard tools and techniques of marketing are hardly ever used by practising managers, which brings into question the relevance of much of what is taught in business schools.

The basic thesis is that, apart from cultural and political blockages, the principal barriers to marketing theory implementation are caused firstly by methodological problems associated with the tools and techniques of marketing themselves, and secondly by the complex nature of the interrelationships between these techniques.

The conclusion reached is that the human mind is largely incapable of dealing adequately with such complexity and that the only way the academic world will be able to make a significant impact on the world of practice, particularly in more holistic domains such as strategic marketing planning, is to develop computerised support in the form of Expert Systems and the like.

TECHNIQUE INTERRELATIONSHIPS AND THE PURSUIT OF RELEVANCE IN MARKETING THEORY

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January, 1990

Does Marketing Theory have any value ?

Stephen King's[1] sensitive paper on applying research to decision-making focussed attention on Britain's lack of innovation as one of the key causes of Britain's industrial demise since the war. His main argument centred around the belief that marketing research in general had failed to address the real marketing issues, because so much of it is quantitative.

He covered most forms of research in his review, including retail audits, TV ratings, multiple choice motivational research, conjoint analysis, Fishbein, econometrics and gap analysis, concluding that they can actually be destructive to innovation if applied directly to decision-making.

"I believe part of our national failure to innovate has come through trying to use market research not as an aid to decision-making, but as a system that ideally reduces all personal judgement to a decision as to which of two numbers is the larger."

Many academics and practitioners have found King's paper to be an excellent and thought-provoking exposé of some of their deep-rooted concerns about the failure, not just of market research, but of marketing science in general, to storm the citadels of industry.

There can, perhaps, be some consolation in the fact that it is not only marketing people who continuously question the body of knowledge, its origins, application and usefulness to the real word of practice.

In 1981 Roger Evered[2] wrote of the emerging realisation that the positivistic science paradigm inherited from the physical sciences, has serious shortcomings for the managerial and organisational sciences, and he concluded:

"We must move beyond the objective, analytic, reductionist, number-oriented, optimising and fail-safe approach to future problems, and learn to think with equal fluency in more subjective synthesising, holistic, quantitative, option-increasing ways."

More recently, John Hughes[3], in his wide-ranging review of the teaching of management education, concluded:

"The mistake we have made in teaching during the past 40 years has been to follow the logic approach to the physical sciences in teaching theory first, followed by an assumed application in practice ... The bridge from theory to practice is too hard to cross without some prior experience of the 'other side' ..."

A common theme running through the substantial literature on the growing concern about the appropriateness of the positivistic science paradigm for understanding the process of management is that much of management deals with judgement, diagnosis, and interpretation of events, which requires a different kind of knowing from logic and rationality.

Most people would acknowledge that in virtually any walk of life, the true expert has built up his expertise largely from experience and an intuitive grasp of problem-solving in the real world, something which is often referred to as the "University of Life". Indeed, many of the world's leading business people acknowledge that they owe their success not to formal business education and text books, but to their own experience, flair and intuitive good judgement.

Donald Schon[4] describes scientific rigour as "describable, testable, replicable techniques derived from scientific research, based on knowledge that is testable, consensual, cumulative and convergent", but then goes on to argue that much of what passes for scientific management is irrelevant because business problems do not come well formed. Certainly, most marketing problems are messy and indeterminate and successful practitioners make judgements using criteria which are difficult to define. Many academics would decry this as a lack of rigour, and in so doing exclude as non-rigorous much of what successful practitioners actually do.

It is this theme which is of particular relevance to marketing.

The paper will not, however, make a plea for more attention to be paid to qualitative as opposed to quantitative research, as the author has already made the case for this[5].

Nor will it take up the argument against those who believe that learning by doing and feedback on performance are more valuable than knowledge in the head, and that theory is the wrong place to start when seeking to educate managers. For few would disagree with the view that theory and knowledge have a valuable part to play in helping managers to interpret, illuminate and illustrate their experience, and there can of course, be value in teaching marketing at school and undergraduate level and to those who lack any kind of commercial experience, providing, it is done sensibly.

This last adverb brings into focus the real intention of this paper, which is to argue that in the domain of marketing, the so-called crisis of relevancy of much of the body of knowledge has less to do with its origin in the positivistic model of science than with the failure of the academic world to understand better what needs to be done to make the bridge between theory and practice.

The Gap Between Theory and Practice

First, however, it is necessary to reiterate that marketing theory is not practised in industry. In no other discipline outside marketing is the gap between theory and practice so great. In March 1989, Tony McBurnie[6], Director General of the Chartered Institute of Marketing, wrote:

"Research in the early 1980s showed that some two thirds of British companies did not have clearly defined market strategies and did not use basic marketing disciplines."

This confirms the findings of researchers such as Greenley[7] and McDonald[8] about the gap between the theory of marketing planning, as written about in textbooks and as taught on management courses, and practice, with almost three quarters of organisations relying principally on extrapolative techniques and financial husbandry. In very few cases was it possible to find any evidence of the use of some of the more substantive techniques taught on most marketing courses, such as the Ansoff Matrix, product life cycle analysis, diffusion of innovation, the Boston Matrix, the Directional Policy Matrix, and other strategic and tactical marketing devices.

Nor is this just a European phenomenon. An interesting conclusion from the MSI Expert System Project, ADCAD[9] was that although American companies would actually like to make use of existing theoretical knowledge of marketing, few actually did.

The most recent study on this topic by Reid D.M. and Hinkley L.C.[10] concluded:

"Respondents were asked which techniques they were familiar with. The results were skewed towards ignorance of all the techniques to which they were exposed. The majority were not at all familiar with any by name. The level of awareness of the techniques was not significantly different between Hong Kong and the UK".

The specific techniques which were the focus of the study included: BCG; Directional Policy Matrix; Ansoff Matrix; PIMS; Experience Curve.

Similar findings have also emerged from Australia[11] *"The awareness and usage level of planning tools is low".*

There are numerous possible explanations for this lack of usage in industry of the everyday tools of marketing teachers. For example:

- companies have never heard of them;
- companies have heard of them, but do not understand them;
- companies have heard of them, have tried them and found that they are largely irrelevant.

Whilst all of these (and others) are distinct possibilities, it would be naive not to recognise also that marketing is essentially a political process, involving organisational, interpersonal, cultural, and social issues which in themselves appear to have no existence as observable entities, since they are contextual and are continuously changing and evolving.

Whilst recent research into marketing and corporate culture[12] goes part of the way in explaining some of the blockages to the implementation of marketing theory, there nonetheless remains the question of why so many companies that genuinely strive to adopt a marketing orientated approach to doing business still repeatedly fall back on fiscal rather than marketing measures to direct and control the business[13]. In such circumstances, one is left wondering why companies find it so difficult actually to implement what is taught about marketing in business schools.

Marketing Techniques/Structures/Frameworks

Most foundation courses in marketing cover at least the following basic frameworks:

- The Ansoff Matrix;
- Market Segmentation;
- Product Life Cycle Analysis;
- Portfolio Management (Boston Box and the Directional Policy Matrix)
- Marketing Research and Marketing Information Systems.

Additionally, a host of techniques revolve around the four basic elements of the marketing mix, Product, Price, Promotion; and Place. Even a cursory glance through Phillip Kotler's standard marketing management text reveals a vast and complex armoury of tools and techniques that can be used by marketing practitioners to gain a sustainable competitive advantage for their product or service.

During the past three decades, each one has been the focus of numerous academic and practitioner papers which have sought to explain their complexities and to persuade managers to adopt them as part of the process of marketing management. On the one hand, there have been several attempts to develop theories and models to explain, rationalise and justify complex phenomena in large industrial companies. On the other hand, there has been a continuous stream of iconoclasts who have sought to explain the same phenomena using a much more simplistic and commonsense approach.

Some landmarks in this on-going debate are:

1956	W White "The Organisation Man"	1954	Drucker's Management by Objectives
1957	Northcote's "Parkinson's Law	1960	General Electric introduce Portfolio Management
1969	Townsend's "Up the Organisation"	1962	Blake & Mouton's "The Management Grid"
1970	MBWA evolves at Hewlett Packard	1968	BCG Portfolio Management
1980	"The One Minute Manager"	1970	General Electric McKinsey's SBUs
1982	"In Search of Excellence" followed by "Passion for Excellence"	1980	Porter's Competitive Strategies

It is observable that for a period, each school has its devotees, many of whom denounce or drop all the earlier received wisdom as they attempt to force their problems into the latest answer. When the latest fad fails to live up to expectations, it too begins to fade into obscurity, except at management education establishments, where it becomes part of the standard fabric of teaching.

There are, however, a number of problems with this somewhat simplistic explanation of the product life cycle effect on each of the tools and techniques. These problems revolve firstly around methodological problems associated with the actual tools and techniques themselves, and secondly with the complexity of trying to link a number of them together.

Problems of Understanding

If we take a look at some of the more important structures and frameworks used in marketing management, we will observe a number of issues of varying degrees of difficulty in understanding, hence in application.

The product life cycle is a case in point. There is clearly a difference between a product life cycle and a brand life cycle[14]. It is also pointless for a firm to draw a product life cycle of one of its own products without also drawing a life cycle at least of the product class to which it belongs. But the question of how to define the product class (market) to which it belongs is fraught with difficulties. Furthermore, the linkage between the product life cycle and the diffusion of innovation curve needs to be properly understood. For example, high priced calculators first diffused through the scientific market, then the professional market, then the business market, then the general market, and finally the school children market. Each bell-shaped diffusion was followed by another, each time adding to the absolute sales curve

depicted by the product life cycle, with different cost and strategy implications along the way.

Failure to understand basic points such as these and others has destined p.l.c. analysis to be a topic of interest solely to interested academics. In the world of business it lies largely dormant.

Another well known, under-utilised and misunderstood tool taught by marketing academics is the directional policy matrix[15]. For example, the criteria for the vertical axis (market attractiveness) can only be determined once the population of "markets" has been specified. Once determined, those criteria cannot be changed during the exercise. Another common mistake is to misunderstand that unless the exercise is carried out twice - once for t.o and once for t+3, - the circles cannot move vertically. Also, the criteria have to change for every "market" assessed on the horizontal axis each time a company's strength in market is assessed. Some way has also to be found of quantifying the horizontal axis to prevent every market appearing in the left hand box of the matrix. If we add to this just some of the further complexities involved, such as the need to take the square root of the volume or value to determine circle diameter, the need to understand that the term "attractiveness" has more to do with future potential than with any externally derived criteria, and so on, we begin to understand why practising managers rarely use the device. Indeed, one cannot help wondering whether all academics have sufficient understanding of the technique to be able to teach it competently.

Even Michael Porter's apparently more easily-assimilated matrix describing the relationship between relative costs and degree of marketing differentiation has become the latest victim of misunderstanding and abuse through ignorance[16].

Reid and Hinkley[10] drew the following conclusion from their own study.

"It reflects a failure of business schools to disseminate knowledge of strategic methodologies. Considering that tertiary per capita education provision in Hong Kong, particularly business school places, is much lower than in the UK, this indicates how they are failing in the UK to make a more significant impression".

The main problem, however, is not just that virtually every tool and technique of marketing is open to serious misunderstanding and abuse, but that no one method by itself can deliver the kind of benefits demanded by practising managers. Most academics would readily acknowledge the singular contribution to diagnosis that can be made by each device, irrespective of whether it is from the iconoclastic school or the more rigorous academic school. For example, whilst it is easy (and tempting) to dismiss most of what Tom Peters says (largely because of its lack of rigour), few would deny his contribution to marketing by dint of the attention he focussed on the need to service the needs of our customers effectively. Likewise, anyone who tries to run their company just on the basis of what Michael Porter says, soon discovers the inherent inadequacies of the nostra, just as those did who worshipped at the alter of Bruce Henderson and the Boston Consulting Group in the late 1960s and early 1970s. Yet few would deny the abiding relevance to business in the 1990s of what all these great writers, researchers and teachers had to offer.

To summarise, not only are most of the tools and techniques themselves inherently complex (and therefore misunderstood and misused), but no one tool on its own is adequate in dealing with the complexity of marketing.

Problems of Technique Interrelationships

There is, then clearly a need to be able to use a number of these tools and techniques in problem-solving, especially when a process as complex as strategic marketing planning is concerned. This raises an additional dimension of complexity for both academics and practising managers, for it then becomes necessary to understand not only the techniques themselves, but the nature of the interrelationships between them, how inputs for one model can also be used for another and how outputs from some models can also be used as inputs to others.

The problem is that the human mind just isn't capable of dealing adequately with such complexity. This view has gradually emerged as a result of working on a computer-based Expert System for Strategic Marketing Planning[17] and is confirmed by a number of researchers, including most recently Lock and Hughes[18].

A new approach, therefore, is necessary.

A Different Approach is Required

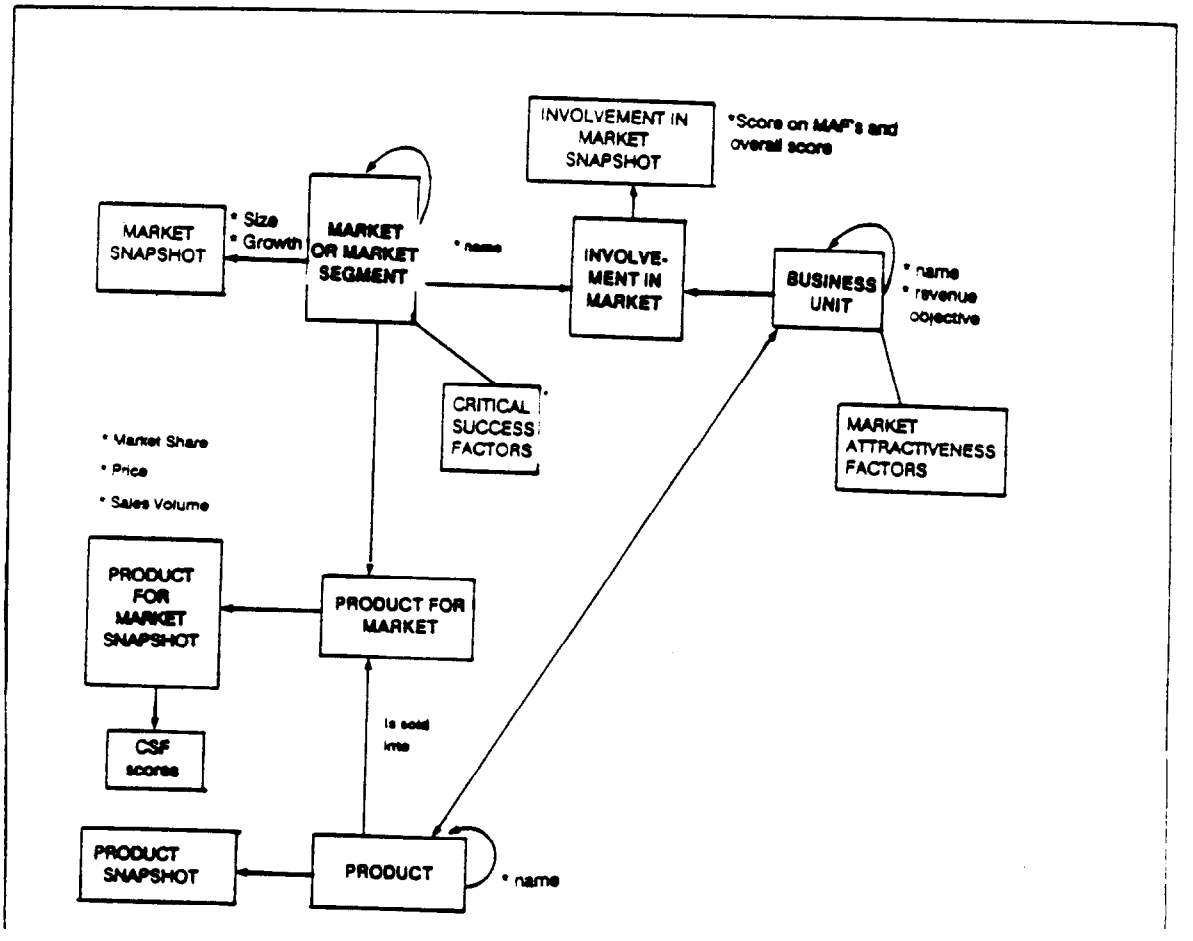
What seems to be the common denominator of the afore-mentioned tools and techniques is that their users and those who teach them tend to concentrate on the "medicine" itself, showing little concern for the "patient". This makes about as much sense as a doctor dispensing the same drug to every patient seen, irrespective of their condition. Certainly, the treatment might help a proportion of the clients, but for a large number of them it will be at best irrelevant, and at worst, even dangerous.

What must be recognised is that there has to be a symbiotic relationship between the doctor, the patient and the cure - it is the three working together which bring success, with the doctor taking a more holistic approach to the situation.

In the process of constructing the Expert System for strategic marketing planning, it became clear that what was needed was some system to link the numerous artefacts of marketing in such a way that outputs from one technique could be used as inputs to other techniques. This was indeed the missing link, as in books and in paper-based marketing planning manuals, the process of marketing planning had of necessity to be iterative, with the onus resting on the user to understand the interrelationships between the techniques used.

The route to this discovery was the Data Model represented in Figure 1.

Figure 1



Here, the basic model consists of a Strategic Business Unit (SBU) (which can be anything from a corporate headquarters to an individual product), which is involved in a number of markets, and for which it produces a number of products (or services). The system starts with the definition of a mission (or purpose) statement for the SBU and indicates very clearly the acceptable structure and content of such a document.

The next stage in the process was the definition of the contents of a strategic marketing plan and the listing of some of the principal tools and techniques which may be relevant to each of its component parts. It will be seen from Figure 2 that some of these techniques may be used for several parts of the plan. However, this does not delineate sufficiently clearly the nature of the technique interrelationships, so it was necessary to define in more detail the actual process involved in the preparation of a strategic marketing plan.

Figure 3 indicates the key steps in the preparation of a strategic marketing plan and some of the subsidiary tasks that have to be completed at each stage.

Each one of the boxes on the "tree" have associated with them a number of marketing tools and techniques, so the next task was to allocate these to each of the main stages in the process.

Figure 2

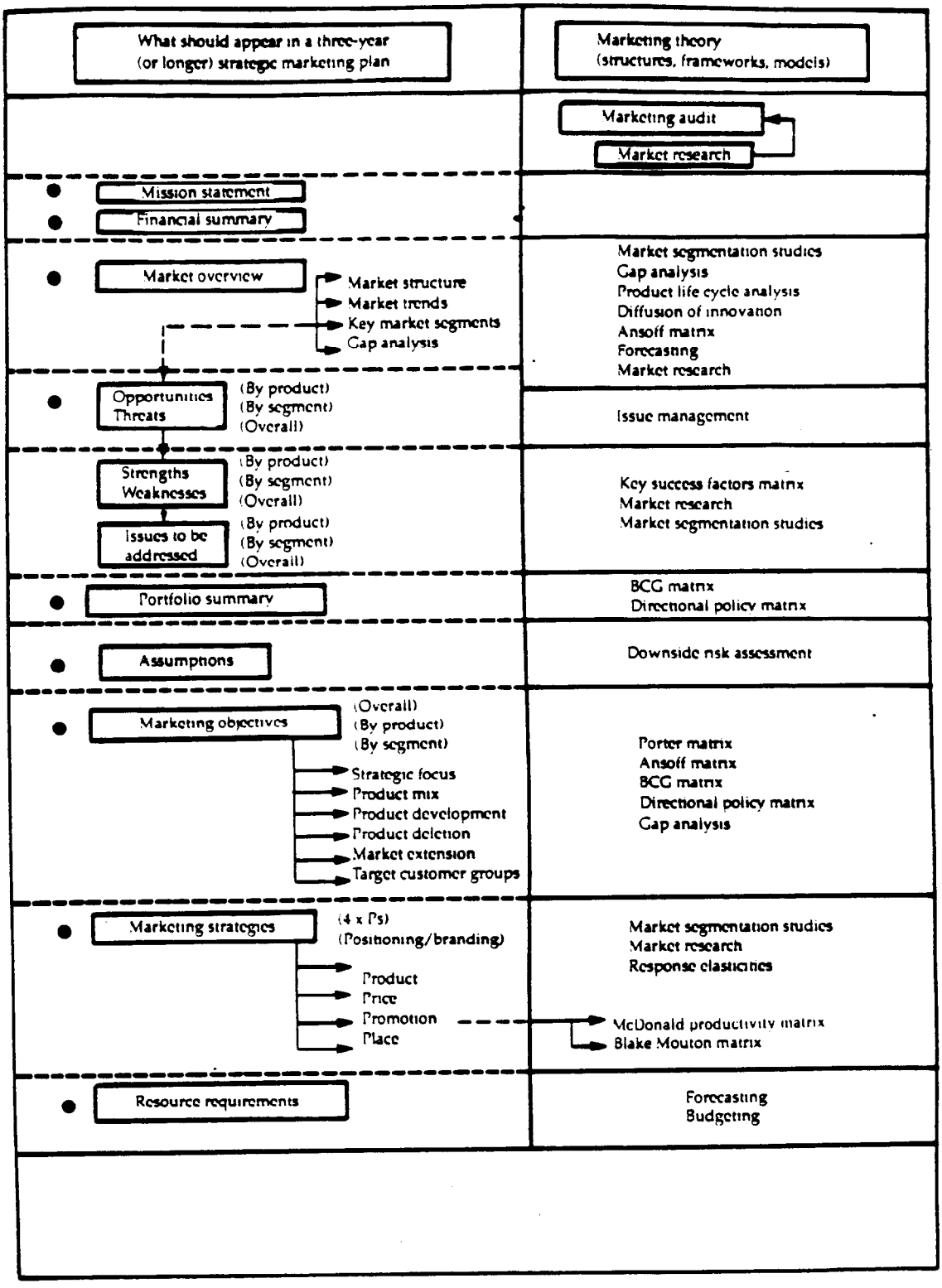
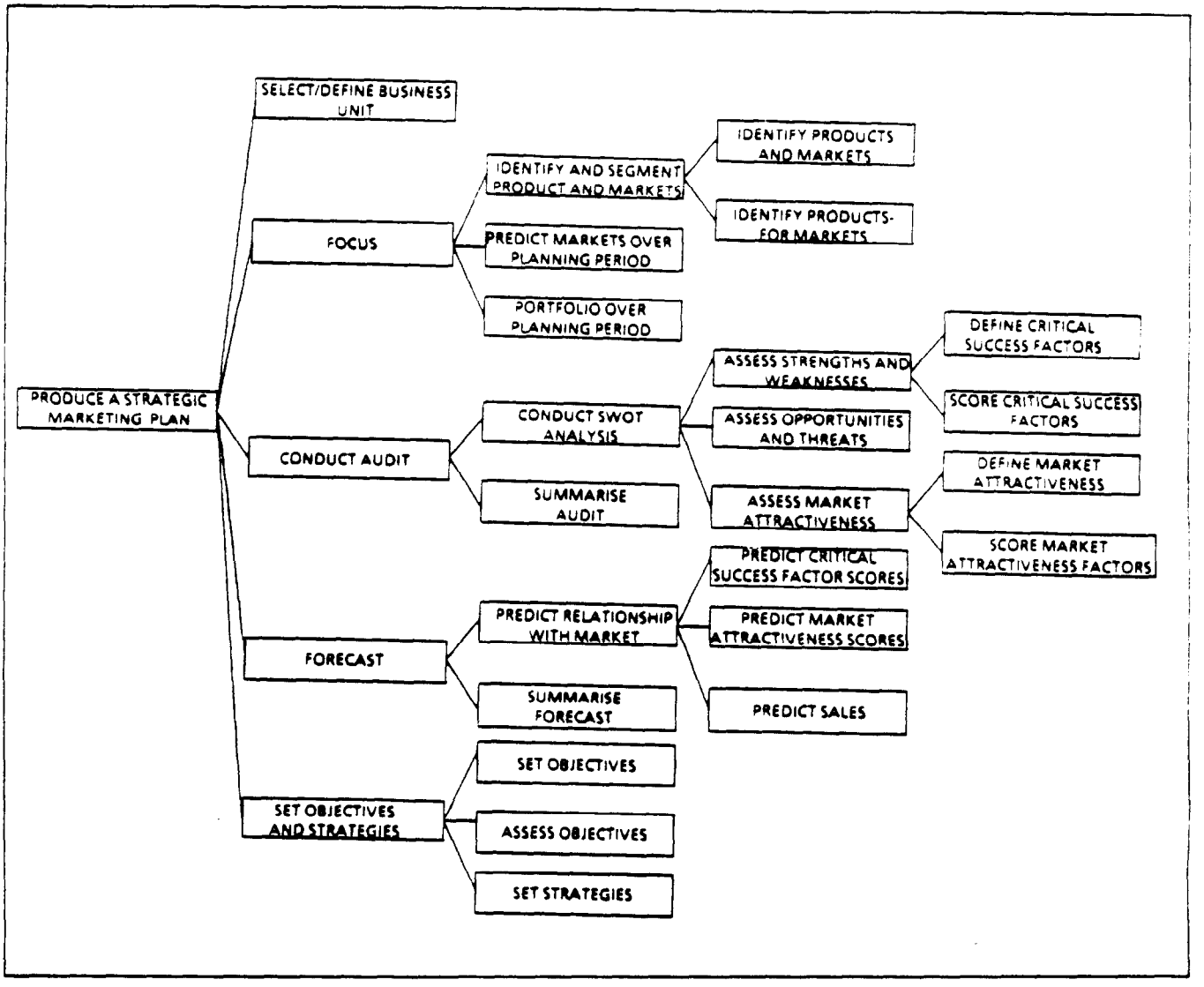

What should appear in a three-year (or longer) strategic marketing plan
Marketing theory (structures, frameworks, models)
Marketing audit
Market research
Mission statement
Financial summary
Market overview
Market structure
Market trends
Key market segments
Gap analysis
Market segmentation studies
Gap analysis
Product life cycle analysis
Diffusion of innovation
Ansoff matrix
Forecasting
Market research
Opportunities Threats
(By product)
(By segment)
(Overall)
Issue management
Strengths Weaknesses
(By product)
(By segment)
(Overall)
Issues to be addressed
(By product)
(By segment)
(Overall)
Key success factors matrix
Market research
Market segmentation studies
Portfolio summary
BCG matrix
Directional policy matrix
Assumptions
Downside risk assessment
Marketing objectives
(Overall)
(By product)
(By segment)
Strategic focus
Product mix
Product development
Product deletion
Market extension
Target customer groups
Porter matrix
Ansoff matrix
BCG matrix
Directional policy matrix
Gap analysis
Marketing strategies
(4 x Ps)
(Positioning/branding)
Product
Price
Promotion
Place
Market segmentation studies
Market research
Response elasticities
McDonald productivity matrix
Blake Mouton matrix
Resource requirements
Forecasting
Budgeting

Figure 3


PRODUCE A STRATEGIC MARKETING PLAN
SELECT/DEFINE BUSINESS UNIT
FOCUS
IDENTIFY AND SEGMENT PRODUCT AND MARKETS
IDENTIFY PRODUCTS AND MARKETS
IDENTIFY PRODUCTS-FOR MARKETS
PREDICT MARKETS OVER PLANNING PERIOD
PORTFOLIO OVER PLANNING PERIOD
CONDUCT AUDIT
CONDUCT SWOT ANALYSIS
ASSESS STRENGTHS AND WEAKNESSES
DEFINE CRITICAL SUCCESS FACTORS
SCORE CRITICAL SUCCESS FACTORS
ASSESS OPPORTUNITIES AND THREATS
SUMMARISE AUDIT
ASSESS MARKET ATTRACTIVENESS
DEFINE MARKET ATTRACTIVENESS
SCORE MARKET ATTRACTIVENESS FACTORS
FORECAST
PREDICT RELATIONSHIP WITH MARKET
PREDICT CRITICAL SUCCESS FACTOR SCORES
PREDICT MARKET ATTRACTIVENESS SCORES
PREDICT SALES
SUMMARISE FORECAST
SET OBJECTIVES AND STRATEGIES
SET OBJECTIVES
ASSESS OBJECTIVES
SET STRATEGIES

Figures 4, 5, 6 and 7 indicate the relationships between the several techniques of marketing at selected stages in the process of marketing planning.

Figure 4

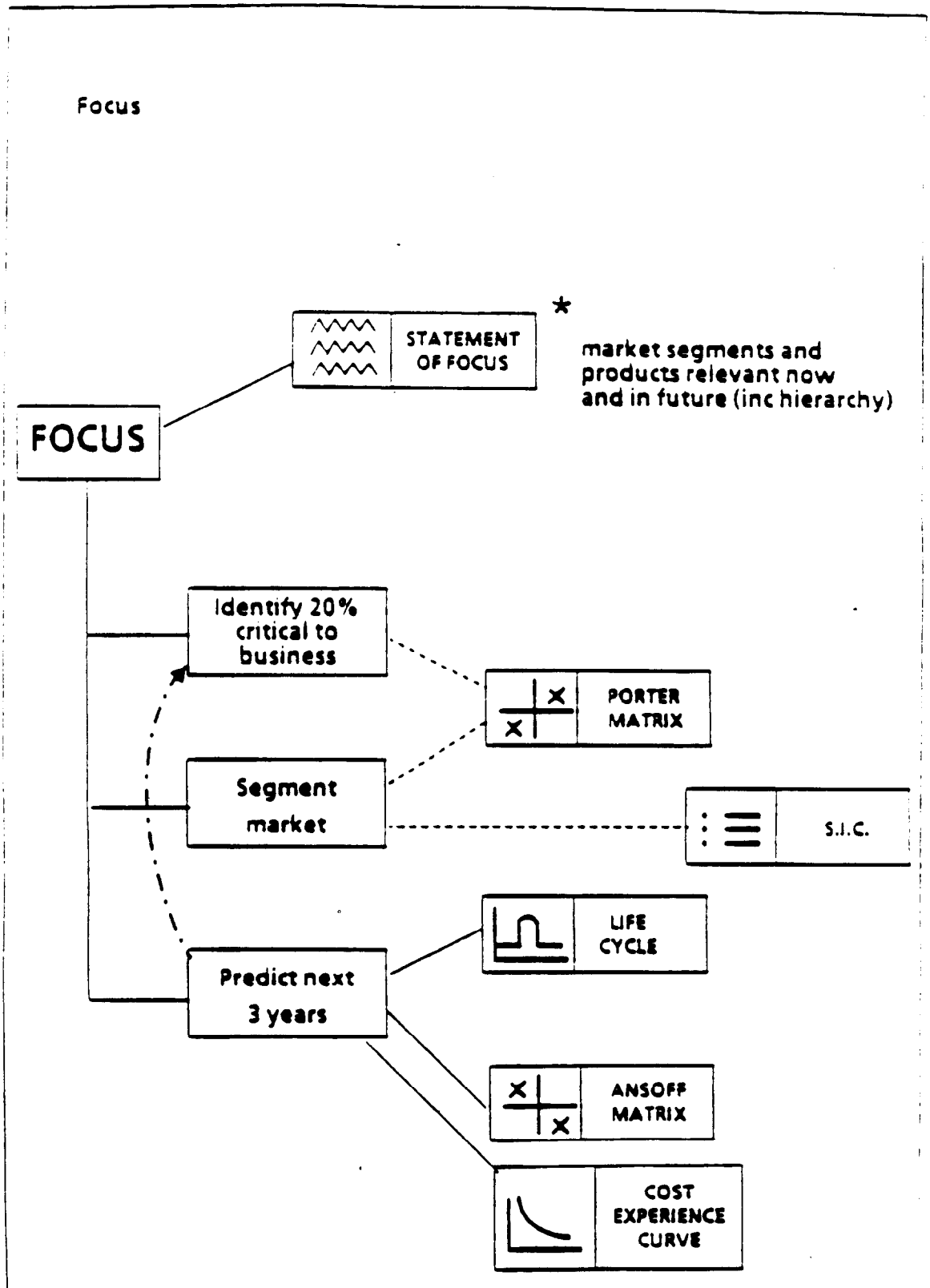


Figure 5

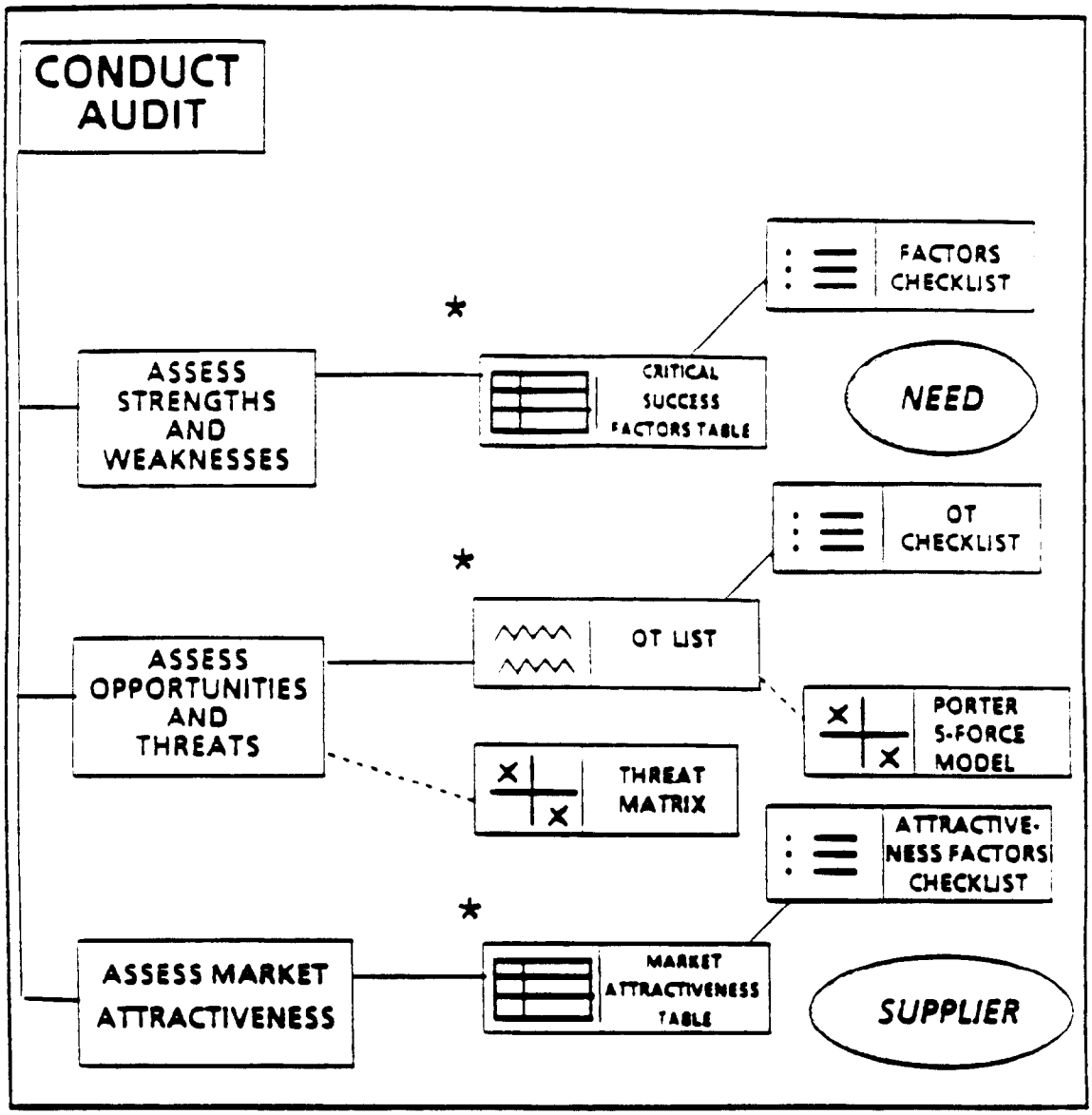


Figure 6

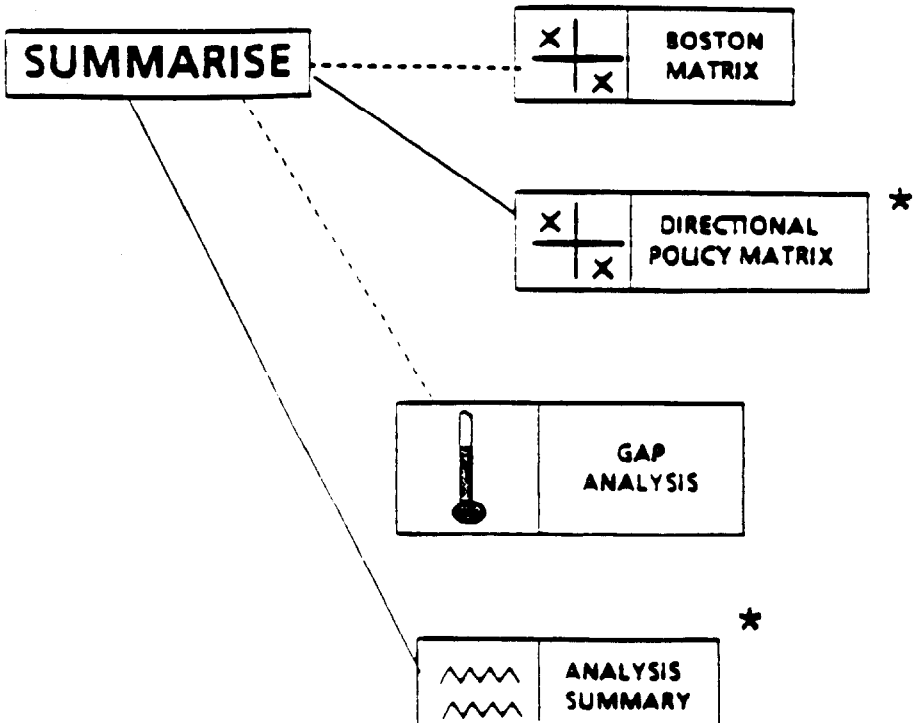
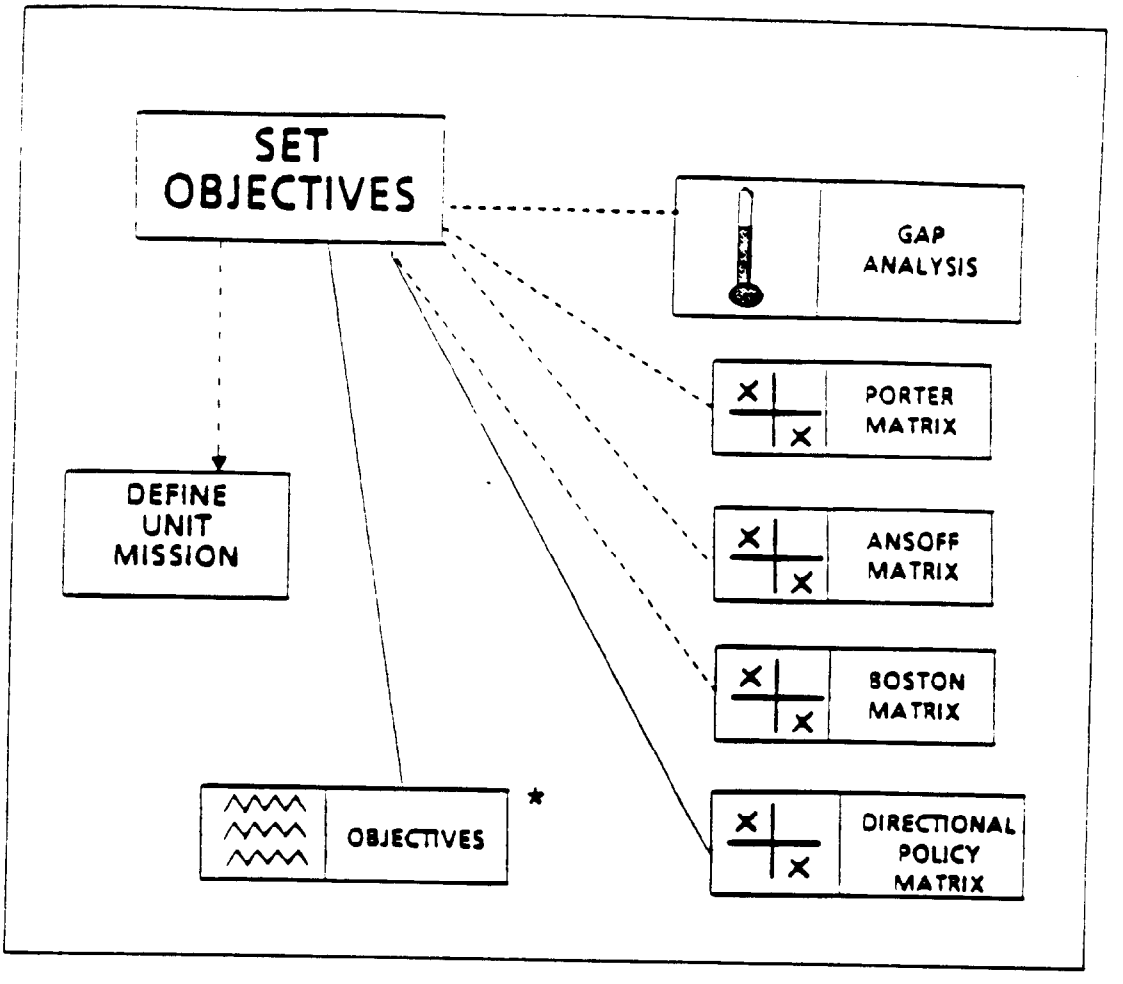


Figure 7



At the focus stage (Figure 4), for example, the output is a statement of those elements of the SBU selected for analysis. In arriving at this focus, Pareto's law is clearly relevant, as are market segmentation studies (the S.I.C. is provided in the computer system as a possible starting point for market segmentation). Porter's cost/differentiation matrix may also be useful at this stage if there is a need to have a balance between high volume, low cost markets and more differentiated, niche type markets. The product life cycle could clearly be useful in helping decide which markets appear more attractive, as could a knowledge of the cost impact of experience. The Ansoff Matrix is also included here because product/market data associated with each of the four boxes could be useful in indicating the balance between existing and new activities.

The purpose of the Audit Stage (Figure 5) is to complete an in-depth diagnosis or analysis of the selected products and/or markets from the Focus stage. Provided here are several checklists to help the program user. The Porter five force model may, for example, provide useful guidelines at this stage. Detailed instructions on how to construct tables for critical success factors, and market attractiveness factors are given, as well as methodological instructions on how to deal quantitatively with external opportunities and threats. (For details of this, see McDonald[19]).

The Audit Stage has to be summarised (Figure 6) and here the Boston Matrix and the Directional Policy Matrix can be useful pictorial representations of the current product/market status. Each one of these techniques emphasises different aspects of the same situation. Likewise, Gap Analysis provides a visualisation in summary form of the revenue and cost implications of current strategies.

It will be seen that the same tools can also be used in the process of Setting Objectives, except that this time they are extended to indicate the desired position at some designated point of time in the future.

Figures 8, 9 and 10 indicate relationships between the techniques themselves.

Figure 8

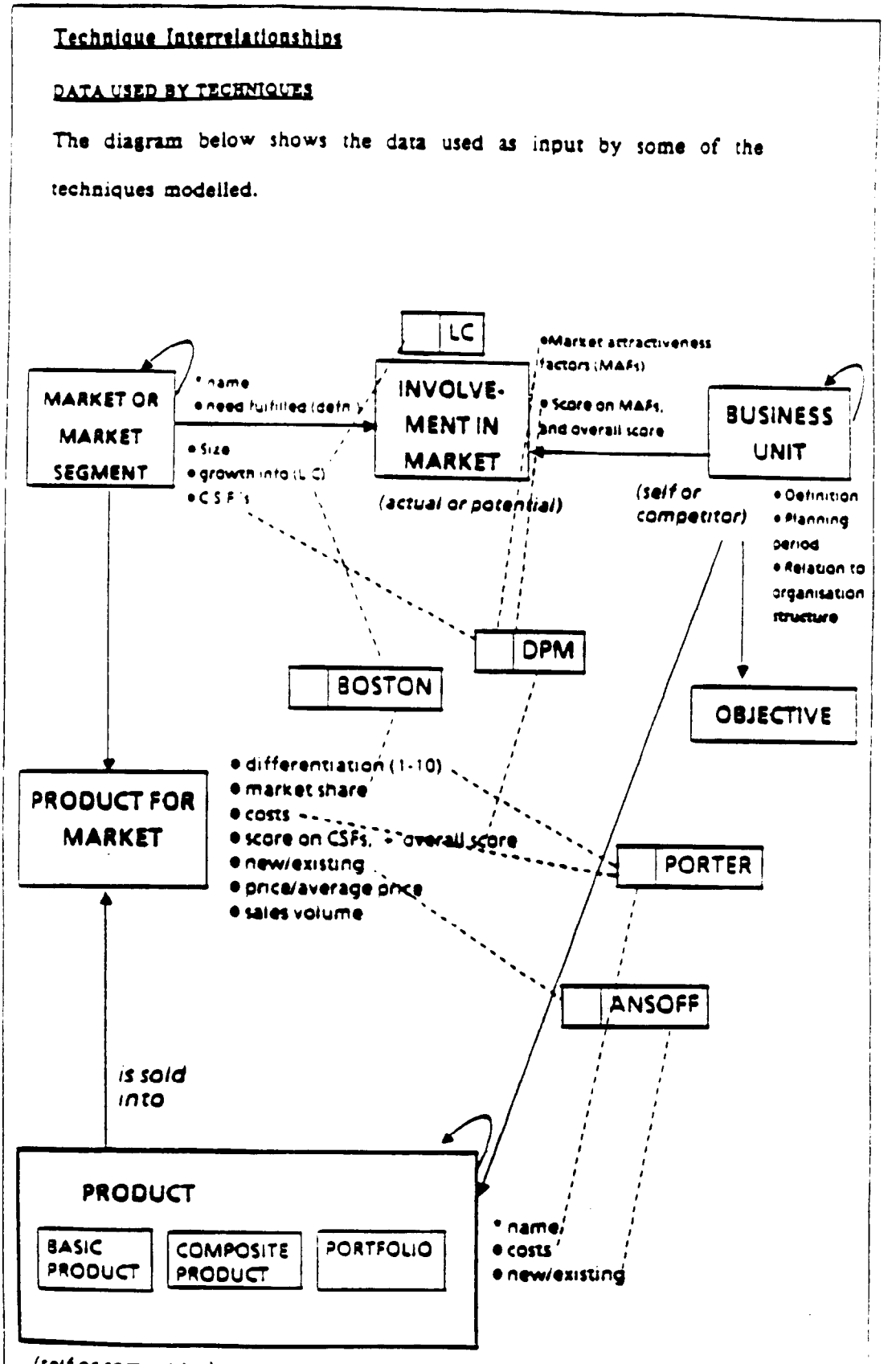


Figure 9

Technique interrelationships

The diagrams below show various connections identified between techniques. They assume that by using a technique, any data required by it is entered into the model by some means, so that data is available for another technique.

TECHNIQUE INTERRELATIONSHIPS (1)

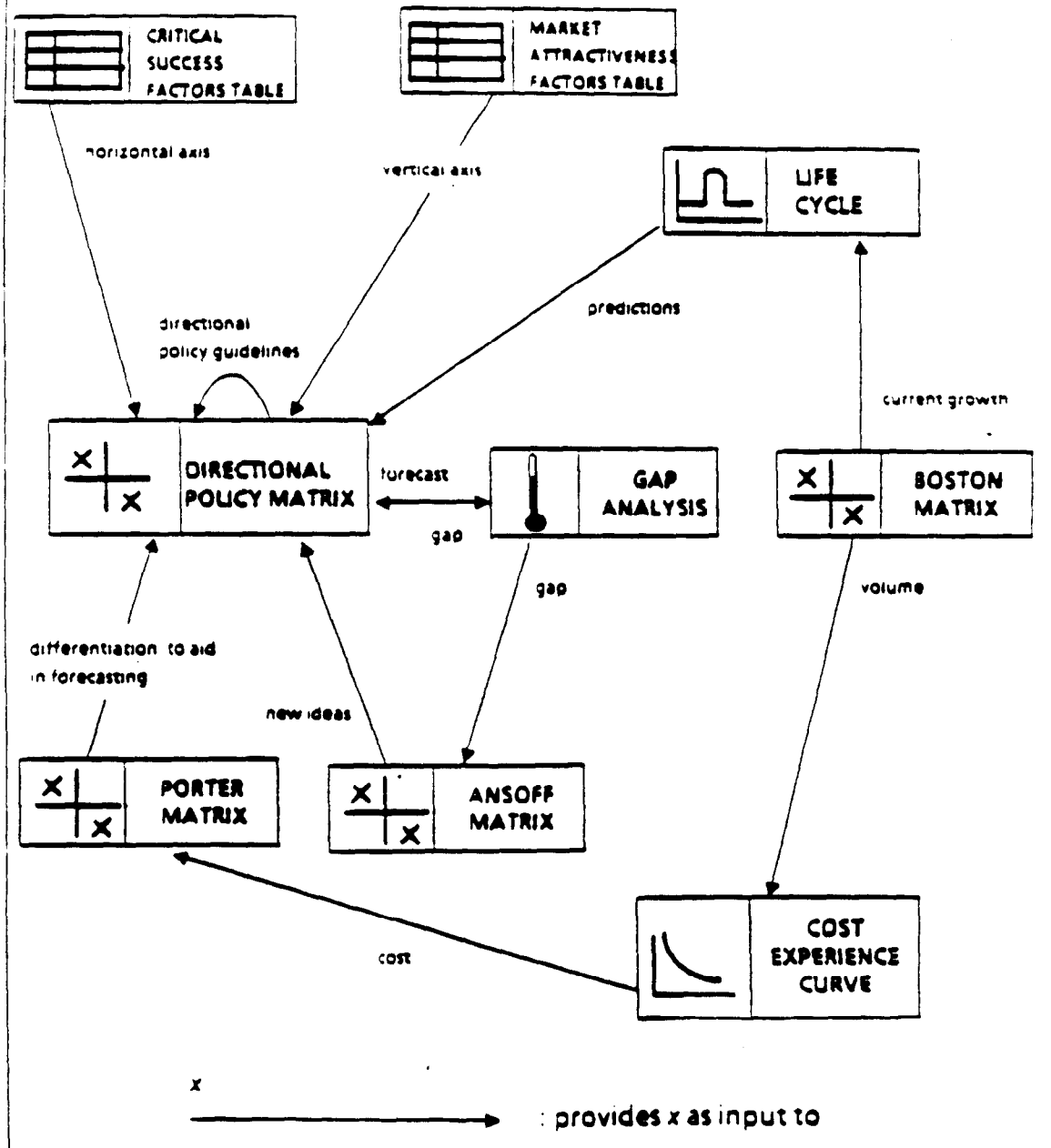


Figure 10

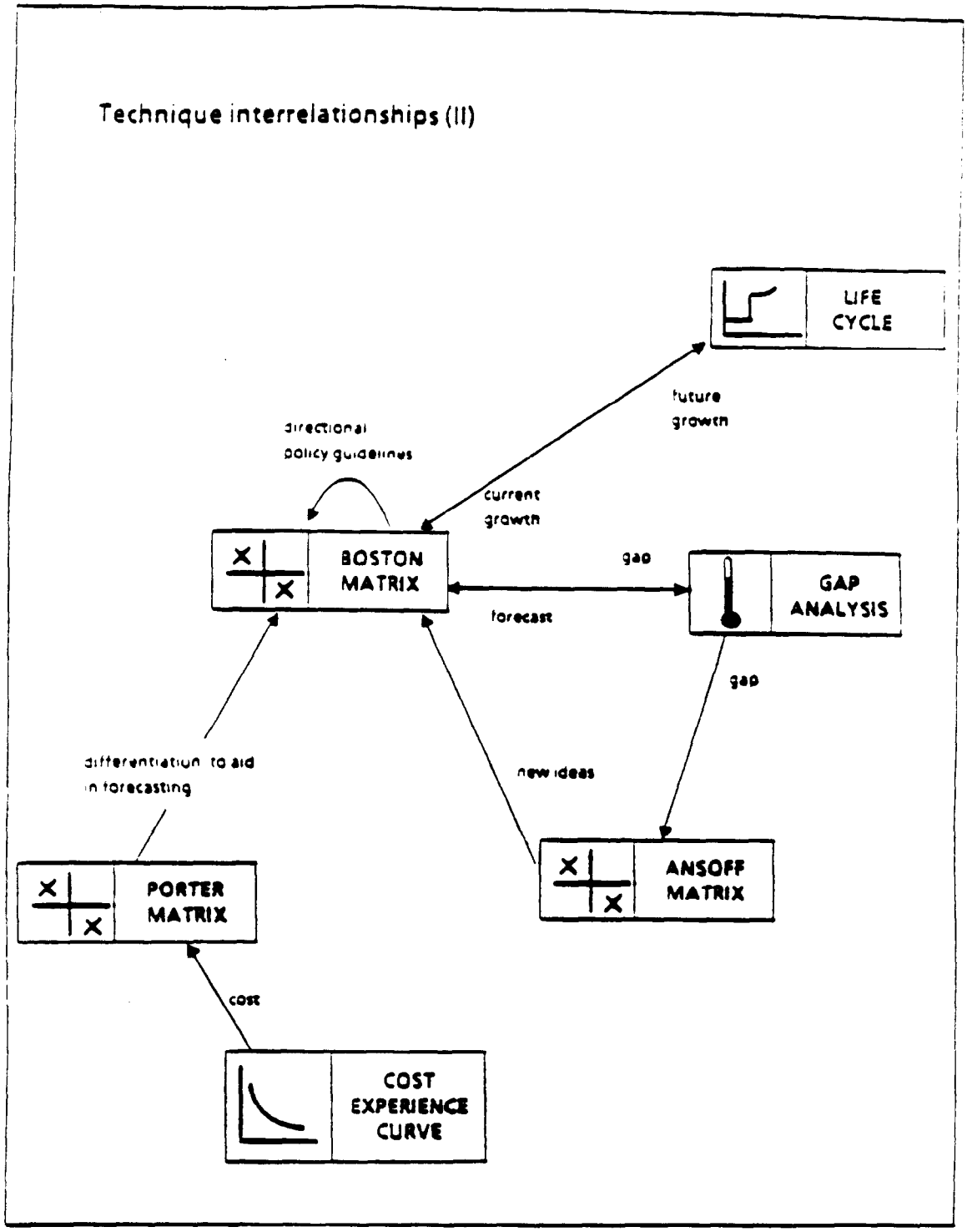


Figure 8 shows the relationship between some of the principal techniques and their relevance to the basic Data Model given in Figure 1.

Figures 9 and 10 are attempts to indicate some of the connections between the actual techniques themselves. Whilst it is not necessary to take the reader through every one of these inter-connections, it would be useful to highlight at least some of the main ones.

The Directional Policy Matrix can be seen to be a central tool in strategic marketing planning (Figure 9). Life Cycle Analysis will indicate the prospects in revenue/volume terms for the individual products/markets that are plotted on the vertical axis. The cost/experience curve of individual products/markets will provide valuable input to both the Boston Matrix and to the Porter cost/differentiation matrix, which will in turn help in determining the market attractiveness factors and critical success factors which are the basis of the Directional Policy Matrix. Gap Analysis works extremely well in conjunction with the Ansoff Matrix, the output of which will be invaluable in judging the balance of the portfolio in the Directional Policy Matrix.

The reader is advised to study these figures very carefully. This advice is given because the Expert System manages these interrelationships on the computer and users (typically marketing managers) do not have to concern themselves with them.

On the other hand, if you are either a practising marketing manager or a marketing lecturer, you would be advised to devote some time to thinking firstly about the technical dimensions of the principal tools and techniques of marketing themselves, secondly about their specific applications, and thirdly about the interrelationships between these techniques in the process of solving some of the more abiding problems of strategic marketing planning.

Conclusions

The only reasonable conclusions to reach from the foregoing are:

i) practising managers must avail themselves of better education in the understanding of the application of marketing techniques to real world problems;

ii) the human mind is largely incapable of understanding and managing the complexities of the relationships between the many techniques of marketing;

iii) in view of ii) above, expert systems will need to be developed so that these complexities are managed by the computer in a way which is helpful to practising managers in solving their complex problems.

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