

## Strategic Planning Tools and Their Usage in Organizations

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**Abstract** The aim of this paper is to understand how strategic analysis tools bring in change to an organization, this paper focuses on understanding four strategic analysis tools used for strategic planning and decision making in organizations and what are the outcomes of using these tools. These tools are SWOT analysis, PEST analysis, Value Chain analysis, and Critical Success Factors analysis.

**Keywords:** Strategic analysis, PEST, Value chain, strategic planning, SWOT, Critical Success Factors, CSF.

### 1. INTRODUCTION

Today's Organizations find themselves operating in environment that is changing faster than ever before. They consciously seek to control and manage change by understanding the environment in which it operates and interacts in order to improve its efficiency and effectiveness with the use of strategic tools. Senge (1990) warns that "redrawing the lines and boxes in your organizational chart without addressing the way people within the organization interact may be like rearranging the deck chairs on the Titanic". So, in order to foster people's support and reach organizational goals we must understand their responses to change.

Strategic Analysis definition often differ, but the following attributes are usually associated with it:

- To identify and evaluate data which are relevant to strategy formulation
- To define the external and internal environment of an organization that needs to be analyzed
- During analysis different ranges of analytical methods can employed

According to Lawlor (2010) there are many benefits for strategic analysis and planning that encourage

organizations and businesses to adopt it. The main benefits of adopting strategic planning and analysis include (but not limited to): (1) helps to make better decisions, (2) the increase of energy, (3) the increase of capacity, (4) customer satisfaction improvement, (5) better solutions, (6) recognizing the market, (7) increase the chances of success.

### 2. Background of Strategic Analysis Tools

In order to ensure consistency during analysis, analytical tools are used. The main aim of using analytical tool is to get a clear image of the analysis and to ensure a balanced and methodical approach. A key skill set of a strategic analyst is to understand which techniques or tools are most suitable to the objective of the analysis. Below are some descriptions of commonly used strategic tools.

**SWOT Analysis:** SWOT focuses on identifying the Strengths, Weaknesses, Opportunities, and Threats in organizations and businesses. By using SWOT, strategies are developed on the strength building and opportunities exploitation while eliminating the weaknesses and encountering the threats. Capturing the strength and weaknesses is done by internal evaluation of the organization covering for example facilities, location, products, and services. In the other hand, opportunities and threats are identified using external evaluation covering for example economic, social, political, and environmental. SWOT is represented by a matrix that includes two columns for strengths and weakness and two rows for opportunities and threats. The main advantage of using SWOT analysis is the connection of internal and external factors which aid to develop new strategy (Dyson, 2004).

**Pest Analysis:** For an organization to find out its political, economical, socio-cultural and technological environment it needs to employ pest analysis to examine organizations external macro-environment it exists in.

Through the use of this analysis organization can find its position, potential and the business direction. PEST and SWOT analysis go hand in hand, SWOT analysis can be used to classify the opportunities or threats of factors discovered through PEST analysis (Porter 2004).

- **Political Factors:** It includes regulations such as environmental regulation, tax policy, employment laws
- **Economical Factors:** It covers economical growth, currency exchange rates, which affects the purchasing power of an organization
- **Social Factors:** It includes age demographics, population growth etc., which impacts the need of consumers.
- **Technological Factors:** Includes make or buy decisions, investment in innovation help adapt to the technological change.

**Value Chain Analysis:** Before an organization makes a strategic decision, it's always important to how each activities within the organization create value for customer and the most common tool used to achieve this is to conduct a value chain analysis. Value chain analysis is based organizations creating value for their customers. The analysis describes full range of activities within an organization and relates them to an analysis of the competitive strength of the organization by evaluating values each activity adds to the organizations services. Value chain concepts are used by organizations to trace product flows, identify enterprises that contribute to production and services, identify bottlenecks and strategies to help local enterprise compete (Porter 2004).

The steps in identifying elements in a value chain analysis are:

- First by separating operations in an organization into separate activities primary and secondary. Primary activities are responsible of physically creating a product, marketing and delivering it to the customer. Support activities are responsible of facilitating to the primary activities.
- Second is by allocating cost to each activities. This provides managers in organization insights into the internal capabilities.
- Third is to identify which of these activities are critical for market success and customer satisfaction. The three things that must be considered while evaluating the roles are company mission, industry type and value system.

**Critical Success Factor Analysis:** the change and growth of companies and organizations arise the need to emphasize on the critical information and their success factors to reach an acceptable level of control and management effectiveness (Daniel, 1961). According to

ON (1981) there are three main uses for the critical success factors analysis in an organization which are: (1) to specify managers' information needs; (2) to aid the strategic planning process of a particular organization; (3) to help organization in their information planning processes.

The following are the Five prime sources of critical success factors as proposed by ON (1981):

- **Industry**  
Industries are set of characteristics which define its own Critical Success Factors (CSFs). Thus different industries will have different CSFs, for example research into the CSFs for the education sectors, health care and business services showed each to be different after starting with a hypothesis of all sectors having their CSFs as entrepreneurial management style, learning orientation, market orientation and organisational flexibility (Barrett, Balloun and Weinstein, 2005).

- **Competitive strategy and positioning**

Industry firms do not all have the same CSFs in a particular industry. A current position of firm in the industry (It is relative to the market leader and other competitors in the industry), its resources, and its strategy and capabilities that will define its CSFs. For example, Inorder to grow revenue Caterpillar defined a new strategy to aggressively grow revenues over the long term. As part of that new strategy, Caterpillar defined several CSFs specific to the firm which were (Gordon, 2005):

Organisational culture: "creating a culture that engaged employees, while focusing on safety and diversity"

Quality control: "accelerating the pace of quality improvement for its products, while focusing on improving new product introduction and continuous product improvement processes"

- **The environment.**

Environmental factors are that which are not in the control of the organisation but which must be considered in an organisation while developing CSFs. Examples for these are the political development, industry regulation, and population trends and economic performance of a country.

- **Temporal factors.**

Temporal factors are one-off or temporary CSFs resulting from a specific event necessitating their inclusion. For example, a firm which is opting an aggressive building method for its business internationally would have a need for a core group of executives in its new markets. Thus, it would have the CSF of "building the executive group in a specific market" and it could have every year for different markets.

- Managerial position.

This is the final primary source of CSF is managerial position. This is important if CSFs are considered from an individual's point of view.

### 3. Case Studies

The following section discusses on why organizations have adopted that particular tool or technique to understand the objective of the analysis and how they benefited from it.

#### Case study 1: Strategic development and SWOT Analysis at the University of Warwick (Dyson, 2004).

The aim of the study is to formulate a strategy for university of Warwick by using SWOT analysis. An application to strategy formulation in the university is described and the linkage of SWOT analysis to resource based planning is illustrated as an iterative process. For the purpose of this work only SWOT analysis part is reviewed and described.

In 2001 the steering committee of university of Warwick decided to hold an away day before the event of annual planning round. To set context for the SWOT analysis they discussed about the mission and characteristics of the university and distributed questionnaire among the participants. As a result, twenty-two strengths were generated sixteen opportunities, twenty-two threats, and twenty-one weaknesses. The participants then asked to rank the generated factors 1-5 where five represent the most important and the items scoring less than three are not selected. The ranking process resulted in selecting nineteen strengths, nine weaknesses, fourteen opportunities, and eleven threats. Figure 1 illustrates the strength and weaknesses while figure 2 depicts the opportunities and threats.

<u>Strengths</u>	Score	<u>Weaknesses</u>	Score
Income generating capacity	4.45	Few endowments	3.55
Warwick brand	4.36	Science base	3.55
Research	4.18	Lack of external clout	3.55
Land	4.00	Complacency	3.18
Staff morale and loyalty	4.00	Arrogance	3.18
Student quality	4.00	Strains of expansion	3.09
Dynamism	4.00	Communication	3.00

Figure 1 Strengths and weaknesses (Dyson, 2004)

<u>Opportunities</u>	Score	<u>Threats</u>	Score
Demand for CPD	4.18	Declining government fund	3.45
Entrepreneurial climate	4.09	The internet	3.45
The internet	4.09	Competition	3.45
Brand status	4.00	Decline in media profile	3.45
Strategic alliances	3.64	Career prospects in HE	3.36
China	3.55	Cumbersome decision making	3.36
Fundraising prospects	3.55	Targeted government funding	3.18

Figure 2 Opportunities and threats (Dyson, 2004)

In the same pattern, the participants were asked to think and discuss the strategies that follow the identification of the SWOT results. Eleven strategies were proposed as shown in figure 3. Eventually the participants were asked to rank and match the factors from SWOT analysis and the proposed strategies to select the most effective strategies for the University of Warwick.

Expansion	Continuing Professional Development
Develop Partnerships	HR Policy
Improve Undergraduate Experience	Improve Government Relations
Develop Science Strategy	Access
Develop Social Sciences	Fundraising

Figure 3 Proposed strategies (Dyson, 2004)

#### Case study 2: A PEST analysis on e-government in Singapore (Huong H., Ken C.2008).

The main aim of their study is to find the strategic framework of e-government in Singapore and its preparedness for future development. This study looks into the practical standpoint of e-government, the authors find employing SWOT and PEST analysis to investigate are the most suitable candidates to identify the external environmental factor of the organization and to identify their strength, weakness and threat.

The government of Singapore came up with a strategic framework consisting on five main thrusts they are:

- Reinventing Government
- Being proactive and responsive
- Delivering integrated electronic services
- Using IT and Telecommunications to build new capabilities.
- Innovating with IT and Telecommunications

The authors identified three target groups the strategic framework of e-government focuses on they are: Government to Business (G2B), Government to Citizen (G2C) and Government to Employees (G2E).

After confirming on their target group they performed PEST and SWOT analysis to access the current and prospective states of e-government in Singapore.

**Political Aspect (P):** Strength- Cooperation between the public and private sector, Weakness- Conservation in trying e-services, Opportunity- Political willingness and Threats- Cybercrimes, Security Breach and Copyright issues.

**Economical Aspect (E):** Strength- Funds for e-services to improve social, physical infrastructure and Low cost internet subscription, Weakness- SARS outbreak, terrorism receive more attention and unemployment, Opportunity- IT-proficient people can have better opportunity for employment and Threats- Higher cost of living.

**Social Aspect (S):** Strength- Recruiting foreign talents and tech savvy population, Weakness- Workers and older generation are computer illiterate, Opportunity- Booming online shopping and e-services and Threats- Rapid development of technology.

**Technology Aspect (T):** Strength- High tech based economy, Weakness- Over capacity of the internet highway due to heavy traffic, Opportunity- Innovation of new equipment's that facilitates faster connection and Threats- Dependency on IT.

In conclusion The Singapore government have successfully developed a strong foundation for e-government but they are faced with increasing issues through political aspects and economical aspects, clear objective and sound policies could contribute to the success of Singapore e-government.

#### **Case study 3: Value chain analysis for improved farmer incomes, employment opportunities and food security (Heiko 2007).**

The main aim is to understand whether value chain analysis can assist in improving agriculture marketing, incomes and opportunities. During research authors found that classical approach uses detailed information collected as a design tool for a strategy which is appropriate for developing new markets, but they found that adopting this analysis would be time consuming, expensive and farmers are often not considered when it comes to strategy design. So the alternative approach is adopting value chain analysis method.

The authors devised a farmer's value chain development plan. They consist of the three phases:

- Phase 1: Diagnosis  
Preparation, Map out the main enterprises and actors in the value chain, interviews, track revenue flow, understand main areas of potential income generation.
- Phase 2: Scope & priorities opportunities

Where there is need of change, analyze blockages, priorities projects in terms of their impact and feasibility.

- Phase 3: Feasibility & Planning  
Project feasibility, planning for funding, and implementation.

Findings from the value chain analysis where beneficial to the farmers, both business set-ups and organizational structures where defined to improve the linkages within the value chains. Relevant training, supplies and information need were identified and built into business development strategies. Educating farmers was found to be one of the key aspects of improving the employment rate so nutritional education and practical training in horticultural production were identified most important for the success of marketed crop production and through reduction of waste profit margins were improved.

In conclusion value chain analysis assisted in finding an effective strategy to apply in agricultural environment which will benefit the farmers, in fact there is growing recognition of the relevance of participatory value chain concepts and their applications in agriculture.

#### **Case study 4: Critical Success Factor Analysis as a Methodology for MIS Planning (Shank, Boynton, & Zmud, 1985)**

This study focuses on the use and benefits of the critical success factor in capturing the information needs for corporation as well as the development of information system plan. The study was conducted for Financial Institution Assurance Corporation (FIAC). FIAC is a private deposit insurer established in 1967 in North Carolina. This organization has two main objectives which are to insure the deposits of member financial institutions and to assure the liquidity of its member institutions.

The corporation hired a consultant to suggest a plan to enhance the systems' capacity. The consultant saw that the senior management underestimates the impact of data processing so he explained to senior management the importance of critical success factor to determine such plans. The idea of CSF was appealing to the top management and appointed the consultant to continue with CSF methodology.

The consultant then recommended adopting an information resource approach to the project instead of the information function approach that was being used by the corporation. Information resource approach uses an wider view in addressing the information system while the function planning approach only address the technical activities to manage firm's information systems

Meanwhile, the consultant started to educate the staff of the corporation on CSF concept by providing materials to read and answering questions. Then each staff was asked

to write a list of CSFs before discussing them with the consultant. Interviews were conducted between the staff and consultant along with senior management to discuss the personal CSF for each staff and trying to relate them with organization CSFs. At this stage the purpose of the CSF concept was not revealed and the sources of information were not discussed.

Based on the gathering and analysis of CSFs the consultant developed a chart of CSFs. The chart contains an aggregated list for the corporation as a whole. The aggregated list was undergone several processes to eliminate redundant data and similarities as well as the differences between departments were taken in consideration. The result was a refined list of corporate CSFs which was obtained from the aggregated list.

Both staff and senior management work together under the supervision of the consultant to characterize the CSF process. The reason is to reduce the gap and conflict which had arisen between senior management and other staff as well as to increase cooperation among staff and their senior managers.

The CSF concept approach results provided a structure for the strategic planning. The final CSF list was used as a guidance to develop organizational structure. The final CSF list generated from the process was as follows:

- Prevent losses through risk management.
- Increase diversification of the customer base.
- Increase professional staff productivity.
- Enhance the corporation's image with the firm's markets and the public.

Next step is to develop specific information needs which works as an input for designing new computer based information system. Meanwhile, the staff continued discussion and review of hardware and software products as well as the development of implementation plan to swift to new corporate information environment. Figure 3 illustrates and summarizes the critical success factor analysis process.

The CSF concept process had impacts on the FIAC use of information technology and culture. These impacts can be described as follows:

- Aids the decision making for the new information system plan.
- Change the corporation attitude towards data processing.
- The increase of staff productivity and cooperation.
- Adoption of the CSF methodology as a continuing management tool.

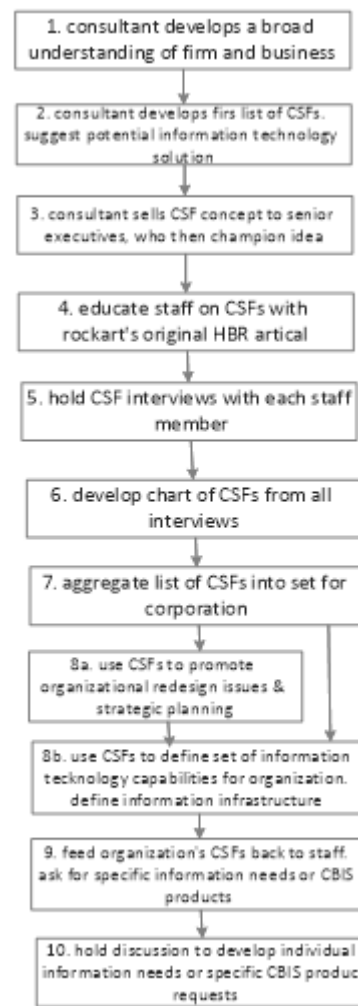


Figure 3 Processes of the CSF concept (Shank et al., 1985)

#### 4. Lesson Learned

Organizations' management should not be a tool addict and focus too much on using latest tools rather they should look for a tool that suits the situation and stage of the strategic planning process. Strategic planning is a process that contains three main stages data gathering, deliberation, and decision taking. For each stage there are set of tools or techniques that is used and applied and it varies from one organization to another. SWOT and PEST analysis are some of the techniques that are suitable for the data gathering stage. In the other hand, Value Chain and Critical Success Factors are best used for the final stage which is the decision taking stage where they aid to select the ideal strategy for a particular organization.

Based on the case studies reviewed in section three, the implementation way of the strategic planning tools differs from one to another even though there are some similarities. SWOT and PEST analysis require the interaction and cooperation of all organization's staff to

identify the most effective factors in the organization. PEST analysis is intended to identify and understand the political, economical, social, and technological factors in an organization, while SWOT is applied to identify the internal strengths and weaknesses as well as the external opportunities and threats of a particular organization. PEST and SWOT demand a brain storming and ranking tasks to come out with most factors that are related and affecting an organization. As shown in figure 3, Critical Success Factors analysis contains sophisticated tasks, thus it is suggested to hire a consultant to coordinate those tasks among staff and top management of an organization. The consultant educates, coordinates, and interviews staff to extract and capture the most critical factors that lead to organization success. In contrast, Value Chain analysis is implemented by a diverse team with different expertise. The core job of this team is to diagnosis, scope & priorities opportunities, feasibility & planning.

Strategic tools are very helpful in providing data for decision making and strategic planning in an organization. SWOT analysis used to give business a way of re-evaluating their position, the ideal outcome is to get an accurate data that can be utilized to form a solid plan for addressing the threats and weaknesses and by highlighting the opportunities and strengths of the organization. Pest analysis are used to help companies improve their timing and decision analysis, the outcome is to aid an organization in predicting the future by looking at the present environmental factors which will in-turn help organization tackle future challenges, the other outcome is that it is able to provide the organization with the right decisions at the right time by analyzing different factors. Through value chain analysis the outcome provides organization the data to create the greatest possible value for the customer, it also provides with method to enhance gross margin and help business reduce costs. Eventually, the outcome of the critical success factor analysis is to express the needs of an organization clearly. Moreover, it allows the measurement that leads to success in a way that aid organization in decision taking.

## 5. Conclusion

In this study, four of the most popular strategic planning tools. Two of the tools which are SWOT analysis and PEST analysis are used in the data gathering and analysis stage in the project while the other two which are Value Chain analysis and Critical Success Factors analysis are used in the decision making stage. The study briefly explains each of the strategic tools as well as states some of the benefits and factors that arise upon the implementation of the tools in a particular project. Case studies were included for each tool to help in understanding how these tools are applied in the real situations. The case studies elaborate in details how the strategic analysis tools are being implemented in organizations as well as the importance and benefits of these tools in a strategic planning process. In fact, many

stakeholders, senior directors, and board understand the benefits about strategic analysis tools but only few of those who know how they are implemented in real life. It is important to know the proper use of the strategic analytical tools otherwise the analysis might be incomplete and interrupted. Furthermore, the case studies show the significance of people collaboration between the staff and the organizations' board to apply the strategic analysis tools and accommodate the analysis. We also see how each case studies show how organizations have strategized different scenarios where different strategic tools are used to diagnose, scope & priorities opportunities,

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