

**SWOT Analysis:
Strengths, Weaknesses,
Opportunities, Threats**

*Liza Groenendijk
October 2002*

Version

Liza Groenendijk/Social Science Division/ITC/Enschede/ Netherlands

29.10.02

SWOT Analysis

What?

The SWOT¹ analysis is a tool designed to be used in the preliminary stages of decision-making, often as a precursor to strategic planning. It is a common tool in evaluation studies.

It focuses on the identification of strong and weak points within an organisation and the analysis of opportunities and threats towards further development. SWOT is an acronym, which stands for Strengths, Weaknesses, Opportunities and Threats.

The results of the SWOT analysis can be summarised in the SWOT Matrix (figure 1). Strategy planning may use the matrix to identify how external opportunities and threats facing a particular organisation can be matched with the internal strengths and weaknesses, to result in possible strategic alternatives. A more detailed process of strategy formulation may follow.

Why?

Basic principle in the SWOT analysis is the idea that good strategy means ensuring a fit between the external situation or environment (threats and opportunities) and the internal qualities or characteristics (strengths and weaknesses) of the organisation.

The process of gathering, analysing and evaluating information among different stakeholders, to investigate the SWOT elements, identify strategic options and formulate a strategy, makes the SWOT analysis a good method for systematic group reflection.

The SWOT analysis creates consensus among stakeholders on reaching strategic priorities to tackle major weaknesses and threats using the major strengths and opportunities. It contributes to ownership and commitment to the process of strategy formulation and further action planning.

¹ The terminology used in this document reflects those generally used in the training modules. In the list of key definitions, the most common synonyms are given.

Fig. 1. Example of a SWOT Matrix for the National Mapping Agency in Europe (Paresi, 1999)

Internal Factors External Factors	Strengths (S) <ul style="list-style-type: none"> Quality culture Large experience in mapping operations Availability of hard/software Well trained personnel/staff development 	Weaknesses (W) <ul style="list-style-type: none"> No marketing structure Divisional structure No flexible system Lack of operations management
Opportunities (O) <ul style="list-style-type: none"> Growing number of new customers Established copyright legislation Growth of E-commerce Enabling power of GI technology 	SO Strategies <ul style="list-style-type: none"> Use internet for easier/cheaper product dissemination Optimise production system making use of available technology and staff Certify products protected by copyright 	WO Strategies <ul style="list-style-type: none"> Develop marketing mechanisms to better identify customer's requirements Re-engineer production system using GI technology + ops. mgt. Techniques to enable product diversity for E-commerce Develop business units
Threats (T) <ul style="list-style-type: none"> Cut in government budget Dissatisfaction of user community Growing competition from private sector Easy access to easy/cheap technology by competitors 	ST Strategies <ul style="list-style-type: none"> Find new market niches to recover part of costs (new users, new products) Make use of culture, capabilities and experience to satisfy users and to enter competition Do not oppose but co-operate with private sector (partnership) 	WT Strategies <ul style="list-style-type: none"> Develop marketing mechanisms to better identify customer's requirements Re-engineer production system using GI technology + ops. mgt. Techniques to enable product diversity to better compete

Field of application

Originally the SWOT analysis was developed for business applications, as a management tool in Strategic Planning and Management of industrial and business enterprises. It has expanded from there to a much broader field of application.

SWOT analysis is used in project planning as a tool for exploring the constraints and opportunities of a project proposal. It is also being used in curriculum development and planning, as well as in individual career planning.

Box 1. Historical overview of SWOT.

The SWOT analysis, as part of Strategic Planning, has its origin in the work of business policy academics at Harvard Business School and other American business schools from the 1960s onwards. Strategic Planning is concerned with developing an organisation's mission, objectives, strategies and policies. Popular became the idea that good strategy means finding a strategic fit between external situation a firm faces (threats and opportunities) and its own internal qualities or characteristics (strengths and weaknesses).

In recent years the SWOT analysis has become a popular tool for strategy formulation for a much broader field of application. Improvements of the tool were proposed which refer to the weighting and commenting of the different internal and external factors. There are other approaches to strategy formulation, but the SWOT-type of analysis of internal and external assessment and seeking a fit between the two perspectives has remained popular.

Description

The SWOT analysis consists of following basic steps: the external analysis to identify opportunities and threats, the internal analysis of the organisation to identify the existing strengths and weaknesses, the generation of alternative strategies and the formulation of a strategic choice (box 2).

Box 2. Basic steps in SWOT

1. External analysis
2. Internal analysis
3. Generating alternative strategies
4. Formulation of strategic choice

1. External analysis

The external analysis takes into account the actual situation (existing threats, non-exploited opportunities) as well as possible trends and developments. The latter have to be realistic with clear indications and without major speculations. Moreover, the effect on the performance of the organisation should be substantial.

An *opportunity* can be defined as an external fact or development that, if taken advantage of, can substantially contribute to the realisation of the organisation's mission. Examples of opportunities are new possibilities for co-operation, favourable government policies and regulations, a new target group or demand for new services.

A *threat* can be defined as an external fact or development that has or can have a substantial negative effect on an organisation's performance. Threats are challenges posed by unfavourable trends or developments in the environment that will lead to the erosion of the organisation's position if no corrective action is taken. Examples of threats are: other projects/organisations coming in with similar products/services, changes in donor policies, changes in government policies and regulations, diminishing resources (e.g. manpower, inputs).

2. Internal analysis

The internal situation is discussed on the basis of the existing situation and explores existing strengths and weaknesses. An organisation's strengths and weaknesses are internal factors that critically determine its performance.

A *strength* is therefore defined as an internal characteristic that contributes substantially to the realisation of the organisation's mission. A strength is any existing internal asset (management, staff capacity/motivation, knowledge, resource, business links, etc.) well placed to help to exploit opportunities (or to meet demands) and fight off threats.

A *weakness* is an internal characteristic that threatens the functioning of the organisation. Weaknesses are internal conditions that erode the organisa-

tion's position, hamper co-operation with others or obstruct the exploitation of opportunities.

3. Generating alternative strategies

Strengths, weaknesses, opportunities and threats are matched/combined in order to arrive at a number of alternative strategies, which may form the basis for further strategy formulation.

Figure 1 shows how strengths, weaknesses, opportunities and threats can be matched in order to arrive at four (or more) sets of alternative strategies. The alternative strategies are based on particular combinations of the four strategic factors:

- SO strategies aim at using the strengths to take advantage of the opportunities
- ST strategies consider the strengths as a way to avoid threats in the environment
- WO strategies attempt to take advantage of opportunities by overcoming weaknesses
- WT strategies are basically defensive and primarily act to minimise weaknesses and avoid threats

More combinations are possible and might be relevant to consider, e.g. using strengths to alleviate or mitigate weaknesses, and using opportunities to combat threats (see figure 3: the enhanced SWOT Matrix).

4. Formulation of strategic choice

The sets of alternative strategies, summarised in the SWOT Matrix, are further discussed and analysed.

Generally successful organisations will attempt to get into a situation where they can work from strengths to take advantage of opportunities. If they have weaknesses, they will strive to overcome them, making them strengths. If they face threats, they will frame strategies that cope with them so that they can focus on opportunities.

Gradually, a "synthesised" strategic choice will be defined and the trade-offs involved appraised. The process of strategic choice formulation will result in one single strategy. The single strategy will often include 'contingency planning'.

The factors displayed in the SWOT Matrix pertain to analysis at a particular point in time. External and internal environments are dynamic: some factors change over time while others change very little. Because of the dynamics in the environment several Matrices could be prepared at different points in time. One may start with a SWOT Analysis in the past, continue with an analysis of the present, and, perhaps most important, focus on different time periods in the future.

Operating the instrument

The SWOT Analysis followed by a strategic orientation can be done by an individual, but is more effective when carried out in participatory exercise involving major stakeholders. The proposed procedure aims at reaching consensus among the stakeholders concerning the strategic choice.

Step 1. Define the entity (organisation, problem area, situation, technique)

Step 2. Brief participants about purpose and procedure, and explain terminology used.

Step 3. Identification of strengths, weaknesses, opportunities and threats

- Ask participants to list perceived external Threats and Opportunities, present ones and, even more important, also future ones.
- List in the same way the internal Strengths and Weaknesses.
- It can be helpful to use a sample 2 x 2 matrix (see figure 2.)

Fig. 2. Sample matrix for listing Strengths, Weaknesses, Opportunities and Threats

<p>Strengths List 5 – 10 Strengths</p>	<p>Weaknesses List 5 – 10 Weaknesses</p>
<p>Opportunities List 5 – 10 Opportunities</p>	<p>Threats List 5 – 10 Threats</p>

- List only the most important factors (5 – 10).
- Read and discuss the responses.

Step 4. Develop alternative strategies

- Draw a 3 x 3 sample Matrix (see format in figure 1).
- Transfer the discussed lists of S, W, O and T to this matrix.
- Analyse the results. Use the following questions to fill in the empty fields of the SWOT Matrix.
 - How can strengths be employed to take advantage of opportunities? (SO analysis for SO strategies)
 - How can strengths be used to counteract threats that tend to hinder achievement of objectives and pursuit of opportunities? (ST analysis for ST strategies)
 - How can weaknesses be overcome to take advantage of opportunities? (WO analysis for WO strategies)
 - How can weaknesses be overcome to counteract threats that tend to hinder achievement of objectives and pursuit of opportunities? (WT analysis for WT strategies)

And, consider the additional fields (see figure 3):

- How can strengths be used to mitigate weaknesses (SW strategies)? And, how can opportunities be used to combat threats (OT strategies)?

Fig. 3. SWOT Matrix: enhanced format (Source: Hunger & Wheelen, 1997; adapted)

Internal Factors External Factors	Strengths (S) List 5 – 10 internal strengths here	Weaknesses (W) List 5 – 10 internal weaknesses here	
	SO Strategies Generate strategies here that use strengths to take advantage of opportunities	WO Strategies Generate strategies that take advantage of opportunities by overcoming weaknesses	OT Strategies Generate strategies that use opportunities to combat threats
	ST Strategies Generate strategies here that use strengths to avoid threats	WT Strategies Generate strategies here that minimise weaknesses and avoid threats	
	SW Strategies Generate strategies that use strengths to mitigate weaknesses		Synthesis

Step 5. Select best strategies

Different methods can be used to select best options or strategies.

Two examples:

- Develop one or more criteria to select the best options and apply the criteria to the options.
- Select the best 5 options using consensus or using voting by participants.

Step 6. Formulate a strategy

- Formulate major tentative strategies based on these options.
- Identify areas for further investigation. This could be a more detailed analysis of the consequences of the tentative strategies.
- Make a final decision (synthesis) on the strategy to follow.

Step 7. Follow up

- Prepare an action plan, or project plan, based on the strategic decision.

Strengths

- SWOT Analysis is a well-understood technique.
- It offers a consistent approach to identify major strategic choices.
- Both growth as well as retrenchment strategies can be considered.
- It is a good way to use brainstorming to create alternative strategies that might not otherwise be considered.
- It assists in generating consensus among stakeholders, providing a good basis for implementation of a project plan
- An important added benefit is that the use of SWOT can be a powerful tool in team building.

Limitations

- The adequacy of the strategic choices depends on the adequacy of the strategic factors identified in the analysis phase
- It requires commitment of the participants
- The SWOT Analysis may easily be used in a limited sense: only as mere list-making

Requirements

Skills

- A SWOT Analysis can be done individually, but it is more effective when major stakeholders of the project/organisation are involved.
- The SWOT Analysis requires a good understanding of the participants in the actual and future situation of the organisation or the project.
- To guide the participants or stakeholders in the process of the SWOT Analysis a good facilitator is required.
- It requires commitment of all stakeholders or participants, during the whole process of the analysis.

Time

- Completing a SWOT Analysis takes from one day to several weeks, depending on the size of the project/organisation, the expected output and the depth necessary to which the technique is applied.
- The SWOT Analysis requires a considerable effort from all parties involved.

Related instruments

The SWOT framework can be used as a tool for situation analysis within a *Strategic Planning* process.

Opportunities and threats can be identified in a number of ways. Instruments that can be useful for identification of opportunities and threats are:

- *Institutiogramme*
- *Network Matrices*
- *Environmental Scan*
- *Problem Tree*

To identify strengths and weaknesses systematically, the following tools may be useful:

- *Integrated Organisation Model*
- *Criteria for judgement* (suitability, legitimacy, effectiveness, continuity, sustainability, flexibility, efficiency)
- *Process Analysis*
- *Problem Tree*

Weighting and *rating* are tools can be used to refine the analysis of strengths and weaknesses, opportunities and threats. *Ranking* tools are applied to prioritise factors and/or alternative strategies.

EFAS (*External Strategic Factor Analysis*) and IFAS (*Internal Strategic Factor Analysis*) are tools used for detailed analysis of the external and internal factors.

Strategic orientation (also used synonymous to SWOT Analysis) is a method in which the SWOT analysis is applied in the following way. In order to develop strategies, an intermediate step is used by first generating strategic 'options' for each opportunity and threat. A selection of these options is than matched with strengths and weaknesses. This results in a number realistic alternative strategies and provides a prioritisation.

Making an action plan or a project plan can follow a SWOT Analysis. This could be done in the form of a *Logical Framework*.

Further reading

Hill, T. and Westbrook, R., 1997. SWOT Analysis: It's Time for a Product Recall. *Long Range Planning*, 30(1): 46 to 52.

Hunger, J.D. and Wheelen, T.L., 1997. *Essentials of Strategic Management*. Addison Wesley Longman, Inc., 212 pp.

MDF, 1998. *Organisational Development for Advisors and Consultants*. Course material, Management for Development Foundation, Ede.

Parsi, C.M.J., 1999. *Situation Analysis in the framework of Strategic Planning*. Power Point Presentation. International Institute for Aerospace Survey and Earth Sciences.

Wehrich, H., 1982. The TOWS Matrix-A Tool for Situational Analysis. *Long Range Planning*, 15(2): 67 to 76.

Key definitions

Alternative strategies

Strategies based on the matching of the four strategic factors (opportunities, threats, strengths and weaknesses) of an organisation. (Synonyms: options, strategic choices)

External situation

The external analysis is described in a dynamic sense taking into account the actual situation (existing threats, non-exploited opportunities) as well as possible trends and developments. (Synonym: external environment)

Internal situation

The internal situation is discussed on the basis of the existing situation and explores existing strengths and weaknesses and not future ones. An organisation's strengths and weaknesses are the internal critical factors that determine its performance. (Synonym: internal environment)

Opportunity

An opportunity can be defined as an external fact or development that, if taken advantage of, can substantially contribute to the realisation of the organisation's mission. (Synonym: development opportunity)

Strategic management

Strategic management is that set of managerial decisions and actions that determines the long-run performance of an organisation. It includes environmental scanning (both external and internal), strategy formulation (strategic or long-range planning), strategy implementation, and evaluation and control

Strategy

A strategy is a translation of the organisation's mission into aims, and provides ideas how these aims could be pursued.

Strength

Strength is defined as an internal characteristic that contributes substantially to the realisation of the organisation's mission. A strength is any existing internal asset which will help to exploit opportunities (or to meet demands) and to fight off threats.

SWOT Analysis

The SWOT analysis is a management tool used for strategy formulation. It is used to identify strong and weak points within an organisation and to analyse opportunities and threats towards further development. SWOT is an acronym which stands for Strengths, Weaknesses, Opportunities and Threats. (Synonym: TOWS Analysis, Situational Analysis, Strategic Orientation)

SWOT Matrix

The SWOT Matrix illustrates how external opportunities and threats facing a particular organisation can be matched with that organisation's internal strengths and weaknesses to result in four sets of possible strategic alternatives. (Synonym: TOWS Matrix)

Threat

A threat can be defined as an external fact or development that has or can have a substantial negative effect on an organisation's performance.

Weakness

A weakness is an internal characteristic that negatively and substantially influences the functioning of the organisation. Weaknesses are internal conditions that erode the organisation's position, hamper co-operation with others or obstruct the exploitation of opportunities.