FUTURE STUDIES AND NET ASSESSMENT: SELECTED TOOLS

INTRODUCTION

INTRODUCTION (CONT)

SOME CHARACTERISTICS OF THE FUTURE

➢**Unpredictable**

➢**Surprises**

INTRODUCTION (CONT)

Planning for Future Surprises

Waiting Passively

Adapt Current Actions

Prepare to Control

Reactive Response

Future Studies

INTRODUCTION (CONT)

IMPORTANCE OF FUTURE STUDIES

➢**Pragmatic planning and decision-making in today's chaotic, complex and rapidly changing world.**

➢**Help us to identify what we don't know but need to know to make an intelligent long-term decision.**

INTRODUCTION (CONT)

SOME FACTS ABOUT US ARMY FUTURE COMMAND

➢ **Established in June 2018.**

➢ **Vision: To modernize critical core capabilities of the US Army so as to regain overmatch against near-peer adversaries by 2028.**

➢ **Capabilities to be modernized include:**

❖ **Long-range precision fires.**

❖ **Next generation combat vehicle and future vertical lift.**

INTRODUCTION (CONT)

SOME FACTS ABOUT NET ASSESSMENT

➢**Long-term planning using future studies as one of the methodologies.**

➢**Additionally, short-term planning.**

➢**Ideal for National Security Strategies.**

INTRODUCTION (CONT)

WORD USAGE

➢ <u>Net</u>. The consideration of all aspects and perspectives of ours against that of a competitor, relevant and significant to the problem at hand, to give a net outcome of a competitive situation.

INTRODUCTION (CONT)

WORD USAGE (CONT)

➢ **Assessment**. The systematic process of analysis, appraisal and review to develop wide and deep knowledge.

INTRODUCTION (CONT)

OPERATIONAL DEFINITION OF NET ASSESSMENT

PAUL BRACKEN
PROF YALE UNIVERSITY

Net Assessment is best defined as "a practice; a way of tackling problems from certain distinctive perspectives that involve skills that can be improved upon".

Source: www.google.com

INTRODUCTION (CONT)

SOME NET ASSESSMENT EFFORTS ON NIGERIA

➢Failed State 2030: Nigeria, A Case Study.

➢USAF Officers, 2011

➢Net Assessment - Nigeria.

➢Cdm India,2018

INTRODUCTION (CONT)

INDISPENSABILITY OF NET ASSESSMENT IN NATIONAL SECURITY

OPERATIONAL NET ASSESSMENT, OR PREPARE TO LOSE THE NEXT WAR

- **International Symposium on Security Affairs, Tokyo 2012**

AIM

To examine common analytical tools used in future studies and net assessment

SCOPE

➢ **Rundown of methods or tools used in future studies and net assessment**

➢**Explanation of Key Terms**

➢ **Flow chart for developing national security strategies (Net Assessment)**

➢ **Selected tools for environmental scanning**

➢**Selected tools for short-term strategies: SWOT Analysis**

➢**Selected tools for long-term strategies: Scenario Planning and Analysis**

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RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

CATEGORIES OF METHODS FOR FUTURE STUDIES

➢ **Qualitative**

➢ **Quantitative**

➢ **Hybrid**

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

METHODS FOR FUTURE STUDIES (CONT)

Ser	Categories	Methods	Remarks
(a)	(b)	(c)	(d)
1.	Qualitative	a. Delphi Surveys b. Futures Wheel c. Simulation and Games d. Agent Based Modelling	

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

METHODS FOR FUTURE STUDIES (CONT)

Ser	Categories	Methods	Remarks
(a)	(b)	(c)	(d)
2.	Quantitative	a. Traditional Forecasting Method (1) Time Series Analysis (2) Explanatory Analysis b. Trend Impact Analysis c. Cross Impact Analysis	

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

METHODS FOR FUTURE STUDIES (CONT)

Ser	Categories	Methods	Remarks
(a)	(b)	(c)	(d)
3.	Hybrid	Scenario	Commonly used method

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

METHODS FOR NET ASSESSMENT

RUNDOWN OF METHODS OR TOOLS USED IN FUTURE STUDIES AND NET ASSESSMENT (CONT)

METHODS FOR NET ASSESSMENT

❖ **Literature Review**

❖ **Case Studies**

❖ **Subject Matter Expects**

❖ **Workshops Seminars and Conferences**

❖ **Alternative Scenarios or Futures**

❖ **Wargames**

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EXPLANATION OF KEY TERMS

EXPLANATION OF KEY TERMS

SWOT ELEMENTS

STRENGTH

➢**Strengths are internal to the organization and include any kinds of capabilities or resources that the organization can bring to bear, in order to achieve its set goal:**

❖ **Political: power, influence, connectedness, image and reputation.**

❖ **Access (to governments, partners, populations, etc.), reach, awareness.**

❖ **Presence on the ground.**

❖ **Economic / financial resources.**

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

STRENGTH (CONT)

- ❖ Capital assets, infrastructure, equipment.
- ❖ Cost/competitiveness advantages.
- ❖ Skills, experience, knowledge (know-how).
- ❖ Qualifications, accreditation.
- ❖ Data, especially if it is unique or hard-to-replicate.
- ❖ Allies, contacts.
- ❖ Dedication, leadership and drive.
- ❖ Cultural strengths.
- ❖ Geographical advantages.

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

STRENGTH (CONT)

❖ **Comparative advantages (with regard to other actors in the same context) in systems, processes, operational efficiency, flexibility, quality standards and other areas.**

❖ **Things your team/organization/partnership does well.**

❖ **Other noteworthy capabilities which the organization can apply. These could be technical, scientific, management, leadership or others.**

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

WEAKNESSES

➢ **Weaknesses like strengths are derived from the internal environment of the organization and include the following:**

❖ **Existing gaps in capabilities or resources.**

❖ **Weaknesses which may manifest in the future. For instance, departure of key staff and expiry of funds.**

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

WEAKNESSES (CONT)

❖ **Known vulnerabilities: things which the organization has difficulties in performing properly. Every organization has such vulnerabilities; the idea is to be aware of them during the planning process.**

❖ **Other competing priorities pressures and internally imposed timelines that detract from available capacity.**

❖ **Relevant areas where a need for improvement has been identified by appropriate authorities or personnel.**

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

OPPORTUNITIES

➢ Opportunities are derived from the external environment and they include:

❖ Events or trends that present opportunities to the organization. These could be Political, economic, social, technological or legal.

❖ Relationships or partnerships that could be exploited or harnessed.

❖ Other actors that that could be of help in achieving the set goals.

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

OPPORTUNITIES (CONT)

❖ **Emerging information relevant to achieving the set goal.**

❖ **Examples that could be drawn from other organizations/actors in addressing similar challenges.**

❖ **Potential sources of funds.**

❖ **Possible efficiency gains from re-allocation of resources.**

❖ **Other initiatives, actions, projects or products that relate to the goal of the organization.**

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

THREATS

➢ Threats, like opportunities, are derived from the external environment and include the following:

❖ Events or trends that could threaten the achievement of the goals of the organization. These could be Political, economic, social, technological, environmental or legal.

❖ All forms of risks and disadvantages that could emanate from any action or initiative of the organization.

EXPLANATION OF KEY TERMS (CONT)

SWOT ELEMENTS (CONT)

THREATS (CONT)

❖ **Competing actors in the external environment.**

❖ **Opportunities that could be foregone if a given course of action is initiated/adopted.**

❖ **All forms of obstacles in the way of the organization.**

EXPLANATION OF KEY TERMS (CONT)

KEY DECISION FACTORS

➢   **Key Decision Factors are the events or outcomes about the future that we would like to know more about to improve the quality and relevance of our decisions. Thus, they are critical elements in grounding the scenarios in operational utility.**

➢   **They are largely internal dynamics and they may include available platforms/personnel, level of training, funding considerations, available technology and immediate operating environment, for instance, terrain.**

➢   **Two illustrations:**

EXPLANATION OF KEY TERMS (CONT)

FIRST ILLUSTRATION OF KEY DECISION FACTORS

➢   Focal Issue: Management of National Security up to year 2030.

➢   Possible Key Decision Factors:

  ❖ Seeking military competitive advantage.

  ❖ Economic security and status.

  ❖ Self-sufficiency in energy & adequacy of raw materials for growth.

  ❖ Internal socio-economic stability.

  ❖ Technology edge to drive key national endeavours.

EXPLANATION OF KEY TERMS (CONT)

SECOND ILLUSTRATION OF KEY DECISION FACTORS

➢ Focal Issue: Management of Military Security' up to year 2030.

➢ Possible Key Decision Factors:

❖ Nature of politico-military competitions.

❖ Politico-security relations with neighbors.

❖ Military cooperation and competition with extra regional powers.

❖ Nature and dimensions of future military commitments.

EXPLANATION OF KEY TERMS (CONT)

SECOND ILLUSTRATION OF KEY DECISION FACTORS (CONT)

❖ **Desired military capabilities and force structures.**

❖ **Military organizational restructuring.**

❖ **Military technology edge.**

❖ **Military human resources.**

❖ **Financial allocations for the military and management of military finances.**

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

➢ Driving forces are critical uncertainties of the future which, depending on how they evolve, may lead to different scenarios in the future.

➢ They influence the key decision factors and may include:

❖ Social.

❖ Technological.

❖ Economic.

❖ Environmental.

❖ Political.

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

SOCIAL TRENDS.

➤ **Rising and ageing population.**

➤ **Movement towards consumer-driven lifelong education.**

➤ **Increasing life expectancy and quality of life, supported by a move towards a more holistic approach to health.**

➤ **Increasing socio-economic inequality.**

➤ **Cultural transformation driven by globalization, immigration and technology.**

➤ **Shift of economic power to the consumer.**

➤ **Growth of population in the urban areas particularly the concentration of knowledge workers around the city centres.**

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

TECHNOLOGICAL TRENDS

➢ Continued improvements in information and communications Technology (ICT) and increased human reliance on this technology.

➢ More efficient and cleaner automobile technologies.

➢ Increasing development of environmental technologies and businesses.

➢ Major health and agribusiness productivity improvement likely from biotechnology advances.

➢ Greatly advanced materials technologies resulting from nanotechnology.

➢ New and cleaner renewable energy sources becoming economically viable.

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

ECONOMIC TRENDS

➢ Declining trade based on traditional commodities.

➢ The global city.

➢ Growth of jobs in new export industries associated with the global economy and increasing participation in the global economy.

➢ Unemployment for those in the old economy sectors.

➢ Change in the locus of wealth creation from industry to the information/knowledge economy.

➢ Evolution of global finance towards a single currency.

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

ENVIRONMENTAL TRENDS

➢ Increasing acceptance of the concept of sustainable development.

➢ Continued degradation of the natural environment.

➢ Declining water quality.

➢ Generally declining air quality and increased energy consumption.

➢ Uncertainty surrounding the impact of global climate change

EXPLANATION OF KEY TERMS (CONT)

DRIVING FORCES OR MAJOR DRIVERS OF CHANGE

POLITICAL TRENDS

➢ Rising influence of global government to the detriment of national governments.

➢ Rising influence of Transnational Corporations and global capital.

➢ Increasing Influence of Non-Government Organisations (NGOs) on the global and local scene.

➢ Possibility of direct democracy and new communities created by the internet.

➢ New possibilities for global conflict, terrorism and crime.

EXPLANATION OF KEY TERMS (CONT)

PRACTICAL SESSION 1

> ➤ **Sentences for Consideration.**
>
> ❖ **The KDFs derived from the analysis of strength and weaknesses are the critical considerations that have a direct influence on the projected future development in the internal environment.**
>
> ❖ **The DFs are identified from the opportunities and threats and derived from the analysis.**
>
> ❖ **KDFs and DFs with high impact and high uncertainty in Quadrant 1 are classified as "Drivers" of the scenarios.**

EXPLANATION OF KEY TERMS (CONT)

PRACTICAL SESSION 1 (CONT)

➢ **Questions.**

❖ **How accurate are the first 2 sentences?**

❖ **How consistent is the third sentence with the first 2 sentences?**

EXPLANATION OF KEY TERMS (CONT)

PRACTICAL SESSION 1 (CONT)

➢ **DS Comments.**

❖ **The first 2 sentences are incorrect.**

❖ **The third sentence is accurate.**

❖ **Third sentence contradicts the first 2 sentences.**

EXPLANATION OF KEY TERMS (CONT)

PRACTICAL SESSION 1

➢ **Origin of the Sentences Considered.**

❖ **The KDFs derived from the analysis of strength and weaknesses are the critical considerations that have a direct influence on the projected future development in the internal environment. (MRSW, P.52).**

❖ **The DFs are identified from the opportunities and threats and derived from the analysis. (MRSW, P.52).**

❖ **KDFs and DFs with high impact and high uncertainty in Quadrant 1 are classified as "Drivers" of the scenarios. (MRSW, P.53).**

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FLOW CHART FOR DEVELOPING NATIONAL SECURITY STRATEGIES (NET ASSESSMENT)

FLOW CHART FOR DEVELOPING NATIONAL SECURITY STRATEGIES (CONT)

➢**Future Studies and Net Assessment in National Security Strategies**

➢**Flow Chart Proper**

FLOW CHART FOR DEVELOPING NATIONAL SECURITY STRATEGIES (CONT)

FUTURE STUDIES AND NET ASSESSMENT IN NATIONAL SECURITY STRATEGIES

National Security Strategies

Short-term

Long-term

Future Studies

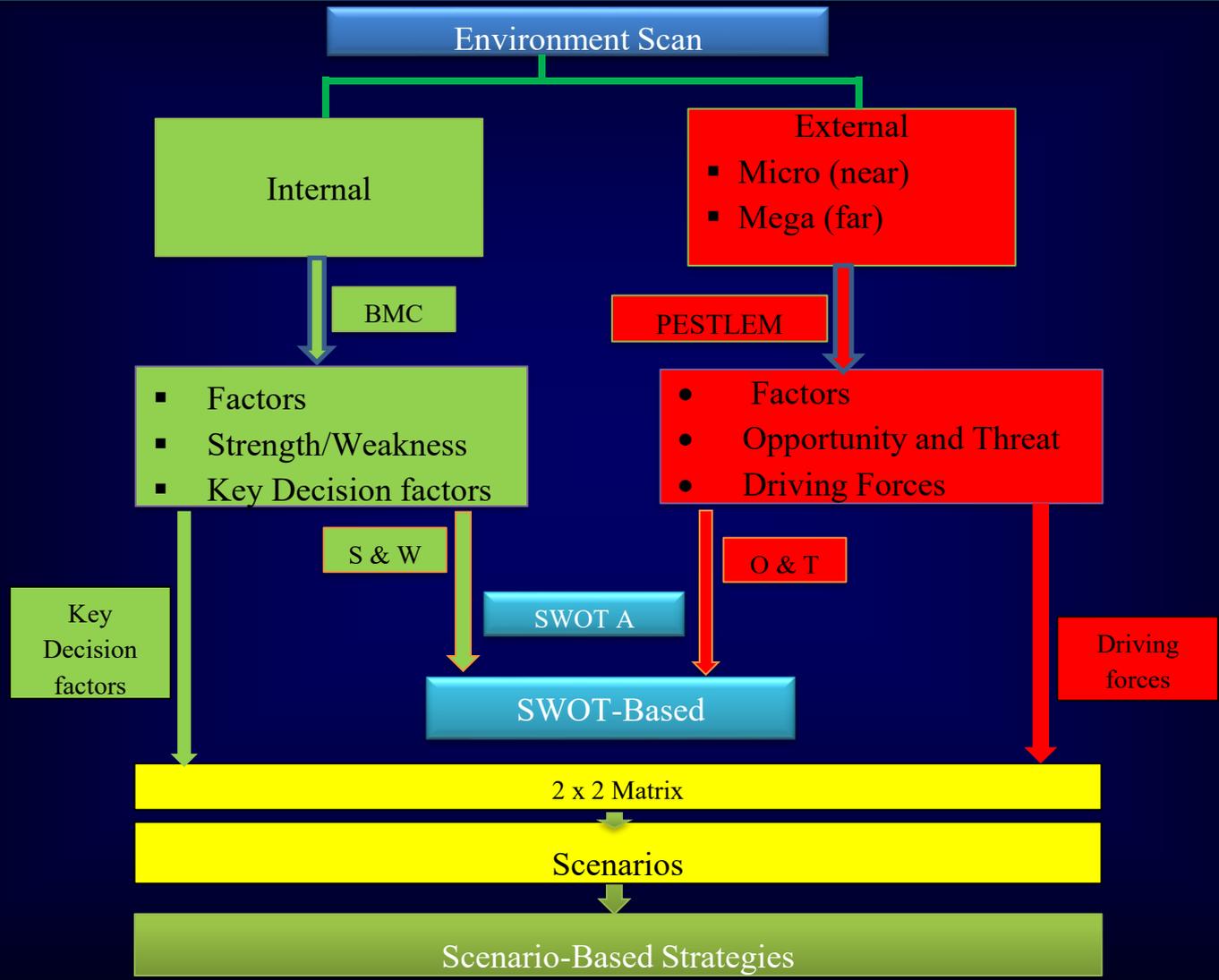**Net   Assessment**

Certainty

Uncertainty

0

Years

5

50

ESTIMATE PROCESS VS NET ASSESSMENT

➢**Net Assessment is more flexible in format**

➢**Estimate process has to do with present campaigns or battles. Whereas net assessment could be employed for immediate, short-term and Long-term situations**

➢**Estimate process unlike net assessment is not applicable to strategic military competition**

FLOW CHART FOR DEVELOPING NATIONAL SECURITY STRATEGIES (NET ASSESSMENT)

Environment Scan

Internal

External
- Micro (near)
- Mega (far)

BMC

PESTLEM

- Factors
- Strength/Weakness
- Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

S & W

O & T

Key Decision factors

SWOT A

Driving forces

SWOT-Based

2 x 2 Matrix

Scenarios

Scenario-Based Strategies

SCOPE

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SELECTED TOOLS FOR ENVIRONMENTAL SCANNING

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

Relevant Environment = **Internal** + **Micro** + **Mega**
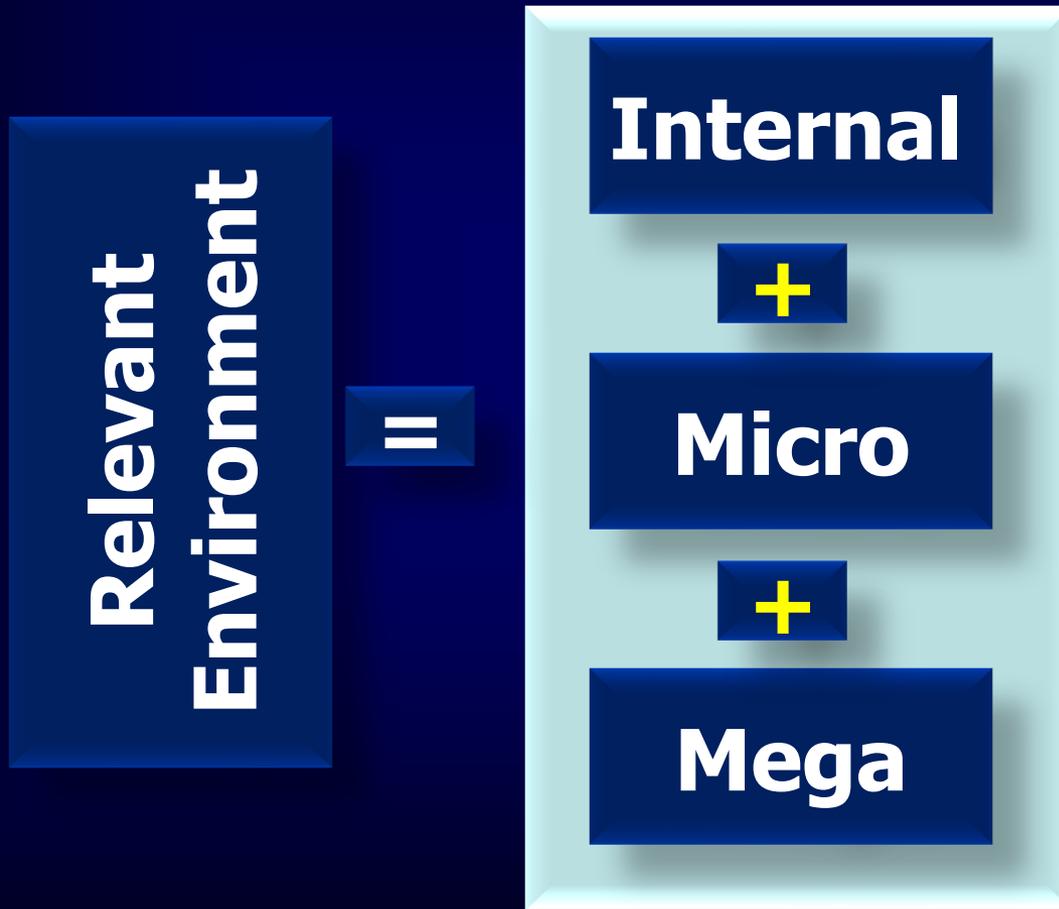
GUIDELINES ON THE SCOPE ITEMS (CONT)

ENVIRONMENTAL SCANNING

➢ **The environment is the surroundings, external objects influences or circumstances under which the organization or nation exists.**

➢ **Environmental scanning is a systematic process of identifying the relevant past, present and future factors that could influence the organization's or nation's performance.**

GUIDELINES ON THE SCOPE ITEMS (CONT)
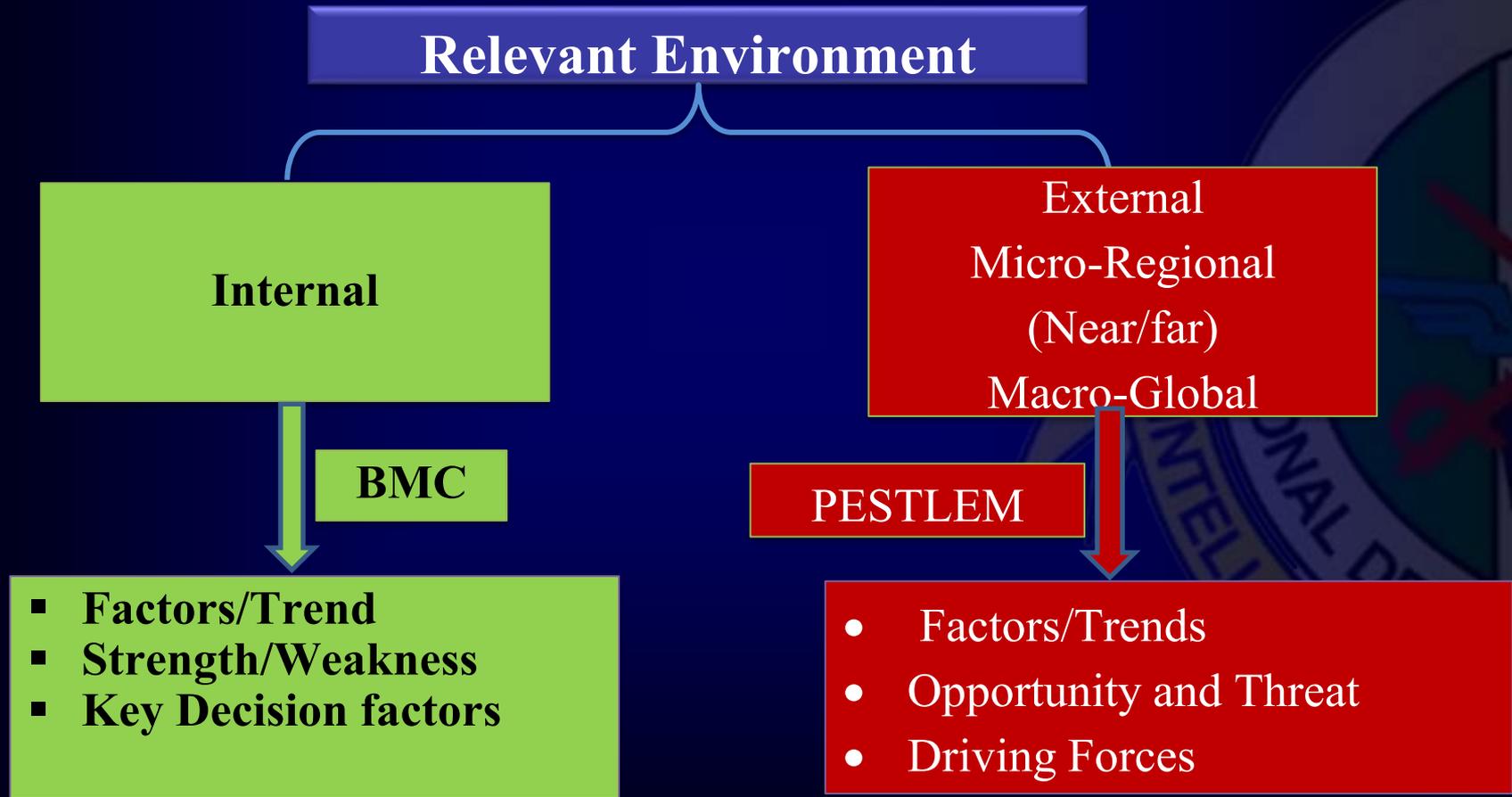
ENVIRONMENTAL SCANNING (CONT)

Relevant Environment

Internal

External
Micro-Regional
(Near/far)
Macro-Global

BMC

PESTLEM

- ▪ **Factors/Trend**
- ▪ **Strength/Weakness**
- ▪ **Key Decision factors**

- • Factors/Trends
- • Opportunity and Threat
- • Driving Forces

GUIDELINES ON THE SCOPE ITEMS (CONT)

ENVIRONMENTAL SCANNING (CONT)

➢ **Factors from Environmental Scanning**

❖ **Events.**

- ▪ **Important and specific occurrences.**
- ▪ **Could be found in both internal and external environment.**
- ▪ **Directly related to context.**
- ▪ **Could be observed and tracked.**

GUIDELINES ON THE SCOPE ITEMS (CONT)

ENVIRONMENTAL SCANNING (CONT)

➢ **Factors from Environmental Scanning (Cont)**

❖ **Trends.**

- ▪ **General tendencies or courses along which events take place.**

- ▪ **Group of similar/related events that tend to move in a direction.**

- ▪ **Pattern of change.**

GUIDELINES ON THE SCOPE ITEMS (CONT)

ENVIRONMENTAL SCANNING (CONT)

➢ **Factors from Environmental Scanning (Cont)**

❖   **Issues.** Concerns arising in response to events and trends.

❖   **Interests.** Expectations of interested group in the light of concern for issues.

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

BMC

BASE	• Given by nature – change slowly • Spatial, Material, Population
MEANS	• Man made competencies • Military, Economic, Political
CAPACITY	• Politico-Social and Psychological capacity • Social, Moral or Psychological, Political

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

BASE

Geo –Spatial Base	Geo –Material Base	Geo-Demographic Base
• Surface & dimensions of territory • Location & strategic posn • Type of frontiers • Weather/Climate • Neighbours	• Arable land • Natural resources of energy • Raw materials • Serious deficiencies	• Size & age profile • Density • Ethnic homogeneity • Cultural & Edn dimensions • Hum Dev Index

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

MEANS

Economic	Infrastructure	Energy	Technology
• Fiscal • Industry • Agriculture • Services	• Adequacy • Roads • Railways • Ports • Strategic Reserves	• Supply & Demand • Energy Export /Import Trends • Energy Sources	• Availability of Indigenous Tech • Indigenous R&D • Availability of Imported Tech • Mil-Industrial Complex

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

MEANS (CONT)

Human Capital	Military	Political
• Size and Quality of Workforce • Availability of Institutions for work force development	• Size of Armed Forces • Defence Expenditure Trends • Dependence on Imports • Capability of Armed Forces	• Type of Government structures • Quality of Governance • Competence of Bureaucracy • Decision Making Processes

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

CAPACITY

Social	• Degree of social integration – religious, ethnic or eco divide • National cohesion • Population Unity & will behind Govt initiatives • Social, organizations, institutional flexibility, solidarity, and social discipline
Moral or Psychological	Historical perspective of nations National character, Strat Culture Morale, spirit in face of hardships Inventiveness, flexibility, perseverance and adaptability
Political	Quality of command/leadership Diplomatic culture Bureaucratic culture Judiciary and law enforcement

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

PESTLEM ANALYSIS

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

PESTLEM

Political	Economic	Social
• Type of Government • Trends in IR • Relations With other nations in the region • Issues with own Nation • Other Geopolitical Drivers	• Macroeconomic Indicators • GDP • Balance of Trade • Govt Expenditures • Government Debt Levels • Dependence on Aid • Ease of doing business	• Demographic pattern • Social Cohesion • Ethnic Structures • Literacy • HDI • Internal Disturbances • Cultural & Class Tensions

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

PESTLEMs (CONT)

Technology	Legal	Environment	Military
• Level of Technology • Access to Modern Technology from abroad • R&D Capacity & Capability • Military – Industrial Infrastructure	• Position on International Law issues • UNCLOS • Arms Trade • MTCR • NPT	• Environmental Issues effecting security • Extreme Climate Events • Natural Resources availability & Deficiencies • Oil & Gas Dependencies	• Capacity & Capability of Armed Forces • Civil –Mil Relations • Military Alliances • Military Eqpt dependencies • Military Bases in Region

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

SOME   REQUIREMENT   FOR   EFFECTIVE   ENVIRONMENTAL SCANNING

❖ **Critical thinking.**

❖ **In-depth analysis.**

SELECTED TOOL FOR ENVIRONMENTAL SCANNING (CONT)

SOME GUIDELINES ON CRITICAL THINKING
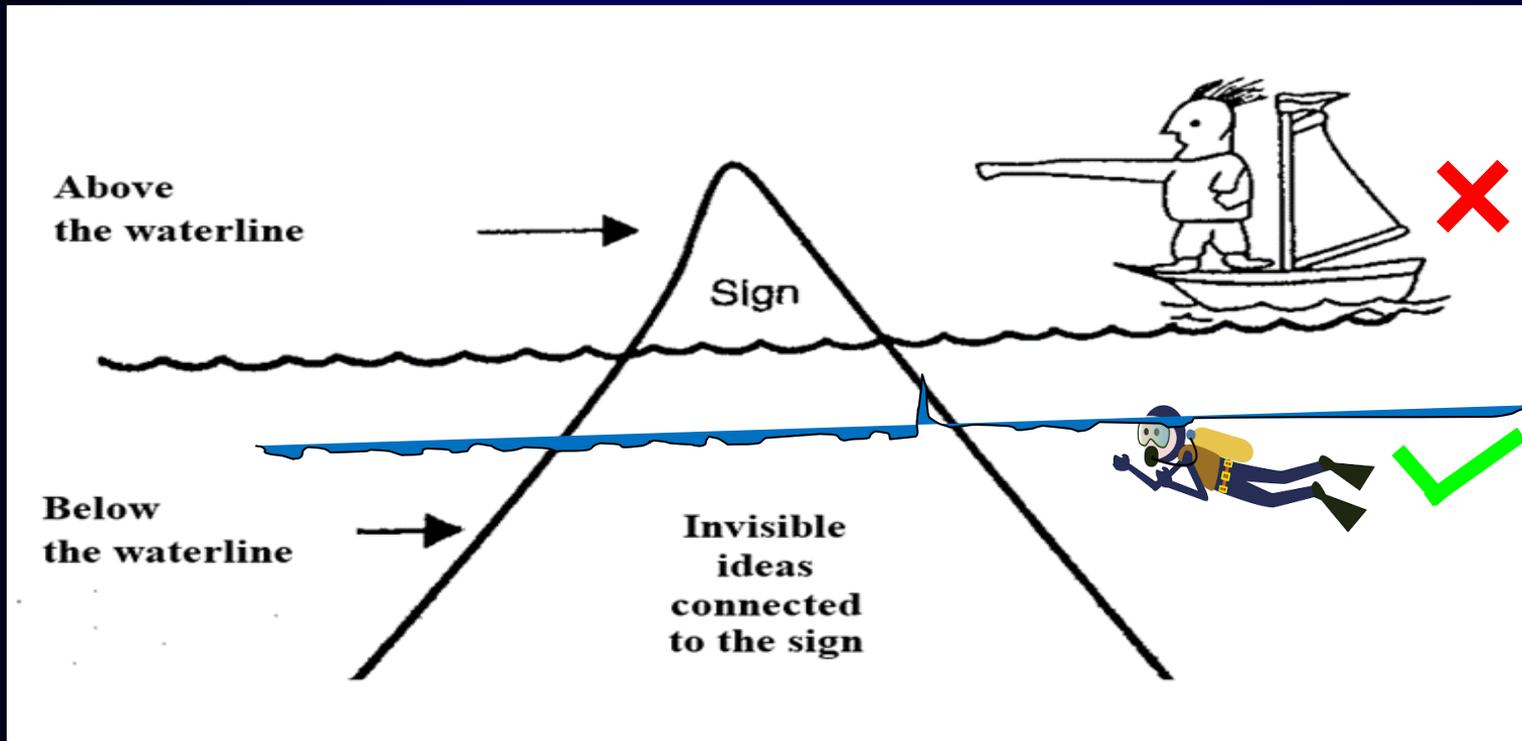
❖ Not taking anything at face value.

❖ Deliberate and purposeful evaluation before believing anything or drawing conclusion.

❖ Asking the right questions – how?, why?, what if?, and so what?

SELECTED TOOLS FOR ENVIRONMENTAL SCANNING (CONT)

IN-DEPTH ANALYSIS ILLUSTRATED WITH AN ICEBAG

Above the waterline → Sign

Below the waterline → Invisible ideas connected to the sign

SCOPE

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SELECTED TOOLS FOR SHORT-TERM STRATEGIES: SWOT ANALYSIS

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

MEANING OF SWOT

SWOT is an acronym for strengths, weaknesses, opportunities and threats.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

SOME INDEQUACIES OF TRADITIONAL SWOT ANALYSIS

➢ **Allocation of equal priorities to SWOT Groups.**

➢ **Allocation of equal priorities to Elements in each SWOT Group.**

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

SOME ANALYTICAL TOOLS USED TO OVERCOME INADEQUACIES OF TRADITIONAL SWOT ANALYSIS

➢ **Importance Performance Analysis (IPA)**

➢ **Analytic Hierarchy Process (AHP)/ Expert Choice**

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

STEPS FOR SWOT- AHP MODEL

➢ **Step 1: SWOT Analysis**

➢ **Step 2: Pairwise Comparison of the elements within each SWOT Group**

➢ **Step 3:   Pairwise Comparison of the four SWOT Groups**

➢ **Step 4:   Strategy Generation Process**

SAATY'S FUNDAMENTAL SCALE

Ser	Int of Importance	Definition	Explanation
(a)	(b)	(c)	(d)
1.	1	Equal Importance	Two activities contribute to the objective
2.	3	Moderate Importance of one over another	Experience and judgement moderately favour one activity over another
3.	5	Essential strong importance	Experience and judgement strongly favour one activity over another

SAATY'S FUNDAMENTAL SCALE (CONT)

(a)	(b)	(c)	(d)
4.	7	Very strong importance	An activity is strongly favoured and its dominance demonstrated in practice
5.	9	Extreme importance	The evidence favouring one activity over another is of the highest possible order of affirmation
6.	2,4,6,8	Intermediate values between 2 adjacent judgements	Used when compromise in needed

SAATY'S FUNDAMENTAL SCALE (CONT)

(a)	(b)	(c)	(d)
7.	Reciprocals	If activity i has one of the above numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i	
8.	Rationales	Ratio arising from the scale	The evidence favouring one activity over another is of the highest possible order of affirmation

ILLUSTRATION OF A COMPARISON MATRIX FOR BUYING A CAR

	Initial Cost (A)	Maintenance Cost (B)	Prestige (C)	Quality (D)
Initial Cost of Automobile (A)	1	2	1	2
Maintenance Cost (B)	½	1	2	1
Prestige (C)	1	½	1	½
Quality (D)	½	1	½	1

Source: Olatunde (2022)

PAIRWISE COMPARISON
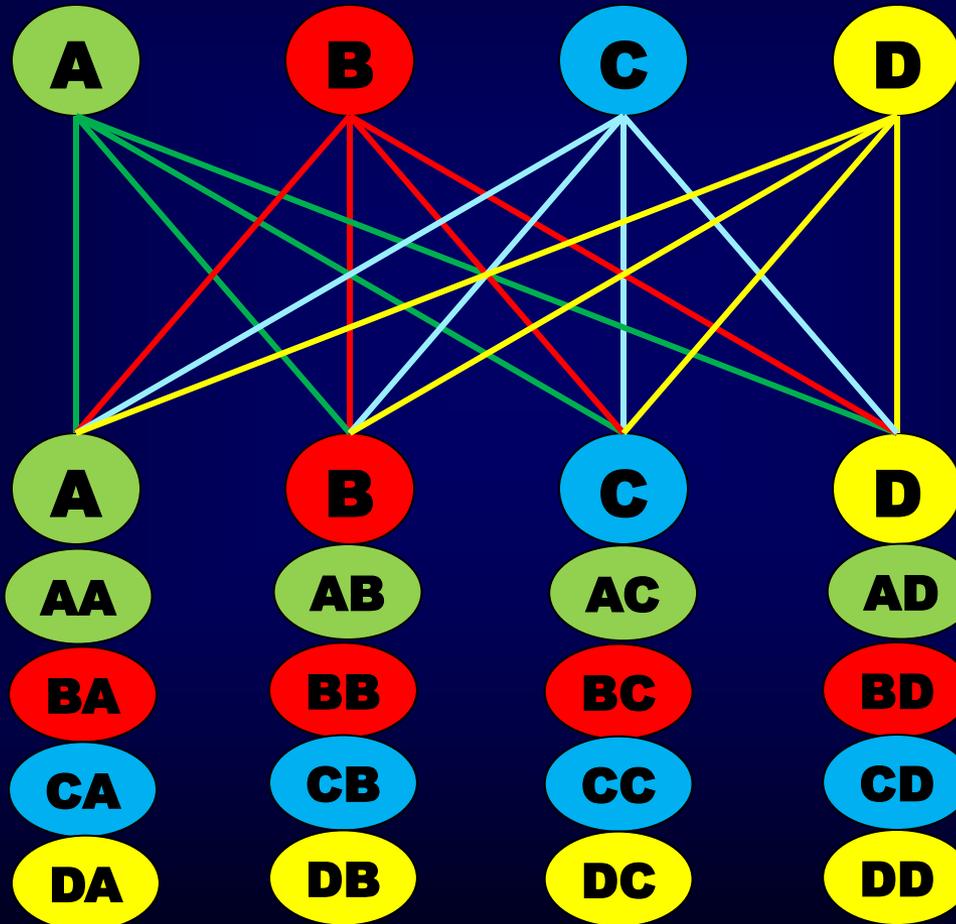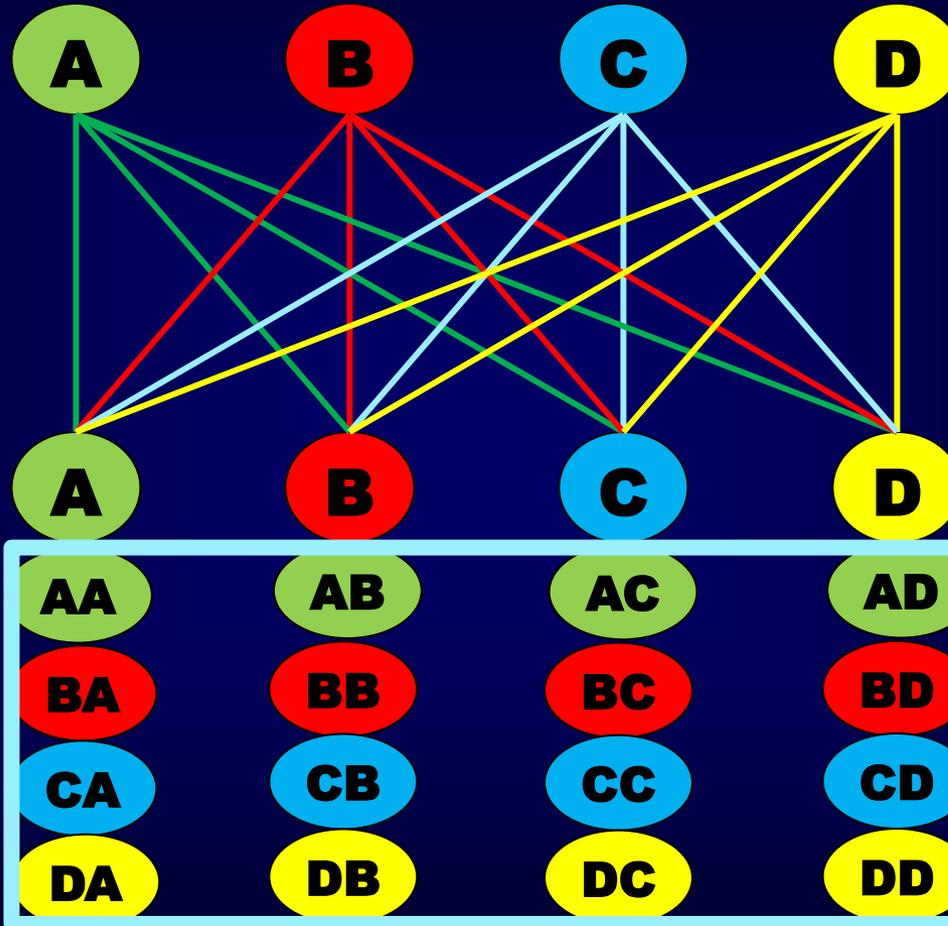
PAIRWISE COMPARISON (CONT)

Source: Olatunde, 2023

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG

STRENGTHS

Leadership (S1)	Economic Resources(S2)	Stable Economic/Geo-Strategic Location(S3)
• Successive Presidents who offer good leadership in the past 30 years.	• Abundance oil reserves that could be harnessed to boost tourism.	• Stable economy with average growth rate of 49% annually. • Anag proximity to Nigeria's large market. • Over 400km coast line, easy access to fresh water from perennial rivers and moderate temperature.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

WEAKNESSES

Inadequate Skilled Tourism Manpower (W1)	Insecurity(W2)	Poor Infrastructure(W3)
• Only 2% of the workforce of 1,271,000 are skilled manpower.	• Kidnapping of 2 tourists in Jun 19. • Robbery, burgulary, armed assault in parts of Anag including beaches. • Sexual assault in areas popular with tourist.	• Poorly maintained access road to tourist destinations leading to traffic congestion. • 23% of Anag's 32,250km road network was underdeveloped.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OPPORTUNITIES

Rising International Tourism Market (O1)	Tourism Initative(O2)	Foreign Direct Investment (O3)
• International tourism market in Africa rose from 3% in 2015 to 5%in 2017 to 7 % in 2018 indicating a growing market for tourism.	• Over 954,000 tourists participated in "Year of Return" launching in Anag in 2018. • It is estimated that 1.7million tourists would participate in the same initiative in 2020.	• Tourism generated FDI of USD 9.6 billion in 2019 in West Africa of which Anag is one of the fastest growing economy.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG(CONT)

THREATS

Competitions by Regional Tourist Destinations (T1)

• Tourism in the Gambia, Ivory Coast, Kenya, Rwanda and Senegal pose a threat to tourism in Anag.

• The Gambia and Senegal currently rank well above Anag in tourism competitiveness index

Maritime Insecurity in the Gulf of Guinea (T2)

• Security reports on the Gulf of Guinea and travel advice by European nations prevent cruise shipping industries from visiting West Africa.

Terrorists from the Sahel Region (T3)

• Terrorist groups from the Sahel region are making attempts to push southwards which implies that Anag may face tourism threats in the near future.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

Participants' Conclusion

Anag's tourism has good internal strengths and immense opportunities in the growing Africa tourism market. There is need to thus leverage the internal strengths to exploit the opportunities.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

Comments on Participants' Conclusion

The team's position is not logically sound. Mere looking at the SWOT groups and elements compiled by the team, it is more logically sound to advance a strategy that would address the internal weaknesses because they appear to be more overwhelming in improving tourism for enhanced national development in Anag.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

SOME KEY TERMS USED IN EXPERT CHOICE

➢ **Goal- A brief statement of the overall purpose of the decision to be made.**

➢**Objectives- Outcomes we are trying to achieve (sub sets of the goal).**

➢**Alternative- An optional choice or cause of action.**

➢**Attributes- Characteristics of the alternative**

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

APPLYING EXPERT CHOICE TO THE PARTICIPANTS SUBMISSION

➢ **Goal- To develop the best strategy to improve tourism in Anag.**

➢**Objectives:**

- ▪ **Increased tourists' security (OBJ1)**

- ▪ **Increased tourists' satisfaction (OBJ2)**

- ▪ **Improvement in tourists' transportation (OBJ3)**

PAIRWISE COMPARISON
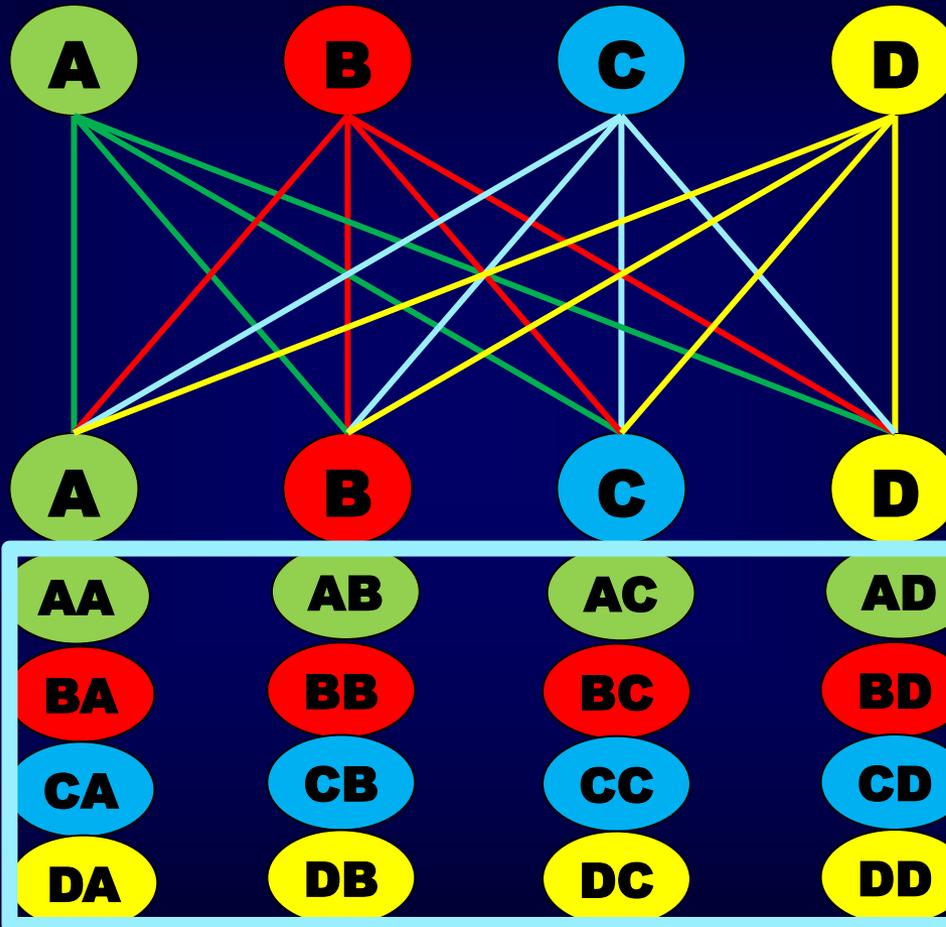
PAIRWISE COMPARISON (CONT)

Source: Olatunde, 2023

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

APPLYING EXPERT CHOICE TO THE PARTICIPANTS SUBMISSION (CONT)

STRENGTH

- **S1- Successive Presidents in Anag in the past 30 years have offered good leadership that promoted tourism.**
- **S2- Anag has abundance oil reserves that could be harnessed to boost tourism.**
- **S3- Over 400km coast line, easy access to fresh water from perennial rivers and moderate temperature which could be harnessed to boost tourism.**

WEAKNESS

- **W1- Only 2% of the workforce of 1,271,000 are skilled manpower for tourism.**
- **W2- Kidnapping, robbery, burgulary, armed assault occur in parts of Anag including beaches which are tourists' destination.**
- **W3- Sexual assault in areas tourists often visit.**

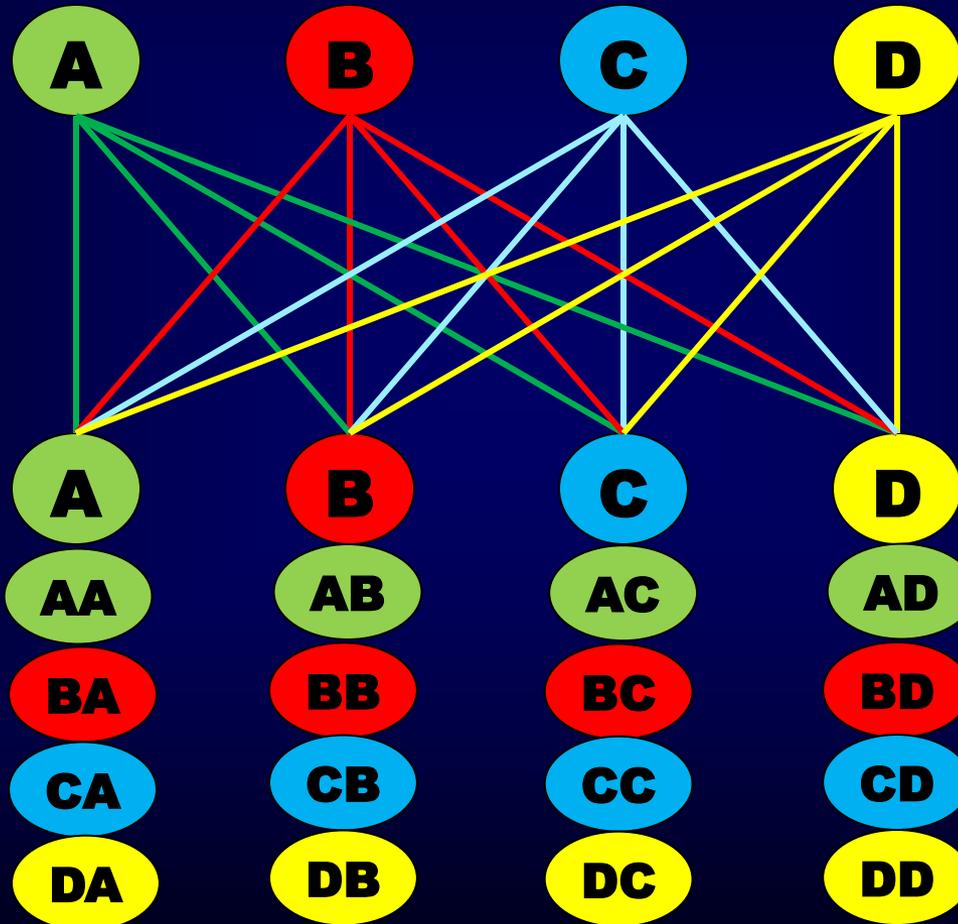# SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)
APPLYING EXPERT CHOICE TO THE PARTICIPANTS SUBMISSION (CONT)

OPPORTUNITY

- O1- Growing international tourism market in Africa which Anag could harness.
- O2- Increasing participation in annual tourists festival from 2018 to 2020.
- O3- Increasing FDI in tourism in West Africa which Anag could harness.

THREAT

- T1- The Gambia and Senegal currently rank well above Anag in tourism competitiveness index.
- T2- Security reports on the Gulf of Guinea and travel advice by European nations could prevent potential tourists from visiting Anag.
- T3- Attempt by terrorist groups from the Sahel region to push southwards implies that Anag could face terrorism threats in the near future with negative consequences on its tourism industry.

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)
OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF OBJECTIVES

Serial	OBJ	Description	Priority (%)
(a)	(b)	(c)	(d)
1.	OBJ 1	Increased tourists security	33.33
2.	OBJ 2	Increased tourists' satisfaction	33.33
3.	OBJ 3	Improvement in tourists' transportation	33.33

Inconsistency Ratio = 0.00

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF SWOT ELEMENTS

Serial	SWOT Element	Description	Priority (%)
(a)	(b)	(c)	(d)
1.	S1	Successive Presidents in Anag in the past 30 years have offered good leadership that promoted tourism	1.84
2.	S2	Anag has abundance oil reserves that could be harnessed to boost tourism	1.84

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF SWOT ELEMENTS (CONT)

Serial	SWOT Element	Description	Priority (%)
(a)	(b)	(c)	(d)
3.	S3	Over 400km coast line, easy access to fresh water from Perennial River and moderate temperature which could be harnessed to boost tourism	1.84
4.	W1	Only 2% of the workforce of 1,271,000 are skilled manpower for tourism.	1.84
5.	W2	Kidnapping, Robbery, Burgulary,armed assault occurs in parts of Anag including beaches which are tourists' destinations	25.97

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF SWOT ELEMENTS (CONT)

Serial	SWOT Element	Description	Priority (%)
(a)	(b)	(c)	(d)
6.	W3	Sexual assault in areas tourists often visit.	32.72
7.	O1	Growing international tourism market in Africa which Anag could harness.	1.84
8.	O2	Increasing participation in annual tourist's festival from 2018 to 2020.	1.84
9.	O3	Increasing FDI in tourism in West Africa which Anag could harness.	1.84

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF SWOT ELEMENTS (CONT)

Serial	SWOT Element	Description	Priority (%)
(a)	(b)	(c)	(d)
10.	T1	The Gambia and Senegal currently rank well above Anag in tourism competitiveness index.	1.84
11.	T2	Security reports on the Gulf of Guinea and travel advice by European nations could prevent potential tourists from visiting Anag.	11.82

SELECTED TOOLS FOR SHORT TERM STRATEGIES: SWOT ANALYSIS (CONT)

ILLUSTRATION OF SWOTS-AHP MODEL WITH PARTICIPANTS SUBMISSION: SWOT ANALYSIS OF TOURISM IN ANAG (CONT)

OUTCOME OF THE EXPERT CHOICE-PRIORITIES OF SWOT ELEMENTS (CONT)

Serial	SWOT Element	Description	Priority (%)
(a)	(b)	(c)	(d)
12.	T3	Attempt by terrorist groups from the Sahel region to push southwards implies that Anag could face terrorism threats in the near future with negative consequences on its tourism industry.	32.72

Inconsistency Ratio = 0.07

PERFORMANCE-IMPACT/PROBABILITY-ATTRACTIVENESS BASED SWOT ANALYSIS

EXPLANATION OF SOME TERMINOLOGIES

PERFORMANCE

- **Performance could be that of strength or weakness**

• Performance of a strength element measures its performance relative to the desired standard on a rating scale of 1 to 9.

• Performance of weakness element measures its performance relative to the desired standard on a rating scale of -9 to -1.

EXPLANATION OF SOME TERMINOLOGIES

IMPACT

- **Impact of weakness or strength element measure its importance to national development and security on a rating scale of 1 to 9.**

EXPLANATION OF SOME TERMINOLOGIES (CONT)

PROBABILITY

• **Probability of Occurrence of a threat or opportunity element measures its likelihood of happening on a 3 discrete scale: Low, Medium or High. (Alternatively, on a scale of 0.1 to 0.9)**

EXPLANATION ON PROBABILIITY OF OCCURRENCE

0,0	.1	.2	.3	.4	.5	.6	.7	.8	.9

Low　　　　**Medium**　　　　**High**
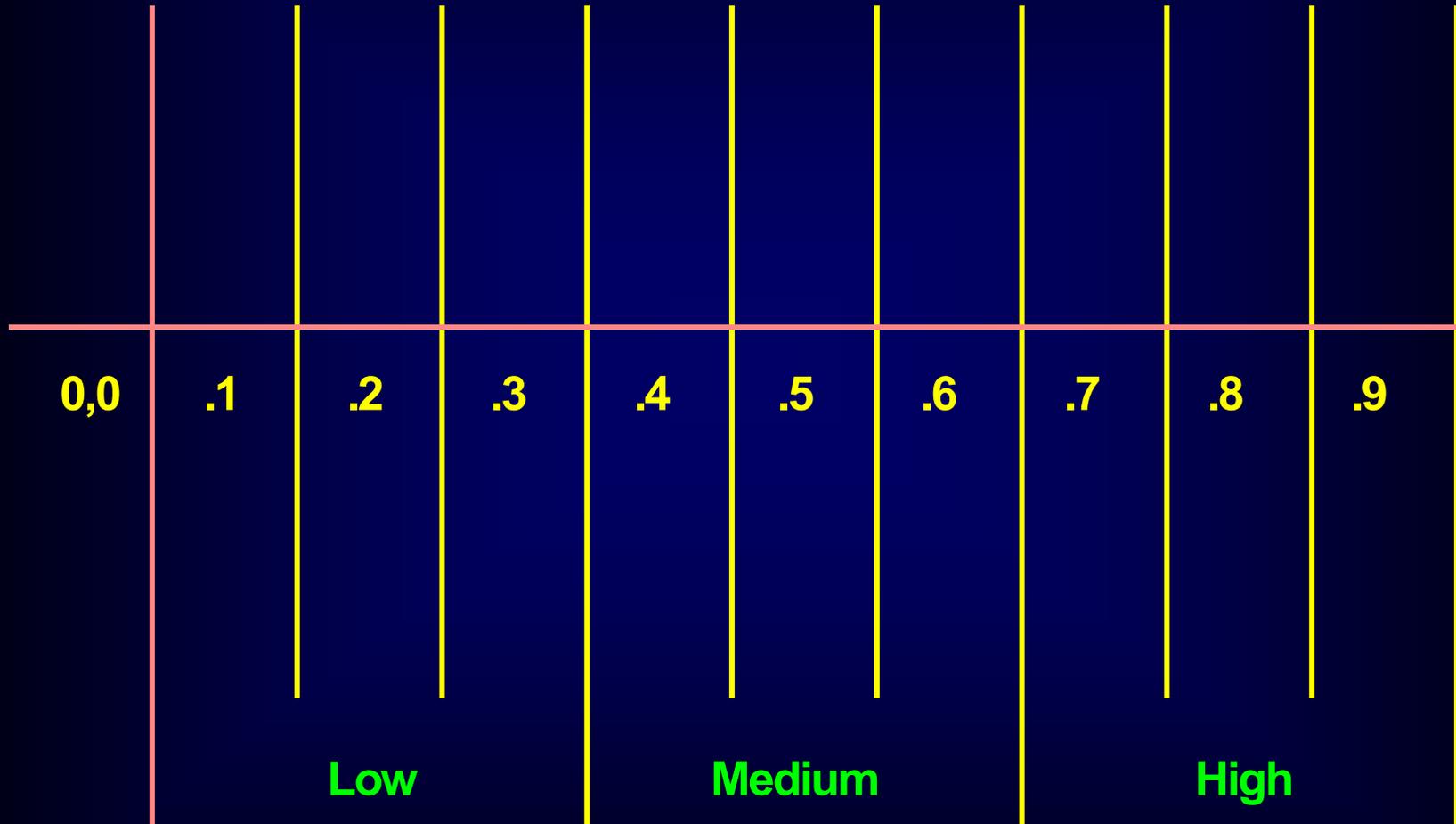
EXPLANATION OF SOME TERMINOLOGIES (CONT)

ATTRACTIVENESS

SERIOUSNESS

- Attractiveness of an Opportunity element measures it lucrativeness on a rating scale of 1 to 9.

- Seriousness of a threat element measures its gravity on a rating scale of -9 to -1.

PERFORMANCE IMPACT MATRIX: STRENGTHS

Factors/ Attributes	Performance																		Impact									Cum	Rk
	Maj W			Med W			Min W			Min Str			Med Str			Maj Str			High			Med			Low				
	-9	-8	-7	-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	9	8	7	6	5	4	3	2	1		
S1																	X				X					8	7	56	6
S2																		X		X						9	8	72	2
S3																	X			X						8	8	64	4
S4																	X		X							8	9	72	2
S5																		X	X							9	9	81	1
S6																	X						X			8	8	64	4
S7																X							X			7	5	35	8
S8															X							X				6	6	36	7

PI MATRIX: WEAKNESSES

Factors/ Attributes	Performance																		Impact									Cum	Rk
	Maj W			Med W			Min W			Min Str			Med Str			Maj Str			High			Med			Low				
	-9	-8	-7	-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	9	8	7	6	5	4	3	2	1		
W1		X																	X									-72	2
W2			X																	X								-56	5
W3	X																		X									-81	1
W4					X																	X						-30	12
W5			X																				X					-35	11
W6	X																			X								-72	2
W7				X																			X					-30	12
W8		X																	X									-72	2
W9		X																			X							-56	5
W10		X																				X						-48	9
W11			X																	X								-56	5
W12			X																		X							-49	8
W13				X																		X						-36	10

THE CARTESIAN PLANE

+Y

-X

+X

-Y
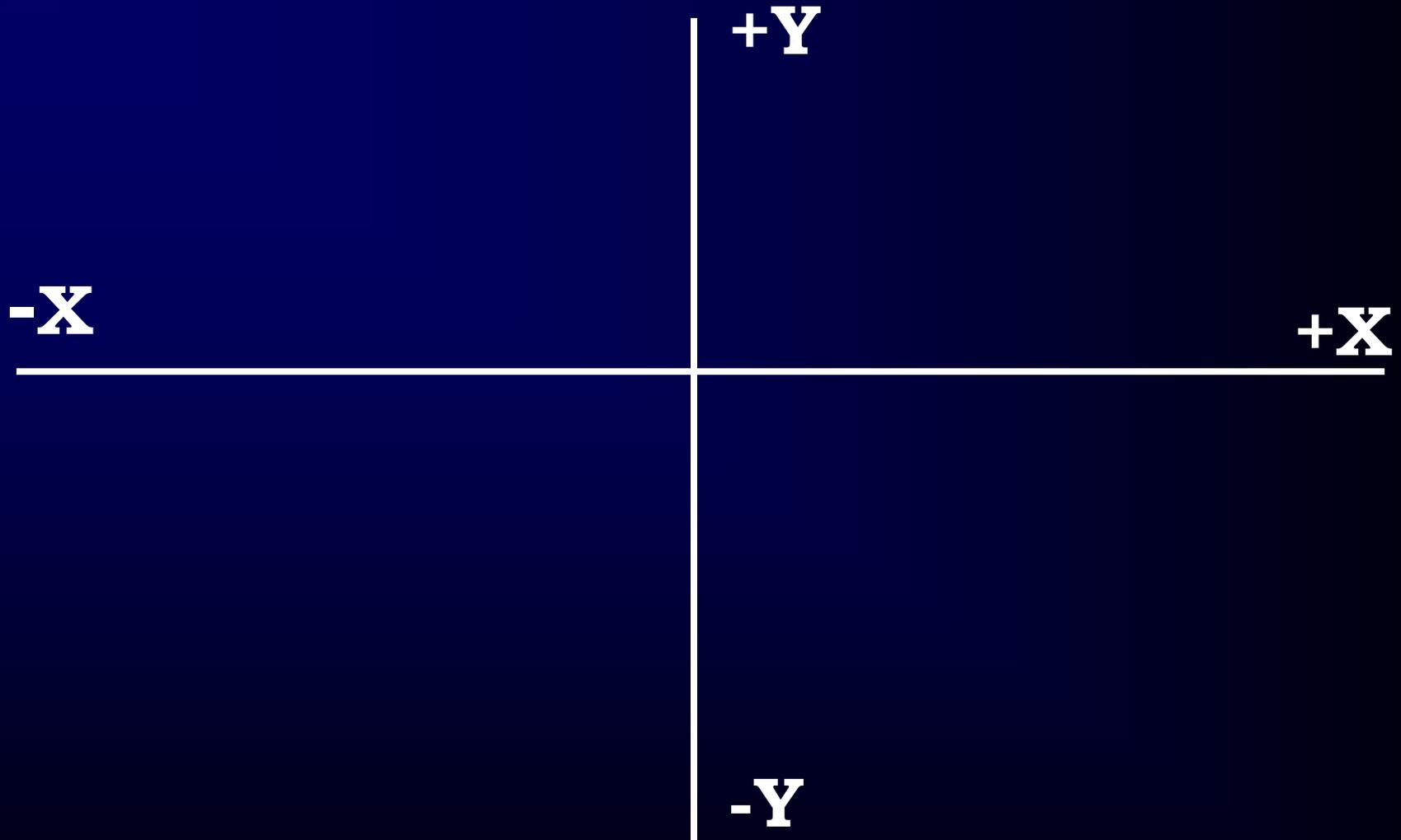
SITUATING THE PERFORMANCE-IMPACT GRAPH OF THE CARTESIAN PLANCE

+ Y

Weaknesses   **Strengths**

- X

+ X

- Y

PERFORMANCE IMPACT GRAPH
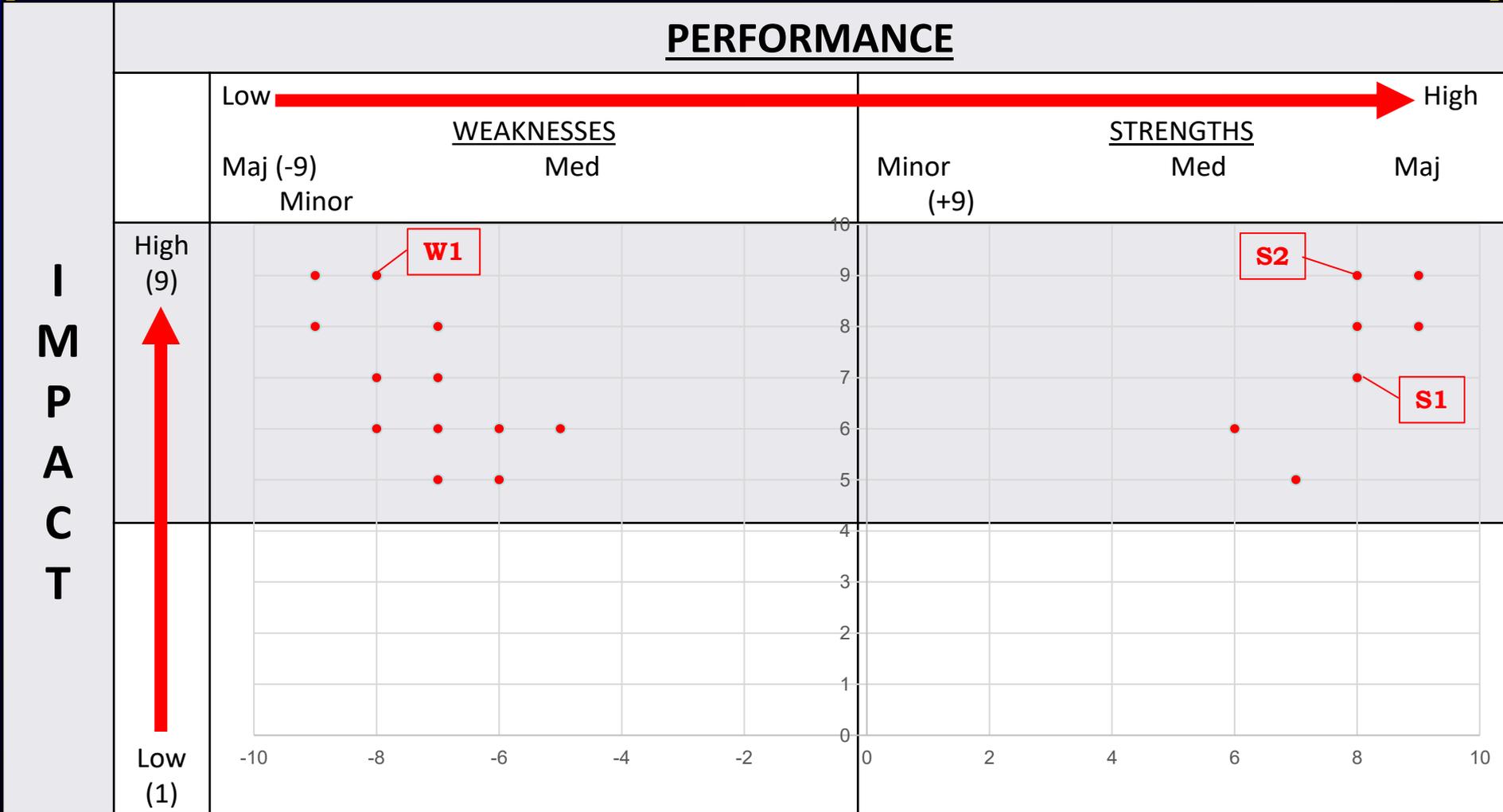
PERFORMANCE – IMPACT MATRIX
STRENGTHS & WEAKNESSES

PERFORMANCE

		Low	High
		Weaknesses	**Strengths**
		Maj (-9) Med Minor	Minor Med Maj (+9)

Conc here

Ensure does not become maj weakness

Conc here

Keep up the good work

IMPACT

High (9)

Low(1)

Mandatory Strategy

Low Priority

Possible Overkill

Divert resources

0 0
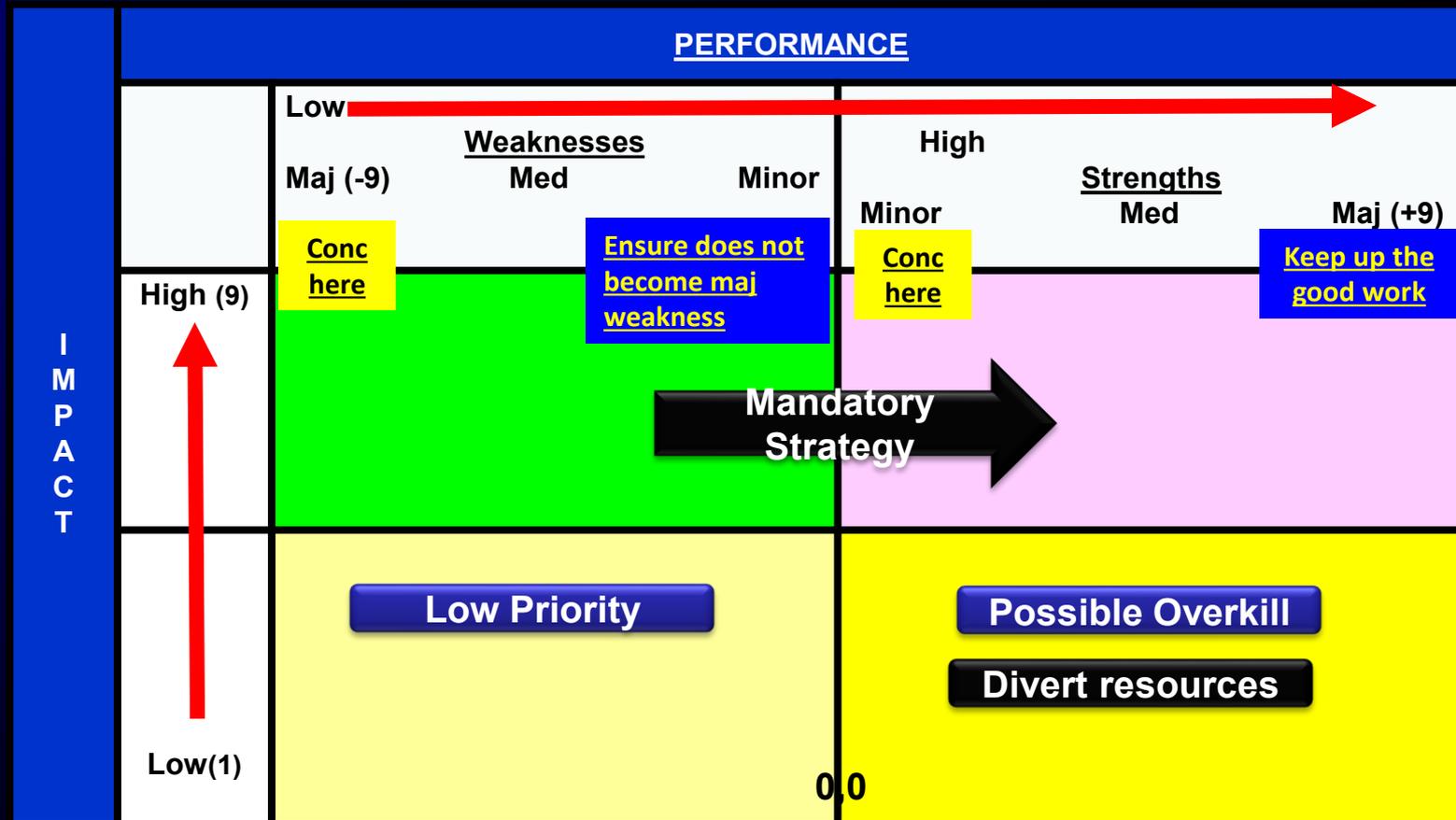
ATTRACTIVENESS-PROBABILITY MATRIX

Factors/ Attributes	External Conditions (Attractiveness of Opportunities)																		Probability of Occurrence									Cum	Rk
	Maj T			Med T			Minor T			Minor O			Med O			Maj O													
	-9	-8	-7	-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	.9	.8	.7	.6	.5	.4	.3	.2	.1		
O1																		x			x							6.3	3
O2																		x		x								7.2	2
O3																x								x				2.8	11
O4																	x					x						5.6	4
O5															x								x					3	10
O6															x						x							4.8	5
O7																x						x						4.2	6
O8																	x	x	x									8.1	1
O9														x									x					2	13
O10														x								x						3.5	8
O11																x								x				2.8	11
O12																	x						x					4	7
O13																x							x					3.5	8

SERIOUSNESS-PROBABILITY MATRIX

Factors/ Attributes	External Conditions (Seriousness of threats)																		Probability of Occurrence									Cum	Rk
	Maj T			Med T			Minor T			Minor O			Med O			Maj O													
	-9	-8	-7	-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	.9	.8	.7	.6	.5	.4	.3	.2	.1		
T1	x																				x							-6.3	3
T2					x																					X		-1	10
T3				x																				x				-2.4	7
T4						x																			x			-1.2	9
T5		x																				x						-6.4	2
T6			x																			x						-5.6	4
T7							x																x					-1.5	8
T8			x																		x							-4.9	5
T9				x																			x					-3.6	6
T10		x																		x								-7.2	1

THE CARTESIAN PLANE

+Y

-X

+X

-Y
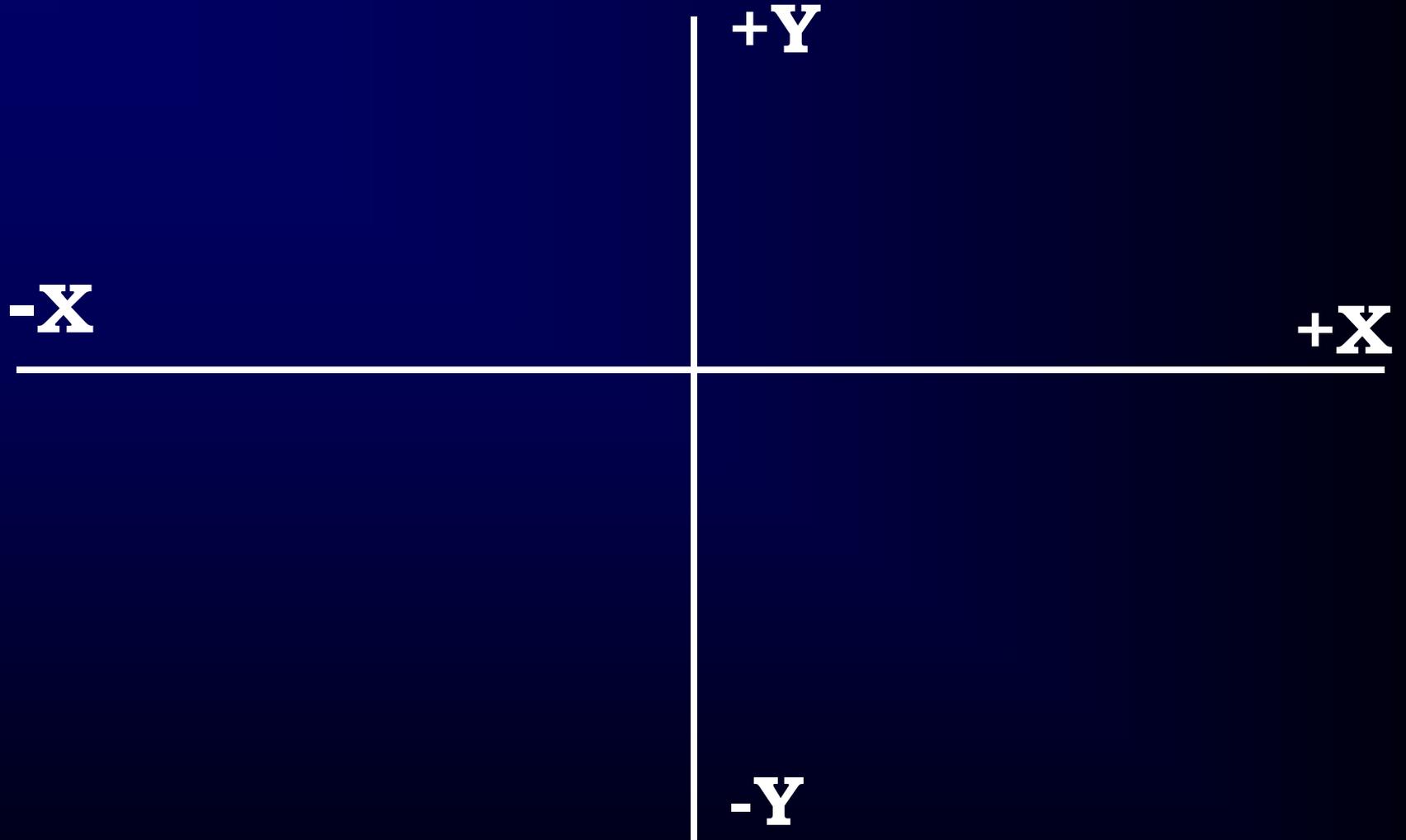
SITUATING THE ATTRACTIVENESS/SERIOUSNESS GRAPH IN THE CARTESIAN PLANE

+ Y

Opportunities
(Attractiveness)

− X

+ X

Threats
(Seriousness)

− Y
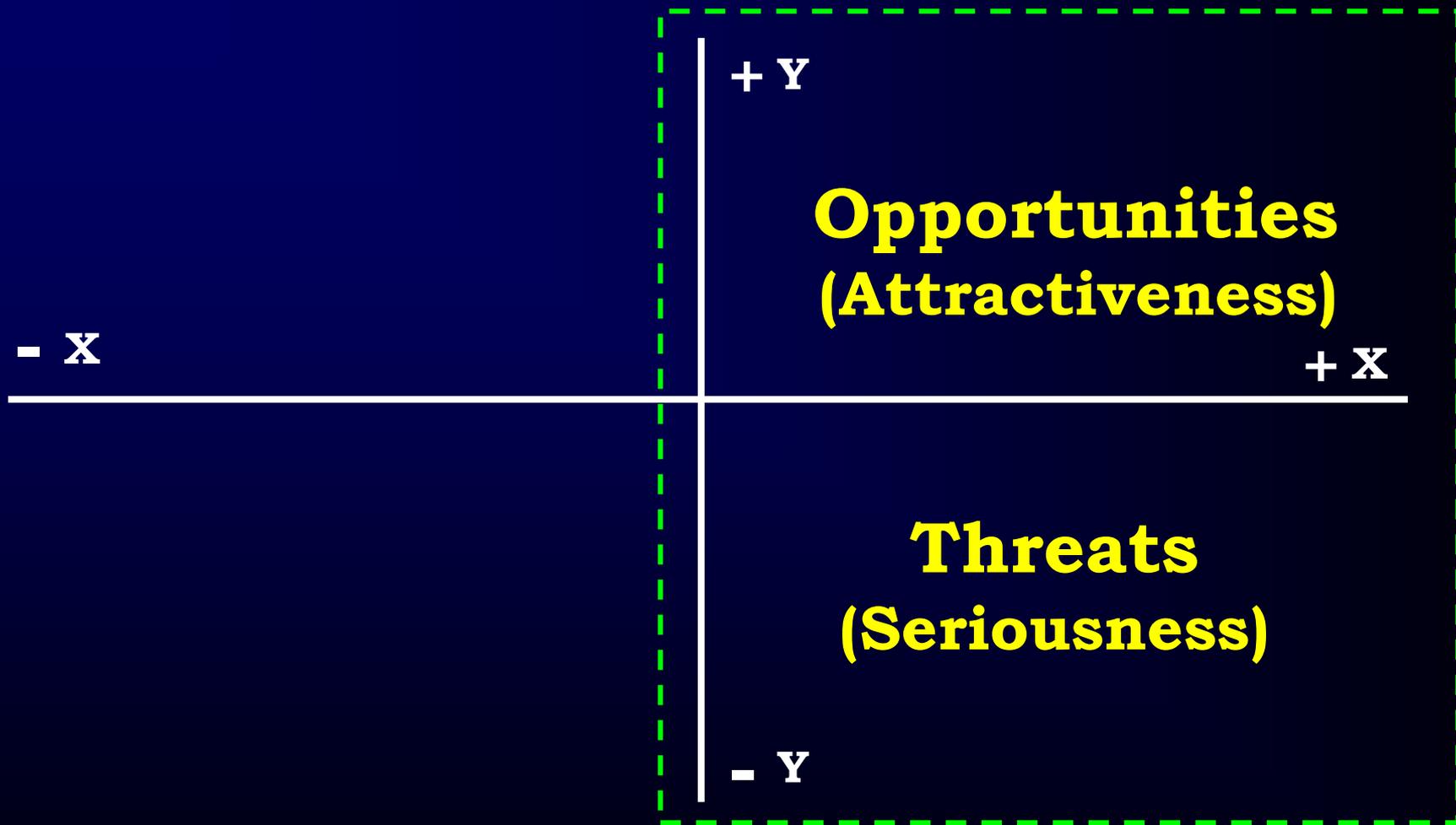
OPPORTUNITY/THREATS – PROBABILITY GRAPH

PROBABILITY

OPPORTUNITY/THREATS - PROBABILITY MATRIX

PROBABILITY

		Low	High

OPPORTUNITY

THREAT

ATTRACTIVENESS

HIGH

SERIOUSNESS

HIGH

9

0 0

-9

Monitor for change

Convert to Maj 'O'

Low priority

Low priority

Ensure Minor 'T' does not become Maj 'T'

Monitor for change

Major Opportunity

Expl Maj 'O'

STRATEGIES

Deter Maj 'T'

Major threat
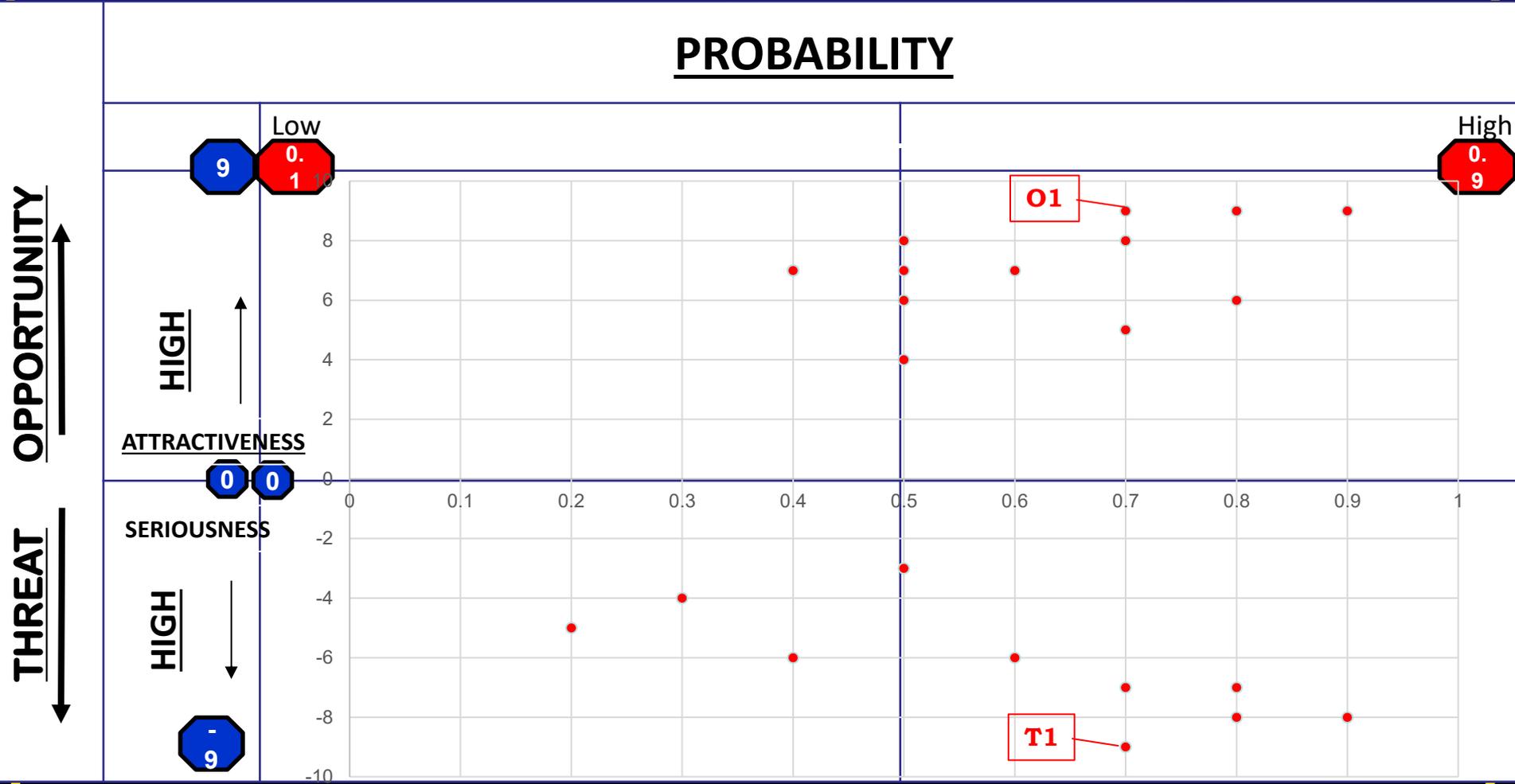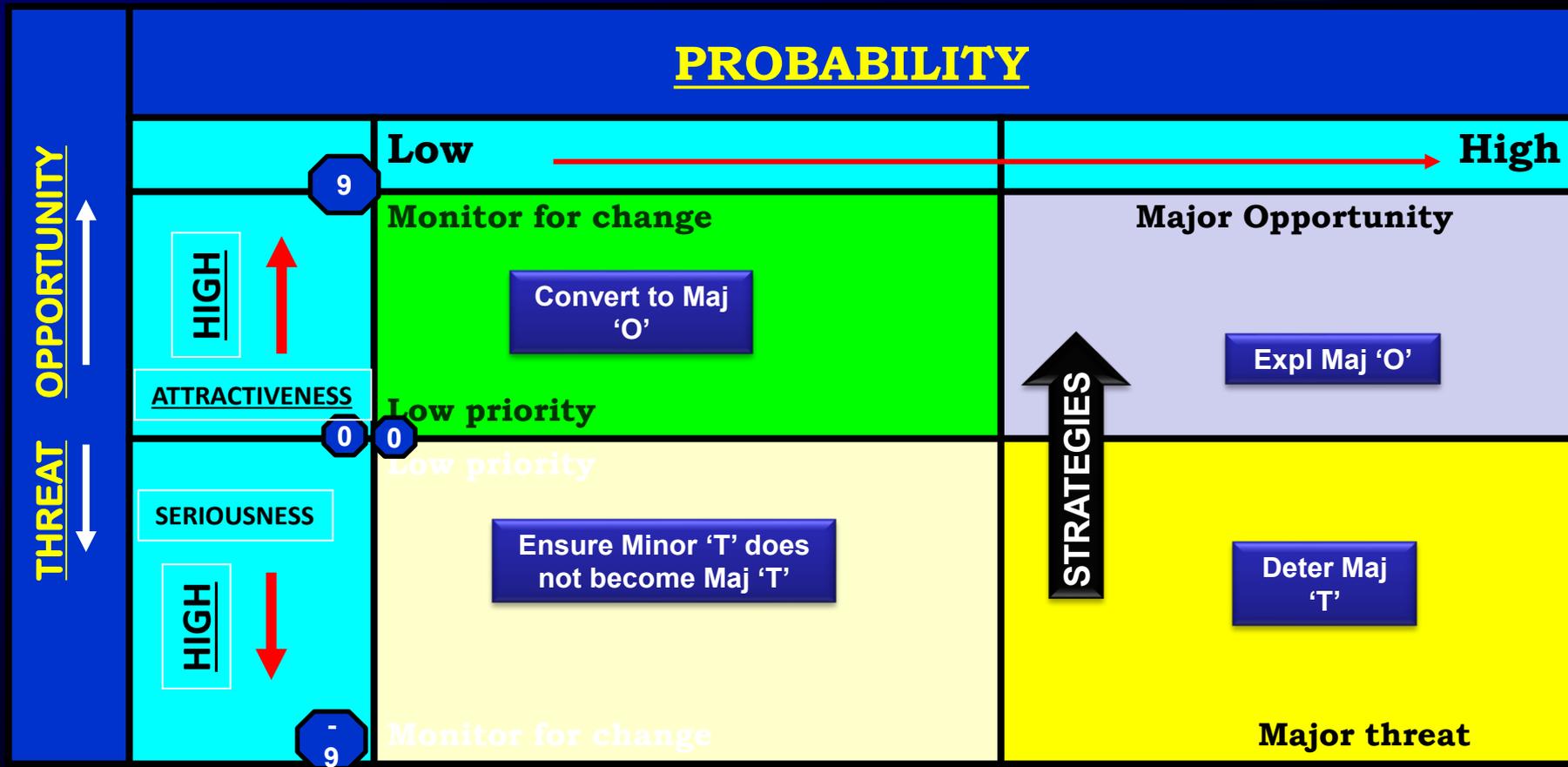
SWOT SUMMARY

Strengths	**Weaknesses**
1. 2. 3.	1. 2. 3.
Opportunities	**Threats**
1. 2. 3.	1. 2. 3.

MIXED STRATEGIES

	Strengths 1. 2. 3.	**Weaknesses** 1. 2. 3.
Opportunities 1. 2. 3.	**SO - Strategies** *Use Strengths to take advantage of Opportunities*	**WO - Strategies** *Overcome Weaknesses by taking advantage of Opportunities*
Threats 1. 2. 3.	**ST - Strategies** *Use Strengths to deter/ defeat Threats*	**WT - Strategies** *Avoid Threats till Weaknesses overcome*

EVR CONGRUENCE

Values in sync with Environment

ENVIRONMENT Key factors

Resource constrained by values

STRATEGY

VALUES guide actions & impose restraints

RESOURCES Raw material, skills and capabilities

Restraint on exploitation of KF
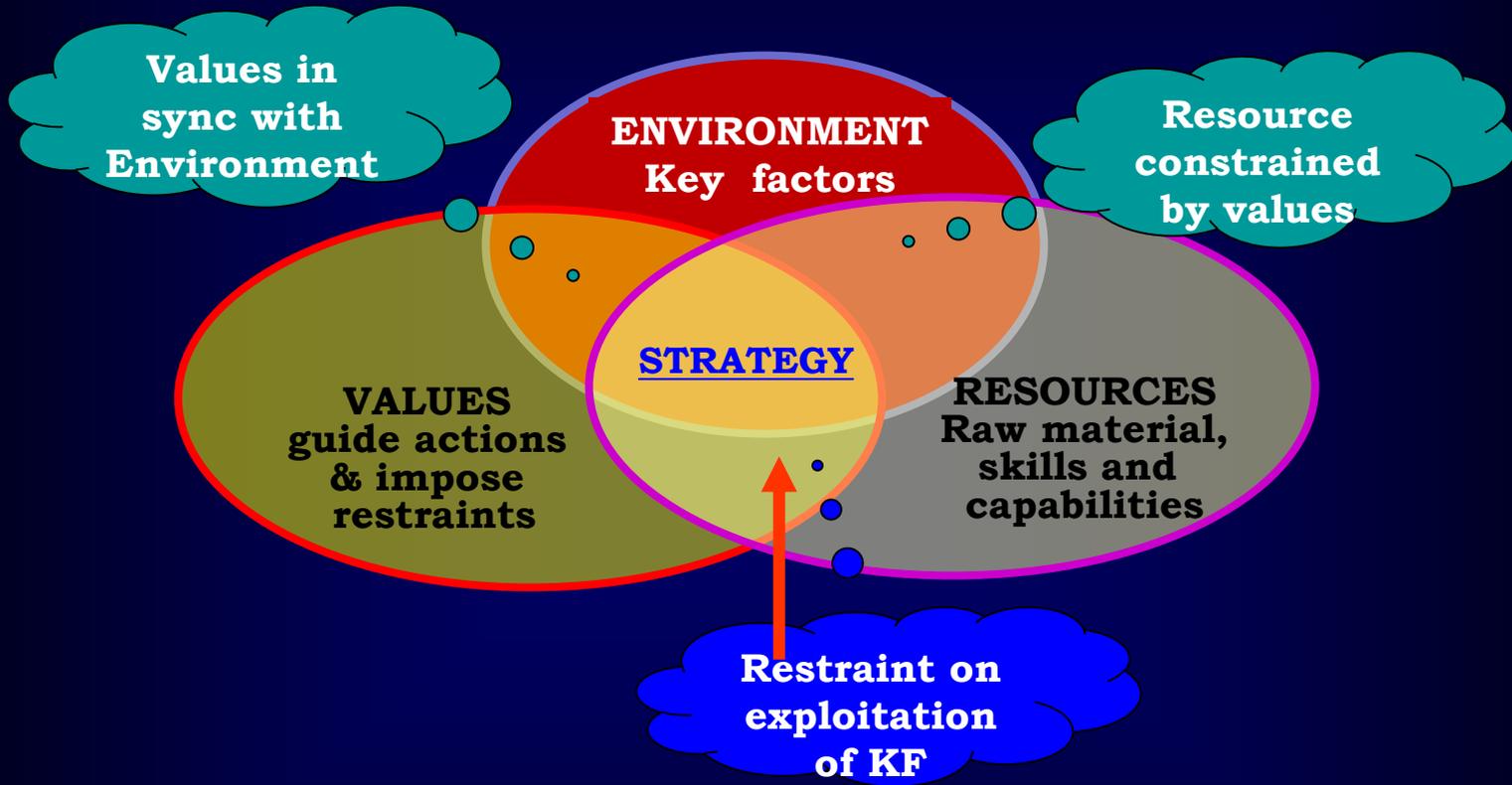
Effective strategy requires a sustained congruence among the Environment, Values and Resources

SCOPE

➢ **Rundown of methods used in future studies and net assessment**

➢ **Flow chart for developing national security strategies**

➢ **Selected tools for environmental scanning**

➢**Selected tools for short-term strategies: SWOT Analysis**

➢**Selected tools for long-term strategies: Scenario Planning and Analysis**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

WHAT ARE SCENARIOS?

Scenarios are plausible and provocative stories about how the future might unfold. They enable decision-makers to plan for the future today.

-Raudolph and Globalytic LLC,2015

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

FLOW CHART FOR NATIONAL SECURITY STRATEGIES

- Factors
- Strength/Weakness
- Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Key Decision factors

Driving forces

2 x 2 Matrix

Scenario Building

Key Decision factors **+** **Driving forces** **=** **Drivers**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

ISSUES TO BE COVERED UNDER SCENARIO BUILDING

❖ **Types of Scenarios**

❖ **Seven steps of Scenario Building**

❖ **Teaching points on participants' submission**

❖ **Illustration of Scenario Building**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

ISSUES TO BE COVERED UNDER SCENARIO BUILDING

❖ **Types of Scenarios**

❖ **Seven steps of Scenario Building**

❖ **Teaching points on participants' submission**

❖ **Illustration of Scenario Building**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

TYPES OF SCENARIO

➤ **Simple Scenarios**

Simple Scenario technique is relatively straight forward (Raudolph & Globalytica. LLC,2015).

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

Simple Scenarios

| Drivers	Best Case An imperfect peace	Worse Case Fragmentation	Mainline Descent into order	Additional Scenario Pockets of civility
Government Effectiveness	+	-	-	-
Economy	+	-	-	+
Civil society		-	+	+
Insurgency	-	+	+	
Drug trade		+		+
Foreign influence	+			

Source: (Raudolph & Globalytica. LLC, 2015)

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

TYPES OF SCENARIO (CONT)

➢ **Cone of Plausibility**

The Cone of Plausibility is a structured process using key drivers and assumptions to generate a range of plausible alternative scenarios that help analysts and decision makers imagine various futures and their effects.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

Cone of Plausibility (Cont)

Drivers

- Economy
- Popular Support
- Civil-Military Relations
- Regional Relations
- Foreign Relations

Assumptions

- Growth likely 2 to 5%
- Slowly Eroding
- Growing Tensions
- Peaceful/ Stable
- Substantial

Scenarios

Plausible Scenario 1
More inclusive policies and sound economic decisions bring stability

Baseline Scenario
President under fire and struggling to retain control

Plausible Scenario 2
Junior military officers' stage successful coup

Wildcard Scenario 2
War breaks out with neighbor as regime collapses

Now — Stability of Regime — 2020

Source: (Raudolph & Globalytica. LLC, 2015)

- ❖ Structured process
- ❖ uses key drivers and assumptions.
- ❖ implemented by a team of analysts and at least a facilitator.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

TYPES OF SCENARIOS (CONT)

Alternative Futures

Source: 2009 Pherson Associated, LLC.
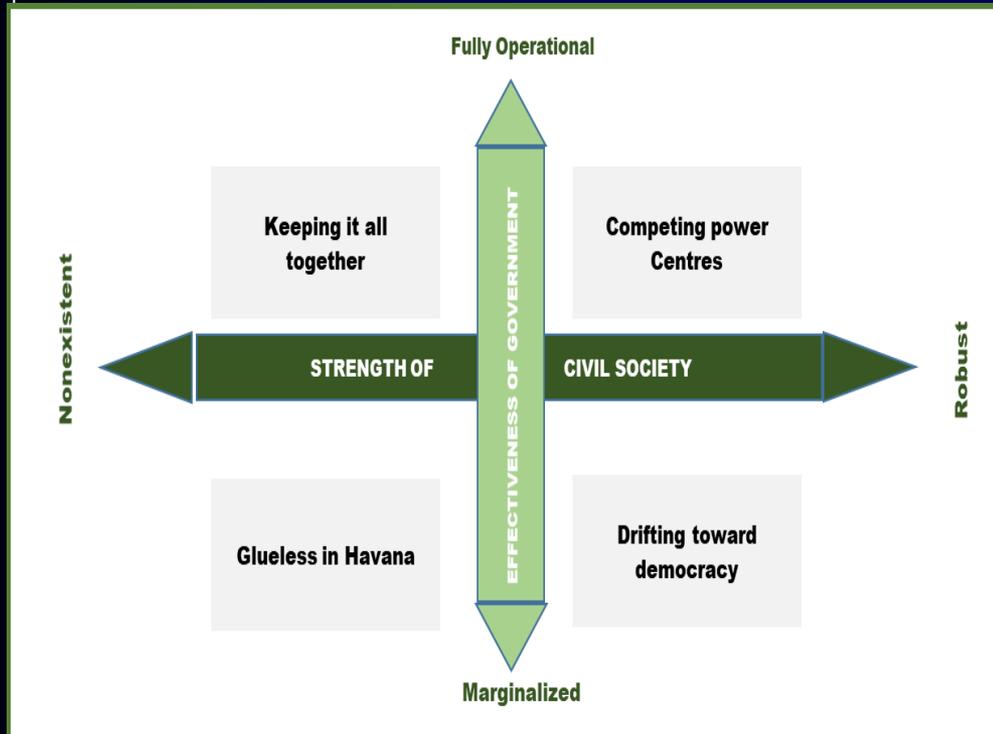
❖ **Relies on a group of experts including facilitator and decision maker**

❖ **Same thing as multiple scenario generation except in the number of scenarios generated.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PLANNING AND ANALYSIS (CONT)

TYPES OF SCENARIOS (CONT)

Multiple Scenario Generation: Future of the Iraq Insurgency.
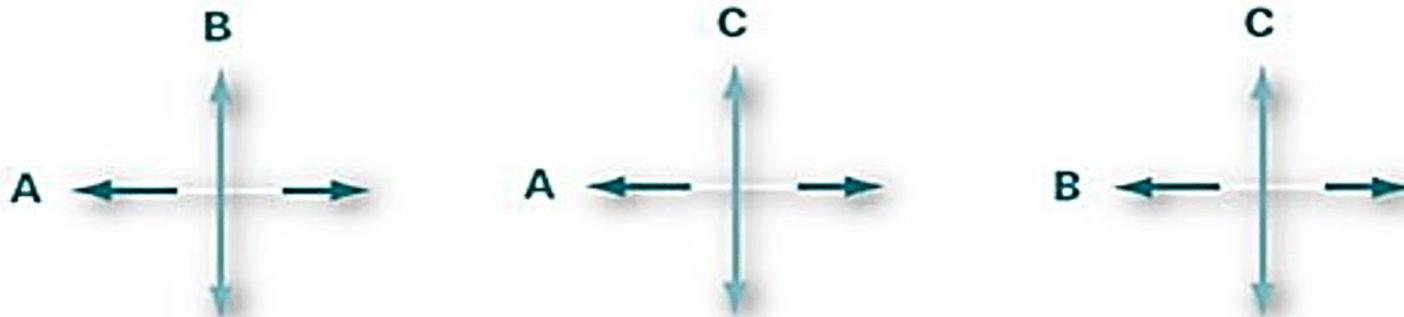
Key Drivers

A. The role of neighboring states (e.g., Syria, Iran)
B. The capability of Iraq's security forces (military and police)
C. The political environment in Iraq

Source: 2009 Pherson Associated, LLC.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

ISSUES TO BE COVERED UNDER SCENARIO BUILDING

❖ **Types of Scenarios**

❖ **Seven steps of Scenario Building**

❖ **Teaching points on participants' submission**

❖ **Illustration of Scenario Building**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision factors

Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Driving forces

2 x 2 Matrix
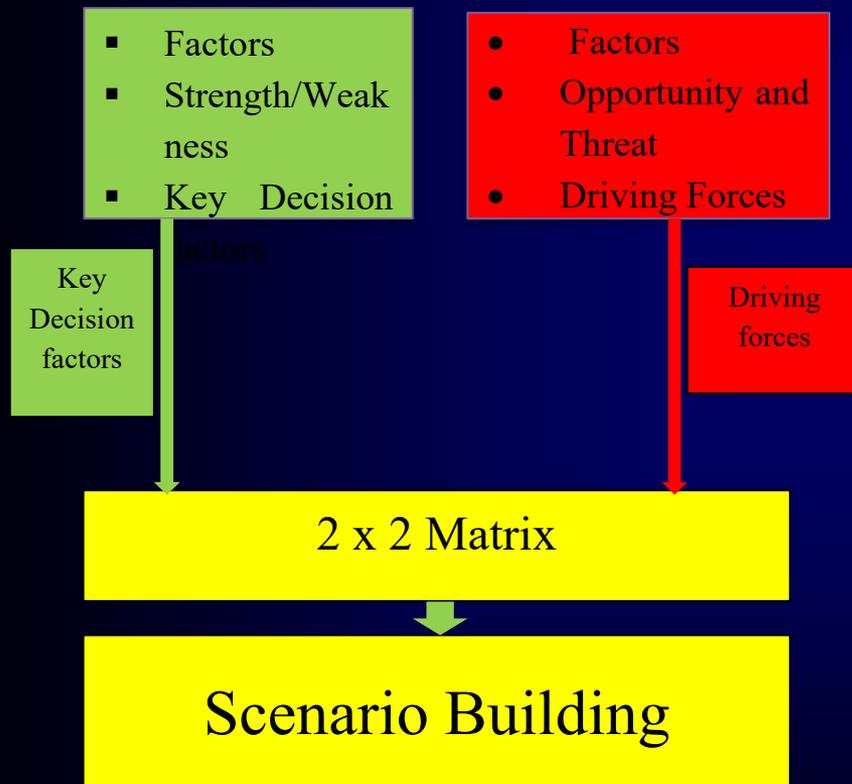
Scenario Building

Seven Steps of Scenario Building

❖ **Step 1: Identify the focal issue in question or the specific decision that has to be made. These could be deduced from the topic and it should be the aim of the paper.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Key Decision factors

Driving forces

2 x 2 Matrix
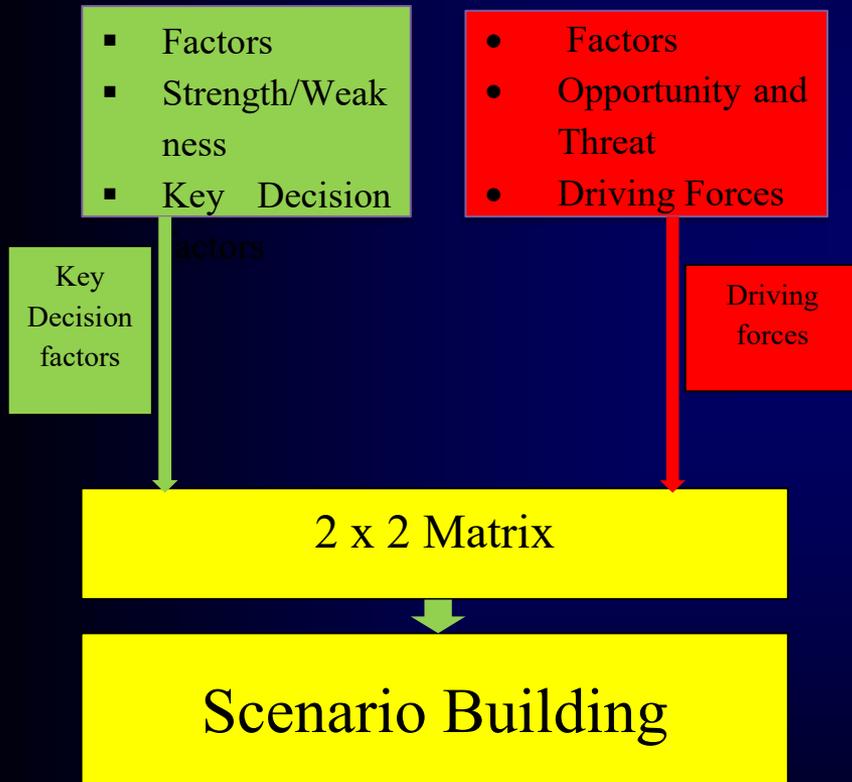
Scenario Building

Seven Steps of Scenario Building (cont.)

❖ **Step 2: Pinpoint from your environment scan the key factors that could influence the success or failure of the focal issue identified in Step one.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Key Decision factors

Driving forces

2 x 2 Matrix
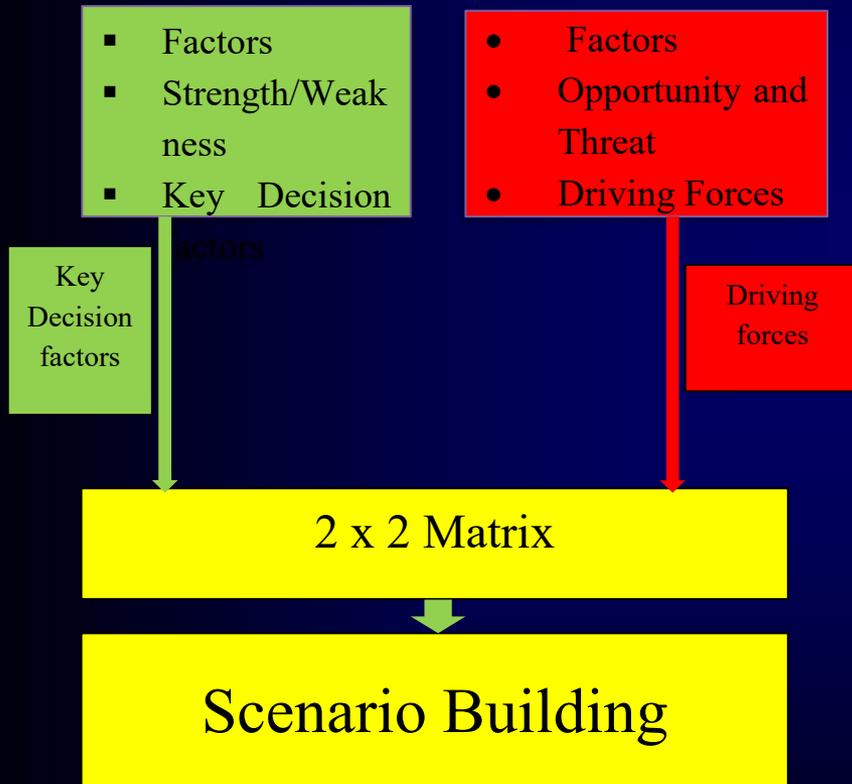
Scenario Building

Seven Steps of Scenario Building (cont.)

❖ **Step 3: Identify the driving forces that could influence the key decision factors identified in Step 2. (these could be economic factors, political consideration, cultural consideration and evolving technology).**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- ▪ Factors
- ▪ Strength/Weakness
- ▪ Key Decision factors

- • Factors
- • Opportunity and Threat
- • Driving Forces

Key Decision factors

Driving forces

2 x 2 Matrix

Scenario Building

Seven Steps of Scenario Building (cont.)

Step 4: Rank the key decision factors and the driving force based on 2 criteria. These are:

✓ **The degree of importance for the success of the focal issue or key decision identified in Step one. This is also called the Impact (high, medium and low).**

✓ **The degree of uncertainty surrounding those factors/driving forces (high, medium and low).**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

RANKING OF KEY DECISION FACTORS AND DRIVING FORCES

Serial	Key Decision Factors			Driving Forces			Remarks
	Factor	Impact	Uncertainty	Factor	Impact	Uncertainty	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1.	Fleet	High	High	Funding	High	Medium	
2.	Motivation	High	Low	Tech	High	High	
3.	Training	High	Low	Environment	High	Low	

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision factors

Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Driving forces

2 x 2 Matrix

Scenario Building

Seven Steps of Scenario Building (cont.)

❖ **Step 5: Using the procedures for the appropriate scenario methodology, identify the scenarios that emerge from the interplay of key decision factors and driving forces considering some criterias (Explanation of Scenario building logic first)**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

BASIC SCENARIO BUILDING LOGIC
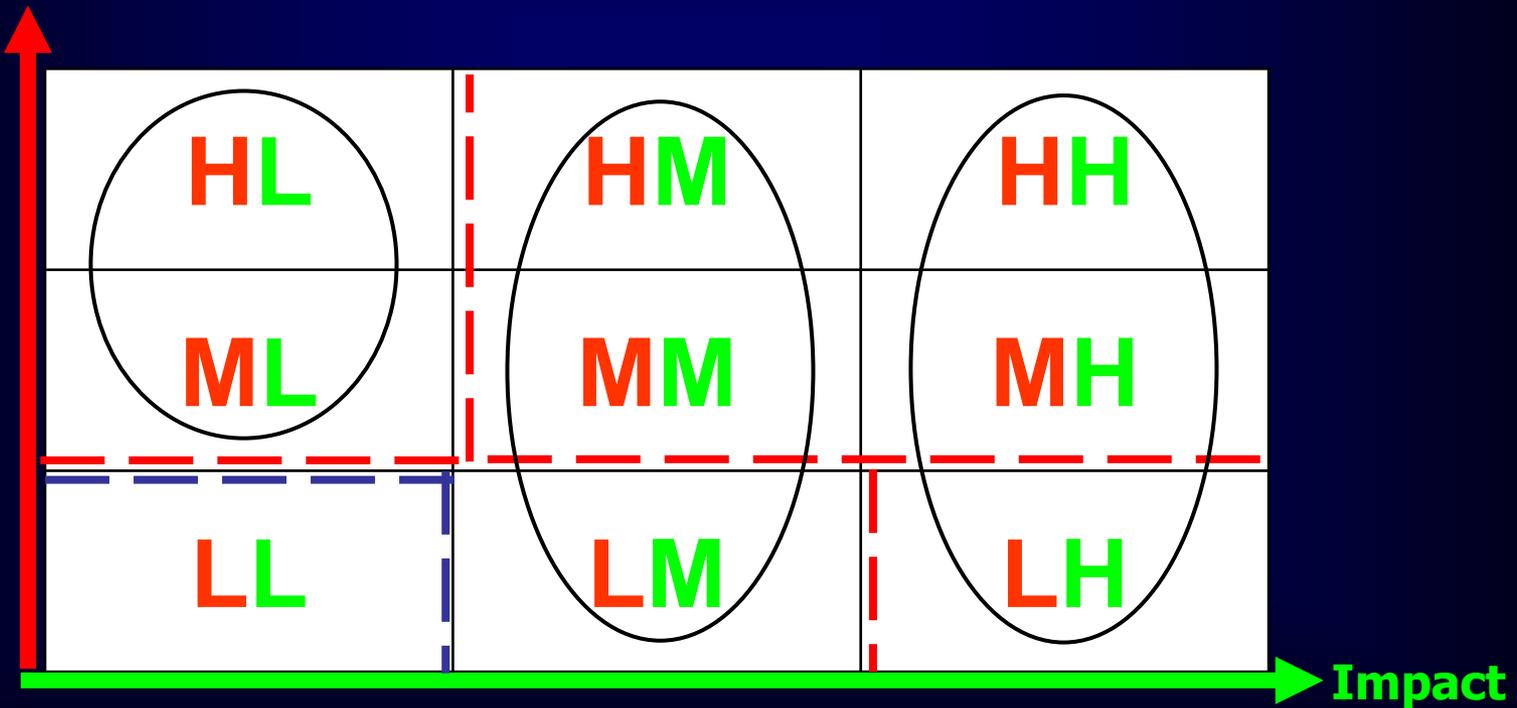
SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- ▪ Factors
- ▪ Strength/Weakness
- ▪ Key Decision

Key Decision factors

Key Decision factors

- • Factors
- • Opportunity and Threat
- • Driving Forces

Driving forces

2 x 2 Matrix

Scenario Building

Seven Steps of Scenario Building (cont)

❖ **Step 5 (cont)**
Criteria for a Good Scenario

✓**Plausibility.** The selected scenario must be capable of happening.

✓ **Differentiation.** The scenarios must be **structurally** different and not simple variations based on the same theme.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/ Weakness
- Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Key Decision factor

Driving forces

2 x 2 Matrix
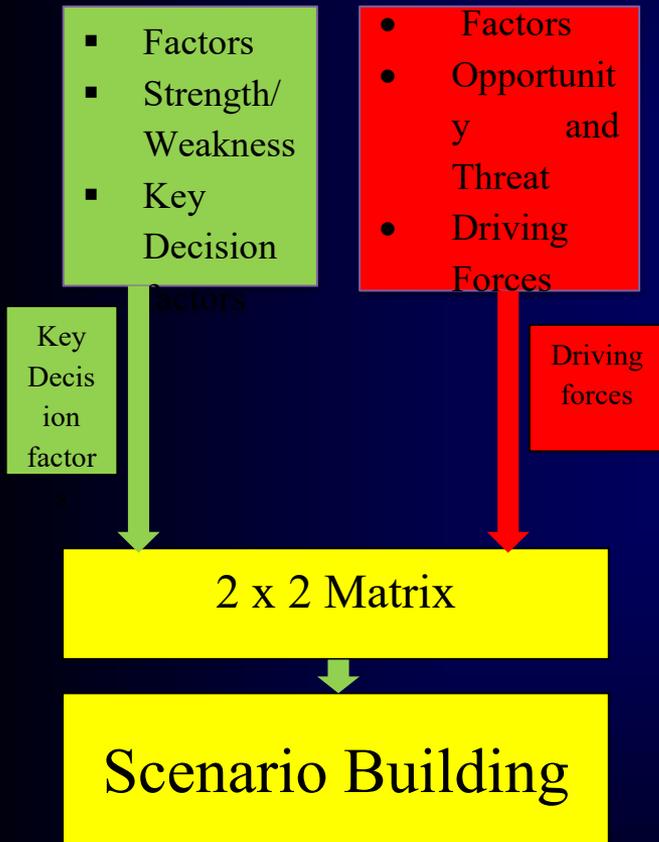
Scenario Building

Seven Steps of Scenario Building (cont)

✓ **Consistency**. The combination of logics in a scenario must ensure that there is no built-in internal inconsistency that would undermine its credibility.

✓ **Decision-Making Utility**. Each scenario must contribute specific insights into the future that help make the decision identified in Step one.

✓ **Challenge**. The scenarios must challenge conventional wisdom about the future.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision Factors

Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Driving forces

2 x 2 Matrix

Scenario Building

Seven Steps of Scenario Building (cont)

❖ **Step 6: Develop, elaborate or flesh-out identified scenario keeping in mind the following points:**

✓ **Use a highly descriptive title that is memorable and conveys the essence of the plot or story.**

✓ **Write compelling story lines that are forceful, logical and plausible.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

Summary of Steps for Scenario Building

➢ Clearly define the focal issue and the specific goals of the future exercise.

➢ Brainstorm to identify the key forces, factors, or events that are most likely to influence how the issue will develop over a specified time period.

➢ If possible, group these various forces, or events to form two critical drivers that are expected to determine the future outcome.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

Summary of Steps for Scenario Building (Cont)

➢ Define the two ends of the spectrum for each driver.

➢ Draw a 2 x 2 matrix. Label the two ends of the spectrum for each driver.

➢ Note that the square is now divided into four quadrants. Each quadrants represents a scenario generated by a combination of the two drivers. Now give a name to each scenario, and write it in the relevant quadrant.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

Summary of Steps for Scenario Building (Cont)

➢ Generate a narrative story of how each hypothetical scenario might come into existence. Include a hypothetical chronology of key dates and events for each scenario.

➢ Describe the implications of each scenario, should it be what actually develops.

➢ Generate and validate a list of indicators, or "observables", for each scenario that would help determine whether events are starting to play out in a way envisioned by that scenario.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

Summary of Steps for Scenario Building (Cont)

➢ Monitor the list of indicators on a regular basis.

➢ Report periodically on which scenario appears to be emerging and why.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

- Factors
- Strength/Weakness
- Key Decision factors

Key Decision factors

- Factors
- Opportunity and Threat
- Driving Forces

Driving forces

2 x 2 Matrix

Scenario Building

Seven Steps of Scenario Building (cont)

❖Step 7: Scenario interpretation and analysis: From Scenario to Strategy.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

SEVEN STEPS OF SCENARIO BUILDING (CONT)

From Scenario to Strategy

➢ Review each of the scenarios to pinpoint the key opportunities and threats, looking at each scenario in turn, and then looking across all scenarios to pinpoint common opportunities and threats.

➢ Determine, based on the above review, what the organization should do, and should not do, in any case.

➢ Select a "planning focus" scenario. This is usually the one judged to be "most probable."

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SCENARIO BUILDING (CONT)

SEVEN STEPS OF SCENARIO BUILDING (CONT)

From Scenario to Strategy (Cont)

➢ Integrate the strategic elements of what should be done/not done in any case into a coherent strategy for the "planning focus" scenario.

➢ Test this strategy against the remaining scenarios to assess its resilience or vulnerability.

➢ Review the results of this test to determine the need for strategy modification, "hedging," and contingency planning.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

ISSUES TO BE COVERED UNDER SCENARIO BUILDING

❖ **Types of Scenarios**

❖**Seven steps of Scenario Building**

❖ **Teaching points on participants' submission**

❖ **Illustration of Scenario Building**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION

Topic – Indigenous Capacity Development and Operational Effectiveness: NAF in Perspective

❖ **Aim (Focal Issue) – To examine indigenous capacity development as it affects operational effectiveness in the NAF with a view to making recommendation**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

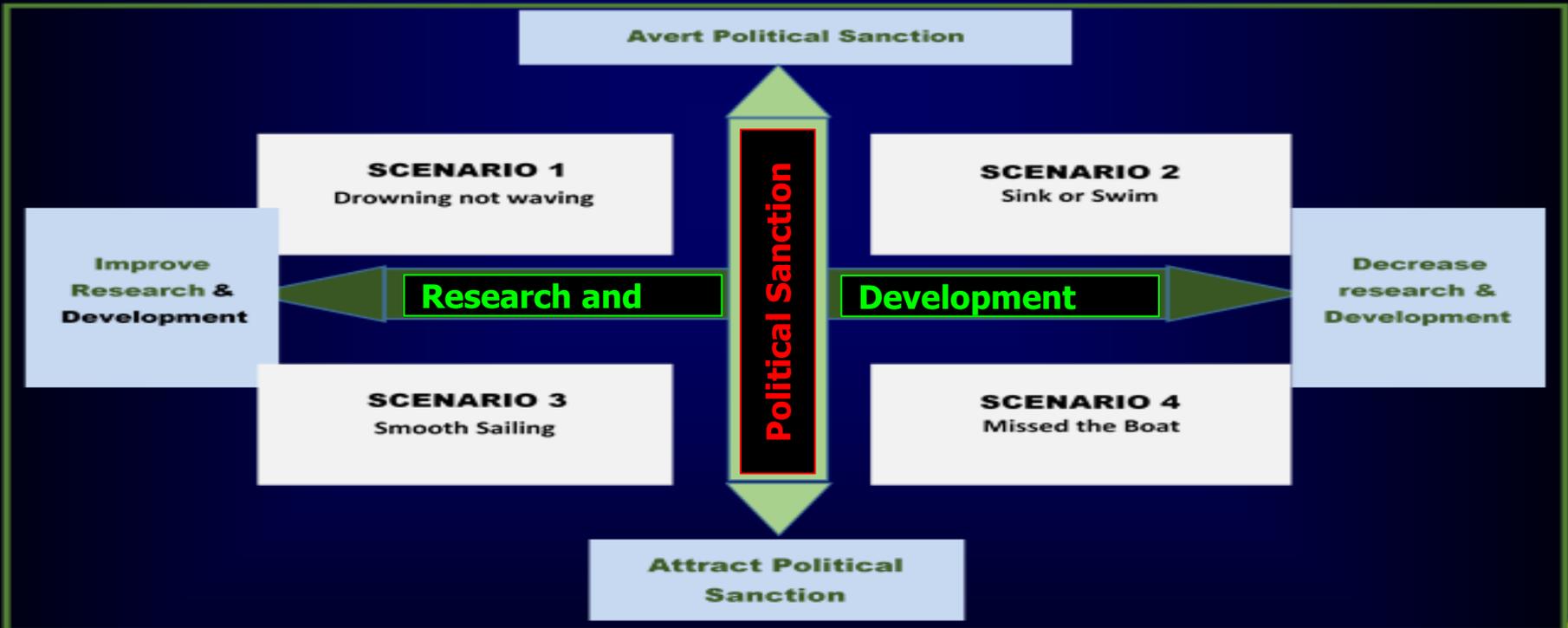❖ **Key Decision Factors (in order of uncertainty/impact)**

✓ **Research and Development** ⬅

✓ **Aerial warfare**

✓ **Pilot Training**

✓ **Emerging Technology**

✓ **Defense Funding**

✓ **Aircraft Availability**

✓ **Energy supply**

✓ **Infrastructure**

✓ **Moral psychology**

✓ **Teaching Institution**

To determine how best the NAF could develop indigenous capacity for enhanced operational effectiveness by…. with a view to making recommendations.

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

❖ **Driving forces (in order of uncertainty and impact):**
   - ✓ **Political sanction** ⬅
   - ✓ **Economic recession**
   - ✓ **Amnesty International**
   - ✓ **Emerging technology**
   - ✓ **Next generation warfare**
   - ✓ **Purchase of equipment**
   - ✓ **Post COVID-19**
   - ✓ **International media**
   - ✓ **Security in West Africa**
   - ✓ **US-China trade war**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

2x2 Matrix

Avert Political Sanction

SCENARIO 1
Drowning not waving

SCENARIO 2
Sink or Swim

Improve Research & Development

Research and **Development**

Political Sanction

Decrease research & Development

SCENARIO 3
Smooth Sailing

SCENARIO 4
Missed the Boat

Attract Political Sanction

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

❖ **DS Comments**

✓ **The aim does not explicitly reflect a decision or focal issue.**

✓ **The key decision factors and driving forces are too many.**

✓ **The key decision factor used for the 2x2 Matrix does not capture other key decision factors.**

✓ **The driving force used for the 2x2 matrix does not capture the other driving forces. For instance, lets look at Slide 111**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

❖ **Driving forces (in order of uncertainty and impact):**
  - ✓ **Political sanction** ⬅
  - ✓ **Economic recession**
  - ✓ **Amnesty International**
  - ✓ **Emerging technology**
  - ✓ **Next generation warfare**
  - ✓ **Purchase of equipment**
  - ✓ **Post COVID-19**
  - ✓ **International media**
  - ✓ **Security in West Africa**
  - ✓ **US-China trade war**

How many of the driving forces in the white box are captured, represented or related to political sanction ?

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

SOME TEACHING POINTS ON PARTICIPANTS' SUBMISSION (CONT)

❖ **DS Comments (Cont)**

   ✓ **The aim does not explicitly reflect a decision or focal issue.**

   ✓ **The key decision factors and driving forces are too many.**

   ✓ **The key decision factor used for the 2x2 Matrix does not capture other key decision factors.**

   ✓ **The driving force used for the 2x2 matrix does not capture the other driving forces. For instance, lets look at Slide 111**

   ✓ **The 2x2 matrix is essentially an interplay of one key decision factor and one driving force.**

   ✓ **No understanding of exercise requirement**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

ISSUES TO BE COVERED UNDER SCENARIO BUILDING

❖ **Seven steps of Scenario Building**

❖ **Types of Scenarios**

❖ **Teaching points on participants' submission**

❖ **Illustration of Scenario Building**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

❖ **Some terminologies**

  ✓ **Key Decision Factors + Driving Forces = Drivers**

  ✓ **Critical Drivers = Composite Drivers used to draw the 2x2 matrix.**

❖ **Topic – Military Operations and National Security: Strategic Operations for the AFN by 2025.**

❖ **Aim/Focal Issues – To determine the strategic options for improving the capability of the AFN for Internal Security Operations by 2025 towards enhancing national security.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

❖ **Key Decision factors**

- ✓ **Political Stability**

- ✓ **Internal threats**

- ✓ **Socio-economic development**

- ✓ **Combat readiness of the AFN**

- ✓ **Inter-agency Collaboration**

- ✓ **Whole of nation approach**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

❖ **Driving Forces**

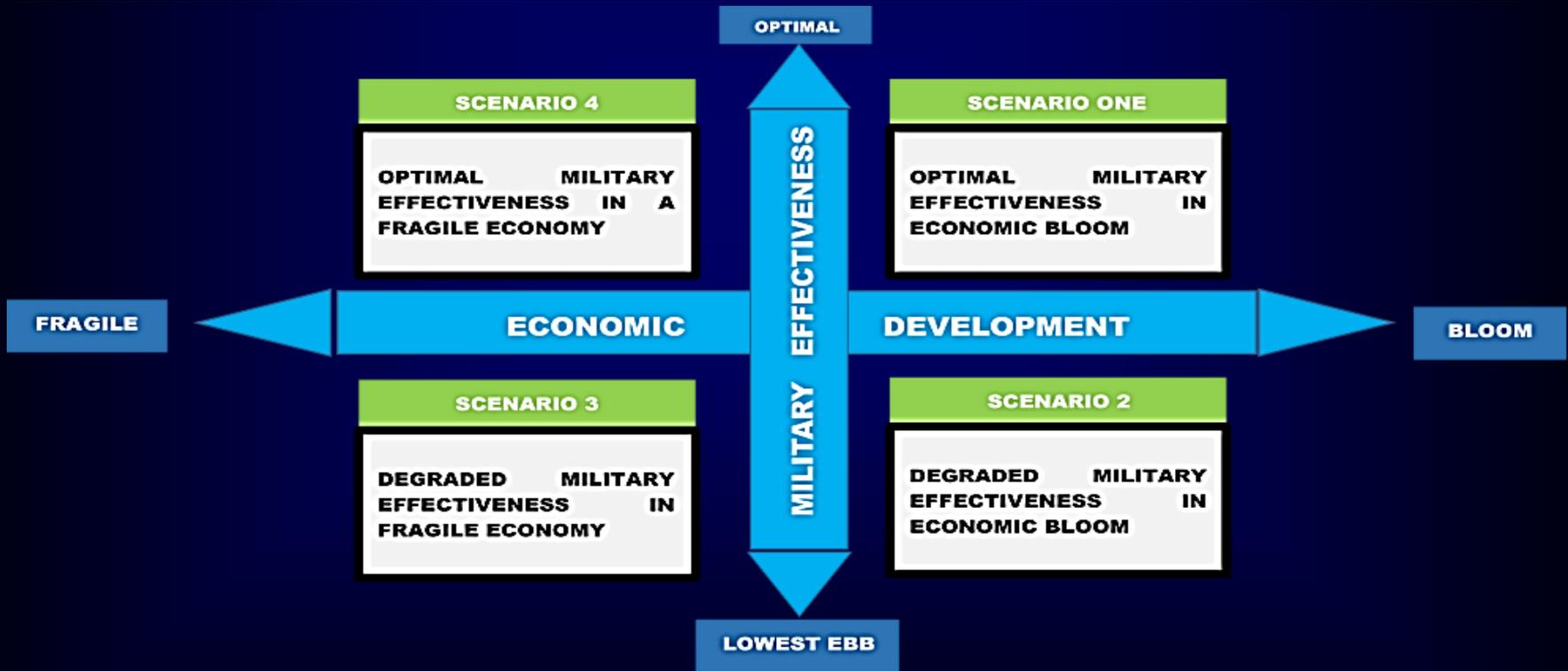- ✓ **Regional political stability**

- ✓ **Regional socio-economic development**

- ✓ **International terrorist alliance**

- ✓ **Nigeria's international relations**

- ✓ **Emerging technologies**

❖ **Critical Drivers – Military effectiveness and Economic Development (2 methods of determining critical drivers)**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

❖ **Military Effectiveness**

- ✓ **Internal threats**

- ✓ **Combat readiness of the AFN**

- ✓ **International terrorist alliances**

- ✓ **Nigeria's international relations**

- ✓ **Inter-agency collaboration**

- ✓ **Whole of nation approach**

- ✓ **Emerging technologies**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

❖ **Economic Development**

- ✓ **Nigeria's political stability**

- ✓ **Nigeria's socio-economic development**

- ✓ **Regional political stability**

- ✓ **Regional socio-economic development**

- ✓ **Nigeria's international relations**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

2x2 Matrix

OPTIMAL

SCENARIO 4
OPTIMAL MILITARY EFFECTIVENESS IN A FRAGILE ECONOMY

SCENARIO ONE
OPTIMAL MILITARY EFFECTIVENESS IN ECONOMIC BLOOM

MILITARY EFFECTIVENESS

FRAGILE — ECONOMIC — DEVELOPMENT — BLOOM

SCENARIO 3
DEGRADED MILITARY EFFECTIVENESS IN FRAGILE ECONOMY

SCENARIO 2
DEGRADED MILITARY EFFECTIVENESS IN ECONOMIC BLOOM

LOWEST EBB

SOME FACTS ABOUT SCENARIO INDICATORS AND INDICATORS VALIDATION

❖ An essential component of the scenario-planning process.

❖Identifies the signs that could indicate an important shift or discontinuity.

ILLUSTRATION OF INDICATORS AND SIGNS

Let's assume we were travelling by car to a destination 300 miles away but heard on the radio, just as we were starting out, that there was an accident on an important bridge still 200 miles away. We would immediately begin thinking about what signs would indicate that the bridge would still be closed when we arrived so that we could potentially take an alternate, but longer, route.

ILLUSTRATION OF INDICATORS AND SIGNS (CONT)

Some signs, like the advisories on the radio, would be important because they could give us very early warning. As we got much closer to the bridge, we would begin looking for other signs, like very few cars coming in the opposite direction, or drivers in the opposite direction blinking their lights, and so on. As we saw or heard more and more signs, we would make a decision about whether or not to take an alternate route.

Source: Ralston & Wilson, 2006, pp. 167-168

IMPORTANT DEDUCTIONS FROM THE METAPHOR

❖ Signs or signposts are as important as strategy.

❖ A sign or signpost, then, is a specific value or outcome of an important force or driver.

❖ We identify the signs we need to monitor by reviewing the forces and drivers of the scenarios and the decision recommendations (brainstorming).

CHARACTERISTICS OF GOOD INDICATORS

❖Observable: it must be possible to sense the indicator visually or by other means and report it accurately.

❖Valid: Good indicators must accurately and reliably capture the phenomenon.

CHARACTERISTICS OF GOOD INDICATORS (CONT)

❖**Reliable:** It must be possible for different people to report the indicator consistently.

❖**Stable:** A good indicator must remain consistent over time.

❖**Unique:** A good indicator must measure only one thing.

TYPES OF INDICATORS

Descriptive Indicators.

Predictive Indicators.

TYPES OF INDICATORS (CONT)

Descriptive Indicators

Descriptive indicators are backward looking and often used to assess whether or not a targeted activity or behaviors are consistent with an established pattern.

TYPES OF INDICATORS (CONT)

Predictive Indicators

Predictive indicators are forward looking and create an awareness that prepares the mind to recognize early signs of significant change. Predictive indicators are used in intelligence analysis.

DESCRIPTIVE INDICATORS OF A CLANDESTINE DRUG LABORATORY

❖Noxious odors associated with chemical/industrial use-ammonia, ether, solvents; strong or prolonged odor.

❖Exhaust fans on house or outbuilding constantly running or running in cold weather.

DESCRIPTIVE INDICATORS OF A CLANDESTINE DRUG LABORATORY (CONT)

❖All window darkened or covered.

❖Abnormal use of electricity and water.

❖High electric and/or water bill.

DESCRIPTIVE INDICATORS OF A CLANDESTINE DRUG LABORATORY (CONT)

❖Purchase of large quantities of chemicals from hardware and other stores such as:

❑ Acetone in multi-gallon lots

❑ Sodium Hydroxide products (e.g., "Drano") by the case.

❑ Purchase of lab supplies or equipment.

DESCRIPTIVE INDICATORS OF A CLANDESTINE DRUG LABORATORY (CONT)

❑ Purchase of key chemicals (ether, etc) or glassware from or through local companies.

❑ Delivery frequently being made by parcel service of glassware, chemicals, etc.

SIGNIFICANCE OF INDICATORS

❖ Help to avoid Hindsight Bias because they provide objective, pre-established lists that can be used to capture an analyst's actual thought process at an earlier stage of the analysis.

❖ Can mitigate cognitive biases including the Anchoring Effect and assuring something is inevitable if the indicators that the analyst had expected to emerge are not actually realized.

SIGNIFICANCE OF INDICATORS (CONT)

❖ **Inclusion in the finished products enables decision makers to track future development and build a more concrete case for the analytic conclusions.**

❖ **Encourages the analyst to reflect and explore all that might be required for a specific event to occur.**

SIGNIFICANCE OF INDICATORS (CONT)

❖ **Could lead to greater objectivity in the analysis, if two sets of indicators are used-one that indicates presence or emergence of the event and the other that indicates its absence.**

SOME FACTORS TO BE CONSIDERED IN IDENTIFYING INDICATORS

❖ **Early warning indicator?** Does the sign provide an early warning of the future? What does the sign indicate? What is the time window for making a decision?

❖**Information available?** Is information available about potential outcomes for the driver? How difficult is it to gather that information? How reliable is it?

SOME FACTORS TO BE CONSIDERED IN IDENTIFYING INDICATORS (CONT)

❖ **Cost?** **What does it cost to obtain the information?**

❖**Trustworthiness of information?** **How believable are the signs? Will decision makers act on the sign information?**

SOME PRACTICAL GUIDELINES FOR WRITING INDICATORS

❖ **Writing Indicators requires, most often, brainstorming, hypothesis generation, or scenario development (critical drivers).**

❖ **Review and refine the list, discarding any indicators that are duplicative and combining those that are similar.**

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)
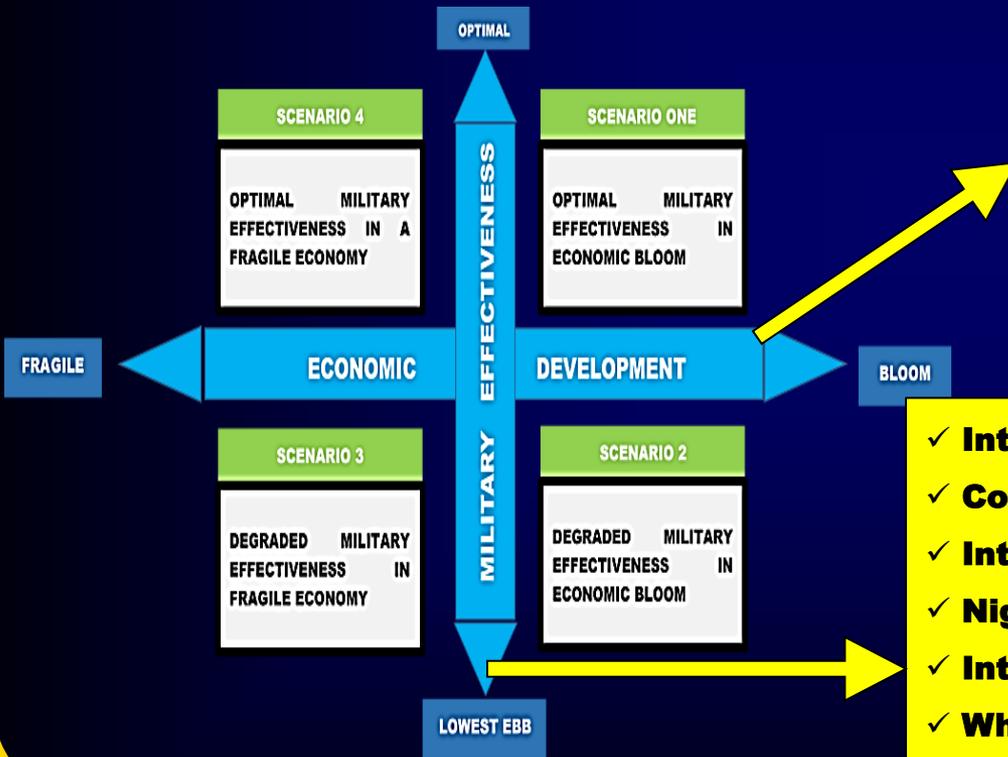
Illustration on Scenario Building (Cont)
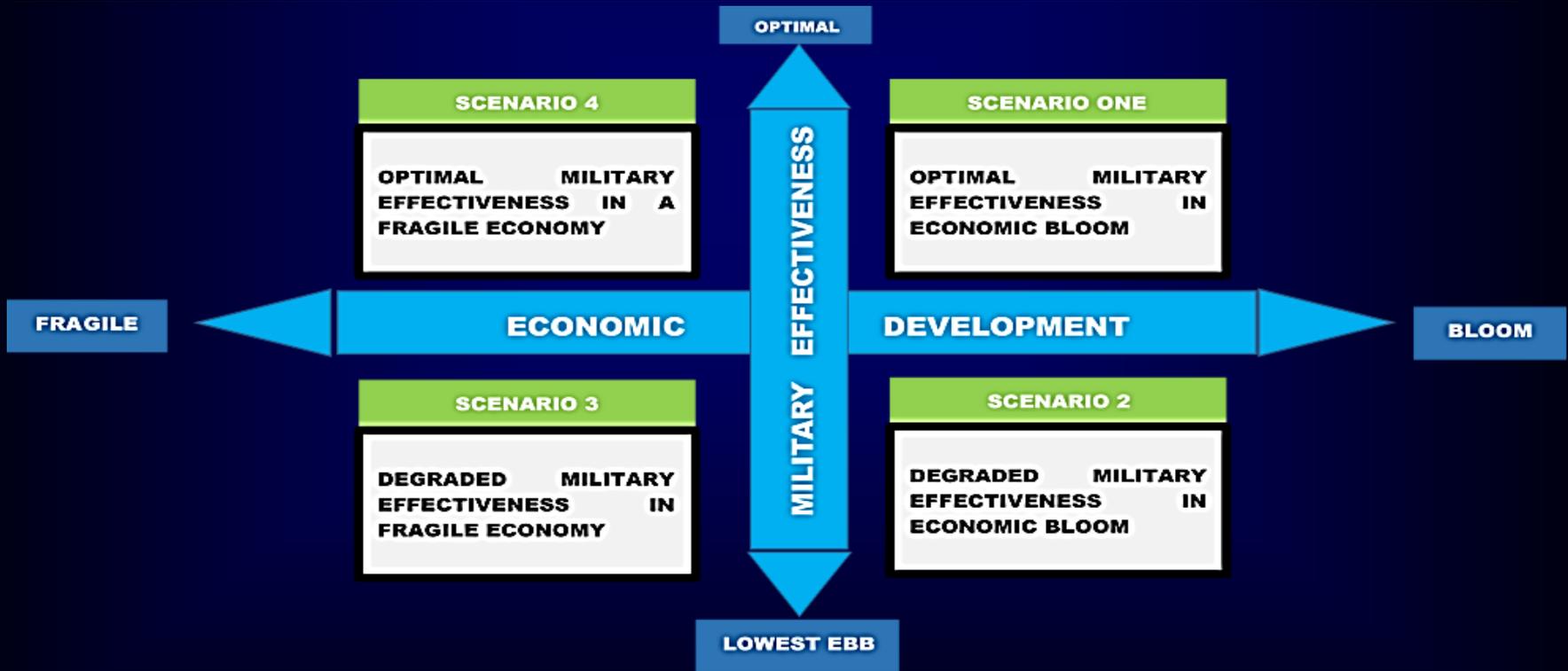
2x2 Matrix

SELECTED TOOLS FOR LONG-TERM STRATEGY: SCENARIO PALNNING AND ANALYSIS (CONT)

Illustration on Scenario Building (Cont)

2x2 Matrix

✓Nigeria's political stability

✓Nigeria's socio-economic development

✓Regional political stability

✓Regional socio-economic development

✓ Internal threats

✓ Combat readiness of the AFN

✓ International terrorist alliances

✓ Nigeria's international relations

✓ Inter-agency collaboration

✓ Whole of nation approach

✓ Emerging technologies

SOME PRACTICAL GUIDELINES FOR WRITING INDICATORS

❖ **Examine each indicator to determine if it meets the five characteristics of indicators discussed earlier discarding those that are found wanting.**

❖**You may check the diagnosticity of indicators with the Indicator Validator Tools.**

SOME PRACTICAL GUIDELINES FOR WRITING INDICATORS (CONT)

❖ **Monitor the indicator lists regularly to chart trends and detect signs of change.**

❖Periodically review the validity and relevance of an indicator to avoid errors in decision-making occasioned by outdated indicator for instance.

INDICATORS VALIDATORS

❖ A process for ascertaining the diagnostic power of an indicator.

❖ Designed specifically to help analyst validate their indicators in the most efficient way possible

SIGNIFICANCE OF INDICATOR VALIDATORS

❖ **It ensures the credibility of the analysis by identifying and dismissing non-diagnostic indicators.**

❖ **It helps you identify the most diagnostic indicators for each scenario and identify those indicators most deserving of monitoring and collection.**

SIGNIFICANCE OF INDICATOR VALIDATORS

❖ It can help overcome habit of minds by showing analyst how a set of indicators that point to one scenario may also point to others.

❖ It can show how some indicators initially perceived to be useful or diagnostic may not be.

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS

❖**The first step is to fill out the validator matrix as follows:**

➢ **List alternatives along the top of the matrix.**

➢ **List indicators that have already been generated for all the scenarios down the left side of the matrix.**

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ **In each cell of the matrix, assess whether the indicator for the particular scenario is:**

- ❑ **Highly Likely to appear (HL).**

- ❑ **Likely to appear (L).**

- ❑ **Could appear (C).**

- ❑ **Unlikely to appear (UL).**

- ❑ **Highly Unlikely to appear (HUL).**

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ Indicators developed for their particular scenario, the home scenario should be either Highly Likely or Likely. If the indicator is Highly likely in the home scenario, then in the other scenarios:

❑ Highly Likely is 0 point.

❑ Likely is 1 point.

❑ Could is 2 points.

❑ Unlikely is 4 points.

❑ Highly Unlikely is 6 points.

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ **If the indicator is Likely in the home scenario, then in the other scenarios:**

❑ **Highly Likely is 0 point.**

❑ **Likely is 0 point.**

❑ **Could is 1 point.**

❑ **Unlikely is 3 points.**

❑ **Highly Unlikely is 5 points.**

➢ **Tally up the scores across each row.**

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ **Once this process is complete, re-sort the indicators so that the most discriminating indicators are displayed at the top of the matrix and the least discriminating indicators at the bottom.**

❑ **The most discriminating indicators is "Highly Likely" to emerge in one scenario and "Highly Unlikely" to emerge in all other scenarios.**

❑ **The least discriminating indicator is "Highly Likely" to appear in all scenarios.**

❑ **Most indicators will fall somewhere in between.**

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ The indicators with the most Highly Unlikely and Unlikely ratings are the most discriminating.

➢ Review where analysts differ in their assessments and decide if adjustments are needed in their ratings. Often, differences in how an analyst rates a particular indicator can be traced back to different assumptions about the scenario when the analyst were doing the rating.

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ **Apply personal judgement to determine whether you would need to retain or discard indicators that have no Unlikely or Highly unlikely ratings. In some cases, an indicator may be worth keeping if it is useful when viewed in combination with a cluster of indicators.**

➢ **Once indicators that are not so helpful have been eliminated, regroup the indicators under their home scenario.**

PRACTICAL GUIDELINES FOR VALIDATING INDICATORS (CONT)

➢ **If many diagnostic indicators for a particular scenario have been eliminated, develop additional and more diagnostic indicators for the particular scenario.**

➢ **Cross check the diagnostic value of any new indicators by applying the Indicators Validators to them as well.**

MANUAL INDICATOR VALIDATOR

Ser	Indicators	Scenarios Ratings/Scores							
		Scen 1		Scen 2		Scen 3		Scen 4	
		Rating	Score	Rating	Score	Rating	Score	Rating	Score
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)

Source: Olatunde, 2023

CONCLUSION

THANK YOU

FOR YOUR

ATTENTION

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