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ROLE OF DECISION MAKING IN ORGANISATION FOR MANAGEMENT AND LEADERSHIP

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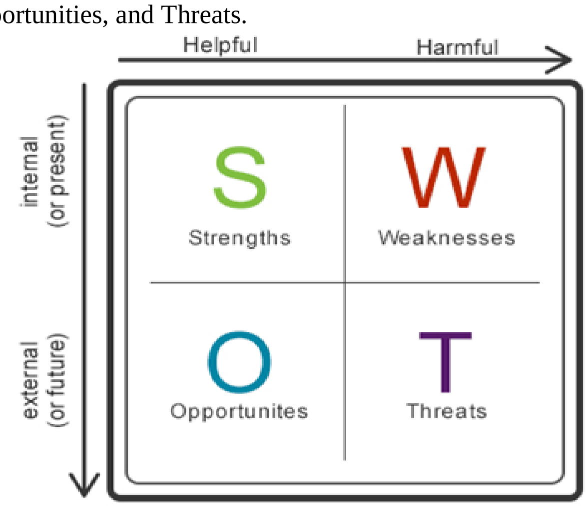
Abstract:

Decision making is a daily activity for the human being. For business organizations, decision making is a habit and a process as well. This is an essential aspect of modern management and integral part of manager's activities. Decisions are important to determine both managerial and organizational actions. A decision may be defined as "a course of action which is consciously chosen from among a set of alternatives to achieve a desired result." It represents a well-balanced judgment and a commitment to action. Effective and successful decisions make profit to the company and unsuccessful ones make losses. Therefore, corporate decision making process is the most critical process in any organization. Decision-making can be regarded as the cognitive process resulting in the selection of a course of action among several alternative possibilities. It is the process of making choices by setting goals, gathering information, and assessing alternative options. There are many processes and techniques to improve decision-making and the quality of decisions. In this paper, our aim is to study one such method which is referred to as SWOT analysis. In this method weuses 2*2 Matrix Model. Itautomatically suggests actions for issues arising from the SWOT analysis.SWOT analysis helps assess the strength of a company, a business proposition or idea. Good decision-making requires a mixture of skills: creative development and identification of options, clarity of judgment, firmness of decision, and effective implementation.

Key Words: Decision-making Process, Strengths and Weaknesses, Opportunities and Threats, SWOT Analysis & SWOT 2*2 Matrix Method.

Introduction:

It is rightly said that the first important function of management is to take decisions on problems and situations. Decision-making pervades all managerial actions. Decision-making is an indispensable component of the management process itself. Decisions are required to be taken regularly as new problems, difficulties and challenges develop before a business enterprise. This may be due to changes in the external environment. New products may come in the market, new competitors may enter the market and government policies may change. All this leads to change in the environment around the business unit. Such change leads to new problems and new decisions are needed. Decision-making creates proper background for the first management activity called planning. Planning gives concrete shape to broad decisions about business objectives taken by the top-level management. In addition, decision-making is necessary while conducting other management functions such as organizing, staffing, coordinating and communicating. A SWOT analysis is a subjective assessment of data which is organized by the SWOT format into a logical order that helps understanding, presentation, discussion and decision-making. The SWOT analysis, comprising four sections, one for each of the SWOT headings: Strengths, Weaknesses, Opportunities, and Threats.



The SWOT analysis is an extremely useful tool for understanding and decision-making for all sorts of situations in business and organizations. SWOT is an acronym for Strengths, Weaknesses, Opportunities, Threats. For some people decision-making is more natural, so these people should focus more on improving the quality of their decisions. People that are less natural decision-makers are often able to make quality assessments, but then need to be more decisive in acting upon the assessments made. SWOT analysis is a structured planning tool for performing internal and external analysis. This can be carried out for product/service, place, organization, industry or a person. It is a technique for understanding your Strengths and Weaknesses, and for identifying both the Opportunities and Threats. It is a basic and straight forward framework which can help to solve organization greatest challenges and find its most promising new markets. At the end of the analysis, you will have a strong strategic plan for your growth. It is simply listing out your strengths, weaknesses, opportunities and threats by which you will have a clear picture of what you have? and Where do you lack? What is available and what is to be done. SWOT analysis is commonly presented and developed into a 2x2 matrix. Strengths and weaknesses are often internal to any organization while opportunities and threats generally relate to external factors. For this reason, SWOT is sometimes called Internal-External Analysis and the SWOT Matrix is sometimes called an IE Matrix. You need to list out your company's strengths, weaknesses, opportunities, and threats. Here are the some ideas which might help you in listing out requirement.

Strengths:

- ✓ What are your unique selling points/propositions?
- ✓ What do you do better than anyone else?
- ✓ What quality of your product/service you think can resist the new entrants in the market?
- ✓ What do customers see as your strengths?
- ✓ What do your competitors see as your strengths?
- ✓ What is your lower cost management?
- ✓ What makes you unique from any other competitor?

Don't list out any quality which is in common with your competitor, because strengths are only the qualities of your organization that make it outstanding**.**

Weaknesses:

- ✓ What are you lacking at?
- ✓ What are the reasons for fewer sales?
- ✓ What are the complaints you usually get from your customers?
- ✓ What are the strengths of your competitor?
- ✓ What are the qualities which you couldn't resist or anticipate few that could not be resisted?
- ✓ Be ready to accept the truth. Be bold in listing out the weakness as it's high time to face it.

Opportunities:

- ✓ What good opportunities can you find from the needs of customers with the change in lifestyles and profiles?
- ✓ What are latest updates in regards to your industry?
- ✓ What are the Current events?
- ✓ What are the new markets suits your product/service to emerge?

Threats:

- ✓ What are the competitors doing?
- ✓ What if any new entrants are in the market?
- ✓ Are there changes in external factors that can affect your company's position?

Strengths and weaknesses can also be from experience what has worked and what not. Opportunities and threats may be from new Govt. rules, any environmental changes or technical developments.

Analysis:

Here is a typical extension of the basic SWOT analysis into a useful 'action-based' 2x2 SWOT matrix. The SWOT analysis in this format acts as a quick decision-making tool, quite aside from the more detailed data that would typically be fed into business planning process for each of the SWOT factors. Here the 2x2 matrix model (2x2 matrix using internal/external categories) automatically suggests actions for issues arising from the SWOT analysis, according to four different categories:

	Strengths (Internal)	**Weaknesses (Internal)**
Opportunities (External)	Strengths/opportunities obvious natural priorities Likely to produce greatest ROI (Return On Investment) Likely to be quickest and easiest to implement. Probably justifying immediate action-planning or feasibility study. Executive question: "If we are not already looking at these areas and prioritizing them, then why	weaknesses/opportunities potentially attractive options Likely to produce good returns if capability and implementation are viable. Potentially more exciting and stimulating and rewarding than S/O due to change, challenge, surprise tactics, and benefits from addressing and achieving

	not?"	improvements. Executive questions: "What's actually stopping us doing these things, provided they truly fit strategically and are realistic and substantial?"
Threats (External)	strengths/threats easy to defend and counter Only basic awareness, planning, and implementation required to meet these challenges. Investment in these issues is generally safe and necessary. Executive question: "Are we properly informed and organized to deal with these issues, and are we certain there are no hidden surprises?" - and - "Since we are strong here, can any of these threats be turned into opportunities?"	weaknesses/threats potentially high risk Assessment of risk crucial. Where risk is low then we must ignore these issues and not be distracted by them. Where risk is high we must assess capability gaps and plan to defend/avert in very specific controlled ways. Executive question: "Have we accurately assessed the risks of these issues, and where the risks are high do we have specific controlled reliable plans to avoid/avert/defend?"

SWOT analysis is a very flexible tool. Its use is not restricted to business and marketing. Be mindful that when SWOT is used in situations outside of business and marketing, strict categorization of the SWOT dimensions (according to 'internal' and 'external' factors) can be limiting, and so a more open interpretation of the model can be helpful in such circumstances, especially when assessing Opportunities and Threats. It helps you focus on your strengths, minimizes threats, and takes the greatest possible advantage of opportunities available to you. This can be a solution for problems, helps in identifying the barriers which are limiting your goals and ensures effective decision making with the steps to face change externally or internally. It can also be used as an ice-breaker with brainstorming sessions, or in a more sophisticated way as a strategy tool. It allows organizations to accumulate meaningful information in order to maximize their potential. You can also use it to get an understanding of your competitors, which can provide acumen to you, or to craft a coherent and successful competitive position. Design a strategy for growth, keeping your weaknesses in mind, so as to reduce your threats, enhance your strengths, and drive you towards opportunities. Here is a larger illustration of SWOT analysis. Note that this format is not presented or proposed as a 2x2 'internal/external' matrix; it's a more open demonstration of the sorts of issues and questions which can be addressed when using the SWOT format as part of business planning and decision-making.

Subject of SWOT analysis: (define the subject of the analysis here)

Strengths • Advantages of proposition? • Capabilities? • Competitive advantages? • USP's (unique selling points)? • Resources, Assets, People? • Experience, knowledge, data? • Financial reserves, likely returns? • Marketing - reach, distribution, awareness? • Innovative aspects? • Location and geographical? • Price, value, quality? • Accreditations, qualifications, certifications? • Processes, systems, IT, communications? • Cultural, attitudinal, behavioural? • Management cover, succession?	Weaknesses • Disadvantages of proposition? • Gaps in capabilities? • Lack of competitive strength? • Reputation, presence and reach? • Financials? • Own known vulnerabilities? • Timescales, deadlines and pressures? • Cashflow, start-up cash-drain? • Continuity, supply chain robustness? • Effects on core activities, distraction? • Reliability of data, plan predictability? • Morale, commitment, leadership? • Accreditations, etc? • Processes and systems, etc? • Management cover, succession?
Opportunities • Market developments? • Competitors' vulnerabilities? • Industry or lifestyle trends? • Technology development and innovation? • Global influences? • New markets, vertical, horizontal?	Threats • Political effects? • Legislative effects? • Environmental effects? • IT developments? • Competitor intentions - various? • Market demand?

• Niche target markets? • Geographical, export, import? • Market need for new USP's? • Market response to tactics, e.g., surprise? • Major contracts, tenders? • Business and product development? • Information and research? • Partnerships, agencies, distribution? • Market volume demand trends? • Seasonal, weather, fashion influences?	• New technologies, services, ideas? • Vital contracts and partners? • Obstacles faced? • Insurmountable weaknesses? • Employment market? • Financial and credit pressures? • Economy - home, abroad? • Seasonality, weather effects?

SWOT Analysis Example:

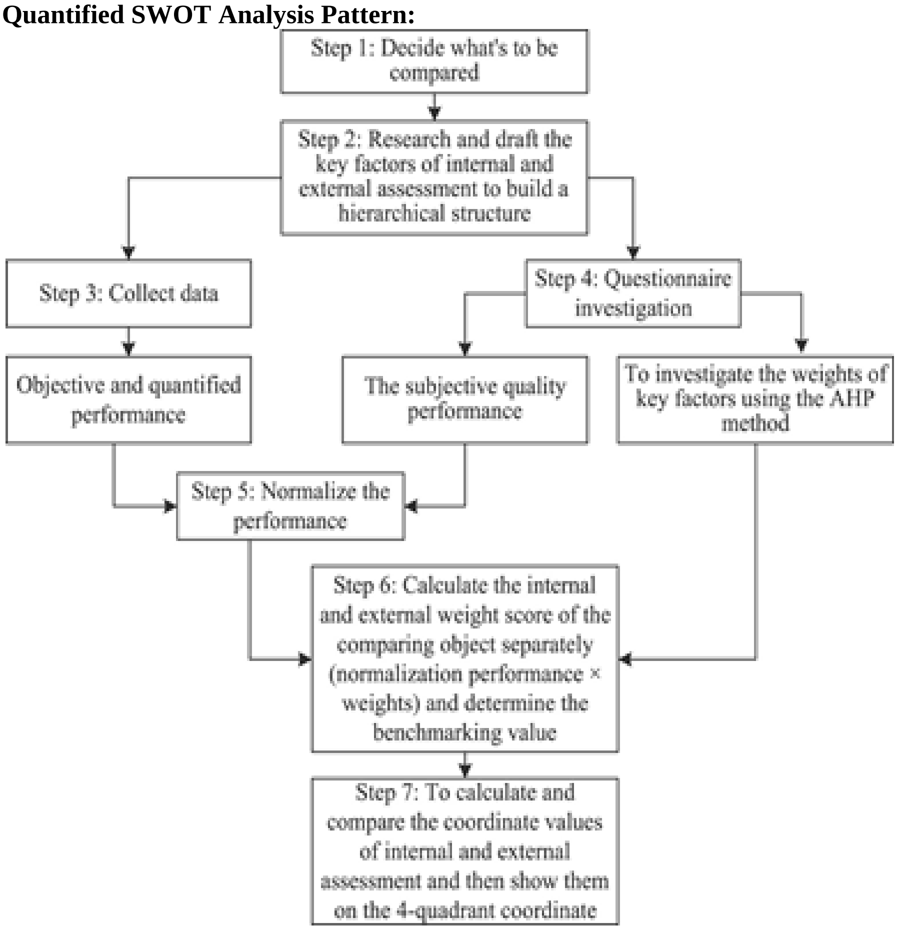
This SWOT analysis example is based on an imaginary situation. The scenario is based on a business-to-business manufacturing company, who historically rely on distributors to take their products to the end user market. The opportunity, and therefore the subject for the SWOT analysis, is for the manufacturer to create a new company of its own to distribute its products direct to certain end-user sectors, which are not being covered or developed by its normal distributors. Subject of SWOT analysis example: the creation of own distributor company to access new end-user sectors not currently being developed.

Strengths • End-user sales control and direction. • Right products, quality and reliability. • Superior product performance vs competitors. • Better product life and durability. • Spare manufacturing capacity. • Some staff have experience of end-user sector. • Have customer lists. • Direct delivery capability. • Product innovations ongoing. • Can serve from existing sites. • Products have required accreditations. • Processes and IT should cope. • Management is committed and confident.	Weaknesses • Customer lists not tested. • Some gaps in range for certain sectors. • We would be a small player. • No direct marketing experience. • We cannot supply end-users abroad. • Need more sales people. • Limited budget. • No pilot or trial done yet. • Don't have a detailed plan yet. • Delivery-staff need training. • Customer service staff need training. • Processes and systems, etc • Management cover insufficient.
Opportunities • Could develop new products. • Local competitors have poor products. • Profit margins will be good. • End-users respond to new ideas. • Could extend to overseas. • New specialist applications. • Can surprise competitors. • Support core business economies. • Could seek better supplier deals.	Threats • Legislation could impact. • Environmental effects would favour larger competitors. • Existing core business distribution risk. • Market demand very seasonal. • Retention of key staff critical. • Could distract from core business. • Possible negative publicity. • Vulnerable to reactive attack by major competitors.

Discussion:

The purpose of the analysis of external opportunities and threats is to evaluate whether an enterprise can seize opportunities and avoid threats when facing an uncontrollable external environment, such as fluctuating prices, political destabilization, social transition, change in the rule of law, etc. The purpose of the analysis of internal strengths and weaknesses is to evaluate how an enterprise carries out its internal work, such as management, work efficiency, research and development, etc. If used correctly, SWOT can provide a good basis for successful strategy formulation. A review of past documents on SWOT analysis reveals that most presented a literal description of the analysis and few conducted quantified analysis. As planning processes are often complicated by numerous criteria and interdependencies, it may be that utilization of SWOT is insufficient. A study by Hill and Westbrook [2] found that none of the 20 case companies prioritized individual SWOT factors, one grouped factors further into subcategories, and only three companies used SWOT analysis as an input for a new mission statement. In addition, the expression of individual factors was of a very general nature and brief. Thus, it can be concluded that the result of SWOT analysis is too often only a superficial and imprecise listing or an incomplete qualitative examination of internal and external factors [3].

Flowchart of Quantified SWOT Analysis Pattern:



How to do a SWOT:

Irrespective of whether you or your team are future planning for specific products, work, personal or any other area, the SWOT analysis process is the same.

- ✓ **Step 1** of a swot analysis– Information collection – In the here and now… List all strengths that exist now. Then in turn, list all weaknesses that exist now. Be realistic but avoid modesty!
    - You can conduct one-on-one interviews. Or get a group together to brainstorm. A bit of both is frequently best.
    - You'll first want to prepare questions that relate to the specific company or product that you are analyzing. You'll find some questions and issues below to get you going.
    - When facilitating a SWOT – search for insight through intelligent questioning and probing
- ✓ **Step 2** of a swot analysis– What might be… List all opportunities that exist in the future. Opportunities are potential future strengths. Then in turn, list all threats that exist in the future. Threats are potential future weaknesses.
- ✓ **Step 3** of a swot analysis– Plan of action… Review your SWOT matrix with a view to creating an action plan to address each of the four areas.

Quantified SWOT Analytical Method:

In this paper, the concept of MADM [6] is introduced into SWOT analysis to construct a quantified SWOT analytical method. Therefore, it is constructed according to the four factors of decision-making: alternatives, criteria, performance, and weight. Alternatives refer to objects to be compared with (e.g., company A and B, etc.). Criteria refer to the key factors of external assessment. Performance structure refers to weights of the key factors. Performance means the performance of the object put into comparison under the evaluation of all the key factors. The Quantified SWOT analytical method consists of the following seven steps (see Fig. 2):

Step 1: Decide what is to be compared, for example: enterprise A and B etc.

Step 2: Research and draft the key factors of internal and external assessment to build a hierarchical structure.

Step 3: Collect data, mainly to collect the objective and quantified performance (e.g., operating income) of the objects compared.

Step 4: Questionnaire investigation which includes two parts: one to investigate the weights of key factors using the AHP method; and the other to investigate the subjective quality performance (e.g., service quality of the shop assistants) of the compared objects.

In this paper, weights of internal and external assessment are proposed to be the same.Weights of key factors are obtained by using the AHP method that was proposed by Saaty [7, 8]. Its aim is to systemize complicated problems and to solve them at different levels and as regards different aspects. A proportion scale of 1, 2, . . . , 9 is used to show the comparison of all the weights to build a matrix; then the strength vector is found by eigenvalue solution which is often used in numerical analysis; finally, the relative weights of key factors can be obtained after the consistency test. When using the AHP method to obtain the weights of criteria, the following steps are included:

Table 1: Average random consistency index (R.I.)

N	1	2	3	4	5	6	7	8	9	10
R.I	0.00	0.00	0.52	0.89	1.11	1.25	1.35	1.40	1.45	1.49

Establishment of a Pairwise Comparison Matrix A: In the hierarchy structure, factors of each level are marked as: A1, A2, . . . , An. Based on the index of the upper level, weights of factors, w_1,w_2, . . . ,w_n are to be determined. The relative importance of a_i and a_j is shown as a_{ij}, the pairwise comparison matrix of factors A_1, A_2, . . . , A_n as A = $[a_{ij}]$; while elements are shown as in formula (1):

$$A = \begin{bmatrix} 1 & a12 & \cdots & a1n \\ 1/a12 & 1 & \cdots & a2n \\ \vdots & \vdots & \ddots & \vdots \\ 1/a1n & 1/a2n & \cdots & 1 \end{bmatrix} \quad (1)$$

In this matrix, the element $a_{i\,j} = 1/a_{ji}$ and thus, when i = j ,a_{ij} = 1. The value of wi may vary from 1 to 9, and 1/1 indicates equal importance while 9/1 indicates extreme or absolute importance.

$$A = [a_{ij}] = \begin{bmatrix} & w1/w1 \; {\scriptstyle w1/w1} \cdots w1/wn & \\ & w2/w1 \; {\scriptstyle w2/w2} \cdots w2/wn & \\ \vdots & \vdots \quad \ddots & \vdots \\ wn/w2wn/w2 & \vdots & wn/wn \end{bmatrix} \quad (2)$$

Calculate key Factor Weights:

Saaty [7,8] suggested that the largest eigenvalue λ_{max} be : $w_i = \frac{1}{\lambda_{max}} \sum_{j=1}^{n} a_{ij} w_j$ (3)

$$\sum_{i=1}^{n} w_i = 1 \quad (4)$$

If A is a consistency matrix, eigenvector w can be calculated by the formula (5):

$$(A - \lambda_{max})\omega = 0 \quad (5)$$

Consistency Test: The consistency index of a matrix of comparisons is given by the formulas (6) and (7). The consistency ratio (C.R.)is obtained by comparing the C.I. with the appropriate one of the following set of numbers (see Table 1) eachof which is an average random consistency index (R.I.) derived from a sample of randomly generated reciprocalmatrices using the scale 1/9, 1/8, . . . , 8, 9. If it is not less than 0.10, study the problem and revise the judgments [8]

$$CR = \frac{CI}{RI} \quad (6)$$

$$CI = (\lambda_{max} - n)/\,(n-1) \quad (7)$$

Step 5: Normalize the performance. Performance of all the key factors includes quantified performance that is an actual statistic (e.g., business volume) and qualified performance that is a score of subjective scoring of the questionnaire (e.g., 1–5 points). The aim of normalization is to unify the scales of the key factors. Here is a suggested normalization method [9]:

(1) Benefit-criteria normalization (the higher the better)

$$r_{ij} = \frac{P_{ij}}{\max_j P_{ij}} \,, \quad \forall_j \quad (8)$$

e.g. p_{11}= 2, p_{12}= 4, p_{13}= 5, p_{14}= 3 then

$$r_{ij} = \frac{P_{11}}{\max_j P_{1j}} = \frac{2}{5} = 0.4$$

and similarly r12 = 0.8, r13 = 1.0, r14 = 0.6, (2) Cost-criteria normalization (the lower the better)

$$r_{ij} = \frac{\min_j P_{ij}}{P_{ij}} \,, \quad \forall_j \quad (9)$$

e.g. p11 = 2, p12 = 4, p13 = 5, p14 = 3 then

$$r_{11} = \frac{\min_j P_{1j}}{P_{11}} = \frac{2}{2} = 1.0$$

and similarly r12 = 0.5, r13 = 0.4, r14 = 0.67, (3) Moderation-criteria normalization (the more moderate the better)

$$r_{ij} = \frac{\min\{P_{ij}, P_0\}}{\max\{P_{ij}, P_0\}} \quad , \quad \forall_j \qquad (10)$$

$$P_0 = \frac{1}{n}\sum_{j=1}^{n} P_{ij}$$

Where
e.g. p11 = 2, p12 = 4, p13 = 5, p14 = 3 then

$$P_0 = \frac{1}{4}\sum_{j=1}^{4} P_{ij} = \frac{1}{4}(2+4+5+3) = 3.5$$

$$r_{11} = \frac{\min\{P_{11}\ ,\ P_0\}}{\max\{P_{11}\ ,\ P_0\}} = \frac{\min\{2\ ,3.5\}}{\max\{2\ ,3.5\}} = \frac{2}{3.5} = 0.57$$

and similarly r12 = 0.88, r13 = 0.7, r14 = 0.86

Step 6: Calculate the internal and external weight score of the comparing object separately (normalization of performance weights) and determine the benchmarking value. It is suggested in this paper that the determination of the benchmarking value can be carried out using the following two approaches: (1) take the mean as the benchmarking value; or (2) take benchmarking enterprises as the benchmarking value. The first approach is recommended to make the calculation easier.

Step 7: To calculate and compare the coordinate values of internal and external assessment and then show them on the four-quadrant coordinate. Firstly, the internal and external scores of the compared enterprises should be added together and then the benchmarking value subtracted. The final value will be the coordinate value of the compared enterprise in the SWOT analysis matrix. The coordinate value will be within −1 ~ +1. The enterprise possesses strengths and opportunities when the coordinate value is larger than the benchmarking value, but the enterprise is comparatively weak and faces threats when the coordinate value is smaller than the benchmarking value.

I Cj= I j − I B j = 1, 2, . . . ,n (11)
E Cj= E j − E B j = 1, 2, . . . ,n (12)

Where

I Cj : the internal assessment coordinate value of the j th enterprise.
I j : internal assessment score of the j th enterprise.
I B: benchmarking value of the internal assessment.
ECj : the external assessment coordinate value of the j th enterprise.
E j : external assessment score of the j th enterprise.
E B: benchmarking value of the external assessment.

$-1 \leq ICj \leq +1$
$-1 \leq ECj \leq +1$

By calculating the benchmarking value and coordinate value according to the above formulas, two groups ofdata can be obtained: one is the coordinate value used to compare the internal assessment of the enterprises; theother is the coordinate used to compare the external assessment of the enterprises. In order to show the comparisonon the four-quadrant coordinate, the ordinate is prescribed to stand for the external environment (opportunities, threats) while the abscissa is prescribed to stand for the internal environment (strengths, weaknesses). Now each enterprise has a coordinate (x, y), so its position in the competition can be clearly realized. This can help theenterprises assess themselves more effectively as well as the components and may be used as the foundation forpolicies of development.

Conclusion:

The SWOT framework is effective for analyzing and creating a simplified picture of a complex situation. But it’s possible for it to be an oversimplification, which is one of the limitations of SWOT analysis. Another is that it is primarily a summary tool and doesn’t provide a clear plan of action. Taking SWOT issues and translating them into actions is a critical part of the process, but it relies on the ability of whoever is conducting the analysis to identify key factors and use them to develop an effective strategy. This is a subjective process with inherent limitations, but there is no question that SWOT analysis can provide valuable insight for any business, project or individual. A realistic recognition of the weaknesses and threats that exist for your effort is the first step to countering them with a robust and creative set of strengths and opportunities. A SWOT analysis identifies your strengths, weaknesses, opportunities and threats to assist you in making strategic plans and decisions. SWOT is a simple yet comprehensive way of assessing the positive and negative forces within and without your organization, so you can be better prepared to act effectively. The more stakeholders you involve in preparing the SWOT, the more valuable your analysis will be whatever courses of action you decide on, the four-cornered SWOT analysis prompts you to move in a balanced way throughout your program. It reminds you to:

- ✓ Build on your strengths
- ✓ Minimize your weaknesses
- ✓ Seize opportunities
- ✓ Counteract threats

A SWOT analysis will be most helpful if you use it to support the vision, mission, and objectives you have already defined. The SWOT will at least provide perspective, and at best will reveal connections and areas for action. In summary of a swot analysis:

- ✓ Strengths need to be maintained, built upon or leveraged.
- ✓ Weaknesses need to be remedied, changed or stopped.
- ✓ Opportunities need to be prioritized, captured, built on and optimized.
- ✓ Threats need to be countered or minimized and managed.

A SWOT analysis can be very subjective, and two people rarely come-up with the same final version of a SWOT analysis. It is an excellent tool however, for looking at the negative factors first in order to turn them into positive factors. Use a SWOT analysis/ framework as guide and not a prescription.

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