

The Use and Misuse of SWOT Analysis and Implications for HRD Professionals

THOMAS J. CHERMACK* & BERNADETTE K. KASSHANNA**

*Colorado State University, **The Pennsylvania State University

ABSTRACT *This article explores the often-used strategy tool known as the SWOT analysis. The history of this tool is explained as well as common uses. The results of a literature review indicate a clear lack of empirical research on the topic and what little research has appeared is reviewed for the purposes of understanding how to further support and develop this tool. An integrative process for conducting SWOT analyses is provided with recommendations for optimizing SWOT in HRD contexts. Common misuses and pitfalls are also discussed along with suggested research for adding robustness to this classic strategic tool.*

KEY WORDS: SWOT analysis, strategic HRD, SWOT research

Perhaps more than ever, organizational decision-makers are seeking ways to manage uncertainty and direct their organizations through difficult and challenging times. Organizational strategy is a popular slice of the HRD and management literature, and it is diverse and complex. Many tools exist in the strategic management literature that are intended to help decision-makers accomplish their goals of fewer surprises, and more steady transitions through difficult market changes and fluctuations.

As HRD professionals are increasingly called upon to be involved in, and sometimes guide organizational strategy (Bartlett and Ghoshal, 2002), knowledge of common strategy tools and processes, as well as their advantages and shortcomings is valuable indeed. Such knowledge can be critical in two key domains for HRD professionals: (1) in the context of developing an HRD specific strategy; and (2) in the context of leading strategy efforts for the organization at large. These domains are both referred to in the HRD literature (Lynham *et al.*, 1998; Torraco and Swanson, 1995), and this article serves this strategic need by providing an in-depth analysis of a particular, and common strategy tool known as the SWOT analysis.

By providing a close look at this often used tool, we summarize a process by which SWOT analyses can be conducted and further highlight key questions for which the answers are not fully understood. Addressing these questions through sound

research will lead to a better understanding of how the effectiveness of this tool can be maximized for use by HRD professionals. In short, this article provides some first steps upon which HRD professionals might consider building with an aim of leveraging their knowledge of this strategy tool to place HRD in the strategy conversation.

According to Barney (1995), SWOT is a simple framework that points to the importance of external and internal forces for the purpose of understanding the sources of competitive advantage. It is a preliminary analytical tool that must be supplemented with rigorous competitive, resource, financial and organizational analysis. SWOT helps decide whether the main problems facing an organization revolve around a need to revise strategy, a need to improve strategy implementation, or both.

SWOT analysis can generally help to portray a strategic organizational situation and to identify what information is needed and what decisions are likely to be made on a personal as well as an organization level (Balamuralikrishna and Dugger, 1995). This tool helps look at the organization's current performance (strengths and weaknesses) and the organization's future (opportunities and threats) by accounting for the factors that exist in the external environment. SWOT is a powerful and sometimes highly successful technique that can be applied to individuals, groups, teams, organizations, or even plans (David, 1997).

Purpose of the Article

There are four main purposes of this article: (1) to provide a review and history of SWOT analysis and its uses; (2) to describe the misuse of SWOT analysis; (3) to describe the implications of the use and misuse of SWOT analysis for HRD professionals along with examples of SWOT as part of the larger strategy system; and, finally, (4) to suggest that SWOT analysis has primarily developed in practice and has thus received little attention from a research-based or theoretical perspective. These four purposes allow us to discuss how the use of SWOT analysis can be optimized by HRD professionals and also allow us to describe the opportunities for research and theory building that are evident in the current status of SWOT analysis as a strategic organizational tool.

Methodology

This article is a primarily a review, analysis and synthesis of literature. However, this review, analysis and synthesis approach has significant implications for theory building as the current status of SWOT analysis could be viewed as an incomplete theory building effort. To clarify, this literature review, analysis and synthesis was conducted with an aim of better understanding the status of SWOT analysis from the perspectives of theory, research and practice.

Literature Search

An initial literature search was conducted in three databases: ABI/Inform, Proquest and Lexis Nexis Academic Database. The search included the presence of the term

'swot' in the article title or abstract and was limited to full text availability and scholarly journals. These three searches yielded 82 articles. After comparing the results of these three searches and omitting any duplicates, 51 usable articles remained. A second screening focused on articles that reported on research studies – qualitative or quantitative. Only seven research studies were found. Notably, the most recent of these was in 2000, by Koch.

Other results of this literature search included several case studies that were useful in understanding the variety of ways in which a SWOT analysis can be performed. These case studies firmly establish one aspect SWOT analysis – namely that it is heavily practiced. One further note about these case studies is that they were generally light on clear descriptions of research methodology and consisted mainly of anecdotal stories from a variety of organizations.

Results

The following sections describe the major concepts that resulted from the literature search. First, SWOT analysis is located within the strategic planning literature along with its key purposes, and the context out of which the SWOT analysis was developed as a tool for strategic planning. Second, a detailed description of SWOT is offered including the history of this tool, traditional uses and a general process for conducting a SWOT analysis.

The Design School of Strategy

Mintzberg *et al.* (1998) wrote a book titled *Strategy Safari*. In it, the authors detailed ten 'schools' of strategy. The Design School is a category that captures the first substantial planning model, according to Mintzberg *et al.* (1998). This 'school' of strategy is characterized as being 'more concerned with how strategies *should* be formulated rather than with how they necessarily *do* form' (Mintzberg *et al.*, 1998, p. 21). Focusing on strategy formation as a process of informal *design*, this school of strategy represents the most influential view of the strategy-formulation process. At its essence, the Design School proposes a model of strategy making that seeks to attain a match, or fit, between the internal capabilities and external possibilities.

'Establish fit' is the motto of the Design School according to Mintzberg *et al.* (1998). The basic premises of the design school originated from two books: *Leadership in Administration* by Philip Selznick at the University of California (1957) and *Strategy and Structure* by Alfred Chandler at MIT (1962). These two books outlined a purpose of bringing together the organization's 'internal state and external expectations' (Chandler, 1962, p. 47). Further impetus for the design school came from the General Management group at the Harvard Business School, starting with the publication of basic textbooks, such as *Business Policy: Text and Cases* (Learned *et al.*, 1965) that later became the most popular classroom book in the field and hence has been the dominant voice for this school of thought (Mintzberg *et al.*, 1998).

The basic design school model emphasizes the appraisals of the external technological, economic, social and political aspects of a company's environment (Mintzberg *et al.*, 1998). These elements are assumed not to be under the company's control. Internal elements, such as the organization's culture, structure and resources

are also evaluated, but the assumption is that the organization has some degree of control over these items (Mintzberg *et al.*, 1998). Analyses of the external environment seek to uncover threats and opportunities, while analyses of the internal are intended to reveal strengths and weaknesses of the organization. The organization's environment can be subdivided into direct environment that includes elements directly influenced by the actions of the company such as shareholders, government, suppliers and creditors, and an indirect environment that includes more general forces that have influence over the long-term decisions of the company, such as economic, socio-cultural, technological, and political influences (Houben *et al.*, 1999).

SWOT Analysis

SWOT analysis is a tool commonly used in strategic planning. The letters stand for Strengths, Weaknesses, Opportunities and Threats. SWOT analysis has been a foundational tool in strategic planning since its development in the 1950s and 1960s and is still extensively used today (Hill and Westbrook, 1997). Classified as the key component of the Design School of Strategy by Mintzberg *et al.* (1998), the SWOT analysis quickly became the standard approach to analysing internal and external organizational environments and remains perhaps the most well-known strategic planning tool.

According to Houben *et al.* (1999), every company is confronted with various internal and external forces that might compromise potential stimulants as well as limitations when it comes to the company's performance or its objectives. Hence, according to SWOT thinking, managers should start by identifying and evaluating those factors that help or hinder the company in reaching its potential (Chandler, 1962). Such analysis is of a permanent nature since the company is faced with a dynamic constantly changing environment. A successful interaction with such a rapidly changing environment is generally thought to result in good performance (Selznick, 1957; Chandler, 1962; Learned *et al.*, 1965).

Historical Development of SWOT Analysis

The SWOT framework as a specific strategy tool was developed by Learned *et al.* (1965) from earlier efforts at the Harvard Business School to analyze case studies. The basic framework is shown in Figure 1. In the 1950s, Smith and Christensen set out to study how organizations related to their external environments and their approach would later form the foundation for SWOT analysis. Andrews (1957) concluded that organizations should have clearly stated objectives that help them be competitive and successful. After the study was concluded by Learned *et al.* (1965), classroom discussions took place in various business schools across the United States and focused on organizational strengths and weaknesses and related them to opportunities and risks (Mintzberg *et al.*, 1998). Then, in 1963, a business policy conference was held at Harvard: SWOT analysis was discussed openly and considered as an essential strategic planning tool.

Further insight into the utility of SWOT analysis came from other research conducted at Stanford Research Institute from 1960–1970 concerning planning failures in organizations (Hill and Westbrook, 1997). Research was funded by

	Strengths	Weaknesses
Opportunities	Achieve opportunities that greatly match the company's strengths	Overcome weaknesses to attain opportunities
Threats	Use strengths to reduce the company's vulnerability to threats	Prevent weaknesses to avoid making the company more susceptible to threats

Figure 1. Two-by-two matrix: SWOT analysis

several Fortune 500 companies in an effort to find out how to strengthen planning practices in the future and avoid what were viewed as planning failures. Executives and CEOs in 1100 companies were interviewed, and 250-item questionnaire was designed. The results classified a synthesis of responses to the research study:

- 1) What's good in the present is **S**atisfactory;
- 2) What's good in the future is an **O**pportunity;
- 3) What's bad in the present is a **F**ault; and
- 4) What's bad in the future is a **T**hreat.

The resulting original acronym became '**SOFT**' analysis. The analysis was then presented to Urick and Orr in 1964, who altered the F in Fault to W for Weakness, and hence, they called it '**SWOT**.' The SWOT analysis quickly received further attention and became heavily used in British organizations and led to a resurgence of use in the United States (Hill and Westbrook, 1997). To reflect an emphasis on external environmental factors, the approach has been alternatively referred to as a '**TOWS**' analysis (Hindle, 1994). The TOWS matrix was initiated by Volkswagen in the early 1970s when the company was faced with high labour costs in Germany and difficulties with exporting to the US (Dyson, 2002). The TOWS matrix has been used as a variation of SWOT (see Dyson, 2002 for complete description) where the various factors are identified and then paired in order to stimulate a new strategic initiative (Dyson, 2002).

SWOT has essentially remained unchanged even though many models and frameworks have emerged – these are all variations on the same theme. In one way or another, SWOT has been a fundamental strategic framework on which various topics of strategic management research and practice have been based. SWOT analysis is a strategic planning framework; it is the first stage in many variations of a 'strategic management process', and therefore considered by some to be the most important (Dyson, 2002; Hindle, 1994).

Traditional Use of SWOT Analysis

SWOT can be a rich and prompt tool that helps explore new possibilities and initiate new programmes. SWOT is a dynamic process for decision-making and is actually a

form of brainstorming in that it looks at future possibilities for the organization through a systematic approach into both positive and negative concerns (Balamuralikrishna and Dugger, 1995). When used properly, SWOT analysis can help find the best match between environmental trends (opportunities and threats) and internal capabilities. An effective strategy is one that takes advantage of the organization's opportunities by employing its strengths and wards off threats by avoiding them or by correcting or compensating for weaknesses.

There are many variations on the basic SWOT analysis and while virtually every consulting firm has their own procedure, all follow the same general steps:

- 1) Define the objective of the SWOT analysis
- 2) Provide an explanation of SWOT analysis procedures to participants
- 3) Ask individuals to consider their organization and list its strengths, weaknesses, opportunities and threats on a two-by-two matrix worksheet (see Figure 1)
- 4) Combine the individual worksheets into a single worksheet
- 5) Engage the group in dialogue and debate about the classification of each item
- 6) Develop specific actions for moving forward

Each of these general steps is described as an attempt to provide a general model of SWOT analysis (as in Figure 2).

Step One: Define the Objective

The first step in SWOT is to define the desired end state or objective, which should be explicit and approved by all participants in the process; it must be performed carefully because failure to identify correctly the end state leads to wasted resources and possibly failure of the organization (Dyson, 2002).

Step Two: Explain the Process to Participants

Once the objective has been defined and approved, the second step follows by providing an explanation to SWOT analysis participants of the procedure. This stage is important for communicating the total nature of SWOT analysis to participants. At this point, future meeting should be clarified and scheduled with the assumption that all members will participate in all meetings. This is critical as a fluctuating participation base will lead to outputs that are not agreed upon by everyone and no resolution is met.

Step Three: Solicit Individual Contributions

Step three features the aspects of SWOT analysis that are most popularly known: ask participants to fill out a worksheet describing strengths, weaknesses, opportunities and threats that the organization is currently facing.

- 1) Building upon Strengths (internal competences and capabilities – What we have).
- 2) Eliminating Weaknesses (lack of internal competences and capabilities – What we lack).

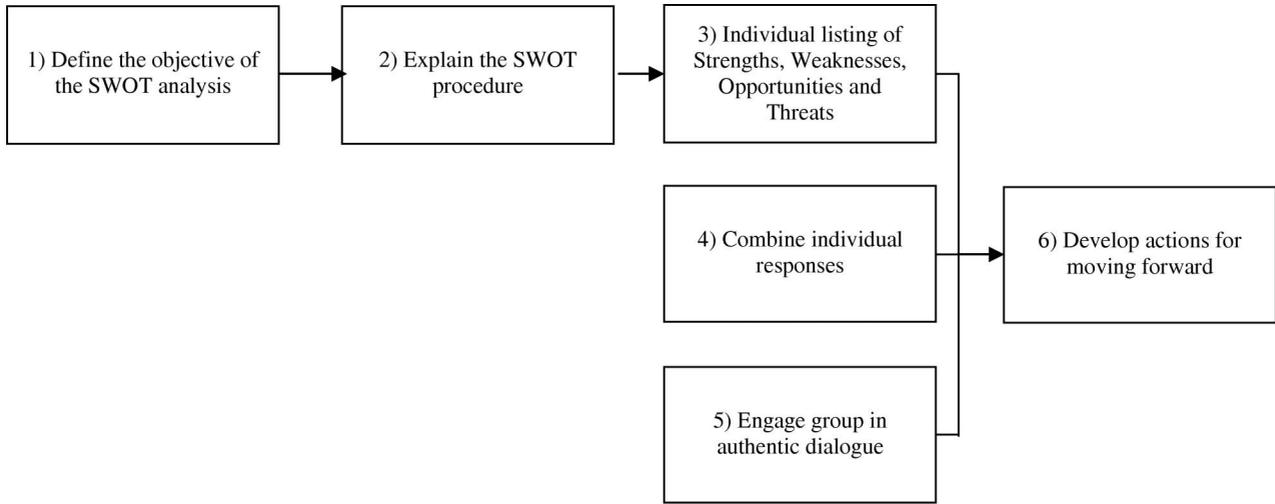


Figure 2. General model of SWOT analysis

- 3) Exploit Opportunities (external positive circumstances – What we could get).
- 4) Mitigate the effects of Threats (external negative circumstances – What we could lose).

Strengths and Weaknesses are seen as internal factors, which are controllable, and can be acted upon (e.g. staff turnover, organizational image). Opportunities and Threats are external, uncontrollable factors, which form the external environment within which the organization operates (Hatton *et al.*, 1992). According to Thompson (1993), strengths are ‘those elements of success such as a strong competitive position’ (p. 57), weaknesses are ‘those elements which prevent the organization from achieving that competitive advantage’ (p. 57), while opportunities are ‘maximized to fit the organization’s values and resources’ (p. 58) and threats are the ‘factors that the organization is not well equipped to deal with’ (p. 58).

Step Four: Aggregate All Contributions

Once individual contributions have been obtained, the task is now to aggregate these responses into one larger picture containing all of the perspectives on organizational strengths, weaknesses, opportunities and threats. This can be in a document format to be distributed to each participant, but is more commonly done on wall charts or computers that can project an image onto a large screen to aid in facilitating dialogue (Hatton *et al.*, 1992).

Step Five: Facilitate Strategic Dialogue

Facilitating strategic dialogue may be the part of the SWOT analysis with the most potential for creating change in participant viewpoints. It is important to recognize strengths can be viewed as weaknesses and opportunities can contain hidden threats as well. Therefore, it is helpful to ask questions such as: ‘How might this threat also be an opportunity?’ and ‘Does this opportunity contain threats as well?’ Also, ‘How might this strength turn out to be a weakness?’ Answers to such questions may give managers new insights into choosing appropriate strategies and promote innovative ways of thinking about known issues in new ways (Thompson, 1993).

It is important to further keep in mind that the way the issues under study are analysed and classified depends heavily on the people or group(s) involved in the analysis (Balamuralikrishna and Dugger, 1995; Thompson, 1993). As a matter of fact, delegating, and involving others in the process allows for higher results to be achieved without being overwhelmed with the issues or factors raised. For example, if competitors come up with a new product, some view it as a threat while others view it as an opportunity for opening new doors, innovation and creativity. Sometimes, pre-work is useful (such as industry trend analyses) when identifying opportunities and threats, so that time is not wasted and participants are aware of cutting edge practices.

An additional outcome of strategic dialogue involves creating a plan to take action, keeping in mind the goals to be achieved or the desired end state to be reached as a result of the SWOT analysis (Mintzberg, 1987). The intent of SWOT is to capitalize on the strengths, address weaknesses, take full advantage of

opportunities, and minimize the impact of threats. SWOT should therefore be used to identify issues that are considered key to the organization's present and future performance (Hill and Westbrook, 1997). These critical issues must be clear and followed carefully through the planning, development and review of any programme, plan or decision (Koch, 2000; Thompson, 1993). Spending quality time assessing the factors under study is crucial after performing the perception-based analysis. Once options have been evaluated and compared, the aim moves toward how to reach a decision by trying to reduce the list of options (Hill and Westbrook, 1997; Mintzberg, 1987; Thompson, 1993).

Placing SWOT in a Strategy System

The proper use of SWOT analysis is as one component of a larger strategy system. Strategy can be loosely defined as a mediating force between the organization and its environment: consistent patterns in streams of organizational decisions to optimize the organization's position within its environment (Mintzberg, 1979). SWOT is a technique that helps check to see if the firm's strategy at all levels is working, and determine the reasons why or why not. It is one tool that enables organizations to formulate competitive strategies to stay effective and operational.

Chermack (2005) suggested a view of strategy as a system rather than a single process. In this systems view of strategy, it is natural that there are multiple components (e.g. SWOT analysis, STEEP analysis, scenarios, etc.). Mintzberg *et al.*'s (1998) 'Configuration' school shares a similar assumption – strategy ultimately should draw on any tools necessary to suit the situation. An important point, however, is to consider the intent, limitations, or issues with each tool.

Argyris and Schon (1996) provided a case study of planning in which the orientation of the executive team contradicted the values of the majority of others involved in the planning system. The executives had their own internal agenda based on power moves in the organization and the rest of the planning team was genuinely trying to implement and follow a detailed planning procedure. The dilemma was eventually solved by using a SWOT analysis to get many competing viewpoints about the organization out for conversation and by incorporating ideas from Mintzberg *et al.*'s (1998) assessment of the 'power school' approach to planning and using this understanding to enhance the planning process that was undertaken. Both approaches to the planning system were used at different times as required by the intended outputs of the planning effort and the SWOT analysis was deemed helpful in providing a forum for strategic dialogue.

In 1997, Daimler-Chrysler integrated scenario planning with their more traditional planning process. In so doing, the planning team consisted of multiple smaller teams, each working with a different approach to the problems presented by recent mergers and growth (Tessun, 1997). Tessun (1997) reported that this was the first attempt at explicitly breaking planning into two distinct phases at Daimler-Chrysler: one of exploring options, and one of assessing and making decisions based on consideration of the options and their implications. Exploring options began with a SWOT analysis in this case.

Scenario planning as advocated by the late Pierre Wack (1985) involves numerous meetings of the planning team during which time the purpose of the planning effort

can be discussed along with its expected outcomes and also during which a SWOT analysis and/or STEEP analysis may be completed. The resulting data, opinions, and goals for moving forward feed into the scenario building process by shedding light on perceptions of organizational strengths, weaknesses, opportunities and threats, and these items play out in surprising ways in the scenarios.

Evaluating SWOT Analysis

A thorough assessment of the effectiveness of SWOT analysis is no easy task. While there have been a few research studies that have purported to examine the effectiveness of SWOT analysis (Hill and Westbrook, 1997; Houben *et al.*, 1999; Koch, 2000), other conceptual tools can direct attention to some failures of, and opportunities for improving this popular strategic tool.

Misuse of SWOT Analysis

For all its simplicity, SWOT is often used poorly, and for purposes different from those it has been designed for (Hill and Westbrook, 1997; Koch, 2000). So, is it appropriate to judge an analytical tool exclusively based on cases of its misapplication and poor usage? SWOT is sometimes used to justify a previously decided course of action rather than used as a means to open up new possibilities' (Koch, 2000). SWOT has also been criticized for giving the option for people or organizations to look for strengths that match opportunities yet ignore those opportunities that cannot be used to their advantage. A more active approach would be to involve identifying the most striking opportunities and then planning to stretch the organization's view in a way that meets these opportunities (Glass, 1991).

Mintzberg (1994), David (1997) and many others suggest that SWOT is the main cause of what is considered an excessive formalization of the strategy making process. Mintzberg (1981, 1987, 1990) has argued passionately for the emergent property of strategy. By this, he meant that strategy is an evolving phenomenon that cannot be boiled down to a few simple steps that work in any situation. Rather, strategy is a complex system in itself requiring that an element of the unknown be allowed to emerge in the strategy process (Mintzberg, 1987). According to Mintzberg *et al.*, (1998) 'emergent strategy emphasizes learning – coming to understand through the taking of actions what those intentions should be in the first place' (p. 189).

Various investigations (Hill and Westbrook, 1997) showed that SWOT is often looked upon as a basic analytical structure only, or used as a way of launching a wide-ranging group discussion about a company's strategic position. SWOT is usually not linked to any subsequent strategic planning application. The failure of consultants to link outcomes of SWOT exercises to the rest of the planning system has been suggested as the primary misuse of the SWOT tool. This failure reduces SWOT analysis to a mere conversational tool – little more than a topic for managers to simply discuss. In short, SWOT's ease of use often leads to its misuse.

Another problem has been the misuse of SWOT analysis to defend a previously decided course of action (Glass, 1991). Research shows that people use the information that best supports their decision by avoiding that which does not (Brock and Bolloun, 1967; Lowin, 1967, 1969; Nutt, 1998; Bazerman, 2006). From this

orientation, cases have shown that decision-makers can manipulate the SWOT process to result in a previously conceived conclusion (Glass, 1991).

A further major misuse of SWOT occurs when organizations prepare an analysis by defining their strengths and weaknesses (which are usually easily detected and therefore always carried out), along with the opportunities and threats (these are usually not easily detected and hence companies tend to discard them or go over them quickly), and they stop at that particular stage (Hill and Westbrook, 1997). They tend not to go any further and, as a consequence, ignore the implementation stage that would help them formulate strategies to achieve their objectives. It can appear that organizational members have achieved their goals' as people are aware of their internal as well as their external environments, which is most often misleading. Despite the level of importance, many companies often only have vague ideas of their competitive strengths and weaknesses, opportunities and threats (Houben *et al.*, 1999).

Koch (2000) listed several additional misconceptions about SWOT, explained why they are wrong and misleading and finally considered their implications (Table 1). Koch's listing of misuses is at a fairly detailed level of analysis and is therefore of high utility in this review. Please see Koch (2000) for further detailed discussion.

SWOT has been outdated by the implementation of resource-based planning that focuses on the internal resources of an organization, its capabilities and core competencies (Wernerfelt, 1984; Grant, 1991) and competency-based planning that identifies the organization's competencies as the foundation for strategy development (Ulrich and Lake, 1990).

Evaluating SWOT Analysis through the Theory-Research-Development-Practice Cycle

The development of the SWOT analysis provides a unique opportunity to analyze an instance of the theory-research-development-practice cycle (Swanson, 1997). Figure 3 represents the links among theory, research, development and practice. SWOT analysis can be viewed as having emerged almost exclusively in practice. Given our review of the development of SWOT analysis, it seems clear that SWOT analysis was driven by a need to understand the failure of planning practices.

Perhaps the critical flaw in the development of SWOT analysis as a solid and reliable strategic tool is a lack of research. Hill and Westbrook (1997) pointed out a general lack of research studies prior to their investigation in 1997, and little is found since. Given this state, the position of SWOT analysis can best be described as a theory that is being built only by developments in practice. Using Figure 3, the current status of SWOT analysis can be characterized as a theory building effort that is stuck in a loop that includes the 'theory', 'practice' and 'development' components only. While this may serve organizations individually, and one at a time, it does little to establish a reliable approach to SWOT analysis that is generally effective regardless of organizational specifics. This lack of research may explain why SWOT analysis is conducted differently from organization to organization, and why it is difficult to answer the overall question of whether or not it is an effective technique.

Our literature search turned up several case studies of the use of SWOT analysis. However, we excluded these from our review based on the fact that these provided

Table 1. Misconceptions about SWOT analysis (adapted from Koch, 2000)

Misconception	What's wrong with it	Consequences of this misconception
SWOT has got an analytical capacity of its own	SWOT is essentially only an analytical framework of the internal and external audit.	Any SWOT generated inputs may be wrongly considered a reliable basis on which to found strategy making.
SWOT should only be done at, and for, the corporate level	Most organizations follow, at any point in time, a number of strategies, some of which may relate to sub-corporate levels of activity (SBU, product line etc.).	If the deployment of SWOT is restricted to the corporate level of strategic analysis, SWOT outputs will often be misleading in that they will suggest that e.g. all strengths and weaknesses are equally relevant to all SBUs and products; another consequence is that the opportunity learn from conducting a series of SWOT based analyses at various corporate levels and in various divisions may be foregone.
SWOT is based on the current competitive situation	If SWOT is done to prepare vital inputs to assist in strategy generation, then the only truly relevant reference is the future competitive situation anticipated in the period the strategy is formulated for.	The strategies selected will be wrongly based on the current, rather than on the anticipated future, competitive situation; should any significant changes occur to the list, and the significance, of current strengths, weaknesses, opportunities and threats, the strategy may turn out to be a poor fit, and a failure.
The content of SWOT generated lists does not depend on the strategy the organization would implement	Different strategies may depend for their success on different strengths and address different opportunities; the degree of this dissimilarity will depend on the underlying key success factors for these alternative strategies.	The relevant inventories proposed at the outset of the strategy making process are very rarely strategy-specific; they also would normally not be revised after future scenarios have been produced and the anticipated strategy performance under individual scenarios examined.
The benchmarking/bench trending can be based on the current list of close competitors	The strategic analysis should foresee the new competitive threats and new entrants into the company's markets; the picture of competition must be brought up-to-date and include instances of hyper-competition.	Companies guilty of such an oversight will be unable to counteract new entries and may find themselves ill-prepared to find an effective long-term strategic response to the new competitive structure and patterns, as well as to the competitive strengths of new entrants.
The benchmarking/bench trending can be based on the local market	The increasing globalization of competition makes it an imperative for many companies to global benchmark/trend.	Companies that rely on local benchmarking/trending will not develop objectives and strategies aimed at achieving/sustaining international competitiveness.

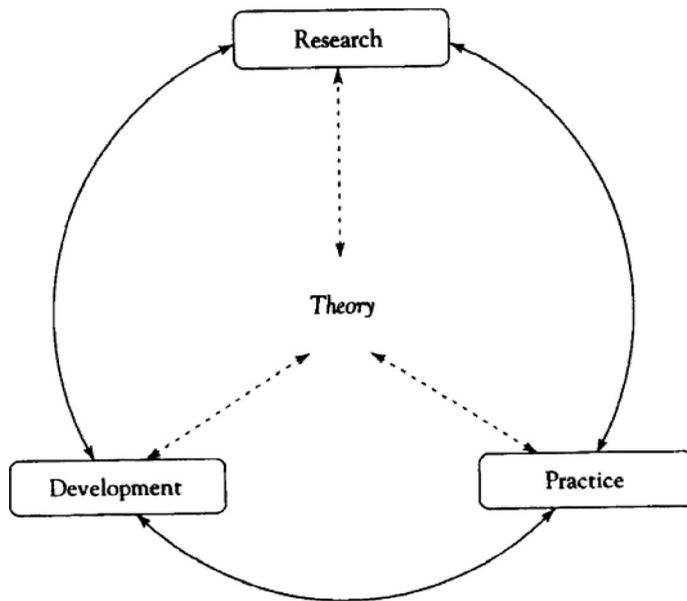


Figure 3. The theory–research–development–practice cycle (Swanson, 1997)

only anecdotal evidence and were not oriented to questions that probed for a deeper understanding of why and how SWOT analysis actually functions as a strategic tool. These data, however, do confirm that the practice of SWOT analysis is alive and well – that people are still making heavy use of this tool, but again, without a deep understanding of procedure, best practice, or research-supported method. In short, there are plenty of data coming from the practice component of this cycle, some (although it is a stretch) from the theory component, and relatively few from the research component. A further key point here is that none of the publications we reviewed integrated these components into a comprehensive and multi-faceted view of SWOT analysis.

Conclusions for HRD Professionals and the Need for a Research Agenda

It seems reasonable to conclude that SWOT analysis has not been rigorously documented as a strategic organizational tool. Significant opportunities exist to study SWOT analysis in more detail that could lend additional weight to the value of its outcomes. These opportunities exist in both quantitative and qualitative research orientations.

This article has provided an in-depth description of the development, use and misuse of SWOT analysis as a strategic organizational tool. Further, this article has analysed SWOT analysis through a research-to-practice lenses. We have concluded that SWOT analysis has the potential to be a tool of high utility in helping organizations maintain fit between internal and external environments. Clear pitfalls have been described so that practitioners may avoid making these same mistakes when using SWOT analysis in their organizations.

It is clear that SWOT analysis has been a highly used strategy development tool. We have learned that SWOT is often poorly used to justify courses of action that have already been decided, and is often disconnected from other parts of the strategy process. In addition, it has been argued that strategy is a phenomenon that is much more emergent in nature than SWOT analysis gives it credit for. For example, organizational environments change, and they can change quickly. Based on this fact alone, some have criticized SWOT for being too rigid in a complex, highly volatile environment. Most of the literature that examines the deficiencies of SWOT analysis suggests that SWOT be used as a part of the strategy process, and that the outcomes are actually used in subsequent components of strategy development.

SWOT can help take an objective, critical, and unemotional look at the organization as a whole when the results are used for purposes beyond simply completing the procedure (Mintzberg, 1987). Without rigorous attention to these factors, the analysis can lead to biased classification and categorization of factors, which will thus result in decisions that are less than optimal and that do not maximize strengths, address weaknesses, explore opportunities or work against threats (Thompson, 1993). SWOT analysis helps strategic managers to determine whether the organization is able to deal effectively with its environment.

We have also concluded that there is a need for research on this topic if SWOT analysis is to be viewed as an effective strategy development tool. This article provides one view of the SWOT analysis process, which can be used by HRD professionals to facilitate this exercise in a variety of settings. Clear pitfalls have also been identified; however, it is currently unknown if SWOT analysis actually has any outcomes, and if so, what they might be and how to most effectively bring them about. What seems most clear is that there is a need to understand this process more fully than we currently do, and sound research is the key to establishing this process as a viable one.

In the spirit of learning more about SWOT analysis, we offer research suggestions from both quantitative and qualitative orientations. These are suggestions for getting started on a research agenda. The purpose of such a research agenda would be for HRD professionals to master this process and to therefore use it to leverage themselves into their organization's strategic conversations. Future research studies will provide additional information on which to build further inquiry – contributing to the theory and research components in the Theory–Research–Development–Practice Cycle (Swanson, 1997), and the operationalization and confirmation components of the General Method of Theory Building in Applied Disciplines (Lynham, 2002).

Quantitative Research Suggestions

Initial suggestions for researching SWOT analysis from a quantitative frame include the identification of key characteristics purportedly affected by involvement in this process, key theories that help make sense of how the SWOT process works, and foundational, definitional reviews that further clarify the nature and purpose of SWOT analysis. From a theory building perspective, these are the studies that could be classified as conceptual development (Lynham, 2002). Once established, logical

further studies would include correlational studies that explore the relationships between or among various characteristics identified in the conceptual development phase. For example, if decision-making style were thought to be a characteristic that would likely change after participation in a SWOT exercise, measures could be taken at anytime during the SWOT process and evaluated based on numerous demographical data, or results could be correlated with some kind of objective measure of organization performance. With a large enough sample size, considerable conclusions might be drawn about the relationship between SWOT analysis and firm performance.

From our perspective, critical research questions include: (1) what are the outcomes of SWOT analysis (Learning? Performance? Improved decision-making? A strategic plan? (2) Is there a relationship between SWOT analysis and firm financial performance? (3) What are the effects of SWOT analysis on participant decision-making? (4) What is the most effective way to engage in SWOT analysis and when in the strategy process? Once the critical contributing factors to a successful SWOT analysis are identified, the possibility of regression studies used to predict the intended outcomes might be considered. At the current point, however, and as we have demonstrated in this article, not enough is known about what makes for an effective SWOT analysis to move into such studies.

Qualitative Research Suggestions

Given various problems with measurement, qualitative research may provide the best immediate opportunity for developing a better understanding of SWOT analysis. SWOT analysis can be viewed as similar to a Delphi technique in many ways. If SWOT analysis is thought to give participants a more complete picture of the internal state of the organization, does it? And what about diversity? As in the case with Delphi, there is always a danger that if all participants are similar in their experience, background, culture and beliefs, nothing new will be learned. How is this issue addressed in organizations?

Little is known about the experience of participating in SWOT analysis exercises. By simply interviewing a series of SWOT participants, much could be discovered about participant reactions, thoughts and experiences that may prove valuable in designing the most effective SWOT procedures again in the future. Not only would such research aid in the conceptual development phase of theory building (if one were to consider creating a theory of SWOT) but such studies have an independent merit in that they capture a part of the experience that is neglected in the quantitative approach.

We have provided these research suggestions that may improve the soundness of SWOT analysis as a solid and reliable tool. Further, engaging in such research studies would yield substantial additional knowledge about the nature of SWOT and how to make even better use of it. We have attempted to convey that the results of current SWOT practices depend largely on the initial purpose and general facilitation of the process. A clear purpose and the placement of SWOT as ONE tool among many are keys to the successful implementation of this process. Rigorous research is the key to the development of this process beyond its current use as a practitioner's tool with ill-defined outcomes. This research may also establish SWOT as an effective process and helping HRD professionals to (1) develop more robust

HRD strategies, and (2) leverage themselves into the strategic conversations of their organizations.

References

- Andrews, K. (1971) *The Concept of Corporate Strategy* (Homewood, IL: Irwin).
- Argyris, C. and Schön, D. (1996) *Organizational Learning II: Theory, Method, and Practice* (Reading, MA: Addison Wesley).
- Balamuralikrishna, R. and Dugger, J. (1995) SWOT analysis: A management tool for initiating new programs in vocational schools, *Journal of Vocational and Technical Education*, 12.
- Barney, J. (1995) Looking inside for competitive advantage, *The Academy of Management Executive*, 4, pp. 49–61.
- Bartlett, C. A. and Ghoshal, S. (2002) Building competitive advantage through people, *Sloan Management Review*, 43(2), pp. 34–41.
- Bazerman, M. H. (1996) *Judgment in Managerial Decision Making* (Hoboken, NJ: John Wiley & Sons).
- Brock, T. and Bolloun, J. (1967) in: Nemeth, C. and Rogers, J. (1996) Dissent and the search for information, *British Journal of Social Psychology*, 35, pp. 67.
- Chandler, A. (1962) *Strategy and Structure: Chapters in the History of the Industrial Enterprise* (Cambridge, MA: MIT Press).
- Chermack, T. J. (2005) Conceptualising and integrated planning system, *International Journal of Technology, Intelligence and Planning*, 1(1), pp. 46–60.
- David, F. (1997) *Strategic Management*, 6th edn (Upper Saddle River, NJ: Prentice Hall).
- Dyson, R. (2002) Strategic development and SWOT analysis at the University of Warwick, *European Journal of Operational Research*, 152, pp. 631–40.
- Glass, N. M. (1991) *Pro-Active Management: How to Improve your Management Performance* (East Brunswick, NJ: Nichols Publishing).
- Grant, R. (1991) Porter's competitive advantage of nations: An assessment, *Strategic Management Journal*, 12, pp. 535–49.
- Hill, T. and Westbrook, R. (1997) SWOT analysis: It's time for a product recall, *Long Range Planning*, 30, pp. 46–52.
- Hindle, T. (1994) *Field Guide to Strategy: A Glossary of Essential Tools and Concepts for Today's Manager* (Cambridge, MA: Harvard Business School Press).
- Houben, G., Lenie, K. and Vanhoof, K. (1999) A knowledge-based SWOT-analysis system as an instrument for strategic planning in small and medium sized enterprises, *Decision Support Systems*, 26, pp. 125–35.
- Learned, A., Christensen, C., Andrews, R. S. and Guth, D. (1965) *Business Policy: Text and Cases* (Homewood, Illinois: Irwin).
- Lowin, A. (1967) Approach and avoidance: Alternative modes of selective exposure to information, *Journal of Personality and Social Psychology*, 6(1), pp. 1–9.
- Lowin, A. (1969) Approach and avoidance: Alternative modes of selective exposure, *Journal of Experimental Social Psychology*, 5, pp. 265–71.
- Lynham, S. A. (2002) The general method of theory-building research in applied disciplines, *Advances in Developing Human Resources*, 4(3), pp. 221–41.
- Lynham, S. A., Provo, J. M. and Ruona, W. E. A. (1998) The role of scenarios in business strategy and human resource development, in: R. J. Torraco (Ed.) *Academy of Human Resource Development Conference Proceedings* (Baton Rouge, LA: AHRD).
- Koch, A. (2000) SWOT does not need to be recalled: It needs to be enhanced. Swinburne University of Technology.
- Mintzberg, H. (1979) *The Structuring of Organizations* (Englewood Cliffs, NJ: Prentice-Hall).
- Mintzberg, H. (1981) *Organization Design: Fashion of Fit?* (Boston: Harvard Business School Press).
- Mintzberg, H. (1987) The strategy concept I: Five Ps for strategy, *California Management Review*, 30, pp. 11–24.
- Mintzberg, H. (1990) The design school: Reconsidering the basic premises of strategic management, *Strategic Management Journal*, 11, pp. 171–95.
- Mintzberg, H. (1994) *The Rise and Fall of Strategic Planning* (Hemel Hempstead: Prentice Hall).

- Mintzberg, H., Ahlstrand, B. and Lampel, J. (1998) *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management* (New York: Free Press).
- Nutt, P. (1998) Evaluating alternatives to make strategic choices, *Omega, International Journal of Management Science*, 26(3), pp. 333–54.
- Selznick, P. (1957) *Leadership in Administration: A Sociological Interpretation* (New York: Harper and Row).
- Swanson, R. A. (1997) HRD research: Don't go to work without it!, in: R. Swanson and E. Holton (Eds) *Human Resource Development Research Handbook* (San Francisco: Berrett-Koehler).
- Tessun, F. (1997) Scenario analysis and early warning systems at Daimler-Benz Aerospace, *Competitive Intelligence Review*, 8(4), pp. 30–40.
- Thompson, J. L. (1993) *Strategic Management: Awareness and Change*, 2nd edn (London: Chapman & Hall).
- Torraco, R. J. and Swanson, R. A. (1995) The strategic roles of human resource development, *Human Resource Planning*, 18(4), pp. 3–38.
- Ulrich, D. and Lake, D. (1990) *Organizational Capability: Competing from the Inside Out* (New York: John Wiley).
- Wack, P. (1985) Scenarios: Uncharted waters ahead, *Harvard Business Review*, pp. 73–89.
- Wernerfelt, B. (1984) A resource-based view of the firm: Summary, *Strategic Management Journal*, 5, pp. 171–81.

Author Information

Thomas J. Chermack is an Assistant Professor in the Department of Learning and Performance Systems at the Pennsylvania State University, USA. His research has focused on scenario planning and decision-making from an HRD perspective, and has appeared in journals such as *Human Resource Development Review*, *Futures* and *Technological Forecasting and Social Change* among others. Email: tjc18@psu.edu

Bernadette Kasshanna is currently in the MS programme in Workforce Education and Development at the Pennsylvania State University, specializing in human resources and training. She holds a MBA from the Lebanese American University and currently works as an IT consultant for the Information Technology Services at Penn State. She is the recipient of the Rose Cologne 'Volunteer of the Year' Award in 2005 and co-author of *Human Extinction Scenarios*, to appear in *Futures*.