Safeguarding SWOT

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Abstract
The very popular SWOT analysis has a number of shortcomings that jeopardise its potential contributions. An extension towards systems thinking can safeguard the technique against dubious references, ambiguous classification, and covert reasoning.

1 Introduction
SWOT analysis is a technique used in planning and management to characterise, evaluate, classify, and generally organise the information about a system under development — for instance, a business or a city. The technique has been very popular in practice, both in the private and the public sector, and well documented in scholarly literature — for instance: Goodstein et al. (1993); Bryson (1995); Mintzberg et al. (1998); Napier et al. (1998); Bradford and Duncan (2000); Niven (2003); Perdicoúlis (2011b).

SWOT generally serves to define the planning or management objectives, or to generate ideas about future action. The main role of the technique is to classify facts into four standard semantic categories, whose initials make up its acronym: strengths, weaknesses, opportunities, and threats. The technique summarises what users think is being done ‘well’ or ‘ill’, or is of value or harm within the system of interest (strong and weak points, respectively) and also in the external environment (opportunities and threats) — Figure 1.

Figure 1  SWOT classifies facts with the help of non-explicit references; the classified SWOT elements are used to define objectives or conceive action
2 Shortcomings

SWOT provides important perspectives and raises critical questions about present and future performance, and thus creates a valuable stimulus for thought. However, although the technique is appreciated for being convenient and straightforward, its simplicity raises a number of well-known practical issues related with the definition, prioritisation and/or subjectivity of the SWOT elements (Pickton and Wright, 1998), its non-explicit values of reference, and the subsequent ambiguity in the classification of the SWOT elements (Perdicoúlis, 2011b) — Figure 1.

At a more abstract level, there is the general concern that reasoning is not explicitly documented in the technique — being that about the process protocol regarding the definition of objectives or conception of action, or about the mental models used as representations of the system of interest (Perdicoúlis, 2011b). Such shortcomings threaten the validity of the technique, and may either introduce gross errors or bring SWOT to a halt. Let us examine some of these shortcomings and consider respective resolutions from a systems perspective.

3 Internal references and class ambiguity

<table>
<thead>
<tr>
<th>Strong Points</th>
<th>Weak Points</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• weight (robustness)</td>
<td>• weight (little agility)</td>
<td>• exercise (to get slim)</td>
<td>• exercise (tiresome)</td>
</tr>
<tr>
<td>• physical strength</td>
<td>• expensive to feed</td>
<td>• food (to get energy)</td>
<td>• food (to get fat)</td>
</tr>
<tr>
<td>• good mood</td>
<td>• gets tired easily</td>
<td></td>
<td>• heart attack</td>
</tr>
<tr>
<td>• hard worker</td>
<td>• little attractive</td>
<td></td>
<td>• diabetes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• social exclusion</td>
</tr>
</tbody>
</table>

Table 1 Sample SWOT table for a hefty man in his forties; the classification of some elements is ambiguous

One common difficulty with SWOT is how to classify a given fact. For instance, ‘exercise’ in Table 1 can be classified either as an opportunity or as a threat. This ambiguity arises because there is not a single criterion against which to judge and classify. For instance, exercise could appear either as ‘good’ or as ‘bad’ depending on how the person feels about the outcomes, such as fatigue or slimming, or on the person’s short- or long-term objectives — Figure 2. With two classification criteria, as in this example, we get a double classification of the fact, which only helps to confuse further reasoning.

Figure 2 A classification dilemma

Most of the classification criteria can be debated before deciding which one to use as the reference, and this opens up a new phase of the technique. This requires the definition of objectives before the SWOT, in which case the technique would be prohibited from producing ‘objectives’ as its output — that is, it is impossible to start the technique with objectives and end it with objectives. The remaining pathway would be to start with defined objectives and perform the SWOT to conceive the action — Figure 1.
4 Explicit reasoning

The elements of the SWOT tables are usually presented in four parallel lists, as in Table 1. These elements represent the system of interest in the way that typical indicator sets do — that is, as sets of loose points and not as structured and functioning networks. So SWOT follows the pattern of ‘point thinking’, and not ‘systems thinking’ (Perdicoúlis, 2010; Perdicoúlis and Glasson, 2011). In other words, in its current development state, SWOT does not include explicit causal reasoning regarding how the system is structured and functions, but it is possible — and highly desirable, for the sake of transparency and verifiability of reasoning — to represent diagrammatically how the system is perceived to be structured or to function — for instance, as ‘reverse blueprints’ (Perdicoúlis, 2010, 2011a). While the use of mental models in SWOT — that is, representing diagrammatically how people think, such as the dilemma expressed in Figure 2 — enhances causal reasoning, it will also resolve any doubts about which facts to consider for classification and entry in the SWOT tables. The obligation to present fully structured and functional systems already makes the selection of the participating elements.

There is another important aspect that requires transparency and verifiability of thought, and that is explicit reasoning regarding the process protocol. This means that SWOT must be linked clearly — and preferably in a diagrammatic form — with previous and subsequent phases of the planning operation, with all functions duly attributed and sequenced, as in Figure 1. This implies additional work, in the direction of process management (Perdicoúlis, 2011b).

5 Discussion

Current SWOT practice creates shortcuts to decision-making that are apparently very convenient — for instance, ideas about action fast and directly from the SWOT table: weak points must be eliminated, strong points must be amplified, etc. However, short-cutting the decision-making conditions reasoning — for instance, introducing logical errors that may not be detected in subsequent phases. ‘Fast’ ideas are good only if created through an efficient process, which presupposes full and explicit reasoning (Perdicoúlis, 2011b).

As it stands, SWOT is distant from systems thinking. Taking the latter as a long-term investment for better planning, it is possible to supply SWOT with an extension of (a) explicit reasoning regarding systems and processes, and (b) explicit classification references, which presuppose some preparation and decision making. All this is likely to turn SWOT a bit slower, but also a more secure — or less uncertain — technique for good planning.

6 Conclusion

A number of improvements can be appended to the practice of SWOT, from the perspective of systems thinking. Clear and structured reasoning can be facilitated through (a) mental models of the system of interest before presenting the current ‘point thinking’ SWOT tables, (b) explicit relations of the SWOT within the planning operation, and (c) unambiguous internal references for the classification of facts before SWOT starts. These recommendations are issued with the intent to safeguard SWOT from many of its current shortcomings, and elevate its potential for good practice.
References


