Environmental Scanning

1

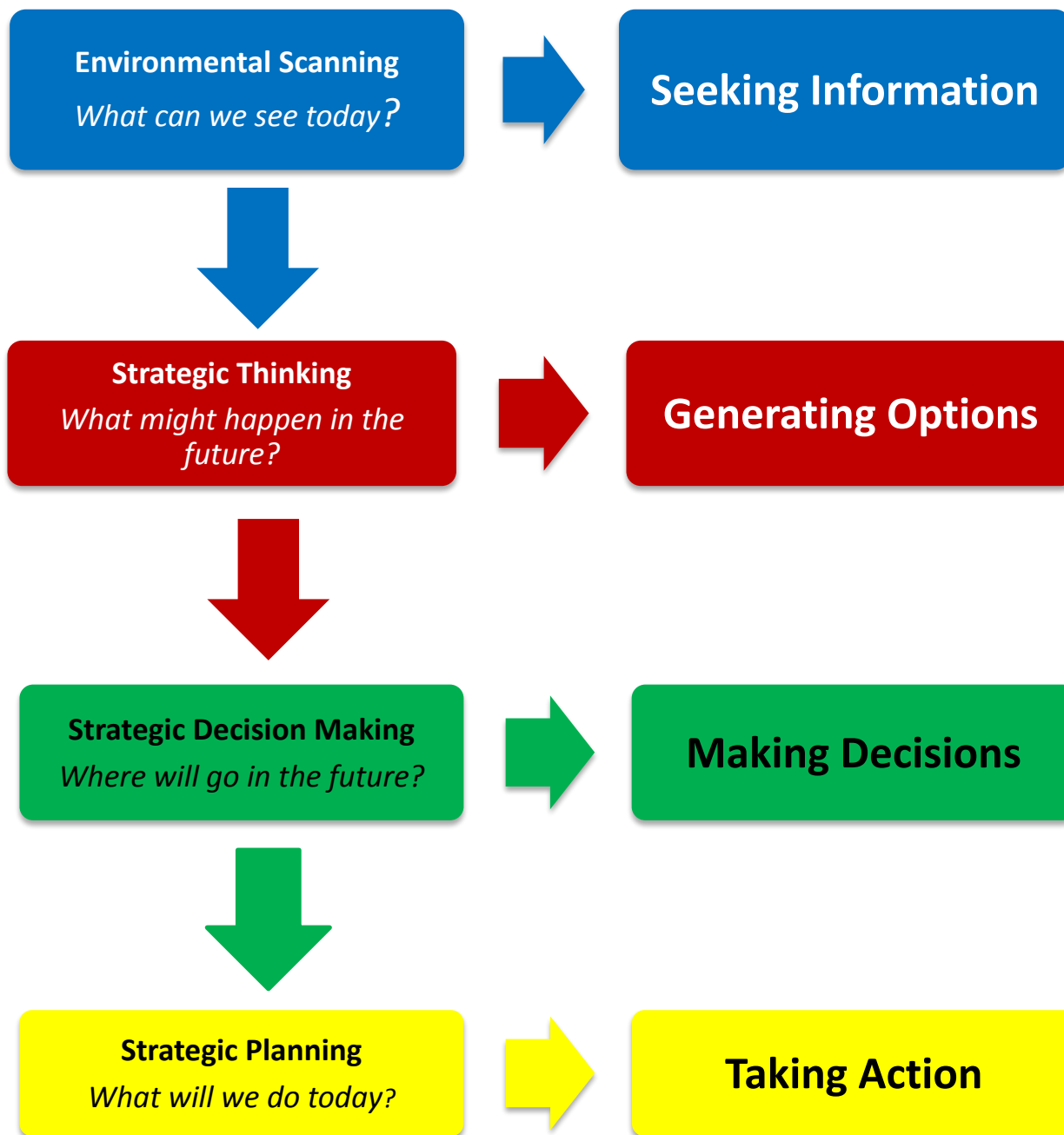# What is environmental scanning?

Environmental scanning is the process of continually acquiring information on events occurring outside the organization to identify and interpret potential trends

Environmental scanning is a process of gathering, analyzing, and dispensing information for <u>tactical or strategic purposes</u>. The environmental scanning process entails obtaining both <u>factual and subjective information</u> on the business environments in which a company is operating or consider entering.

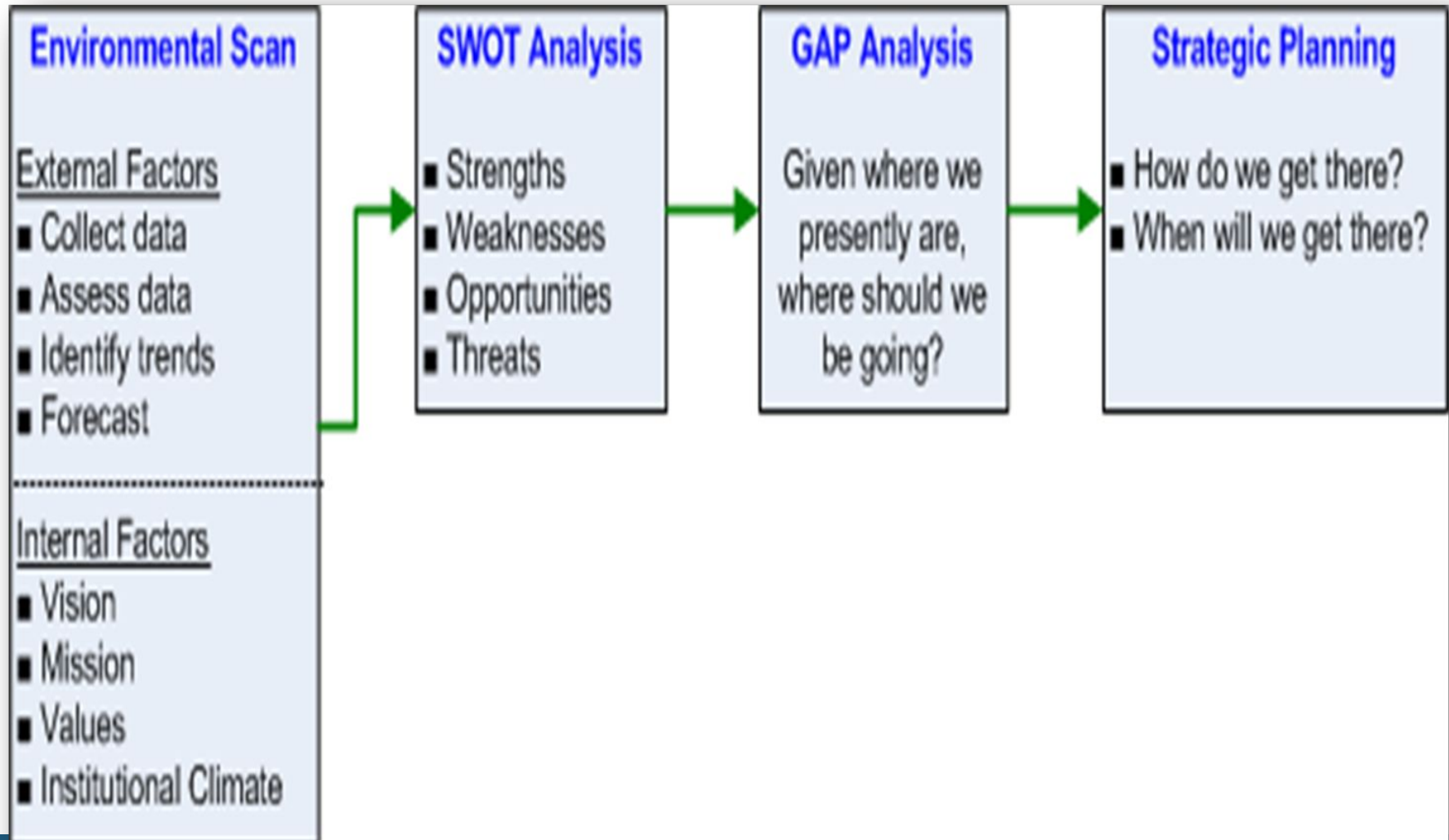# Environmental Scanning in Strategy Planning and Implementation Process

One cycle in the strategic planning process

Objectives of Environmental Scanning

Coates (1985) identified the following objectives of an environmental scanning system:

1) Detecting scientific, technical, economic, social, and political trends and events important to the institution,

2) Defining the potential threats, opportunities, or changes for the institution implied by those trends and events,

3) Promoting a future orientation in the thinking of management and staff, and

4) Alerting management and staff to trends that are converging, diverging, speeding up, slowing down, or interacting.

Importance of Environmental Scanning

Oladele (2006) stated some importance to environmental scanning as follows:

a) The environment is dynamic in nature, therefore scanning is necessary to keep abreast of change.

b) It reveals the elements or factors that constitute threats and opportunity to the overall objectives of the organization.

c) Competitor's activities can be monitored and appropriate strategies put in place to check market incursion.

d) It gives necessary inputs to the formulation and implementation of potent marketing strategies.

Methods of Environmental Scanning

This aspect of environmental scanning has caused much debate among the scholars in the field of Management. However, the following are therefore suggested:

- Secondary data collection approach such as articles, textbooks, magazines and ready-made information etc...

- Primary data collection approach, using research instruments such as questionnaire,

- Personal interview, personal observation etc.

- Establish a unit within the organization which will responsible to scan wide range of environmental factors and makes forecast about specific variables through qualitative and quantitative means.
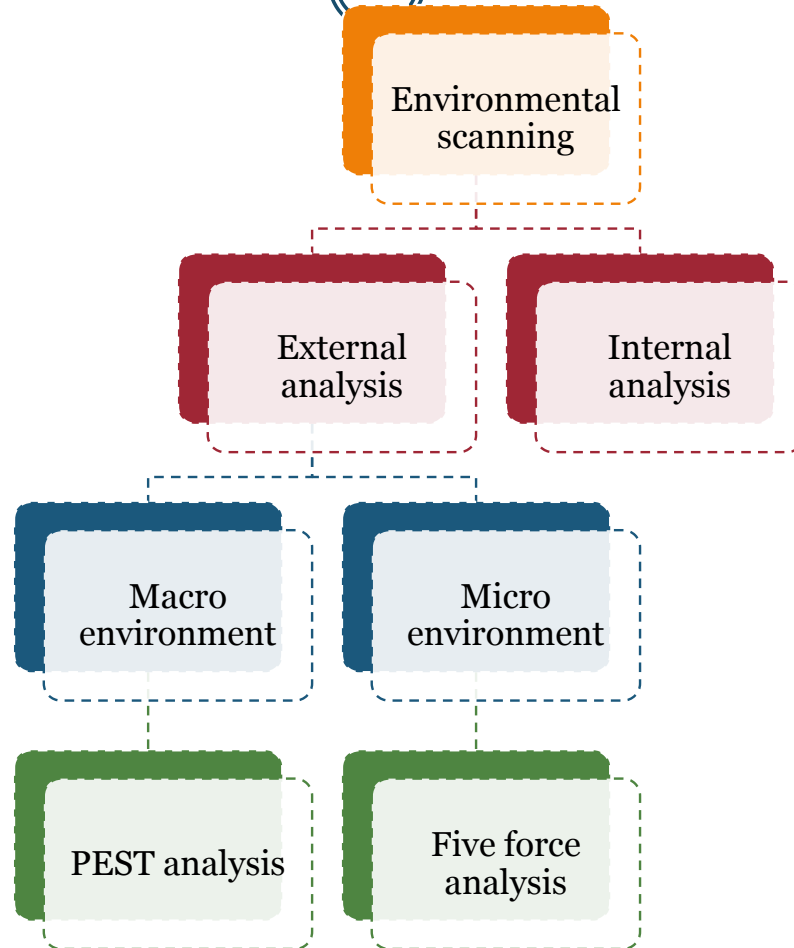
Kinds of environmental scanning

1. **Ad-hoc scanning** - Short term, infrequent examinations usually initiated by a crisis

2. **Regular scanning** - Studies done on a regular schedule (e.g. once a year)

3. **Continuous scanning** (also called continuous learning) - continuous structured data collection and processing on a broad range of environmental factors

	Ad Hoc	Periodic	Continuous
General Character-istics	▪Usually performed in response to crisis ▪Not as in-depth ▪Forecasts are more short-term	▪Tied to planning cycle (e.g., every 3 years) ▪In-depth ▪Forecasts 5 to 10 years	▪Also called Continuous Learning ▪Structured, in-depth data collection and analyses by dedicated staff ▪Data gathered is more comprehensive
Pros	▪Allows for quicker turn-around of scan results ▪Lower commitment of resources over time	▪Predictable frequency allows for appropriate budget planning ▪Frequency provides timely information gathering for planning ▪Planning is proactive…	▪Dedication of time by researchers allows incorporation of data from more sources ▪Provides planners with more comprehensive information ▪Informs planners of critical changes sooner ▪Plans can be adjusted or adopted more proactively
Cons	▪Data can be more superficial ▪Results may address immediate issues, but are less generalizable ▪If only conducted in response to crises, indicates lack of organized institutional planning efforts ▪Planning response is reactive	▪Reaction to unforeseen changes in environment (e.g., onset of recession) may require Ad Hoc scan to supplement information. ▪Planning response is then more reactive	▪Requires ongoing institutional commitment of resources (funding, personnel, and time)

```
                        Environmental
                          scanning
                 ┌────────────┴────────────┐
            External                    Internal
            analysis                    analysis
        ┌───────┴───────┐
     Macro              Micro
  environment        environment
        │                  │
  PEST analysis      Five force
                      analysis
```
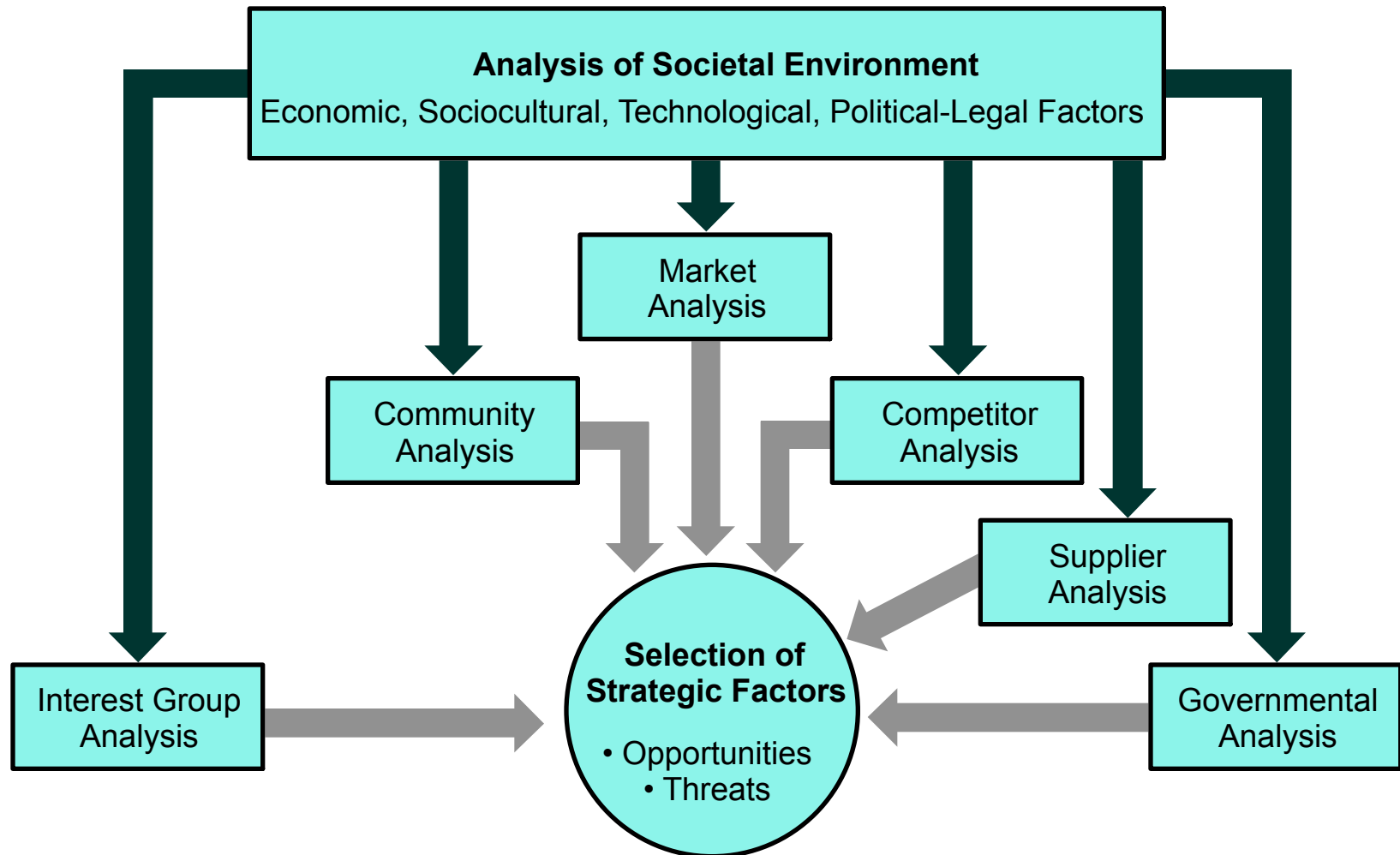
Scanning the External Environment

Some Important Variables in the Societal Environment

Economic	Technological	Political-Legal	Sociocultural
GDP trends	Total government spending for R&D	Antitrust regulations	Lifestyle changes
Interest rates	Total industry spending for R&D	Environmental protection laws	Career expectations
Money supply		Tax laws	Consumer activism
Inflation rates	Focus of technological efforts	Special incentives	Rate of family formation
Unemployment levels	Patent protection	Foreign trade regulations	Growth rate of population
Wage/price controls	New products	Attitudes toward foreign companies	Age distribution of population
Devaluation/revaluation	New developments in technology transfer from lab to marketplace	Laws on hiring and promotion	Regional shifts in population
Energy availability and cost	Productivity improvements through automation	Stability of government	Life expectancies
Disposable and discretionary income			Birth rates

Techniques of Scanning

- Issue Priority Matrix
- ETOP
- SAP
- Functional area profile
- SWOT
- The Opportunity and Threat Matrix
- The Impact Matrix

1. Issue Priority Matrix

The Issues Priority Matrix is a way to identify and analyze developments in the external environment. Managers can use it to decide which environmental trends should be merely scanned (low priority) and which should be monitored as strategic factors (high priority).

Steps to Building the Issues Priority Matrix :

1. Identify likely trends emerging in societal and task environments (Strategic environmental issues - important trends that determine what the industry will look like in the future)
2. Assess probability (low-medium-high scale) of these trends occurring
3. Ascertain impact (low-medium-high scale) of these trends on the corporation

Issue Priority Matrix

Probable Impact on Corporation

	High	Medium	Low
High	High Priority	High Priority	Medium Priority
Medium	High Priority	Medium Priority	Low Priority
Low	Medium Priority	Low Priority	Low Priority

Probability of Occurrence

Source:

Adapted from L. L. Lederman, "Foresight Activities in the U.S.A.: Time for a Reassessment?" *Long Range Planning* (June 1984), p. 46. Copyright © 1984 by Pergamon Press, Ltd. Reprinted with permission.

2. Environmental Threat and Opportunity Profile (ETOP)

Environmental threat and opportunity profileIt is description of the structure of external factors. These factors may be neutral, in favourable, unfavourable impact on operations of an organization in the environment .

Steps in preparing ETOP

1. Identify major environmental sector- social, economical, political, technological, ecological, natural, legal etc.

2. Sub - divide the sectors in to subsectors3

3. Identify major issues in the subsectors

4. Assess the possible impact – favourable, unfavourable or neutral

Environmental Sectors	Impact of each sector
Social (↑)	Customer preference for motorbike, which are fashionable, easy to ride and durable.
Political (→)	No significant factor.
Economic (↑)	Growing affluence among urban consumers; Exports potential high.
Regulatory (↑)	Two Wheeler industry a thrust area for exports.
Market (↑)	Industry growth rate is 10 to 12 percent per year, For motorbike growth rate is 40 percent, largely Unsaturated demand.
Supplier (↑)	Mostly ancillaries and associated companies supply parts and components, REP licenses for imported raw materials available.
Technological (↑)	Technological up gradation of industry in progress. Import of machinery under OGL list possible.

3.Strategic Advantage Profile

Strategic advantage profile is a summary statement which provides an overview of the advantages and disadvantages in key areas likely to affect future operations of a firm.

it is a total for making systematic evaluation of strategic advantage factors which are significant for the company in its environment. it involves functional areas like marketing, production, finance, accounting, personnel, human resource and R&D

SAP is a summary statement of corporate capabilities,

INTERNAL AREA		COMPETITIVE STRENGTH OR WEAKNESS
Marketing	+	Overall product range is extensive, and focus is always on customer satisfaction
	-	Channels of distribution are limited to the self-owned branches which cater to limited segments
Research & Development	-	No research and development performed
Operations	+	Strategically located retail outlets
	+	Good sourcing of inputs through a network of suppliers
	-	Facilities are relatively old and outdated
Corporate Resources	0	Company size is about average for the industry
	0	Profits have been consistent but average.
	-	Labour turnover is relatively higher
Finance	0	Availability of funds is made easily, but is limited to the internal family resources

Foot note: + indicates strength; 0 indicates neutral; - indicates weakness

Fig. 4: Strategic Advantage Profile of Fashion Textiles
Source: (Adapted from Jauch, L.R. and Glueck, W.F., 1988, p180)

4. Functional Area Profile & Resource Development Matrix

Hofer and Schendel have developed this technique to make a comparative analysis of a firm's own resources deployment position and focus of efforts with those of competitors

First, technique requires preparation of matrix of functional area with common features.

Secondly matrix is prepared showing deployment and focus of efforts over a period of time.

The matrix gives data pertaining to resources deployment in various functional areas over a period of time. It also shows how the focus of efforts has changed within a time frame.

Functional areas	Resource development Emphasis	5Yrs ego	4Yrs ego	3Yrs ego	2 Yrs ego	1 Yrs ego	This Year	Next year
Marketing	Development outlay % & amount, forces & efforts							
Finance	Development outlay % & amount, forces & efforts							
Production/ Operation	Development outlay % & amount, forces & efforts							
Human Resources	Development outlay % & amount, forces & efforts							
Research development	Development outlay % & amount, forces & efforts							
Management	Development outlay % & amount, forces & efforts							

5. SWOT Analysis

A SWOT analysis (alternatively SWOT matrix) is a structured planning method used to evaluate the strengths, weaknesses, opportunities and threats involved in a project or in a business venture.

A SWOT analysis can be carried out for a product, place, industry or person.

SWOT analysis was created in the 1960s by business gurus Edmund P. Learned, C. Roland Christensen, Kenneth Andrews and William D. Book in their book "Business Policy, Text and Cases" (R.D. Irwin, 1969). While the tool was originally intended for business use, it has since been adopted to aid personal development.

Strengths

list your:
+ advantages
+ unique and low-cost resources
+ factors mean that you "get the sale"

Weakness

list your:
+ disadvantages, limitations
+ what could you improve
+ factors lose you sales

Opportunities

list your:
+ chances to improve performance
+ good opportunities can you spot

Threats

list your:
+ external trouble for the business
+ obstacles do you face
+ what your competitors are doing

SWOT

6. The Opportunity and Threat Matrix

A Threats & Opportunities Matrix is a simple 2 x 2 grid that captures the threats of not implementing a proposed solution and, conversely, the potential opportunities if the solution is accepted .

A company after identifying the threats, can judge the threats based on
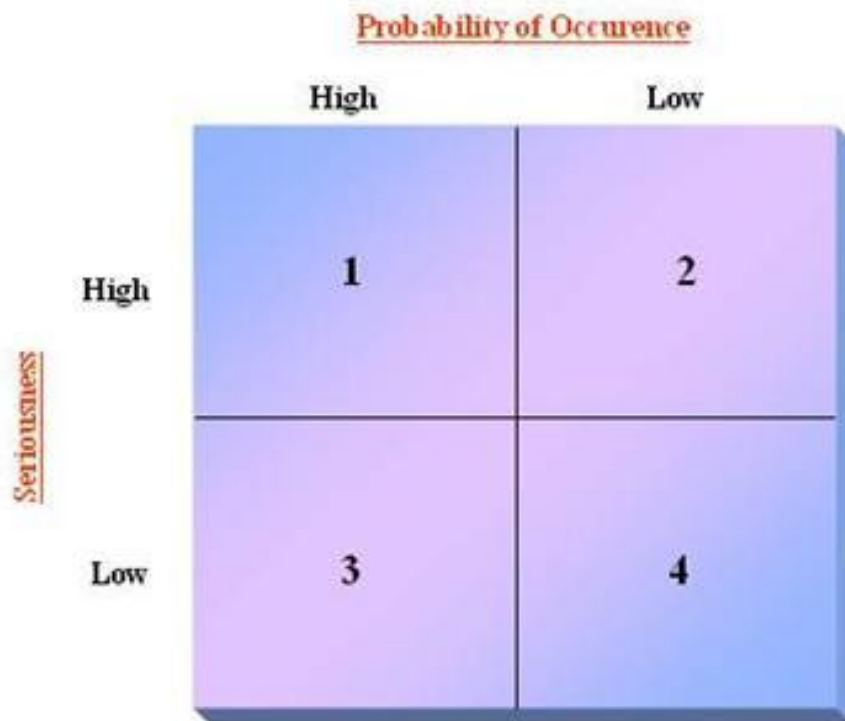
1.   Seriousness and
2.   Probability of Occurrence

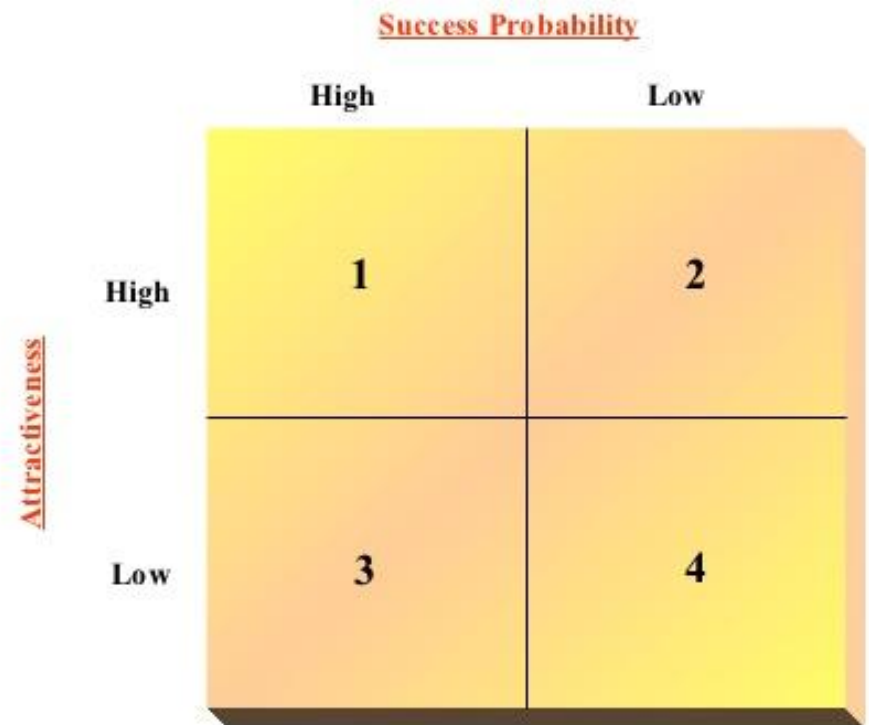On the other hand, the company can classify the identified opportunities based on

1. Attractiveness
2. Probability of occurrence

Threat Matrix

Probability of Occurence

	High	Low
High	1	2
Low	3	4

Seriousness

Opportunity Matrix

Success Probability

	High	Low
High	1	2
Low	3	4

Attractiveness

Threats & Opportunities Matrix

Threats & Opportunities Matrix		
	Threats If We Don't Do Something	**Opportunities** If We Do Take Action
Short Term (Less Than 6 Months)		
Long Term (More Than 6 Months)		

7. The Impact Matrix

The impact effort matrix was designed specifically for the purpose of deciding which of many suggested solutions to implement.
The impact of the trend on various strategies could be visualized using an impact matrix. After identifying the emerging trends in mega, micro and relevant environments, the degree of their impact can be assessed with the help of the impact scale

To assess the degree and quality of impact of each trend on different strategies a five-point impact scale could be used. The pattern of scoring can be: (also called **impact scale**)

+2 extremely favorable impact
+1 moderately favorable impact
 0   no impact
-1   moderately unfavorable impact
-2   extremely unfavorable impact

| Trends	Probability of occurrence	Impact on strategies			
		S1	S2	S3	S4
T1					
T2					
T3					

8. Gap Analysis

A gap analysis is a method of assessing the differences in actual performance and potential performance to determine whether the system requirements are being met and, if not, the steps needed to do so.

Gap refers to the space between "where we are" (the company's present state) and "where we want to be" (its target state). A gap analysis is also known as a needs analysis, needs assessment or need-gap analysis.

It is useful method to describe the process involved in deciding what course of action should be taken to remove any potential profit or sales gap or risk gap

Gap Analysis

Where we aim to be

GAP

Where we will end up
if we do nothing
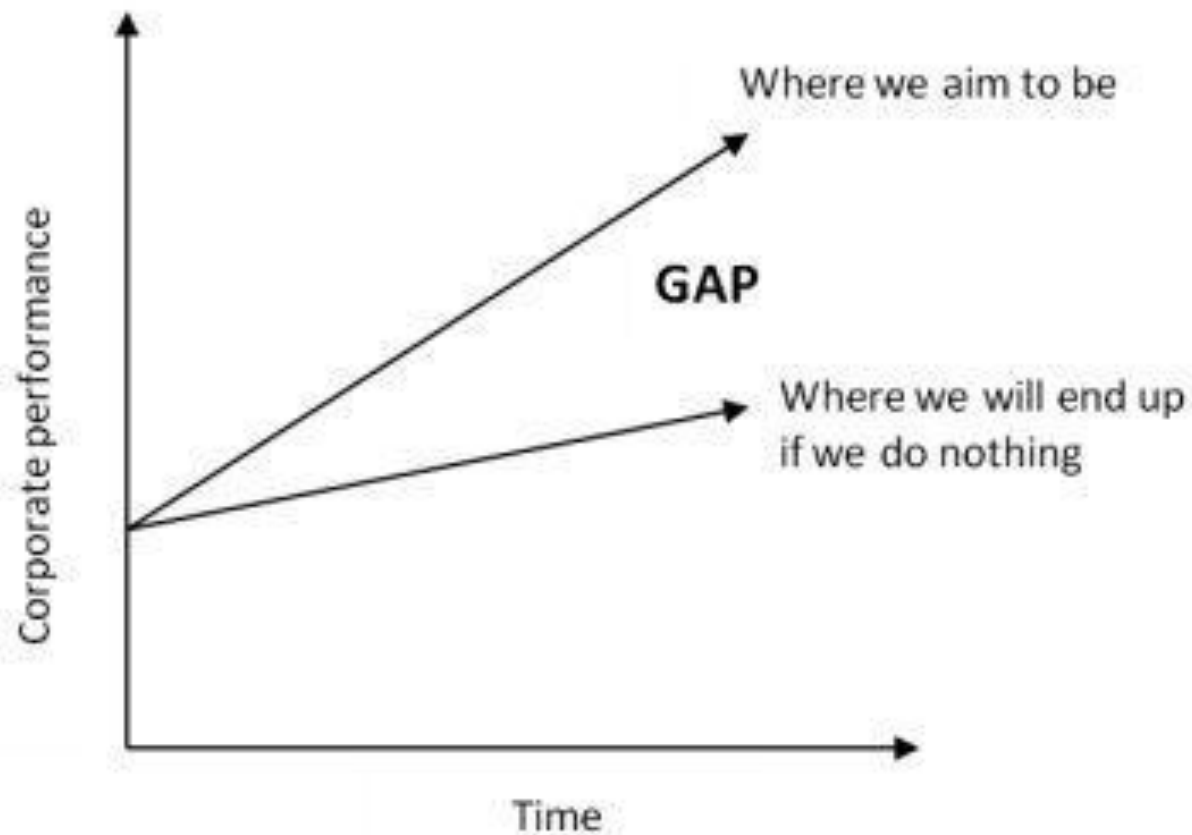
9. Balanced Score Card

Two eminent doctors (Robert S Kaplan and David P Norton) evolved the Balanced Scorecard system

The balanced scorecard (BSC) is a strategy performance management tool - a semi-standard structured report, supported by design methods and automation tools, that can be used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions

balanced scorecard - factors examples

Department	Areas
Finance	Return On Investment Cash Flow Return on Capital Employed Financial Results (Quarterly/Yearly)
Internal Business Processes	Number of activities per function Duplicate activities across functions Process alignment (is the right process in the right department?) Process bottlenecks Process automation
Learning & Growth	Is there the correct level of expertise for the job? Employee turnover Job satisfaction Training/Learning opportunities
Customer	Delivery performance to customer Quality performance for customer Customer satisfaction rate Customer percentage of market Customer retention rate