Original Paper

Strengths vs. Strong Position: Rethinking the Nature of SWOT Analysis

Alan Clardy1*

1 Towson University, Maryland, USA
* Alan Clardy, E-mail: aclardy@towson.edu

Abstract
The analysis of strengths, weaknesses, opportunities and threats (SWOT) has long been recommended as the foundation for strategy. In spite of this popularity, the actual procedure remains vaguely operationalized, and both descriptive and empirical accounts of its use (as noted here) indicate both conceptual and procedural problems. After reviewing the development of SWOT in the strategy literature, examples of SWOT analyses are noted. A variety of criticisms of the SWOT method are examined, leading to a summary of key principles for SWOT analysis. A new, five-step method for carrying out SWOT is proposed based on critical customer values and competitor comparisons, producing an assessment of organizational strengths in terms of strong product positioning. This method is illustrated by a case analysis of a graduate degree program. The implications of SWOT analysis for analyzing threats are considered in some detail, stressing the importance of competitive intelligence as part of this process.

Keywords
SWOT, organizational analysis, organization diagnosis, assessing organization strengths and weaknesses

1. Introduction
Assessing an organization’s strengths, weaknesses, opportunities and threats – SWOT analysis – has been a well-established component to strategic planning (Kotter, 1994). Yet in spite of SWOT’s general high standing, its basic terms are not universally defined, and its methodology remains surprisingly vague. As a result, the value of SWOT analysis remains uncertain. The purpose of this paper is to review SWOT theory and practice in order to recommend a procedure for SWOT analysis based on critical customer values and competitive position, redefining the meaning of “strengths” in turn. The procedure advanced here will be illustrated in an application to educational programs.
2. SWOT Analysis: Origins and Basics

SWOT’s relationship with strategic planning is long-standing, dating as early as the 1957 study by Selznick on the TVA where he noted how both an organization's internal characteristics and external orientations affect strategic policy (Kong, 2008). In turn, Ansoff (1965) defined the key business strategy problem as how to configure and manage a firm’s resources in order to maximize goal achievement (primarily as Return on Earnings). His solution involved searching for synergies among assets so that their combined results are greater than the cost of the sum of the parts. This search required creating a “capability profile” based on an assessment of the firm’s current internal strengths and weaknesses. **Strengths** are the “synergy components of the firm’s strategy” (p 91). Later, Andrews (1971) proposed analyzing industry or market potential to reveal marketplace opportunities. According to Mintzberg (1994), this dual process of internal and external assessment forms the core model of strategy formulation that emerged from what he called the “design school” of strategy (the group of business policy scholars at Harvard). This generic model for strategy sought to optimize the fit between a firm’s internal characteristics and the demands of the environment in which it operated.

More detailed and specific elaborations on the SWOT model appeared shortly thereafter in two papers. Stevenson (1976) studied how management personnel interpreted and diagnosed the corporate strengths and weaknesses of their organizations. **Strengths** became those organizational characteristics that “make [firms] uniquely adapted to carry out their tasks” while **weaknesses** “inhibit their ability to fulfill their purposes” (p. 51). Fifty managers at six large companies evaluated the perceived strengths and weaknesses of their firms, and provided the reasons for those assessments; the method followed was not otherwise detailed. Their responses were then classified into five broad categories: organizational management features (like the planning and control system), personnel, marketing practices, technical systems, and financial status. Rather than finding consensus, Stevenson discovered little agreement among managers about what were the strengths and weaknesses of their companies. For example, what was considered important varied by position, with top managers more concerned about personnel issues while lower managers were more concerned about technical matters. In short, it appeared that simply asking managers to identify their company’s strengths and weaknesses was a method fraught with reliability and validity issues.

In 1982, Weirich proposed a SWOT model (what he called TOWS) as a tool for situational analysis and strategic planning. He recommended a nine-step strategic planning process (the last four of which, not covered here, involved action planning and assessment). After identifying organizational inputs and profiling the organization, two critical steps involve identifying trends in the external environment that portend threats and opportunities, and preparing a resource audit of the firm’s strengths and weaknesses. Environmental factors to be examined included economic, social and political factors, products and technology, markets, and the competition. (In a 1977 article, Kotter, Gregor and Rodgers suggested that the external environment can actually be decomposed into two components. The “macro-environment”
is all the broad societal level trends over which the company has little control; this is clearly what Weirich had in mind. However, there is also a “task environment” that includes those factors external to the firm but over which the firm has some influence, such as suppliers, distributors, customers, and even markets.) The audit of the organization’s internal factors would consider a diverse number of management and organization matters (personnel policies, labor relations, planning and control systems, and so on); operational practices (productivity, R&D, marketing); financial conditions; and miscellaneous factors. These internal factors may either be strengths or weaknesses; strengths appear to be those factors that can match the challenges presented by the external environment. Weirich further offered four strategic templates based on the possible combinations of S, W, O and T (e.g., an SO strategy uses strengths to capitalize on opportunities). These options can be displayed using a 2 x 2 matrix that shows specified strengths and weaknesses in the columns and opportunities and threats in the rows.

The analysis of strengths and weaknesses played an important role in Porter’s (1985) overall model of strategy. As he put it, “competitive strategy involves positioning a business to maximize the value of its capabilities that distinguish it from its competitors (p. 47).” Strengths would be those capabilities in which the firm enjoys some operating or performance advantage, like factors that increase entrance barriers or that increase bargaining power vis-a-vis buyers and suppliers. Weaknesses are those factors that can reduce entry barriers or that diminish bargaining power. Strategic opportunities essentially capitalized on a firm’s competitive position while risks [threats] weaken any positional advantages. Strategy emerges from matching a firm's strengths (particularly its distinctive assets) to the opportunities or risks present in its environment. Finally, Porter noted how detailed analysis would be necessary to produce a SWOT assessment.

Kotter (1994) codified SWOT analysis as the critical second step to his seven-phase process of strategic planning. Initially, environmental trends are identified and then classified as either opportunities or threats. Opportunities are those market needs that a firm can supply profitably; threats, those trends that portend deterioration in sales or profits. Then, managers and/or consultants rate a generic list of marketing, financial, manufacturing and organizational factors on a continuum from a major strength to a major weakness. Kotter also recommended analyzing competitors in terms of their likely reactions to strategic action. This requires a competitive intelligence capability. Further, in order to identify potential platforms for achieving competitive advantage, customer value analysis is also indicated.

More recently, the fundamentals of SWOT have been translated into the language of the resource-based (R-B) approach to strategy (Barney, 1995). A firm’s internal attributes are either tangible resources and/or intangible capabilities. Following R-B logic, internal attributes can only become strengths if they meet the VRIO test. That is, attributes must add value that customers want to products and services. "Firm resources are not valuable in a vacuum, but rather are valuable only when the exploit opportunities and/or neutralize threats" (p. 52). Second, internal attributes must be rare or atypical, and
third, must be difficult to imitate (inimitability) -- either by duplication or by acquisition. Finally, the attribute must be capable of being exploited by the organization. Xerox’s Palo Alto research center in the 1960s and 70s produced a number of innovations, but Xerox was not able to take advantage of those innovations because of its organizational blinders.

Table 1 compares the definitions of the key SWOT terms provided or implied in the literature.

In general, then, these foundation studies created the basic conceptual foundation for SWOT analysis. SWOT emerged as a tool for strategic planning, suggesting how the organization can respond to and even take advantage of the larger environment in which it must operate. SWOT analysis goes in two directions: an internal assessment of the firm’s capabilities and attributes, and a description of the conditions and trends of its environment. Importantly, strengths and weaknesses are defined in terms of environmental factors. Environmental factors include those things over which the organization has no control as well as things over which it may have some influence. The firm’s internal capabilities may or may enable it to deal with the challenges presented by its environment. The appraisal of the firm’s internal capabilities results in classifying them as strengths or weaknesses.

3. SWOT in Practice

Hill and Westbrook (1997) found that SWOT analysis is still used extensively. Based on their study of the strategic planning activities of 50 British firms, SWOT was the planning technique most frequently used. It is still recommended in strategic planning textbooks (Day, 1990; Hill and Jones, 1998; Jenster and Hussey, 2001). Helms and Nixon (2010) found 141 academic studies reporting on SWOT analysis in peer-reviewed journals between 1999 and 2009. From this inventory, they catalogued the various types of SWOT studies produced, finding only a relative handful that critically examined SWOT methods and procedures, though. In short, in spite of its popularity, there is surprisingly little research about the method itself. For their literature review, Chermack and Kaschana’s (2007) search of three extensive databases found only seven studies about SWOT, leading them to conclude “that people are still making heavy use of this tool, but … without a deep understanding of procedures, best practice, or research-supported method” (p. 395). Indeed, without a standard procedure, each SWOT analyses becomes its own idiosyncratic exercise. In this light, Hill and Westbrook (1977) found three distinct approaches to SWOT analysis (plus their variations) used by the 20 firms in their sample: (1) a senior manager or consultant does the analysis alone after discussions with other managers; (2) several senior managers do their own individual analysis that may or may not be integrated into a single product; or (3) a single SWOT analysis emerges from a meeting of managers. Recall Stevenson’s (1976) findings that managers do not tend to agree on what a firm’s strengths, weaknesses, opportunities, or threats are, however. That is, self-reported opinions of strengths and weaknesses, while a common procedure for SWOT analysis, are at best unreliable, and the net effect of using self-reported or opinion-based assessments of strengths and weaknesses, thus, would be a list that is of dubious validity and value.
Table 1. Defining S W O T terms

<table>
<thead>
<tr>
<th>Author</th>
<th>Strengths</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
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</thead>
<tbody>
<tr>
<td>Ansoff</td>
<td>Products have a synergy: share some capability (distribution channel, skills, facilities, etc.) that reduce costs and leverage multiple outcomes. IM</td>
<td>Products (and their production processes) that are stand alone without any sharing or synergy. IM</td>
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<tr>
<td>Stevenson</td>
<td>Organizational characteristics that are unique in allowing the firm to carry out its work. S</td>
<td>Organizational characteristics that inhibit a firm from meeting its purposes. S</td>
<td></td>
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<tr>
<td>Weirich</td>
<td>Organizational resources are matched to the demands of the environment. IN</td>
<td>Organizational resources are not sufficient to match environmental demands. IN</td>
<td></td>
<td></td>
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<tr>
<td>Porter</td>
<td>Those areas or capabilities in which a competitor enjoys some operating or performance advantage</td>
<td>Those areas or capabilities of competitive disadvantage in operations or performance strengthening position</td>
<td>Situations where performance would weaken position</td>
<td></td>
</tr>
<tr>
<td>Brownlie</td>
<td>The firm’s capabilities are favorable attributes associated with strategic advantage</td>
<td>The firm’s capabilities are not associated with strategic advantage</td>
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<tr>
<td>Kotter</td>
<td></td>
<td></td>
<td>“a challenge posed by an unfavorable trend or development that would lead, in the absence of defensive marketing action to sales or profit deterioration” (p 81). S</td>
<td></td>
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<tr>
<td>Valentin</td>
<td>“Resources and capabilities that facilitate realizing opportunities.” S</td>
<td>Internal conditions that make a firm’s profitability or competitive position vulnerable. S</td>
<td>Pioneering or poaching</td>
<td>External conditions that make a firm’s profitability or competitive position vulnerable</td>
</tr>
<tr>
<td>Barney</td>
<td>Internal resources and capabilities that add Value for exploiting</td>
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</table>
opportunities or neutralize threats;
are not held by competitors (Rare);
cannot be easily duplicated or
substituted (Inimitability); and can
be fully implement (Organization)

[VRIO], S

definitions either S=Stated, Im=Implied, or In=Inferred; blank cells not otherwise defined

More broadly, the range of applications and methods for both environmental scanning and internal
assessments can be illustrated in several studies, as now reviewed.

3.1 Analyzing the Environment for Threats and Opportunities
Lawton and Weaver (2009) did a SWOT analysis of the U.S. tourism industry in general (not a specific
firm) by conducting in-depth interviews with 19 owners of successful travel agencies. Using a
grounded theory approach, they identified these generic threats to the industry: macro-environmental
forces of the Internet, poor public perceptions of agencies, unfavorable relationships with travel
vendors, changes in booking fees, and geopolitical uncertainty. The opportunities in many ways were
the counterpart versions of the threats, such as educating the public about travel agency operations and
services or about geographical and cultural conditions, along with using the Internet more effectively.
Haven-Tang, Jones and Webb (2007) conducted what amounted to a SWOT analysis (although the
word SWOT does not appear in their report) of how the city of Cardiff, England could become a more
attractive business tourism destination. They interviewed various suppliers and consumers of business
conference services at their main competitor cities to identify a variety of critical customer factors
that buyers used in evaluating potential city-sites for business conferences. They identified a number of
factors, including municipal leadership, local infrastructure, and marketing practices, then completed a
comparative assessment of how all of the cities (Cardiff and competitors) stacked up on each of these
factors.

3.2 Diagnosing an Organization’s Strengths and Weaknesses
Weaver and Lawton (2008) also separately reported on agency strengths based on their convenience
sample of 19 successful US-based travel agencies. Again, using the grounded theory approach, they
relied upon the owners’ self-reported opinions of what they think their agencies do well, finding such
factors as customer service, client selection, employee development, adaptability, and networking.
Mayer and Vambery (2008) suggested an entirely different approach, using the product lifecycle as a
framework for identifying strengths and weaknesses. That is, in an organization's early startup phases,
certain types of characteristics are particularly important, such as product innovation and customer
responsiveness. Over time, as the organization matures, other characteristics become more important,
such as manufacturing efficiencies and cost controls. In short, they offer a logical framework for
analyzing factors that can become strengths and weaknesses.

Coman and Ronen (2009) proposed a more empirical process for identifying strengths and weaknesses using what they term an "event-factor review" based on analysis of 6 to 9 events (both successful and not) that significantly affected a company's performance; this could include such events as winning or losing contracts, dealing with technical challenges, or gaining or losing market share. An analysis of these events would reveal the strengths and weaknesses embedded in the firm. Further analysis would follow a “focused current-reality tree” (very similar to stream analysis; Porras, 1987): various factors are organized into symptoms and underlying causes, resulting in two or three "core problems" which reveal fundamental deficiencies within the organization. In turn, a core competency tree is produced from a list of strengths. The outcome of these assessments would be a list of strengths and weaknesses that meet these four standards: no more than 4-5 factors; the factors should be actionable; they should be significant in impacting a company's value; and the factors should be realistic, not based on wishful thinking.

Brownlie (1989) recommended a five-step process for assessing an organization's strengths and weaknesses:

1) Identify “strategic advantage factors”. These are the keys to competitive advantage in an industry, located within the firm’s functional areas, such as: marketing (efficient and effective market research or an efficient and effective sales force, e.g.); research and development (such as process or product design, or scientist capabilities); production and operations management (including efficient inventory control systems or the ability to control raw material costs); corporate human resources and management practices (getting and keeping top-quality employees, good relationships with trade unions, controlling labor costs); and finance and accounting management. It is the analyst's job to determine which of these factors are most critical to organizational success. A comparable process has been recommended as a way to identify organizational core competencies (Clardy, 2008).

2) Identify capabilities and competencies through an "audit of each of the functional areas of the firm [by collecting data about] the firm's activities and competencies in executing specific tasks so as to develop a profile of its capabilities, resources, and skills -- or lack of them" (p. 310). Such an assessment must be conducted by someone who can be independent and objective, such as a team of consultants or a multidisciplinary team of the firm's executives.

3) Analysis and evaluation. With the available data, analysis proceeds to isolate strengths and weaknesses. This begins by identifying the attributes of the strategic factors that are most critical for success, followed by comparative assessments based on three different standards: historical comparisons with the firm's past results; competitive comparisons with direct and indirect competitors; or normative comparisons using some provided standard.

4) Finding strengths and weaknesses. Strengths are those areas in which the firm has a comparative advantage. A weakness would be where it does not.
5) Assigning priorities. The list of strengths and weaknesses should be rated and prioritized in terms of their impact on overall strategic organizational objectives. They can then be compared and rank ordered.

In summary, reports on SWOT methodology show a variety of techniques. Often, executive opinions without any corroborating evidence are gathered as the raw data for the assessment. Other methods solicit the criteria used by consumers, rely on the organizational life-cycle to identify key factors, or attempt to apply a critical event technique to isolate operating strengths or weaknesses. Many recognize the importance of actually using the emergent list of factors to compare the firm in question with its competitors. At its best, factors are prioritized or given causal significance in understanding the relative importance of purported SWOT factors.

4. Critiquing SWOT

In spite of its popularity, SWOT is not without its critics, and there have been several telling and appropriate arguments against the process. Two problems, for example, can be illustrated in the Weaver and Lawton (2008) study of the travel industry. First, the use of self-report data itself is provided without any other independent form of evidence; it is as if personal opinions without any other evidential confirmation are enough. As Hill and Westbrook (1997) observed about SWOT in general, seldom is there any independent assessment of the opinions put forward as strengths or weaknesses. While the opinions may be true, the susceptibility of self-report data to bias and misinterpretation is substantial. Second, these self-reported assessments do not distinguish reports of what internal conditions are from normative prescriptions of what should be. For example, one reported comment from a travel agency owner illustrating customer service requirements was that "if it is not a nice experience from start to finish, then [the customer is] not going to come back" (p 45). While no doubt true, this does not in itself say anything about whether any particular agency does a good job in providing a nice experience. In other words, it would be important to establish, either through customer confirmations or through other comparative assessments, whether self-reported strengths are actual strengths.

Coman and Ronen (2009) identify four more criticisms. (One -- that SWOT analysis is often done as a one-time event -- is not so much a flaw in the process as a fault of the user.) Three other problems are more intrinsic to the process. First, the outcome of a SWOT analysis often leads to a large and rather undifferentiated list of strengths and weaknesses; as a result, participants may be lulled into thinking that list-making is strategic planning (Mercer, 1992). Second, further, whatever list of strengths and weaknesses are produced, the items are not necessarily arranged into a causal or hierarchical framework. If SWOT analyses are to assist decision-makers in strategic planning, it is important that the factors be noted in terms of their critical and/or causal importance. Third, there is no uniform conceptual framework (and hence, no well-established methodology) for identifying strengths and
weaknesses.
In his report of the strategic planning process at England's University of Warwick, Dyson (2002) noted that while the first two problems could be addressed; left unresolved was the third biggest construct definition problem. A planning committee brainstormed separate lists of perceived opportunities, threats, strengths and weaknesses. They then rated each item on a 1 to 5 scale (for example, 5 = unique or preeminent strength and 1 = a minor strength). With this information, each item on all four lists had an average score, and then the items were rank ordered, yielding some sense of priority or importance. Yet the problem remains: there were no criteria reported that defined what a strength, a weakness, a threat or an opportunity meant. It is as if the everyday meanings of the terms were sufficient.
Chermack and Kasshanna (2007) pointed out three additional misconceptions about SWOT conventional analytic practices. The first misconception is that SWOT should only be done at the corporate level. In reality, firms may have different strategies for different products or product lines. By implication, SWOT can be applied to any competitive offering, regardless of its organizational position. Second, SWOT tends to focus on the existing competitive mix when it should anticipate what that mix of factors and players will be in the future. The third misconception is that SWOT can be done without reference to the organization’s strategy. In fact, different strategies will emphasize certain factors more than others that will in turn create different lenses for seeing what a strength or a weakness might be.
For Mintzberg (1990), the problems with SWOT are more paradigmatic than methodological. That is, the underlying assumption of SWOT (and the design school of strategy from which it emerged) is that executives can “[sit] around a table discussing the strengths, weaknesses, and distinctive competencies of an organization… Having decided what these are, they are then ready to design strategies” (p. 182). The conventional wisdom is that pure and detached analysis is sufficient. Indeed, he argues that SWOT is really a pedagogical method derived from and suited for the “case study classroom”. In the real world, though, this approach might only work in certain very specific conditions: when both the competitive situation and the strategy process are simple enough to be comprehended fully, when the operating environment is relatively stable and predictable, and when the firm can implement a centrally defined strategy. Such conditions are rare. Rather, firms typically operate in uncertain and risky environments where comprehensive plans made in advance are seldom sufficient. Instead, strategy is better seen as an emergent outcome of learning and experimentation.
Valentin (2001, p 55) offers this summary critique of conventional SWOT procedures:
Rather than provide a sense of direction for delving deeply into strategic issues, conventional SWOT checklists seemingly beckon analysts to limit their work to judging offhandedly which listed items characterize a business and which do not. They are laden with catchall questions that lack coherent theoretical underpinnings, slight contextual complexities, prompt analysts to meander haphazardly from one issue to another, and leave in doubt how listed issues are to be examined.
By contrast, Valentin suggests that a resource-based view can provide a better approach. According to
that approach, every firm is a collection of resources and capabilities that operate in a larger environmental context of both opportunities and potential threats. The firm's resources and capabilities can either be (1) strengths that contribute to a firm’s asymmetrical advantages in cost and/or differentiation, or (2) weaknesses that reduce differentiation and thereby become disadvantages. Moreover, according to the resource-based perspective, strategy is about developing and capitalizing on those strategic factors that produce asymmetry and differentiation that in turn yields sustained competitive advantage. Throughout, it is important to understand what customers value, for customer values are the ultimate arbiter of product and firm performance. Turning conventional procedures askew, he advocates both a defensive analysis (to identify those factors – either internal weaknesses or external threats – that can reduce differentiation and competitive advantage) as well as an offensive analysis (to identify those internal strengths or external opportunities for capitalizing on advantages to differentiate one’s firm and yield sustainable advantages). Opportunities may be noted for pioneering or innovating fundamentally new products and services, or in poaching into existing underserved markets due to competitor vulnerabilities.

5. The SWOT Technique: Lessons Learned and Applied

From this review, four major lessons and principles for SWOT analysis can be proposed. The first major lesson concerns when SWOT may or may not be used. SWOT analysis has been noted as a general process that has been applied to cities, entire industries, firms, strategic business units, product groups, individual products (Mayer and Bembery, 2008), academic disciplines (Leong and Leach, 2007), internal operating departments, and even individuals (Kuiper and Thomas, 2000). This indiscriminate application is wrong. Since SWOT is intended to help strategic planning create competitive advantage in a marketplace, the unit to be assessed must exist as a product or service offering. That is, the sine qua non of SWOT must be that it can only be applied to products or services for which there are competitors. This rule both limits and expands the range of SWOT application. One should not perform a SWOT analysis of an isolated unit of analysis; SWOT is always a comparative exercise. One can do a SWOT analysis of a travel agency because there are competing agencies, but who are the competitors to the travel industry? One could do a SWOT analysis of a firm’s Marketing or HR department if the option involved outsourcing the function to a private vendor, but a SWOT analysis of one of these departments by itself makes no sense. On the other hand, SWOT can clearly be applied to any product offering for which there are competitors, such as a city competing for business travel, an entire firm offering a bundle of services (a CPA firm or a university), or a specific product (be it a car model or a degree program, for example). Even so, the more specific the unit, the better. While a CPA firm could be SWOT analyzed, it might be better to focus on its corporate tax preparation services specifically, for example.

In short, as Mintzberg (1994) put it, “strengths and weaknesses are situational internal capability [that]
can be assessed only with respect to external context – markets, political forces, competitors, and so on” (p. 276). Strengths, weaknesses, opportunities and threats cannot be identified in the abstract or without specific reference to both consumers and competitors. This rule in turn has two implications for conducting a SWOT analysis. First, since what is being analyzed is a competitive offering vying for consumer purchase, what customers value must be the criteria used for comparison. If product quality is a vital concern to customers, then the quality of each competitor’s product must be considered. In this framework, a strength is the internal capability or process that produces asymmetry for the firm on a feature(s) the customer values. Second, the information used as the basis for analysis must be empirically grounded; off-the-top opinions do not qualify. Again, from Mintzberg, “the assessment of organizational strengths and weaknesses cannot be just a detached cerebral exercise. It must be above all an empirical one….,” (p. 278). Operationally, this means that one does not begin an analysis by asking the firm’s managers for their opinions about what a firm’s strengths, weakness, opportunities or threats are; rather the analysis begins by asking what the customers want in the product and who the competitors are. Alternatively, strengths, weaknesses, opportunities and threats are socially constructed, after-the-fact interpretations of conditions based on raw comparative data, not a priori, self-evident categories used to prompt opinions.

The second major lesson is that strengths, weaknesses, opportunities and threats are not mutually exclusive categories; rather, one factor can be all at the same time. That is, a factor may be a weakness compared to one competitor, while a strength compared to another. Say a firm has a product that is lowest price on the market. Clearly, such a situation could be considered a strength by many. But if the firm is attempting to reach a higher-end niche market, low price could actually signal low quality, making it a weakness. Likewise, a lowest price might indicate an opportunity for raising prices to generate more income without losing customers; or assuming that one’s competition is doing the same kind of analyses, one might project threats from competitors in the form of lowering their prices to make them more competitive. Thus, a factor (like price) can be interpreted as a strength and a weakness and a threat and an opportunity all at the same time.

Third, environmental forces can be grouped into two main categories: the direct, competitive, task-based environment, and the noncompetitive, indirect, macro one. “The direct environment includes those elements or groups which are directly influenced by the actions of the company…. The indirect environment includes more general forces which primarily have an influence on long-term decisions of the company” (Houben, Lenie and Vanhoof, 1999, p 126). The direct environment includes shareholders, suppliers, government agencies, competitors, employee organizations and so on; the indirect (or “macro”) environment involves larger societal, cultural, political, and economic transformations, including changing customer needs and preferences, changing market dynamic (favoring e-commerce, for example), general product improvements, and so on. Macro-environmental trends establish the emerging needs, requirements and challenges that must be met in the years ahead to
be successful; significant macro-trends may actually be the more important aspect of environmental conditions on which to focus.

The fourth major lesson concerns the time frame or horizon in which the analysis is being carried out. In other words, the listing of competitors and of the critical customer factors must derive from a strategic analysis that is future-oriented. The competitive landscape will be dynamic as firms make adjustments to conditions they face today. SWOT assessments may be helpful in anticipating competitor moves in the marketplace several years out, because there will undoubtedly be lags or delays between identifying deficiencies and implementing remedies. How frequently should SWOT assessments be made? One possible guide can be pegged to the response cycle of the market involved. In higher education, for example, it may take years before a proposal for a new degree can wind its way through the labyrinth approval process followed to bring the degree to life; rapidly changing technology markets may require much more frequent assessments.

5.1 A New Procedure for SWOT Analysis

As now proposed, these various lessons can be integrated into a protocol for developing a new and somewhat distinctive procedure for carrying out a SWOT analysis. Building on Brownlee’s (1989) model, this method acknowledges many of the points noted in prior studies while overcoming some of the problems. This process assumes that an appropriate unit of analysis – a product/service offering for which there are consumers and competitors – has been identified as the focus. The five-step process developed and offered here will be illustrated by a case example of a graduate degree program in the section that follows.

1) Identify competitors. As noted, organizational characteristics can only be defined as strengths or weaknesses, opportunities or threats in the context of direct environmental factors, of which competitors are the primary referent. Thus, identifying who the competitors are of the product in question is essential. Multi-product firms, including universities with different degree programs, will likely have different sets of competitors for each of its products (degrees, for example), particularly as they might be located in specific regions and/or market niches. The identification of competitors will be a function to some extent of the organization’s strategy or mission. Further, the analyst should be concerned not simply with the markets in which the firm is competing today but also any markets in which it may be competing – by choice or not – in the future.

2) Identify critical customer values. The organization’s product offerings will be targeted to customers, either in a broad mass market or in certain market segments or niches (Porter, 1980, 1985). One must determine what factors the targeted customers find important or valuable when making their buying decisions. These are the critical customer values that are used as the basis for comparison. It is important to keep in mind, too, that customers will likely exist in different market segments, and there would likely be a customer profile of what each segment identifies as its most important characteristics and features. This suggests that a more nuanced analysis would seek to learn how the full, potential
consumer market is segmented, what segment(s) it wants to pursue (defined by the larger strategy or mission of the organization), and then study what values are most important for each targeted segment(s). At least four different techniques may be used to understand what the critical customer values of customer markets: laddering, repertory grid, focus groups (or interviews), and surveys. Laddering (Reynolds and Gutman, 1984, 1988) and the repertory grid technique (Franksella and Bannister, 1977) are formalized and structured ways to elicit critical customer values by extracting decision criteria in use. Focus groups are more direct ways to gather similar information. Surveys are perhaps the most direct way to gather this data, basically asking customers simply to identify what factors guide their shopping decisions. It is unclear whether the added complexity, time and cost of laddering and/or repertory grid methods produce more useful information that justify their use compared to the more direct methods of interviews and surveys.

3) Collecting comparative data. Given the data identified in steps 1 & 2, a matrix (there may be several, depending on the format) is created. Competitors (from step 1) are identified in the columns, while critical customer values (from step 2) are placed in the rows. Each cell would be filled in with the appropriate raw data. For example, if price is a factor among consumers of product X, and there are five competitors, the price charged by each competitor for X would be entered into the cells. As Valentin (2001) proposed, this is simply a listing of factual conditions that are not labeled as strength, weakness, opportunity or threat at this point.

4) Analysis. With this information, the actual SWOT assessment can begin. Observations of the data should indicate the areas where the firm is better than, equal to, or worse than its competition. Turning observations into judgments as to whether a factor is a strength, weakness, threat and/or opportunity becomes more complicated at this point, though. Consider this possibility with an educational degree program. Say the program has relatively simple or easy admission standards and quicker or shorter degree requirements. This situation might seem to be a strength in attracting students, but it could also be considered a weakness because it may attract students without strong academic credentials. Likewise, it could indicate opportunities to raise standards without sacrificing numbers of students, or it could suggest threats from other institutions that might reduce their requirements to attract more students.

The labeling of a condition as a strength, weakness, opportunity, or threat must be pegged to the critical customer values. A factor may be strength compared to one competitor and a weakness compared to a second. The language used in this rendition should be complete, so that “Factor X is a currently a strength compared to competitors B and E, is a weakness compared to A and D, and is on parity with C.” Fundamentally, such a judgment (no doubt with explanations and details added) would be made about how the product in question compares on each critical customer value.

This is a subtle yet important distinction in rethinking SWOT analysis, for what is being analyzed is competitive position, not internal capability. That is, what is being analyzed is whether the product
(firm) is in a strong (or weak) position vis-à-vis its competitors, not the organization’s capacity to create strengths or not. The trap that conventional approaches to assessing internal capabilities can fall into is thinking that some internal process is a strength when the firm has no competitive advantage (Clardy, 2007, 2008). The potential limitation of the approach advanced here is that it does not attempt to isolate what internal factors, if any, are causing any competitive advantage that might exist.

5) Strategic plans. SWOT analysis is a tool for informing strategic decision, planning and action. A necessary condition for good decision-making is good information. This means that a SWOT analysis must clearly and accurately describe competitive position before making strategic decisions. There are essentially three main kinds of strategic decisions that can follow from this kind of SWOT assessment. First, if the firm/product is strongly positioned, the decision would be to take the actions needed to protect or enhance that strength. Second, it may be necessary to take remedial action to redress weak positions or deal with threats. The nature of the actions indicated here would obviously depend on the type of weakness involved as well as the larger strategy and marketing context. Bona fide weaknesses may require any of the following: improving quality or service delivery; redesigning product features; altering prices; or better targeting products and services to market segments. In response to perceived opportunities, the third strategic option would be to look for actions in which one could gain customers and market share, increase revenue, or in some way strengthen further one’s competitive advantage. This appears to be Valentin’s (2001) offensive analysis.

The recommended procedure for carrying out a SWOT analysis is shown in Table 2.

Table 2. SWOT procedure recommended here

<table>
<thead>
<tr>
<th>Step</th>
<th>Key Issue</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify competitors</td>
<td>Who are the other parties against which our product/service competes?</td>
<td>Different products may have different sets of competitors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competitors may be defined by strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider who our future competitor could be</td>
</tr>
<tr>
<td>2. Identify critical customer values</td>
<td>What are the primary factors that consumers use in judging this product/service?</td>
<td>Customers may be segmented and each segment may have a somewhat unique set of critical customer values</td>
</tr>
<tr>
<td>3. Collect comparative data</td>
<td>What are the conditions of each competitor on each critical value?</td>
<td>Using a Competitor x Critical Value matrix, enter raw data into each cell</td>
</tr>
<tr>
<td>4. Analysis</td>
<td>On what values are we stronger than, the same as, or worse than our competition?</td>
<td>The raw data is converted into judgments of strengths and weaknesses, opportunities and threats. All judgments are relative to a specific competitor on a specific value.</td>
</tr>
<tr>
<td>5. Strategic planning</td>
<td>What strategic actions are</td>
<td>There are three main options: makes one’s...</td>
</tr>
</tbody>
</table>
5.2 Case Example: A University HRD Graduate Degree Program

The SWOT method proposed here will be illustrated by an analysis of the graduate degree program in Human Resource Development at a major metropolitan university in the mid-Atlantic region, called Chaplin University here. Established in 1988, the degree program has an average enrollment of around 100 or more graduate students over the last 15 years. This degree program has several direct and near-substitute comparable degree programs in the larger metropolitan area (given aliases in this analysis). The five-step SWOT method just proposed will be illustrated using this program as the basis.

1) Identify competitors. Competitors are defined by the stated mission of the degree program which is to provide trained and qualified individuals for responsible human resource positions for employers in the metropolitan area. Competitors are, first, the complimentary master’s level degree programs in human resource development and, second, the near or substitute programs in human resource management, organization development, or industrial psychology in the greater metropolitan area. These competitors were identified from known sources, internet searches, and published records by the State Higher Education Commission: Western Smith College Masters in HRD; Southern State College Masters in HRD; International University MBA in Organization Development; City University Masters in Industrial/Organizational (I/O) Psychology; and the Mary Belle College Masters in Industrial/Organizational Psychology.

2) Identify critical customer values. Using a convenience sample in the Fall, 2009, students in the Chaplin HRD program (n=38) were asked to identify all the factors they used in selecting this degree program. Their critical customer values are listed in order of frequency (response frequencies in parentheses): cost (11), proximity/location (10), reputation (7), and time to complete the degree (6). Admission requirements, class size and availability all had four responses; faculty qualifications had three. It is important to be mindful of a sampling issue here. The students in this convenience sample had already self-selected and been admitted into the program; it is entirely likely that the factors identified by this group are not representative of the larger population of students in this region interested in a graduate education in HR. For example, it is very possible that the students in the International University MBA/OD program would rank reputation ahead of cost. The segmentation structure of the broad consumer market of potential students for this major was not known.

3) Collecting comparative data. Table 3 was constructed using the competitors and critical customer values identified in the prior two steps. The data were collected from various public sources and phone inquiries.
Table 3. Critical customer values and the competition: comparative data (all data for Spring, 2010).

<table>
<thead>
<tr>
<th></th>
<th>Chaplin University</th>
<th>International University</th>
<th>Western Smith College</th>
<th>Southern State University</th>
<th>Mary Belle College</th>
<th>City University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per credit hour (in-state)</td>
<td>$297</td>
<td>$890</td>
<td>$325</td>
<td>$335</td>
<td>$435</td>
<td>$539</td>
</tr>
<tr>
<td>Proximity or convenience</td>
<td>a. 1</td>
<td>a. 1</td>
<td>a. 2</td>
<td>a. 2</td>
<td>a. 3</td>
<td>a. 1</td>
</tr>
<tr>
<td></td>
<td>b. 1.9</td>
<td>b. 3.2</td>
<td>b. 12</td>
<td>b. 5.6</td>
<td>b. 2</td>
<td>b. &lt; 1</td>
</tr>
<tr>
<td></td>
<td>c. 9</td>
<td>c. 1.6</td>
<td>c. 37</td>
<td>c. 28.3</td>
<td>c. 6.2</td>
<td>c. 2.4</td>
</tr>
<tr>
<td>Reputation</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Time to complete degree</td>
<td>36</td>
<td>54</td>
<td>42</td>
<td>39</td>
<td>39</td>
<td>42</td>
</tr>
<tr>
<td>Admission requirements in addition to transcripts</td>
<td>2 rec. letters; Master’s or 5+ years’ experience; Personal Essay; Resume</td>
<td>GMAT if not admission essay; Goal statement Writing sample</td>
<td>3 rec. letters; 2 rec. letters; 2 rec. letters; Resume; Essay; 2 rec. letters</td>
<td>Possible interview 1 rec. letter GRE; Personal statement</td>
<td>17-18</td>
<td>15</td>
</tr>
<tr>
<td>Average class size</td>
<td>20</td>
<td>20-25</td>
<td>8-15</td>
<td>NA</td>
<td>17-18</td>
<td>15</td>
</tr>
<tr>
<td>Number of courses offered</td>
<td>16</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

a. Number of locations at which courses are offered; b. Distance in miles from beltway or major artery; c. Distance in miles from City center; NA = not available

4) Analysis. Inspection of these tables produces the following judgments. First, the Chaplin University program is the lowest cost program in the market. (Tuition rates are set by the State and are beyond the control of the program or the University.) Second, the course requirements for completing the degree are the fewest, allowing the degree to be completed more quickly than any other. Third, the Chaplin University program offers and conducts more courses that are offered to students each semester. Fourth, the campus location is more convenient than most others and is much closer to central downtown area than any of the specific direct competitors (Western and Southern State). Fifth, the admission requirements are about in the middle of the pack, arguably somewhat more involved than the direct competitors but not requiring a graduate test (GMAT or GRE). Finally, reputation cannot be determined at this time.

It does appear that price is a clear competitive advantage (strength) to all competitors, with location a strength compared to all direct competitors. Degree requirements are also an advantage compared to all other competitors for at least some segments of the potential consumer market. Reputation differentials
cannot be ascertained at this time. In short, the program seems to have a relatively strong competitive position on many factors of importance to buyers (students), and this position is based on several enduring, sustainable sources. Note that in this case, the factors responsible for producing a strong position are not due to operational processes of the program or the University, though; price and location are factors outside the control of the enterprise (university). On the other hand, one might expect competitors to see an opportunity to lower their prices in order to gain potential market share; but given funding and approval barriers, it would be expected that these are latent threats (discussed shortly). It is unknown whether the lowest level of degree completion requirements is seen as a weakness or not in the buying public.

5) Strategic planning. There seem to be four main strategic implications from this analysis. First, given this position of relative strength, a mostly defensive strategy seems indicated. Second, it is important to make an attempt to identify reputation. Third, it would be helpful to do a more specific analysis of the target market of potential students, particularly in terms of segmentation and the critical customer values of each. Finally, the analysis should include online degree programs in HRD as potential competitors.

6. Observations, Caveats and Guidelines

This case points to two major issues for SWOT analysis. First, what is really being assessed when looking at strengths and weaknesses? Presumably, strengths are those internal capacities, operations or processes that produce competitive advantage in some way. As such, analysis must isolate what the process is and then show a direct causal linkage between it and the competitive advantage. Such linkage is far from obvious, and certainly requires much more investigation than that produced by managers in a SWOT brainstorming exercise. But even before that point, it is important to distinguish strengths as internal value-generating processes from strong product positioning. This distinction is apparent in this case because a strong position in certain key parameters, like costs of tuition, are not the result of any internal operating capacity or process but are the result of purely extra-institutional (read: political) decisions. The bottom line is to suggest that strengths and weaknesses can be defined either in terms of internal characteristics or as product/service positioning. It is easier to establish strengths as the latter than the former.

6.1 Discursus: Threats and Their Analysis

The second major issue involves identifying threats. Much of the important raw data used in the product comparisons were identified using information available from internal reports and environmental assessments. These same veins of data cannot be mined for threats, however. This concept of threats requires elaboration, as illustrated by the following example. Shortly after the first draft of this paper was completed, a smaller, privately-controlled college within 10 miles of the Chaplin campus — and not previously considered a competitor -- announced its plans to introduce essentially a
duplicate degree program to the one analyzed here. The SWOT analysis being developed here did not even have this smaller institution “on the radar screen” as a competitor. Indeed, the SWOT analysis may have contributed to a certain complacency by suggesting the Chaplin program had certain important strengths and that there were a sufficient number of competitor degree programs in the market. SWOT analysis did not contribute to anticipating a new competitor that became a real threat to this program.3

One of the principal threat vehicles is driven by competitors. The assessment of competitive threats requires peering into the minds and circumstances of one’s competitors to understand their intentions and capabilities. This point was offered by Porter (1985) long ago, but was easily forgotten in simplistic approaches to SWOT analysis. For example, assume that one’s competition can do the same kind of analysis of the comparative standing of their products and services as have you, allowing them to see the same types of comparisons of their products and services. Seeing those differences, though, does not mean that competitors will automatically and immediately act on them. In order for a competitor to react to weaknesses and/or opportunities (thereby becoming a threat to others) depends on at least two factors: their motivations and intentions, and their capability. 4 While SWOT may suggest vulnerabilities and threats from competitors, it cannot predict how competitors will act; and though competitors may not publish their strategic plans, it could be possible to infer pressures on them which in turn may be driving them towards certain types of decisions. For example, a high-priced competitor with a stable or growing market share, satisfied customers, and controlled costs of materials or labor may be very happy to cede low-end markets to low-cost producers and would not be motivated to react to more aggressive competitor actions in that market segment. Christensen (1997) explored this basic dynamic in some detail in terms of how established firms react to transformative technology. On the other hand, a struggling or ambitious competitor may be very motivated to take actions to regain or achieve a stronger competitive position. In short, even if perceived, product/service weaknesses and/or opportunities may not trigger competitor reactions; they may or may not become actual threats. Moreover, the potential for competitor actions that would become threats are not simply a function of competitor intentions; there may also be barriers or limitations of various kinds that restrict their capability for reacting, even if motivated. Consider the Western Smith College’s HRD degree which requires 42-hours to complete and costs about 10% more than the lowest cost competitor. Even if their decision-makers were motivated to make their program more competitively equal to their dominant competitor, could they change those parameters and if so, how quickly? Caught in a tight budget crunch in a semi-depressed economy, they may be very dependent on all revenues and would be unlikely to reduce their prices as a result, especially if they would not expect to pick up more students at a lower price because of their inconvenient location. The extent to which the competitor university has deep pockets to fund changes, say, in location or in advertising, would be a critical factor to understand. Likewise, it might be difficult to reduce degree credit hours because of faculty resistance to altering

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their ideal curriculum, desired academic reputation, or state regulatory hurdles. As another example, International University essentially painted itself into a corner by positioning itself as a MBA program whose structure cannot be changed without essentially changing its very nature. Threats, thus, are more than simple disparities between competitors on important critical customer requirements.

This suggests that a more nuanced analysis would classify threats as *latent* (when there are asymmetries on critical customer requirements) or *active* (when a competitor is both motivated to and capable of acting to reduce asymmetries). Using imaginary ratings of product quality (on a 1-10 scale) between Our Firm and three competitors, the result of this threat assessment would look like Figure 1. For this simple illustration, assume that competitor A has its product quality on parity with Our Firm, but that there is an asymmetry between Our Firm and Competitors B and C (Our Firm has better quality). Competitor B is the current market leader and seems content with its current position, while Competitor C has new leadership committed to improving its position in the marketplace.

<table>
<thead>
<tr>
<th>Critical Customer Value</th>
<th>Our Product</th>
<th>Competitors</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality</td>
<td>Parity; no latent or active threat</td>
<td>Latent threat</td>
<td>Active threat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1. Threat analysis and assessment*

The implication here is that it is important to understand the strategic intentions of one’s competitors, making competitive intelligence an important, even essential component of SWOT analysis, as Kotter (1994) observed. Kahaner (1996) noted that competitive intelligence (CI) involves collecting raw information about one’s competition, transforming that raw data into knowledge about the competition, and using it in making decisions. Such intelligence could help anticipate changes in competitor practices and products; discover new or potential competitors; and learn about new products, technologies, or processes. A major element to his “intelligence cycle” is gathering data about competitors. Primary or original data is directly from or about the target and is the ultimate goal of CI. It can include annual reports, officially-filed documents (government reports), speeches or interviews by organization leaders or representatives, financial reports, advertisements, employment want ads, or direct personal observations. In particular, certain items can be predictive of competitor intentions or future actions, like company public forecasts (including mission statements); industry expert forecasts; and capital investments (such as buying land or facilities). Much of this kind of information is available in the public domain, but it can also include direct personal observations (human intelligence) from sales reps or other employees, from customers (through focus groups or surveys), trade show visits, benchmarking, or direct visits to the stores, shops, etc. While it may not be possible to define exactly...
what a competitor will do from the intelligence, it may be possible to define several possible courses of action, each with some degree of probability. In short, competitive intelligence must be a combined and integrated aspect to SWOT analysis. The extent to which imbalances between a firm and its competitors can become real or active threats, then, is a judgment call that can only be made by first understanding the motivations and intentions of one's competitors.

This rule complicates the analysis of market threats because at any one time, there are likely to be threats to a firm on condition X from some competitors but not from others. In other words, there can be different kinds of threats from different competitors at the same time on different customer requirements. It will probably be helpful to identify the most motivated, aggressive and active competitors and then use them as the barometer for assessing threats. What this also suggests is that SWOT analysis and competitive intelligence need to be a continuous, real-time assessment analysis that is competitor-specific.

7. Conclusions

The analysis of a firm’s strengths, weaknesses, opportunities, and threats has been a long-standing prescription for strategic planning. Even so, the actual mechanics and procedures for carrying out such an analysis have been surprisingly ill-defined, and a number of criticisms of this process have been justifiably advanced. Yet if strategy is about achieving competitive advantage, it would seem essential to understand where a firm’s products are well-positioned and where they are not. In this paper, a five-step process for carrying out a SWOT analysis has been proposed. The process begins by identifying the product competitors as well as the critical values customers use in making buying decisions. With these two conditions identified, product comparisons are based on empirical assessments, not management opinion. This is followed by an analysis that labels conditions as strengths and/or weaknesses and/or opportunities and/or threats. SWOT analysis, properly done, cannot make strategy prescient, but it can better inform strategy as to when, where, and how to allocate resources for sustained competitive advantage.

Endnotes:

1) It's not clear whether he is suggesting that all of these factors must be assessed or only a selected few. Further, the assessments are keyed to the general industry segment involved, not to the firm’s specific strategy. It is also interesting that he assumes that the identification of these factors can be done internally. In other words, he is not using customers and their judgments as to what's important or valuable for defining critical success factors.

2) The weight of these arguments led Hill and Westbrook (1997) to call for a “product recall” of the SWOT method as part of strategic planning.

3) About a year earlier, a faculty member in the Chaplin University program resigned and went to work
for that same private college. That faculty member was instrumental in designing and advocating the introduction of this mirror-image program at this new school. The rationale for this mirror program was that a large segment of the potential market for HR-type programs was not being met by the existing set of providers and that their proposed program could differentiate itself from the pack. Interestingly enough, in the State in question, newly proposed degree programs offered by institutions that receive state funding must have proposed degree programs approved by the state’s Higher Education Commission. Here, the proposing institution’s rationale as to the demand, the need, or how its program would be differentiated from the others was not persuasive, and their proposal was declined. The threat from this new and unexpected entrant was eliminated but not because of the SWOT procedure.

4) A version of this kind of competitor analysis is the AMC framework. That is, competitor responses are a function of three factors: awareness of a threat, motivation to react, and capability to respond. These factors define possible response barriers for any given rival (Chen et al., 2009).

5) Shortly before the unknown competitor school filed for the creation of the duplicate program, it began a rather aggressive set of local television advertising promoting the institution. This was new and expensive advertising should have been a signal as to its more aggressive plans.

References


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