

# SWOT Analysis: It's Time for a Product Recall

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**T**HERE ARE VARIOUS FRAMEWORKS and approaches used in the analysis of a company's strategic position. One of the most straightforward is the SWOT analysis, SWOT being an acronym for "strengths, weaknesses, opportunities and threats". The occasions to investigate empirically the use of such a tool are comparatively rare. This article presents the findings of one such opportunity, being based on the use of SWOT analyses in 20 UK manufacturing companies in 1993–1994. The chance to undertake the research came out of a UK government initiative called the Manufacturing Planning and Implementation (MPI) Scheme, which is explained in the following section. The remainder of the article is in four parts:

- ❑ The MPI scheme.
- ❑ SWOT analysis.
- ❑ MPI SWOT findings
  - The case database;
  - The SWOT process;
  - Content of SWOTs;
  - Subsequent use of SWOT outputs.

## The MPI Scheme

Over the last decade the Department of Trade and Industry (DTI) has launched a series of initiatives designed to stimulate technological innovation in UK industry. One of the most recent of these initiatives is the MPI scheme. The specific aim of this scheme was to relate advanced manufacturing technology to market needs. A total of 140 small- and medium-sized enterprises have taken part in this scheme, which came to an end in December 1994.

The aim of the scheme was to support the development of the client company's manufacturing strat-

**The attempt to improve the corporate strategy development process has fostered a range of approaches which have enjoyed different levels of support and popularity over time. One of the most popular is the SWOT analysis. This article reports on an in-depth review of its use by consultants who included this as part of their approach to understanding a business from a corporate perspective and as part of the Department of Trade and Industry's Manufacturing Planning and Implementation Scheme. Of the 50 companies reviewed within the scheme, over 20 companies used a SWOT involving 14 consulting companies. All the applications showed similar characteristics—long lists (over 40 factors on average), general (often meaningless) descriptions, a failure to prioritize and no attempt to verify any points. But the most worrying general characteristic was that no-one subsequently used the outputs within the later stages of the strategy process. The continued use of the SWOT analysis, therefore, needs to be questioned. © 1997 Published by Elsevier Science Ltd. All rights reserved**

egy. The stated intent was made clear in the initial DTI announcement, which required projects to:

"enhance advanced manufacturing technology (AMT) activities within consultancy, industrial, research and training communities in the UK by encouraging small and medium-sized enterprises to adapt best practice in their application of AMT's by strategically planning and implementing AMT's for competitive advantage".

This statement shows the influence of the body of research into manufacturing strategy, which has



increasingly emphasized the need to prioritize investments in manufacturing according to the needs of a company's markets.<sup>1</sup>

A major part of each project was to complete a strategic review, the importance of which was explicitly emphasized in the guidelines issued to advisers:

"the key to any project is the analysis phase which challenges a company's assumptions regarding its business, markets, competitors and why products are chosen by customers."

However, the scheme guidelines did not indicate the analytical methods to be used. The choice of method was assumed to be the task of the consultants who were hired under the scheme, and whose selection was the responsibility of the firm which then sought grant support. Most major consultants which offer services to manufacturing companies in the UK took part. Although some consultancy companies were classed as small, over 40% were categorized as being large international firms. Furthermore, in all instances the consultancy companies were required to register with the scheme contractors and, as part of the registration procedure, were required to demonstrate that they could deliver the necessary range of capabilities to complete the tasks identified in the scheme guidelines. High on this provision was the need to show that they had the personnel to undertake the initial corporate strategy developments called for in each project.

## Research Method

A unique feature of the MPI scheme was the inclusion of an analytical co-ordination (AC) role, undertaken by a group of operations management academics (including the present authors), whose task was to analyse the methods used by consultants working with client companies to meet the aims of the scheme. The AC team conducted in-depth reviews of 50 of these projects, for which they were permitted full access to all personnel involved and all relevant data and documentation. The reviews all involved:

- ❑ Several site visits for each project over a number of months.
- ❑ Close comparative analysis of documents and reports relating to a project.
- ❑ Structured interviews with company executives and consulting advisers.
- ❑ Additional analyses on primary data, including consultants' time sheets.

As a consequence, this task offered a unique research opportunity, both because of the number of projects within a single research theme and also the quality of access to all relevant data.

## SWOT Analysis

It could be claimed that strategic planning in general, and the SWOT analysis in particular, have their mutual origins in the work of business policy academics at Harvard Business School and other American business schools from the 1960s onwards. The work of Kenneth Andrews<sup>2,3</sup> has been especially influential in popularizing the idea that good strategy means ensuring a fit between the external situation a firm faces (threats and opportunities) and its own internal qualities or characteristics (strengths and weaknesses). Manufacturing strategy can be seen as reflecting this idea of fit in functional terms.<sup>4,5</sup>

There have, of course, been other subsequent approaches to strategy formation which urge different thinking, most importantly the work of Porter.<sup>6,7</sup> Yet this SWOT-type analysis of internal and external assessment and seeking a fit between the two perspectives has remained popular. Modern textbooks on strategy still feel obliged to include SWOT, even if they have reservations about its application.<sup>8</sup> And it seems likely to survive even so eloquent a critic as Henry Mintzberg<sup>9</sup> who sees SWOT as underlying all attempts to formalize the strategy making process. He dubs the ideas of Andrews *et al.* as "the design school" because of its "belief that strategy formation is a process of conception" and involves "the use of a few basic ideas to design strategy". Of course Mintzberg is concerned to advance a thesis that strategic planning of this type has failed, and has been supplanted by a better understanding of how humans think and create, what managers really do and how organizations learn. And he quotes much evidence in support of this view. All the more surprising then that SWOT, as we shall see, is alive if not exactly well.

It is worth noting here that proponents of SWOT—and there are still many—do not see it as mere list-making. A strategy textbook revered enough to be in a 5th edition shows how SWOT lists should be enhanced by weighting and commenting upon the different factors in the list,<sup>10</sup> and there are other proponents who prescribe SWOT as a rigorous analytical tool.<sup>11</sup> But these advocates all maintain a clear distinction between external factors (threats and opportunities) and internal viewpoints (strengths and weaknesses), and on the need for the testing of assumptions.

## MPI SWOT Findings

This section presents the findings of the MPI scheme and is in four parts: the case database; the SWOT process; content of SWOTs; subsequent use of SWOT outputs.

### *The Case Database*

Of the 50 companies analysed by the AC team, 20 used SWOT in whole or in part. No other mode of

analysis was as popular with the consultants, who are very well represented in the 20 cases—14 different consulting companies were involved. The 20 companies also represent various sectors: food, textiles, clothing, pottery and a range of types of engineering. Clearly SWOT is a technique widely used by different consulting companies and is felt by them to be of general applicability.

### *The SWOT Process*

In order to leave the research environment as undisturbed as possible, members of the AC team undertook their first site visit when the analysis phase was complete or almost complete. As a result, we were not present at any occasion when a SWOT analysis was actually carried out, but we were able to question both clients and consultants on the process they went through to complete this task. The evidence is not complete—some memories were vague or contradictory. However, we saw that there were broadly three approaches:

1. An individual client company's senior manager undertakes the analysis alone, or a consultant does it himself after discussion with senior managers.
2. Several senior managers of a company would undertake individual SWOTs, which are then collated. This collation may or may not then be followed by a meeting in which a communal SWOT is agreed.
3. The SWOT is the output from a meeting or meetings of managers, who all contribute to the final analysis. The meeting may be facilitated by the consultant or a client company employee.

We were quoted examples of each of these variations. The points to make are: that in each case the consultant suggested SWOT analysis (except in one case, where the client carried out one on its own initiative); that the process of producing the SWOT was also recommended by the consultant; that in at least one way the process influenced the content—where several managers undertook individual SWOTs many more items were listed.

An example of this will illustrate some of the process issues. One company in our sample held a SWOT analysis workshop on a single day. The workshop attendees were divided into four groups, one group consisting of senior personnel and directors, the other three groups containing a mix of participants. Each group was required to produce a review of the company's perceived 'order winners and qualifiers',<sup>1</sup> and a SWOT analysis. This led to a list of 52 order-winners and qualifiers and 122 SWOT factors. We need to note several points about this process and its outputs which illustrate our concerns about the SWOT approach as currently used, and which are replicated in several other of our company examples:

- ❑ The terms used to describe factors were general and often vague, e.g. 'value for money', 'performance' and so on.
- ❑ No analysis or verification of any point was undertaken.
- ❑ All points were universal, i.e. assumed to apply equally to all products, functions and markets.
- ❑ After the lists were produced, the consultants made their own list, which differed significantly from those of company personnel. But there had been no onsite work by the consultant in the interim and no explanation of the differences between the lists was offered.

As the remainder of this section shows, these elements were typical of the SWOTs undertaken in the MPI scheme.

### *Content of SWOTs*

Table 1 summarizes some of the data under this heading. Of the 20 companies, 16 conducted full SWOT analyses. In the remaining 4 companies only a partial SWOT was done (e.g. only lists of strengths and weaknesses were produced).

A method of analysis assumes a certain rigour and precision. We obtained the actual SWOT analyses produced and analysed them to investigate the value these lists might have as a foundation for developing manufacturing strategy. We sought answers to these questions:

- ❑ How many items were listed as strengths, weaknesses, opportunities and threats?
- ❑ How precise were they?
- ❑ How were they weighted or prioritized?
- ❑ How were they used subsequently?

Table 1 gives a breakdown of the number of factors identified as strengths, weaknesses, opportunities and threats, and Figure 1 shows the data from Table 1(A) as a histogram. This shows that generally quite long lists were produced, with 10 SWOTs containing over 40 factors each, an average of 10 factors per category. Four SWOTs had over 70 factors identified. Also worthy of note perhaps is the range, from 11 total factors to 216. At the upper end (Companies E and J) the high numbers reflect the fact that large groups of managers contributed to the list, either jointly in a workshop or providing separate analyses. The number of factors per SWOT category is shown in Table 2. It shows that, on average, companies identified more weaknesses than strengths, but perceived slightly more opportunities than threats.

We have seen that textbooks suggest that the making of these lists, though important in itself, is only a first step. There is a need to allocate relative importance to the individual factors, especially when the lists are

TABLE 1. Number of factors identified in each SWOT

SWOT	Company		Number of strengths	Number of weaknesses	Number of opportunities	Number of threats	Total
<i>(A) Number of factors identified in each SWOT</i>							
1	A	July 1992	2	4	3	2	11
2	A	July 1993	3	5	2	2	12
3	B		8	17	8	7	40
4	C		6	5	5	3	19
5	D		6	5	5	4	20
6	E	External based on customer survey	19	19	19	14	71
7	E	Internal	65	78	40	33	216
8	F		12	14	6	8	40
9	G		11	6	5	5	27
10	H		13	17	12	8	50
11	I		15	10	12	7	44
12	J	Detailed	42	69	67	29	207
13	J	Summary	7	10	6	6	29
14	K		12	3	3	3	21
15	L	Corporate	11	28	6	4	49
16	L	For 7 individual products	18	23	—	—	41
17	M	UK market	10	5	3	3	21
18	M	Export market	5	8	6	3	22
19	N		21	38	22	14	95
20	O	Division A	11	8	6	4	29
21	O	Division B	13	14	12	7	46
22	O	Division C	6	15	7	3	31
23	O	Division D	8	5	7	5	25
24	O	Division E	7	—	5	—	12
25	P		6	34	2	1	43
		<b>Total</b>	337	440	269	175	1221
		Less two part SWOTs	25	23	5	—	63
		<b>Net total</b>	312	417	264	175	1158
<i>(B) Number of factors identified in part SWOTs or SWOTs completed by individual managers</i>							
1	Q		5	6	—	—	11
2	R	Group	9	10	—	—	19
3	R	Manager A	9	11	2	3	25
4	R	Manager B	5	2	2	2	11
5	R	Manager C	6	5	2	3	16
6	R	Manager D	3	5	3	7	18
7	R	Manager E	23	13	4	6	46
8	R	Manager F	7	2	2	3	14
9	R	Manager G	4	3	2	3	12
10	R	Manager H	4	2	3	2	11
11	S		—	—	2	10	12
12	T		—	49	—	—	49
		<b>Total</b>	75	108	22	39	244

very long. Yet in all but one case, the lists were not prioritized, grouped (other than under the four headings: strengths, weaknesses, opportunities and threats), weighted or sequenced in any way. The one structured list had four sub-categories (products; product management; markets; marketing and sales) within each of the four SWOT headings.

We also undertook verbal analysis of the SWOT outputs and the main finding is that the items listed are all extremely brief in expression, often only three- or four-word phrases. For example, company N (SWOT 19) used four groups to develop SWOTs and had 122 items in all (95 net of repetition across

groups). They listed 38 weaknesses (net), using on average 4.3 words to describe each factor. Here and elsewhere, the factors are very general points, e.g. weaknesses such as 'high stocks', 'long lead times', 'not innovative enough', 'poor quality' and so on. Also very few factors were made more explicit by the use of numerical data. Related to this sketchiness are three other main findings:

- The consultants rarely challenged or sought clarification of the points raised. They merely recorded the points and listed them under each heading. No independent verification was carried out on any SWOT issue.

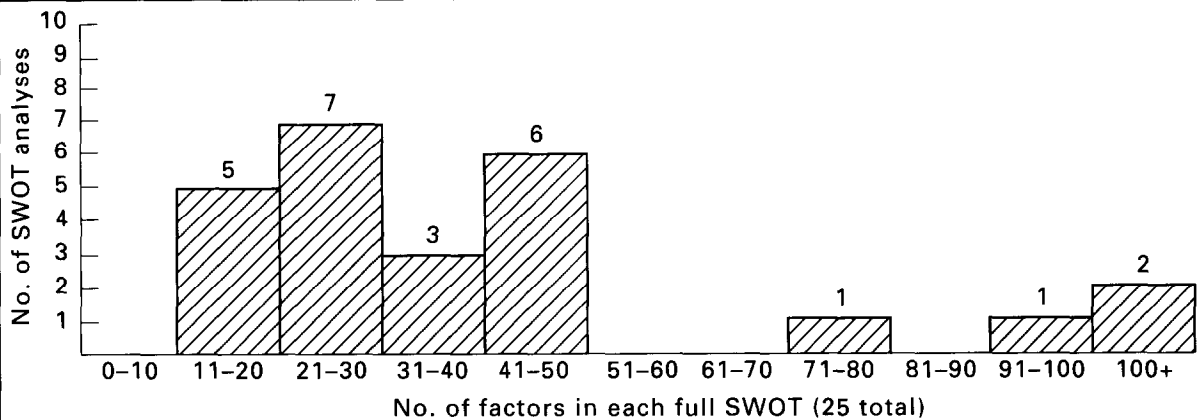


FIGURE 1. Distribution of number of factors in SWOT analyses.

TABLE 2. Number of factors per SWOT category

	Strengths	Weaknesses	Opportunities	Threats	Total
No. of factors listed	410	544	291	214	1459
No. of occasions	35	35	33	32	135
No. of factors/occasion	11.7	15.5	8.8	6.7	10.8

- ❑ Where the same point was recorded under two or more categories (e.g. as both a 'strength' and a 'weakness'), no reconciliation was made to explain the apparent contradiction.
- ❑ The distinction between internal (strengths and weaknesses) and external (threats and opportunities) was not always preserved.
- ❑ The many general points remained general, i.e. they were assumed to apply equally to all products or all markets. No process of increasing the precision of the SWOTs was undertaken.

#### *Subsequent Use of SWOT Outputs*

In only three instances was the SWOT output used in subsequent MPI project work. These three companies used the SWOT as inputs to a new mission statement, as part of the inputs to an action plan and as input to a strategy workshop. In the remaining cases the SWOT was not used at any time by the company or consultants following its completion. In one company (which is not included in this review) a record of the SWOT analysis could no longer be found at the time of our investigation. The consultant explained that it had only been used as a method of initiating discussion.

### Conclusion: Time for a Product Recall

Our principal conclusion has to be that, from the evidence given above, SWOT as deployed in these companies was ineffective as a means of analysis or as part of a corporate strategy review. Indeed, it is arguable that this SWOT activity and its outputs do not constitute analysis at all, for they do not go beyond description, and description only in the most general terms. In these circumstances it is not only unsurprising that the outputs were largely not used in subsequent stages of the project, but it can be argued that the general lack of further use is consistent with their apparent intent—to raise a general debate, using general terms and without the need to link the analysis to application. The most positive outcomes were simply the familiarization of the consultant with some company issues and/or the initiation of company personnel into a discussion process. This would have been valuable if the process was followed up, lists were structured and prioritized, points were validated or investigated further. But as we have seen, in most cases this did not happen. The projects continued and some subsequent analyses (especially

customer surveys) were carried out, but hardly ever with reference to the preceding SWOT.

Yet consulting time was spent (and fees charged) in facilitating this activity and clients did not directly question its value. SWOT seems to survive, and be accepted, as merely a way of structuring a list, a peg on which to hang a wide-ranging group discussion about a company's strategic position. But strategic assessment requires substantial analysis, and SWOT was not, in these instances, used as a true mode of analysis. SWOT survives, we suggest, because it is very straightforward and requires little preparation on anyone's part—hence its popularity as an early, even the first, activity in a consulting project.

The outputs delivered using this approach lacked relevance and afforded inadequate insights. The results were uniformly of little value in terms of corporate strategy development. The question then to be considered is, what are the origins of this inadequacy? Was it the fault of the consultants and their clients, or the fault of SWOT itself?

The relevance and usefulness of any approach is in part related to the ability of those involved. Unless their understanding of how an application should be made, together with the ability to undertake the work in a rigorous and meaningful way, then the outcomes will be less than adequate. It is reasonable to expect that the size of the adviser firm and client company in which an application was made have a bearing on the adequacy of the outputs which result. Larger firms would have more professional management and larger consultancies invest more in the training of their personnel. Conversely, if the adviser firms and client companies were mainly small, then this may affect the professional competence of those involved and the quality of the work undertaken. But we are not dealing only with small companies advised by small consulting firms. The size of company eligible within the scheme could be up to 500 employees and 27 of the 66 consultancy firms were classed as international with fee levels reflecting their size and reputation—typically upwards of £750/day with a high of £1200/day. These are well represented in our data—indeed the larger consulting companies tended to undertake more than one MPI project, and showed the same fondness for SWOT as other firms.

It could be argued that there is perhaps no reason why SWOT could not still be valuable—especially if undertaken with more rigour, challenging of assumptions and subsequent validation and investigation. One example alone will suffice to show what might have been done. One of our examples concerned a food company with a dominant customer (X) taking more than 50% of the company output. On their SWOT analysis, strengths include “the value of our contract with X”, while among the weaknesses are “over-reliance on company X”. Here, where the same point is raised as a strength and a weakness, the con-

tradiction in itself *could* have been a spur to analytical action. In what circumstances was it a strength and in what circumstances a weakness? What conditions were needed for over-reliance to do harm, and what actions to avert that? What was the most plausible timescale for reduction of this dependence? Or what actions might increase the closeness to the customer to ensure this factor became a more important strength? But these questions were not raised—both consultant and client were content with the single level of analysis.

In summary, there are other fundamental concerns about the intrinsic nature of SWOT analysis:

- ❑ The length of the lists.
- ❑ No requirement to prioritize or weight the factors identified.
- ❑ Unclear and ambiguous words and phrases.
- ❑ No resolution of conflicts (as with the example given in the preceding paragraph).
- ❑ No obligation to verify statements and opinions with data or analyses.
- ❑ Single level of analysis is all that is required.
- ❑ No logical link with an implementation phase.

There is therefore a lack of rigour in SWOT because there is no inherent requirement to overcome any of these weaknesses.

There are also perhaps certain assumptions embodied in the SWOT approach which lead to these weaknesses. SWOT was developed in an era of stable markets, and there is an argument that today's markets are unsuited to the inherent rationale of the SWOT approach. The dynamic nature of demand and the increasing proliferation of segments has resulted in markets which are characterized by diversity rather than homogeneity, and instability is the predominant characteristic. Yet SWOT, like many overview approaches used in strategy, aims to solve strategic problems by reviewing companies as wholes, overlaying corporate diversity with generic solutions. Such arguments are perhaps seductive in their apparent offerings, since the promise of uniformity may appeal to those with the task of developing strategies for businesses with increasingly diverse markets. In fact, such approaches purport to identify a corporate similarity which, though desirable, is no longer available. According to this view then, SWOT as currently deployed cannot be an effective tool of analysis in the 1990s. On balance, we feel our evidence offers some support to this conclusion.

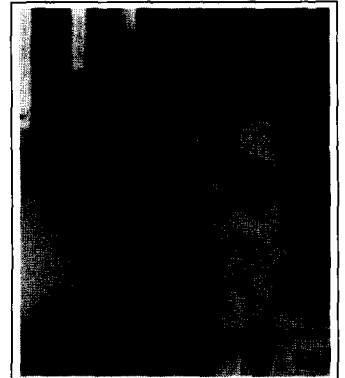
One criticism that might be levelled at academics is that we never do any product recalls. Ideas and approaches which were useful once may continue to have an influence in the field long after they have served their purpose. Outmoded ideas, therefore, may

hold an unmerited position in the thinking used in education, management development, consultancy and in the real world of managing businesses. Not only does this lead to poor results and bad practice

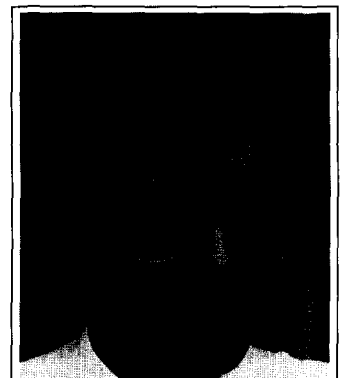
but may actually inhibit the take-up of newer and better approaches. It may be time to relinquish our fondness for SWOT analysis which seems now to have passed its sell-by date.

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