

# A RESEARCH ON THE EXTERNAL ENVIRONMENT FACTORS IN THE COMPANIES' SWOT ANALYSIS THAT ARE COMPETING IN THE INTERNATIONAL MARKET: AN EXAMPLE OF OIL COMPANIES

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**Hassin ALTWILE** 

Thesis Advisor Assist. Prof. Dr. Neşe YILDIZ

### A RESEARCH ON THE EXTERNAL ENVIRONMENT FACTORS IN THE COMPANIES' SWOT ANALYSIS THAT ARE COMPETING IN THE INTERNATIONAL MARKET: AN EXAMPLE OF OIL COMPANIES

#### **Hassin ALTWILE**

Karabuk University
Institute of Graduate Programs
Department of Business Administration
Prepared as PhD. Thesis

Thesis Advisor Assist. Prof. Dr. Neşe YILDIZ

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NameSurname: HASSIN ALTWILE

Signature: \_\_\_\_\_

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#### **ABSTRACT**

The global oil industry has become highly competitive because resources are increasingly nationalized, and several oil companies are trying hard to gain access to newly explored oil and gas reserves. The National Oil Company (NOC) Libya is facing a challenging task to enter the international arena from the protected local market into extremely competitive global markets. It is indeed an ambitious strategy because it largely depends on gaining access to newly explored fossil fuel reserves and huge amounts of investments in latest exploration and processing technology. In this situation, the Libyan National Oil Company is considering multiple growth alternatives to improve its global competitiveness. In the current study, it is proposed that it should internationally merge with a key oil producing and marketing giant because it seems to be economically and politically feasible. The main question is: Whether this initiative can provide the National Oil Company with enough strength to fiercely compete in the international markets.

In this situation, NOC should also consider some possible growth alternatives or change the business model to adjust to the industrial requirements of the international market. This study is aimed at analyzing how realistic it is for the Libyan government to create local Libya petroleum firms. In order to analyze this, it is needed to analyze how the environments affect to build and strengthen the Libyan local Petroleum firms, which are ready and looking forward to challenging companies in the international market. This study explored how the Libyan local petroleum firms can compete with the international players in the field of oil and gas exploration and marketing keeping in view the fact that the international companies have already dominated the domestic market. A case study of comparison between international Companies and the Libyan local petroleum firms (Arabian Gulf Oil Company) will also provide valuable insigts in the intense competition and the power of Libya government in the international oil market.

**Keywords:** SWOT Analysis, Strategic Planning, Strategy Management, OPEC, Internal Analysis, External Analysis, Competitive Advantage.

#### ÖZET

Kaynaklar giderek kamulaştırıldığı için küresel petrol endüstrisi son derece rekabetçi hale gelmiştir ve birçok petrol şirketi yeni keşfedilen petrol ve gaz rezervlerine erişmek için çok uğramaktadır. Libya Ulusal Petrol Şirketi (NOC), korunan yerel pazardan uluslararası arenaya son derece rekabetçi küresel pazarlara girmek için zorlu bir görevle karşı karşıya bulunmamaktadır. Bu gerçekten iddialı bir stratejidir, çünkü bunu gerçekleştirmek, büyük ölçüde yeni keşfedilen fosil yakıt rezervlerine ve en son keşif ve işleme teknolojisine yapılan büyük miktarlarda yatırımlara erişmeye bağlıdır. Bu durumda, Libya Ulusal Petrol Şirketi, küresel rekabet gücünü artırmak için çoklu büyüme alternatifleri düşünmektedir. Mevcut çalışmada, ekonomik ve politik olarak uygulanabilir gibi göründüğünden, uluslararası bir kilit petrol üretim ve pazarlama devi ile birleşme önerilmişir. Ana soru, bu girişimin Ulusal Petrol Şirketi'ne uluslararası pazarlarda şiddetli rekabet için yeterli gücü sağlayıp sağlayamayacağıdır.

Bu durumda NOC, uluslararası pazarın endüstriyel gereksinimlerine uyum sağlamak için bazı olası büyüme alternatiflerini de dikkate almalı veya iş modelini değiştirmelidir. Bu çalışma, Libya hükümetinin yerel Libya petrol firmaları yeniden organize etmesinin ne kadar gerçekçi olduğunu analiz etmeyi amaçlamaktadır. Bunu analiz etmek için, uluslararası pazardaki zorlu şirketlere hazır ve sabırsız olan Libya yerel Petrol firmalarını kurmak ve güçlendirmek için ortamların nasıl etkilendiğini analiz etmek gerekir. Bu çalışma, uluslararası şirketlerin zaten iç pazara hakim olduğunu göz önünde bulundurulduğunda. Libya yerel petrol firmalarının petrol ve gaz araştırmaları ve pazarlama alanındaki uluslararası oyncularla nasıl rekabet edileceğini araştırmaktadır. Uluslararası Şirketler ile Libya yerel petrol firmaları (Arabian Gulf Oil Company) arasındaki karşılaştırılmasına ilişkin bir vaka çalışması, Libya hükümetinin uluslararası petrol pazarındaki yoğun rekabeti ve gücü konusunda değerli bilgiler sağlayacaktır.

**Anahtar Kelimeler:** SWOT Analizi, Stratejik Yönetimi, Iç ve Dış Analiz, Rekabet avantajı.

#### ARCHIVEMENT RECORD

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Supervisor of the	Asst. Prof. Dr. Nese Yıldız	
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#### **ABBREVIATIONS**

**AGOCO:** Arabian Gulf Oil Company

**ALEC**: American Legislative Exchange Council

**API** : American Petroleum Institute

**CO2** : Carbon Dioxide

**CSO**: Chief Strategy Officer

**CSR** : Corporate Social Responsibility

**EandP**: Exploration and Production

**EIA** : Environmental Impact Assessment

**FLNG**: Floating Liquefied Natural Gas

**GDP** : Gross Domestic Product

**GHG**: Green House Gas

**GRI** : Global Reporting Initiative

**HSE**: Health, Safety and Environmental

**IDPs**: Internally Displaced Person

**IEA**: International Energy Agency

**IOC** : International Oil Companies

**ISO**: International Organization for Standardization

**LNG**: Liquefied Natural Gas

**LPG**: Liquefied Petroleum Gas

**MBO** : Management By Objectives.

**MIS** : Management Information Systems

**NGOs**: Non-Governmental Organizations

**NL**: The Netherlands

**NOC** : National Oil Corporation

**OPEC**: Organization of the Petroleum Exporting Countries

**PESTLE**: Political, Economic, Social, Technological, Legal and Environmental

**PRIMO-F**: People, Resources, Innovation, Ideas, Marketing, Operations and Finance

**RDS** : Royal Dutch Shell

**R&D**: Research and Development

**ROACE**: Return on Average Capital Employed

**SPDC**: Shell Petroleum Development Company

**SRI** : Stanford Research Institute

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

#### SUBJECT OF THE RESEARCH

A Research On The External Environment Factors In The Companies' SWOT Analysis That Are Competing In The International Market: An Example Of Oil Companies.

#### PURPOSE AND IMPORTANCE OF THE RESEARCH

The purpose and importance of this research are that it can address major Libyan economic issues where oil is the sole financier in the economy because it depends on oil for most of its exports. In addition to the fact that it is a depleting and non-renewable substance, which brings the future of the economy to several risks.

The importance of this analysis is to focus on individual threats and opportunities of the firm. In other words, for gaining competitive power in the market, it is a method, through which, the firm's strategy is adjusted according to the outcomes of the competition and the market. Perhaps, it is the most important factor that the firm's structural status is clearly stated and competitiveness is measured.

In this context, as the country's exports, power analysis, and strengths and weaknesses affecting the exporting power of the country are introduced by the managers, who assess the potential opportunities and risks in the international market and the emergence of long-term measures

Indeed, what is aimed here is primarily the determination of strengths and weaknesses of Libyan oil companies to sustain in the international market. For this purpose, it is aimed to be takes into account possible developments and emphasize the measures that should be taken to assure these developments, in the direction of creating export strategy, this study will describe and analyze the possibilities for Libya to create a socio-economic environment to make the domestic petroleum firms compete in the global markets.

#### RESEARCH PROBLEM

This study is aimed at analyzing how realistic it is for the Libya government to run local Libyan petroleum companies. In order to discover its viability, it is needed to analyze how the internal and external environments affect to build and strengthen the Libya local Petroleum companies, which will be looking forward to challenging major companies in the international market.

The reason for Libyan local petroleum firms to compete with the companies in the international market is what it will be examine. It is a fact that the international companies have already dominated the domestic petroleum firms in the international markets. For this reason, it has been formulated this problem statement.

The problem is there are only big oil global firms that dominate the national markets throughout the world. This study propose to the Libyan government to set its future expectations for the coming years using the latest advanced technology to build local public and private oil companies in Libya, so that Libya might emerge as a good example for other countries to follow.

The competition in oil industry has become intense, so multinational oil exploration and marketing companies are increasingly looking for establishing their secure access.

The Libyan National Oil Company is making efforts to become an international company by moving from the protected domestic market, which is certainly ambitious; however it largely relies on access to newly-explored gas and oil reserves and latest technology. It is considering different growth options for becoming internationally competitive. So far, most of the study has been focused on competitive business strategy; so no study has been conducted based on SWOT analysis of oil companies, which are operational in Libya; so, this study investigates some significant questions: How can local national oil companies in Libya gain a competitive advantage to compete with largest companies in the international market by using SWOT analysis?

#### **Research Objectives**

In order to assess SWOT analysis and its effectiveness to gain competitiveness in the Libyan oil industry, it is needed to analyze how the environment affects to build and strengthen the Libyan local petroleum firms, which are ready and looking forward to challenging opportunities in the international market. The reason why Libyan local

petroleum firms have been chosen is that to examine the opportunities and compete with the companies in the international market.

The international companies have already dominated the domestic petroleum firms. The comparison of the gap between international oil companies and the Arabian Gulf Oil Company (AGOCO) will provide us with further insider information about the intense competition and the power of the Libyan government in the international market, which is highlighted in this thesis.

#### **Research Importance**

The importance of the research is that it addresses major Libyan economic problems, which means that the oil is the exported and the sole financier is the Libyan economy because it depends on oil for most of its exports. In reality, it is a depleteable and non-renewable element, which makes the future of this economy fraught with dangers.

The importance of force analysis is to estimate the individual threats and opportunities for the company on one hand that may arise on the other hand in the future or current markets. To assure the determination of competitive power in the market, a company's strategy is formed according to the results of the competition and the market, and most importantly, its own structural status should be clearly stated and competitiveness is determined.

In the context of the nation's exports, the country's power analysis, and the strengths and weaknesses affecting the exporting power of the country are important; so, the country directors are in search of potential new opportunities and risks in the international market and the emergence of long-term measures.

In fact, the aim is primarily the measurement of strengths and weaknesses of Libya in the international market. For this purpose, possible developments have been considered and some measures have been emphasized that should be taken to assure these developments. For the creation of the export strategy, this research is significant to describe and analyze the possibilities for Libya to create a socio-economic environment whereby the domestic petroleum firms might be able to face the international oil companies in the future.

#### METHOD OF THE RESEARCH

#### Introduction

First of all, most nations use oil as a main power source, and finding other alternatives is difficult to meet the power requirements. Research and development investment should be conducted for designing and discovering ideas for the desired technological innovation, which helps decreasing their dependence on oil; therefore, positive effect has been created for the overall society and the environment (White, Lundberg, and Pierre, 2015).

In the study local Libyan oil companies are compared with Royal Dutch Shell and analyzed in terms of opportunities and threats that forms basis for external analysis, which has been chosen to be compared and analyzed in detail. In order to prove the methodology of the study and achieve its objectives, it is followed the method of SWOT analysis by using some tools like tables and graphs, in addition to the official statistical data issued by the National Oil Corporation, and the reports of the Libyan Central Bank and the Ministry of Planning. it will be compared the external factors of SWOT analysis, opportunities and threats to compare Shell Royal Dutch Company and Gulf Arab Oil company.

#### **Research Design**

For conducting this kind of research, the researchers must consider a suitable research design that acts as an objective-achievement plan to answer the initially-decided set of questions with conclusive answers (Yin, 2003). The research design should include logical decision-making, mentioning the data needs, and data analysis methods.

The research design refers to a plan that describes how, when and where data will be gathered and analyzed.

The research design of the current study is divided into several steps, each of which presents one of the stages of the research. The design process in this study began with choosing the area or the subject of interest. A comprehensive and systematic review of the previous literature was conducted.

The data were analyzed using the SPSS program including a description of demographic variables and the significant differences within groups using independent Samples t-Tests and One-Way ANOVA tests.

A correlation and regression analysis were conducted to determine the relationship between the independent variable which include the competitive advantage and dependent variables that refers to SWOT Analysis (X1 = Strengths, X2 = Weaknesses, X3 = Opportunities, X4 = Threats, e = Random error).

#### **Exploratory Study**

Local Libyan oil companies are compared with Royal Dutch Shell and analyzed in terms of opportunities and threats that forms basis for external analysis, which has been chosen to be compared and analyzed in detail. In order to prove the methodology of the study and achieve its objectives, it is followed the method of SWOT analysis by using some tools like tables and graphs, in addition to the official statistical data issued by the National Oil Corporation, the reports of the Libyan Central Bank and the Ministry of Planning. This study will compare the external factors of SWOT analysis, opportunities and threats to compare Shell Royal Dutch Company and Gulf Arab Oil company.

Reasons to choose Arabian Gulf Oil Company (AGOCO) is its magnanimous pre-crisis oil production capacity (440,000 bbl/d), which is unprecedented by any foreign or domestic organization operating in Libya. It has been have compared the Libyan local oil companies to the best productive oil companies in Libya, and after comparing these companies, it is has found that AGOCO is the best oil company operating in Libya. This company was selected and compared to Shell, which is one of the firms selected for this research (Labbok, 2012).

#### **Data Collection Methods**

Data collection methods primarily studied Arabian Gulf Oil Libyan Company, and compared them using SWOT analysis importance of some of the internal and external environmental factor in oil companies. Swot analysis makes it easy to compete in the international market to review and refine the literature for a more detailed analysis of the case study.

The questionnaire was approved as a main tool for collecting data and information related to the subject of the study. The questionnaire was designed after reviewing several previous studies. The research relied on the study of (Otieno,2017) and (Al-Zubaidi, 2017) and (Fadia, 2016) in his design.

The questionnaire included general information and demographic characteristics of the individuals targeted in the study, questions were asked from managers, department heads and employees and some previous studies were also consulted. All this was accomplished at an early research stage and the supervisor reviewed the first draft at the Karabuk University, and the questionnaire consisted Of the 5 basic variables, part one is strengths, includes 6 phrases related to the strengths of petroleum companies, part two is weaknesses includes 6 phrases related to the weaknesses of petroleum companies, part three is opportunities includes 5 phrases related to providing opportunities in petroleum companies, part four is threats includes 6 phrases related to threats facing petroleum companies, part five is competitive advantage includes 7 phrases related to competitive advantage in petroleum companies.

#### POPULATION AND SAMPLE

A research population is a specific set of people that is brought under investigation (Collis and Hussey, 2013). After examining and exploring facts for this study, the two companies were included in the main data collection stage. The target population comprises department heads, managers, and employees of both the companies. The companies were chosen that makes a successful case for Libyan companies keeping in view the time, cost and access.

The study community consists of managers, department heads and employees in Libyan Arab Gulf Oil Company reaching about 6000 persons due to their direct connection with the subject of this study, as well as, a random sample has been selected from the managers, department heads and employees in Libyan Arab Gulf Oil Company. Therefore, the sample size should not be less than 361 respondents, and to ensure that this number is obtained, the study distributed 400 questionnaires and the researcher obtained 366 questionnaires that are valid for analysis, and testing the

credibility of the answers of sample individuals to the questions set out in the questionnaire form.

Before distributing the questionnaire to the study sample, its reliability was confirmed in terms of structural consistency and stability through an experimental study, the questionnaire was distributed to (100) individuals. The research studied the extent of sample members' understanding of the questionnaire questions and verified the structural consistency and reliability of the questionnaire.

In order to determine the consistency of each question of the questionnaire with the dimension to which it belongs. The validity of the content was identified by calculating the correlation coefficient between each question and the total dimension to which it belongs and with the total questionnaire.

#### **Pilot Study**

The pilot study was conducted in the Gulf Arab Oil company in Libya. Before distributing the questionnaire to the study sample, its reliability was confirmed in terms of structural consistency and stability through an experimental study, the questionnaire was distributed to (100) individuals. The research studied the extent of sample members' understanding of the questionnaire questions and verified the structural consistency and reliability of the questionnaire.

The data set presented Cronbach alpha ( $\alpha$ ) coefficient values for stability and credibility were high (more than 0.6) and the Cronbach alpha results for the overall questionnaire was 0.914, that shows the reliability of the results

#### **Data Analysis**

It is analyzed the data using SPSS software, which was used to analyze the basic data collected through questionnaires and documents.

It is analyzed data at both inferential and descriptive levels applying different tools such as SPSS. The tools include open-ended questions, factor analysis, and correlations using contingency tables and regression analysis.

Frequency tables were used as a descriptive statistical tool because they have charts, percentages, and other measures to test associations between the variables.

#### SCOPE AND LIMITATIONS

The scope of the study is limited to includes managers, department heads and employees serving in the Libyan Arab Gulf Oil Company in Libya, who are almost 6000 persons; so, a random sample has been selected from the managers, department heads and employees working in Libyan Arab Gulf Oil Company.

The nature of the empirical study requires collecting reliable and valid data from different sources. One of the common challenges faced by the researcher in the data collection stage is how to convince employees to participate in the survey.

#### Value of the Study

The current study sheds light on the oil companies' role in the Libyan national development and deciding its policies to create conducive environment for the Libyan oil businesses. It is important to search for opportunities, which are available in the international market for sustainable business.

This study provides theoretical design that focuses on the relations between the strategic management practices and strict implementation of competitive advantage. It also implements SWOT analysis to help the Libyan oil companies sustain and gain competitive edge.

Other Importance of the study this study provided insight regarding how to plan strategies for local oil Libyan companies Furthermore, conducting this research will help to build new approaches to the previous studies and to fill the gaps in the literature.

This comparative study is also important in terms of revealing the importance of strategic decision making in the oil sector.

#### **Thesis Structure**

The current thesis has an introductory chapter followed by four more chapters. The thesis structure is evident from Figure 1, which is described below:

Chapter 1: The first chapter introduces the literature Review of Study, It reviews literature in terms of research issues and SWOT analysis. Strategy concept and traces the origins of various perspectives from past scholars and learned practitioners that have shaped the strategy field, defining Strategic Management, the

Process of Strategic Management, Adapt to Renewal, Role of Strategic Management in the organization, analysis of these definitions identifies the role strategic management plays for organizations. It comprises nine terminologies: strategies, competitive advantage, mission/vision, external threats and opportunities, internal weaknesses and strengths, long-term goals, strategies, yearly policies and goals.

It also describes the first chapter background of SWOT analysis is a time-tested concept; so it has a historical background. It is is linked to strategic planning that is considered as a key strategic planning element. Also, stages of historical development in the SWOT analysis evaluates an organization present situation. A significant benefit of SWOT analysis is providing an organization's present and general overview that depicts its strategic situation, Model of Swot Analysis which gives direction and forms basis to develop strategic plans. This is done through assessing the organizational strengths to understand what the organization is capable of and weaknesses inform what is not possible for the organization.

Definition and advantages and disadvantages of SWOT Analysis, building SWOT Analysis. The purpose and limitations of SWOT analysis, SWOT analysis of strategic planning, the process in companies, strengths, weaknesses, opportunities and threats for strong operations in this context, an organization concentrates on its future goals based on its strengths and averts matters pertaining to their weaknesses. It also SWOT analysis in the strategic management cycle to make swot analysis perform, some qualities are needed for success, and the SWOT analysis brings confidence to deal with threats, weaknesses and SWOT description, internal and external case indicators in SWOT analysis, the SWOT matrix, applications of SWOT analysis simple rules for a successful SWOT analysis process to do the SWOT analysis, using SWOT with an objective, SWOT analysis characteristics in companies.

Chapter 2: The second chapter describes a brief overview of the shell's history and action plan for company stakeholder engagement, employees working with shell across the globe, suppliers, external stakeholders, customers, local communities.

It also describes the second chapter Shell 's Strategy, Shell operations and social, environmental Importance, and CSR leadership in the industry, finally Shell Global SWOT Analysis.

Chapter 3 is focused on the Arabian Gulf Oil Company, it is involved in the gas and oil business also take care of health and education facilities of the Libyan people, the history, geography and economy of Libya. It also focused on the oil industry and crude oil production in Libya and balance, capital flows of Trade of Libya, in this study mentioned about the political crisis in Libya and subsidiaries of the Libyan National oil corporation and reasons to choose Arabian Gulf Oil, Libyan exports and imports, a current account to GDP, gold reserves, company the main reason for choosing AGOCO. It is one of the subsidiaries of NOC which is the greatest in Libya, it also describes chapter 3. history, vision, mission and the CSR of the Gulf Arab oil company and strategy, departments, employees and goals of the Gulf Arab oil company.

It also describes exploration, exploration and development, output and playback of the Gulf Arab oil company, operations of the Gulf Arab oil company and SWOT analysis for Gulf Arab oil company, finally a comparison between the shell oil company and Arabian Gulf oil company.

Chapter 4: This chapter 4 discusses conclusions and recommendations which show qualitative-quantitative-mix based on previous study data, discussions, empirical generalizations, and financial reports of Libyan National Oil Company and Shell Royal Dutch Company.

It also describes cases study SOWT analysis practical framework for of the local Libyan oil company Arabian Gulf oil. This chapter summarizes the overview and findings of the current study by representing the background of the current research, a summary of its objectives, and a discussion of the findings with respect to the developed theoretical framework, conclusion and recommendation. This chapter aims to assess the purpose of this study, reinforce the contributions of this research, its limitations, and potential for future.

#### **CHAPTER ONE**

#### STRATEGIC MANAGEMENT

#### 1.1. Strategic Management

#### 1.1.1. Introduction

Strategy is a commonly discussed matter on top organizational levels, which require future planning, finance, and growth, and that is possible through mergers, acquisitions, searching new markets, innovating products, and higher internal efficiency.

Recently, strategies are needed for the accomplishment of mutually-agreed objectives that gives the organization a sense of purpose and direction. The recent social/technological transition has increased competition. The strategy is, therefore, a kind of future work plan, and the senior management should carry it out with high commitment levels.

As long as the globalisation keeps on increasing, the environment of the organisations will regularly grow, and this will create competition for companies to survive and succeed in business activities; so, every organization needs to develop and change whether the government wants it or not. The growing global population and the growing competitive market have resulted in increasing challenges to develop businesses and competitiveness. Strategic planning and management are important topics for companies, in which, skillful managers work and they focus on achieving competitive edge and superior performance, and accomplish the highest goals of the organization to stay in the global market

Strategic planning gained popularity as a terminology in 1950s, mid-1960s and mid-1970s. In these years, it was considered as the solution to all the problems. Then, most of corporate America showed obsession with this concept. Later, the concept of strategic planning was ignored in the 1980s because most of the planning models failed to assure high returns. It was revived in the 1990s, and even now, it is widely practiced in corporate business. Some large companies have chief strategy officers (CSOs), who look after a good strategic plan for successfully competing in the market.

In most industries, profit margins are thin; so, they don't have little chance for making errors in their strategies. Making tough managerial choices result in a strategic plan when several good alternatives are available, which need commitment to certain policies, markets, operations, and procedures to make it happen. This management type helps evaluating the internal weaknesses and strengths of an organization, and external threats and opportunities. Using strategic management has a major advantage in terms of providing an overview of the strategic situation of an organization (Rue and Byars, 2002: 107).

Many post-modern organizations perform strategic planning because it can help them to be highly productive, and allocate their resources to achieve their objectives, which are important strategic management tools. Strategic planning, which is a significant part of strategic management, helps manage the organizations and their growths in a better way (Rue and Byars, 2002; p. 107).

This management type continuously involves planning, implementing, creating, and evaluating the actions, which help organizations to gain their objectives. It helps an organization to take proactive instead of reactive actions to shape its future, which means that it enables the organizations to take initiatives that influence people, which helps them gain control over their future (David, 2003: 15).

#### 1.1.2. Background of Strategic Management

In 1950s and 60s, strategic management was introduced as a discipline. Despite the fact that many early contributions to the literature were worthwhile, Peter Drucker, Alfred D. Chandler, Igor Ansoff, and Philip Selznick were prominent among them.

Prior to discussing the key elements of strategic management, it will be useful to give a brief survey on the subjects of historical development of strategic management. Strategy means the war-related planning operations like the armies' movements and favorable fighting positions. In comparison, tactics are just means and methods of gaining some objectives (Andersen, 2013).

A strategy is fundamentally the art of war and its planning/moving forces while a tactic is merely an expedient for a goal (Morris, W. 1980).

Alfred DuPont Chandler was a pioneer corporate historian and he used to teach business history at Harvard Business School. He has described in detail the modern corporations' management structures. Alfred Chandler reinforced the rationalistic topdown logic, and mentioned that strategy determines long-term goals of an enterprise, which includes courses of action and resource allocation.

He discussed several formulations and distinguished between them to outline and implement the strategy. His studies described that large conglomerates started their business in the US from 1850 to 1950. He noticed that strategic decisions determine the establishment of corporate structures for gaining economic payoffs. His work prepared grounds for Strategy Structure Performance, which implies that organizations should first develop strategies before making structural adjustments for accommodating different strategies (Chandler, A. D. 1990).

Mintzberg, H. (1990), who wrote "The Rise and Fall of Strategic Planning" prolifically wrote that the topics such as business strategy and strategic management are significant. He has criticized some strategic planning practices, which result in the organizational strategy-making role. His recent book "Managers Not MBAs" has mentioned that today's management education is flawed.

Philip Selznick presented his idea that the internal organizational factors should be matched with the external circumstances, which was refined to make today's SWOT analysis that was presented by Andrews, Learned, and other Harvard graduates. While analyzing, a company's strengths and weaknesses are analyzed based on threats and opportunities the business environment creates. Philip Selznick mentioned that institutional objectives can't be separated from the articulation of overseeing standards. Objective setting is important for institutions; it reveals to us how we can assure progress towards becoming what we need to do (Selznick, 2011).

Ansoff is considered as the first management strategy guru who stressed strategic planning as a viable action for organizations, specifically those, which are operating in either turbulent or complicated environments. Since he was a professor at the US International University, he extensively conducted strategic management researches. Now, he has been globally recognized as a father and pioneer of the subject of Strategic Management. He recognized that strategic planning is important for firms, which are operating in competitive and challenging environments. Building on Chandler's contribution to the strategic management literature, Ansof added several strategic concepts, which resulted in the introduction of new vocabulary for this

important subject. His contributions include a strategy grid, which was used as a tool to compare the product development, market penetration, diversification, integration, and market development strategies. According to him, the mentioned strategies are useful for the organizational management for preparing to achieve future opportunities and deal with the emerging challenges. His classic work on Corporate Strategy shows that he introduced gap analysis; so it is important to identify the gap between an organization's current situation and where the management sees it in future (Ansoff, 1987).

Ansoff's work is based on his predecessor Chandler's opinions, who added several strategic concepts. For him, strategy implies a selection/decision out of many decision-making rules, which guide and lead the overall organizational behavior (Ansoff, 1987).

Peter Drucker introduced his famous term "knowledge worker" and pioneered the concept of knowledge economy. By doing so, he challenged the Marxist concept of political economy. He made significant contributions to the strategic management literature as a strategy theorist. He wrote large number of management books over fifty years of his career. Although he has made several contributions to the strategic management literature; however, two of those contributions are very significant. His first important contribution is his emphasis on objectives. According to him, organizations without clearly defined objectives are directionless. In 1954, he developed his objective-based management theory. It was later called as management by objectives.

Drucker believed that setting targeting with continuous progress monitoring needs to be in all the ranks and files of an organization. He did another seminal contribution, which was predicting the intellectual capital and its importance. His predictions include the emergence of knowledge worker, which he discussed along with its merits for organizational management. According to his views, knowledge work doesn't take place in a hierarchical way; so, it should be accomplished in teams of experts, and the one, who understands the current task better should act as a temporary leader. Some significant quotations that Drucker has added to the management literature are given below (Drucker, 2012, p.378) (Drucker, 2006, p. 70), (Drucker, 2008, p. 54).

- Management means doing things right while leadership is doing the right things.
- The best way to predict the future is to create it.
- Wherever you see a successful business, someone once made a courageous decision.
- Company cultures are like country cultures; so don't try to change them; instead, try to work with them.
- To focus on contribution means focusing on effectiveness.
- Rank does not confer privilege or give power. It imposes responsibility.
- Most of what we call management generally makes it difficult for people to do their work.

Ellen-Earle Chaffee stated that key administration includes adjusting an organization to its environment. The concept of strategic administration is complex and flexible. Organizational change results in novel blends of circumstances, which need unstructured reactions. This type of management guides and influences the whole organization. It includes procedural developments and furthermore, usage of a methodology. This kind of management is partially managed. Performing this type of strategic management is accomplished through: corporate strategy and business business strategy. It covers both analytical and conceptual points of view (Chaffee, 1985).

## 1.1.3. Literature Review of Study

Many sources in literature have warned that SWOT analysis is a guide but not a prescription. On the other hand, there are many examples where SWOT analysis is applied to business companies, non-profit institutions and public sector institutions (Pahl and Richter, 2009). SWOT analysis is used since 1960s to help taking different decisions. This terminology is broadly utilized, and it needs changes to help taking administrative decisions.

In natural settings, companies remain in certain external environments, situations, and people, who have an impact on their strategic options. All of them define an organization's competitiveness. Organizations with dynamic environments intensively compete (Pearce and Robinson, 1997). The organizations methods to

interact/deal with their environments are important for their growth and survival. In addition, companies require continuous adjustments and realignment with their systems to remain competitive. Asnoff and McDonnell (1990) indicated that an organization's inability to appropriately adjust to its circumstances is a key issue that debilitates its reality. The atmosphere's dynamism means that companies should continuously update to remain competitive. In case they dont appropriately adjust to the external conditions; it creates a gap between the products/services companies offer and what actually sells. Administrators should take key decisions pertaining to their choices about their companies' future, and how to react to the external circumstances. Planning system designers should agree on grand strategies because they have a critical role to achieve competitive advantage that lasts.

Alotaibi et al. (2015) conducted a comparative analysis of Shell, Conoco-Phillips, ExxonMobil, Chevron, and BP. They conducted SWOT analysis of the mentioned oil companies as a part of his study. The five companies showed different methods to assure their sustainability but showed the same kind of commitment to protect environment and society, for which, they allocated hundreds of millions of dollars to social and environmental projects. However, the predominant emphasis of each of these companies is clearly on environmental initiatives, which their business operations affect the most. They are pursuing an agenda of corporate social responsibility and show goodwill towards the society and the environment, the criticisms of the negative effects of these companies are most certainly detrimental not only towards each of these companies, but more importantly on the entire oil industry (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

According to Mabel Darkwah (2012), who conducted a study and published a report on Petrobras, a Brazilian national oil company, a company gets benefit from its strategy, if it increases its capital resources to acquire/merge with significant companies in the oil and gas sector, which ultimately allows them to compete/dominate because it increases their reserves, which means that it needs more capital that ultimately improves its balance sheet to acquire/partner with other organizations. It increases the portfolio of the organization, which helps making it one of the top-five energy companies that makes it a preferred choice for its stakeholders. The mentioned report explains the corporate strategy and vision 2020 (Darkwah, 2012).

Another study concludes that the transport industry does employ SWOT strategies to keep up with the competitive environment they face. The strengths and opportunities of the industry have helped in coming up with great strategies employed for a competitive edge. The weaknesses and threats were analyzed to help the sector in formulating strategies for their improvement. A firm is able to establish itself in the market by formulating good strategies. A firm also has to adapt to the ever-changing needs of its customers to enable it to outperform its competitors and ensure its survival and sustainability in the market place (Otieno, B. O. 2017).

Thompson (2005) suggested that every organizatin should develop competence using its resources. When this is successfully accomplished, they should transmute into a firm's competitive edge. Positioning of a company should be done, so that it has the most appropriate resources, which are useful for its business strategy. He further suggested that first, a firm should gain competencies, and then they should be turned into sources of an organization's competitive advantage. According to Hamel and Prahalad (1994), distinctive competencies of a firm should provide appropriate customer value, to make it "competitor unique" to assure maximum advantages. It is not enough to get the resources. An organization gains competitive edge through its management and usage of the available resources to create synergies.

Thus, a good combination between the firm's internal capabilities and the external market is needed. The actual asset-based view is heterogeneity of assets that helps companies to gain benefits of diversity and asset stability (Barney, 2007). Such assets may be immaterial or unmistakable; so, they provide all the advantages, skills, benefits, abilities, qualities, learning, and data, which the companies control. All of them empower companies to execute methods, which increase their viability and proficiency (Pearce, Robinson, and Subramanian, 2000; Barney, 2007).

In another research, Khan, U. A., Alam, M. N., & Alam, S., (2015). tried to explore whether Blue Ocean strategy makes a company maximize profits. They chose Apple for study, and found out that it is possible for the company to reduce its future threats by further investments, and the current 1 billion-dollar annual investment isn't sufficient. They recommended that the company should focus on emerging markets such as India and China which have been taken over by its competitors. They also

recommended that Apple should improve its corporate governance by increasing its directors.

Ayub, Razzaq, Aslam, and Iftekhar (2013) conducted a survey on a population of more than 100, which showed significant mistrust in this method. Menon, Bharadwaj, Adidam, and Edison (1999) claimed that they interviewed 212 Fortune 100-company executives, and found out that the executives believed that the SWOT analysis is negative for performance. Its random nature is largely about the subjective perception, so it lacks quantification as well as prognostic power (Agarwal, Grassl, and Pahl, 2012). SWOT is not a straightforward method to identify weaknesses and strengths (Coman and Ronen, 2009). Keeping in view the pointed out issues of SWOT analysis, a main reality is that it doesn't have any concrete theoretical support to validate its analysis (Helms and Nikson, 2010). It is partially a development snapshot, which occurs at a specific time; however, organizations require consistent external factor monitoring and continuous monitoring of the operational environment to avail the opportunities, which diminishes threats and assures the organizational survival despite cut-throat competition (Pearce and Robinson, 2005).

In conclusion, environmental changes are continuous and new strategies are needed; so, SWOT should be updated. In addition, it might result in detrimental outcomes for strategic marketing planning because inaccuracy and biases are certain risks if SWOT analysis isn't appropriately conducted. Rational analysis and planning are sources to combat the external environment's uncertainties. Some evolutionary theorists think that the organizations have limited capacities to anticipate the future and respond; therefore, they suggested that the direct strategy is the best that should be selected from the environment. Some Processual theorists argued that the strategy focused on profit maximization is the best despite different kinds of environmental factors. On the other hand, Systemic theorists believe that the strategies should be based on social sensitivity because it helps understanding external and internal environments. In other words, the Systemic theorists suggest that the organization's internal contest is not just department or individuals but the interests of the social group, and the resources available in the society (Whittington, 2001).

### **1.1.4. Defining Strategic Management**

Strategic management is a popular term, which is part of business education imparted at various institutions. It integrates the learning from different business courses, and introduces new techniques and concepts, which are widely used for strategic planning. It is both a science and art that implements, formulates, and evaluates cross-functional decisions, which help an organization to accomplish its goals. This definition means that strategic management integrates marketing, management, accounting, finance, operations, production, information systems, and research and development to make the organizations successful. In this text, the term strategic management has been used in the sense of strategic planning, which is more popular in the business world. Strategic management is mostly used by academics, and it means formulation, implementation, and evaluation of a strategy while strategic planning implies just formulation. Strategic management exploits the existing and creates different new opportunities, which require long-run planning (David 2016).

Definition focused on strategic plans, their formulation, continuous evaluation and implementation, which set the long-run direction and benchmarks for organizational performance. Strategic management, in essence, implies strategic plans and updating them (Rue, and Byars, 2002; p. 100). Rue and Byars noticed the strategic management process is composed of three major phases:

- Formulation phase is concerned with developing the initial strategic plan.
- Implementation involves implementing the strategic plan that has been formulated.
- Evaluation phase stresses the importance of continuously evaluating and updating the strategic plan after it has been implemented.

Defined strategic management as a source of understanding organizational strategic position, deciding the necessary actions, conducting evaluations, selecting the right strategies, planning to implement a strategy to maximize its effect, and managing change (Johnson, and the others, 2006).

Organizational performance depends on strategic management, and research shows that organizations involved in strategic management are likely to show higher performance levels, which enable them to gain sustainability and competitive edge in comparison with their rivals. Strategic management combines integrated

organizational actions and decisions, which help gaining strategic and competitive advantages and higher return. It is possible to gain strategic position through effective strategic formulation and implementation. To create a strategy, organizations conduct a firm's fundamental analysis based on its internal and external environments (Coulter, 2008: 4-5).

# 1.1.5. The Process of Strategic Management

This process has four sub-processes, through which, the management formulates, implements, evaluates strategies, and performs environmental scanning. Formulation includes vision, mission, identification of external threats and opportunities, evaluating internal weaknesses and strengths, planning alternative strategies, setting long-run goals, and selecting strategies for implementation.

### 1.1.5.1. Strategy Formulation

It includes decisions like finding new businesses, abandoning some businesses, diversifying or expanding operations, gaining access to global markets, merging or forming joint venture/s and avoiding hostile takeovers (David, 2016).

Since organizational resources are limited; so, strategic planners should decide a suitable alternative strategy that can benefit the firm. Formulating decisions associate an organization with certain markets, products, technologies, and resources in the long-run. Such strategies help gaining long-run competitive edge. Certainly, strategic decisions have significant multi-functional outcomes, which may be positive or negative but they have lasting impact on the organizations.

Senior management should be able to understand the strategy formation and its ramifications; so, they dedicate resources, which are essential for implementation.

#### 1.1.5.2. Strategy Implementation

Implementating strategies require the management to set yearly objectives, motivate employees, make policies, and allocate resources to execute the chosen strategies. Strategic implementation requires effective organizational structure, preparing budgets, create a strategy-supporting culture, focusing marketing efforts, using/developing information systems, and creating incentives for employees to perform.

Strategies are implemented during the the action stage, which motivates managers and employees to bring strategies into action. Generally, strategic management is very difficult while implementation needs commitment, discipline, and contribution. Implementing successful strategies depends on the managers' abilities to utlize the employees' skills, which is less of a science and more of an art. If strategies are made but there is no implementation, they are purposeless. In this context, interpersonal skills are crucial to implement strategies. Strategic implementation has impact on managers and employees. In this case, every department or division should decide: What must be done for implementing our part of the overall organizational strategy? How can we perform our level best?

The implementation challenge is stimulating employees and managers in an organization that perform with enthusiasm and pride to achieve the organizational objectives. The most significant implementation problems generally involve marketing that is focused on timing to launch new products. The management of an organization should implement the plans with no signal to the competitors (Ritson, 2011).

#### 1.1.5.3. Strategy Evaluation

It is the final strategic management stage. Managers should know what kind of strategies isn't functioning; in that case, strategic evaluation acts as a primary source to obtain this information. Almost every strategy needs future modification since internal and external factors continuously change. Three activities pertaining to fundamental strategy evaluation act as a first step to review internal and external factors, which form basis for the current strategies. Measuring performance is the second step while taking corrective actions is the third. There is a need to evaluate strategies because the current success might not guarantee future success. Accomplishements and success create different and new issues; so, the organizations, which do not handle them, cannot sustain for long.

Strategic activities take place on three levels in major corporations, their divisions/business units, and operational units. When communication is fostered, employees and managers interact in the hierarchical level; so strategic management makes an organization perform as a single competitive team. Many small and large businesses have no separate or dedicated strategic business units/divisions; so, they

only have operational and corporate levels. Even in that case, employees and managers should be involved in strategic initiatives (David, 2016).

The major strategic management function is paying attention to the the overall business mission by asking a question: What is our business? It helps to set objectives, develop strategies, and make decisions now for future results. This should be clearly accomplished because the management looks after the entire business operations; so they can match the needs of today and tomorrow, which helps allocating resources (Drucker, 1974). While discussing corporate strategies, Johnson and Scholes (2006) presented a model that could evaluate strategic options based on three key criteria:

- A strategy is suitable when it addresses key strategic issues, which depend on an organization's current position.
- A strategy can be termed as feasible when the required resources are available to implement it. They include people, funding, information, and time.
- A strategy is acceptable when the employees, shareholders, and customers agree with the expected outcomes.



Figure 1. Long Range Planning: "How Companies Define Their Missions?"

#### 1.1.5.4. Environmental Scanning

It implies processes such as audit, collection, and information exchange to assure the achievement of strategic goals. It helps analyzing the external and internal

factors, which have some impact on the organization. When the environmental analysis is conducted, it needs continuous evaluation for improved management (Lolav, 2016).

### 1.1.6. Adapt to Renewal

This process is belief-based that organizations must consistently monitor external as well as internal trends and incidents to take on-time actions to deal with issues. The change magnitude and rate have impact on organizations, which are dramatically increasing, for example, when oil prices fell, they surprised so many firms. Organizations are like living species, so they have to adapt themselves to their suroundings to survive. For survival, these organizations should fully adapt and update themselves.

Strategic processes help and allow organizations to effectively adapt in the long-term. Latest businesses show consistent changes. Many organizations successfully manage change, and adapt appropriate management structures, systems, strategies, cultures, and products for surviving the shocks despite cut-throat competition (Waterman, 1987).

Politically, the borders are clear, but in case of business competition, the real financial and industrial activities have no borders. The quick information flows have practically ended international borders because people living in almost all the countries can themselves see how the residents of other countries work or live. People have turned into global citizens and borderless; so there are global customers, competitors, distributors, and suppliers.

Renewal directs organizations to certain strategic questions: What kind of business should we become? Are we operating in the right industry/s? Should we initiate business transformation? Whether new competitors have or trying to enter this industry? What kind of strategies we should pursue? Whether our customers are changing? Whether new technologies can put us out of business (David, 2016)?

### 1.1.7. Role of Strategic Management in the Organization

Analysis of these definitions identifies the role strategic management plays for organizations. It comprises nine terminologies: strategies, competitive advantage,

mission/vision, external threats and opportunities, internal weaknesses and strengths, long-term goals, strategies, yearly policies and goals.

#### 1.1.7.1. Competitive Advantage

Strategic policies help maintaining/gaining the ultimate competitive edge. It implies an activity that an organization accomplishes in comparison with activities that a rival firm performs or it may be a resource that an organization has that rivals wish to own. Owning a few fixed assets that rivals dont have, leads to a major competitive edge. Generally, firms enjoy competitive advantage just for a specific time period because later, other organizations imitate or exceed to finish that advantage; therefore, obtaining some kind of competitive advantage is insufficient. Thus, a firm should move towards achieving a sustainable competitive edge through continuously adapting to variations in the external events and trends. Developing internal competencies, capabilities, and resources to formulate, implement, and evaluate strategies are some beneficial factors. A significant purpose behind a company is implementing and building strategies to generate competitive edge over other competitors. Such companies create great economic value as compared to other competing companies. The cost-benefit difference is the real economic value, which is obtained from the customers who deal in a company's products/services (Barney, 2007: 17).

Competitive advantage refers to the superiority gained by an organization by providing the same value as its competitors at a lower price, or at higher prices by providing greater values through differentiation. When an organization provides benefits, which surpass the offers by the other players in that industry, it gains "upper hand" over others (Porter, 2008). Business rivalries depend on three general methods, including cost initiative, centre methodology, and separation. Some procedures are needed to identify a firm based on its condition, which requires understanding its inward capacities in relation with the outer circumstances. Irrespective of whether it is a business or a war; this method is useful to win against the competitors. This achievement/disappointment relies on skillful power use. Most of the useful techniques have certian essential components, whichdepend achieving long-haul targets.

Many companies remain in search of a sustainable competitive edge that helps them excel/survive in their industry for long time. Companies generate competitive advantages by real or imaginary service/product difference or offering a lower cost.

Differentiation provides the customers with special and higher value because of the product features, quality or after-sales service; so, a company can ask for a higher price; therefore, it will assure significant gains because of differentiation while its expenses are largely similar as compared to its competitors (Pakkanen, 2012; p. 15-16).

#### 1.1.7.2. Strategists

It means individuals who take responsibility for the organizational successes/failures. They might have different job titles, like CEO, owner, president, chairperson, chancellor, executive director, or dean. Strategists make an organization to collect, organize, and analyze concerned data. They follow trends in the industry, and competitor activities, perform forecasting, analyze scenarios, evaluate performance of their own company/division, find opportunities, track threats, and make actionable plans. Such planners normally don't serve in the supporting roles but generally have higher management positions, so they have authority to take decisions and implement them. CEOs are the most visible strategic managers but some other strategic managers include those, who head a division, and bear responsibility for loss/profit, they are also strategic managers.

#### 1.1.7.3. Vision Statements

Some organizations develop vision statement/s, which show that the organization is going to create a change. Such kind of vision statements are generally considered as the first step towards strategic planning and developing a mission statement. Generally, vision statements are one-liners, for instance: Our vision is taking care of your vision.

#### 1.1.7.4. Mission Statements

This kind of statements shows purpose which distinguishes a business from another and besides, it identifies the firm's operational scope in services or product markets (Pearce, and David, 1987).

Mission statements answer a basic question that what the business is. Clearity in the mission statement shows priorities and values of an organization. If a mission statement is properly developed, it helps strategists to envision the scope and nature of

operations and find out what will make them operate in the future markets for long time.

In the nutshell, a mission statement broadly describes the direction in the future, and it gives reminder to its employees as to why the organization has come into existence in the first place and the vision of the founders, for which, they put their fames and fortunes at risk.

### 1.1.7.5. Internal Strengths and Weaknesses

They are organizations' controllable activities, which can be done either appropriately or poorly. They can emerge in marketing, management, production, finance, R&D, or IT department. Evaluating and identifying them are functionally possible in different business areas, which is a compulsory for strategic management. This kind of organizations pursue certain methodologies, which are based on either internal strengths or eliminating all or some of the internal weaknesses.

Both weaknesses and strengths are relative to competitors. Their relative superiority or deficiency is significant. Moreover, both of them are determined through their performances. For instance, ownership or control over some natural resouce may be a strength or reputation for quality. Both of them can be determined through an organization's objectives.

Sometimes, high inventory turnover is not strength if it seeks not to stock out. We can determine the internal factors in several ways, such as measuring performance, calculating ratios, and conducting comparisons with past industry averages. Many survey types have been developed, which can be used for examining internal factors, like production efficiency, employee morale, customer loyalty, and advertising effectiveness.

## 1.1.7.6. External Threats and Opportunities

They imply socio-economic, demographic, cultural, political, environmental, governmental, legal, competitive, and technological trends. They also include incidents, which benefit/negatively affect an organization in the long-run. Threats and opportunities are generally beyond the organizational control.

Some general threats and opportunities for the oil industry are given below:

- Over supply that drives down both oil and gas prices.
- Political unrest.
- Globally increasing underemployment and unemployment
- Price competition.
- Higher revenues in the global markets.
- Crises and civil wars in oil producing countries.
- New laws.
- Reducing product life cycles.
- Natural disasters.

Fundamental strategic management requires organizations to make strategies to avail external opportunities or reduce external threats. This is why, monitoring, identifying, and evaluating both threats and opportunities are necessary. Conducting researches and information collection are called as "environmental scanning" and it is sometimes called as industry analysis. Another activity is lobbying, which some organizations do for influencing external threats and opportunities.

## 1.1.7.7. Long-term Objectives

They have specific results, which organizations want to pursue as their main mission. For oil industry, long-term means tenures longer than one year. Some objectives are necessary to assure success of the organizations, since they act as a direction, which helps evaluating, focusing coordination, creating synergies, revealing priorities, and providing basis for organizational activities. It is necessary that the objectives should be measurable, challenging, reasonable, consistent, and clear. Multidimensional firms require objectives to grow and develop in the long-run.

#### **1.1.7.8. Strategies**

Strategies are sources to gain long-term objectives. They include diversification, geographic expansion, product development, acquisition, retrenchment, market penetration, liquidation, divestiture, and joint ventures. They need decisions by the top management, and generally demand for the substantial organizational resources. Strategies also affect the organizations' long-term development, specifically in five years. Some strategies have multi-functional while others have multi-divisional effects; therefore, they should be considered for both internal and external factors.

### 1.1.7.9. Annual Objectives

They are short-term milestones, which organizations should achieve for gaining long-run goals but they should be quantitative, measurable, challenging, consistent, realistic, and prioritized.

In large organizations, they should be set at the divisional, corporate, and functional levels. They should be mentioned in terms of marketing, management, finance, operations, or IT etc. Annual objectives are required to achieve long-run objectives. Such objectives are significant for implementing strategy while long-run goals are specifically significant for formulating strategies. For resource allocation, annual objectives provide the foundation.

#### 1.1.7.10. Policies

They are sources to achieve annual objectives. They include rules, guidelines, and procedures for supporting attempts for achieving the decided objectives. Policies guide the decision-making process in repetitive situations. Normally, policies deal with matters pertaining to marketing, management, finance, operations, IT, production, and R&D etc. On corporate level. They are decided while they apply to the whole organization. Sometimes, they are selectively implemented and applied to just one department. Some of them are implemented on the functional level.

### 1.2. SWOT Analysis

#### 1.2.1. Introduction

Currently, many blue chip companies engage themselves in strategic planning, which is a method for helping an organization to become productive when the resource allocation process is focused on achieving goals. Since, it is based on strategic management tools, such as strategic planning, which is a significant tool for successful futuristic strategies. Strategic management comprises actions, decisions, and analysis that organizations take or conduct for creating a sustainable competitive edge.

Strategic management comprises several choices and analyses. It carries on until an the organizational management chooses a "good strategy" which generates some kind of competitive advantage. It starts with vision, which means how the future will look like. It informs the employees about the desired future position the

organization needs to achieve. Another step in the context of strategic management is mission that reflects an organization's long-run purpose. They show what the organizational management aspires to do or avoid in the future. The third step to manage and form strategies is objectives, which are generally concrete goals the organization wants to pursue. In this context, the next phase is internal and external analysis, or SWOT Analysis. When external analysis is conducted, the organization first wants to know the nature of viable opportunities and critical threats in competitive environment. It collects information about the competition that is evolved and its implications for the opportunities and threats that the organization faces. Since external analysis is focused on environmental opportunities and threats, internal analysis is conducted to find out the organization's weaknesses and strengths. It assists organizations to know their true capabilities and resources, which might have the potential to transform into competitive advantage/s. SWOT analysis helps organizations to choose right kind of strategies.

SWOT analysis is methodical since it is used for evaluating positives and negatives in a system or plan. SWOT analysis is generally conducted to analyze a place, product, product, manufacturing, product, or sometimes a brand/person. It studies the internal and external factors, which oppose or favour when the organization attempts to achieve its goals. Strengths show project components, which provide advantages while weaknesses refer to those components, which have disadvantages as compared to to others. Moreover, opportunities show certain characteristics, which a project can use to gain advantages while threats show certain aspects of the ongoing situation that might lead to some kind of issue (Goodrich and Ryan, 2015).

Strategic choices are linked to mission, vision, and objectives while they largely deal with the internal/external organizational analysis. Every organization needs to choose its method to obtain some major and sustainable competitive edge. Another step in the realm of strategic management is the strategy implementation. Selecting a strategy has no use if it is not backed by implementation. Implementing a strategy is only possible when the organization chooses certain policies/practices, which are helpful to implement that strategy (Barney and Hesterly, 2006: 6-11). Tek (1999) mentioned that the enterprises should conduct the Swot analysis for identifying as well as evaluating their weaknesses, strengths, threats, and opportunities. To

survive, the organization should avoid threats and deal with its weaknesses when it assesses its opportunities and strengths (Tek and Özgül, 2010).

The Economist's Guide to Management Approaches and Gurus has pointed out that SWOT acts as a "handy mnemonic" that helps corporate planners to decide about the strategy (Hindle, 2008: 181).

## 1.2.2. Background of SWOT Analysis

The SWOT analysis is a time-tested concept; so it has a historical background. It is is linked to strategic planning that is considered as a key strategic planning element. SWOT first emerged as an analytical method in 1960, and since then, it has been extensively used in business management. In the relevant literature, historical growth of this concept shows that some experts give credit to Harvard Business School for developing it, while others think that it was developed at the Stanford University. SWOT framework is not rigorously-defined, so it is more of a science than an art, which makes it difficult-to-use and get the right strategies using it. Recently, however, it became part of several methodological works, which make it more operational. Some researchers believe that SWOT provides some solutions, which have overcome some of its shortcomings. We have briefly summarized their work below to use SWOT more objectively and precisely (Weihrich, 1982).

SWOT analysis has certain benefits: It is user-friendly and familiar, so, it needs no complex, hard-to-find or computer-assisted information. In fact, it has a simple but very structured approach that identifies all the four important decision-making factors the organization faces but this concept is not without shortcomings (Beeho and Prentice, 1997).

Humphrey (2005) was working at the Stanford Research Institute (SRI), where he conducted a research with his research team (1960-1970). Actually, SWOT analysis came into existance as a concept when Fortune 500 firms funded a research to understand what goes wrong when they do corporate planning and try to bring and manage change. Robert Stewart was leading the project, and his research team also contributed to it (Humphrey, 2005; p. 7).

A study pointed out that no academic references was available to back Humphrey's claim; so, the SWOT is actually a work by Philip Selznick, Kenneth Andrews, Alfred DuPont Chandler, and Harry Igor Ansoff, and it was developed at Harvard Business School during the 1960s. All the mentioned stalwarts besides Richard Dealtry, Heinz Weihrich, J. David Hunger, and Thomas L. Wheelen contributed to the SWOT development.

Mainly, internal weaknesses and strengths are analyzed while the external threats and opportunities act as the main instruments of the Design School Model presented by Henry Mintzberg. He subdivided the topic of strategic management into different schools of thought based on varying perspectives: Planning school, prescriptive school, positioning school, design school, entrepreneurial school, descriptive school, learning school, cognitive school, cultural school, political school, and environmental school. The mentioned schools have their distinct strategic processes, while just the prescriptive school has developed its own instruments to form and manage strategies. The design school placed its primary emphasis on internal and external appraisals. The former believes in uncovering the opportunities and threats in its environment while the latter believes in uncovering the weaknesses and strengths of the organization (Kraus and Kauranen, 2009: 40; Sarbah and Otu-Nyarko, 2014: 232-235).

Some primary concepts regarding the design schools were first introduced to the academic circles by Berkeley (1957). Another author was sociologist Philip Selznick (1957), who published "Leadership in Administration" in 1957 (Mintzberg, 1990; p. 171-173). He emphasized that organizations's internal realities should match the external expectations. Moreover, he analyzed the relation between what distinctive competence and institutional leadership. He advised institutional leaders to make efforts to safeguard their organizations' distinctive values and identities from external or internal threats. The combination of organizational structure and vision helps defining the organizational competencies (Selznick, 2011).

Chandler (1990) was the pioneer of the design school, and he believed in that the business strategy is linked with the organizational structure. According to his views, long-term coordinated strategies are essential for providing direction and structure to a company. His popular research "Strategy and Structure" appeared in 1962 that explained four multinational organizations' development processes, and their managerial structures. He mentioned that the environmental factors, including

aggregate demand/supply, fluctuations, technology, rival firms' behaviours significantly affect the organisational strategy, and helps determine objectives, environment, and resource allocation and vice versa. According to him, an organization needs awareness of development opportunities that takes place due to environmental changes, which should be creatively dealt (Sevkli et al., 2012: 15).

The design school gained attention of the academic community in the mid-1960s. It developed at Harvard Business School, where it was debated and discussed. Their course concentrates on equalizing a company's weaknesses and strengths with threats and opportunities. It was an important step that was based on competitive approach to strategy. Andrews reportedly put together all of the elements, and called it SWOT when he was working at Harvard Business School (Ghemawat, 2002: 43).

Andrews conducted studies on the concept of strategy with his colleagues Christensen, Learned and Guth. Their textbook: Business Policy: Text and Cases was published back in 1965, which appeared as a signficant textbook and represented the voice for the design school of thought. Andrews (1971) suggested that strategies are developed when threats and opportunities are defined keeping in view the organizational environment, and building on that, an organization should identifying strategic alternatives. Before choosing an alternative, the organization should know its weaknesses and strengths. The organizational potential needs harmonization with certain objectively-defined opportunities. The strategy that harmonizes environmental opportunities and resources is the most suitable strategy for the organization. Ansoff (1965) wrote a popular book "Corporate Strategy" that discussed the fundamental SWOT model and converted it into delineated steps, such as techniques and a checklist that linked aims with the goals and operating plans with the organizational levels. His other contribution is Ansoff Matrix that is actually a product market matrix, which compares certain market penetration strategies, such as product/market development and diversification. All four options define a strategic response to group that has different external and internal conditions. Ansoff (1965) further argued that for systematical preparation for the future, the management should use this matrix (Otungu et al., 2011: 233; Lowy and Hood, 2004: 135-136).

Both small and big enterprises used SWOT analysis in their marketing and business plans since 1980s. Weihrich (1982) contributed to the analytical literature by

introducing SWOT Matrix that matched organizational weaknesses and strengths to its opportunities and threats. The SWOT variables coincided in a systematic way; so now, SWOT model could be used for formulating plans, environmental development, and social marketing for humanitarian organizations. In a later development, Dealtry, T. R. (1992) presented his Dynamic SWOT Analysis (DSA), and developed it through dynamic plan management method that involved directors and dealt with implementing value-driven strategies and organizational learning principles, cycles,

and notions. Later in 2000s, the critics directed criticisms on strategic planning redirected them towards SWOT analysis. In the later works, several scholars proposed variants forms of the SWOT analysis, which actually enriched this concept; however, some scholars suggested that there is a need to have an alternative analysis method instead of SWOT, or it should combine with with other method.

# 1.2.3. Historical Development in SWOT Analysis

SWOT (strengths, weaknesses, opportunities and threats) evaluates an organization present situation. A significant benefit of SWOT analysis is providing an organization's present and general overview that depicts its strategic situation (Rue and Byars, 2002: 107).

Today, business organizations are facing some unprecedented issues and same is the case with threats and opportunities to continue with their mission. In the current scenarios, managers find comprehensive detail about the present organizational circumstances and based on that, they analyze the future keeping in view both external and internal environments (Azimi et al., 2011). The overall SWOT description includes internal weaknesses as well as strengths, and external threats as well as opportunities, which form a popular technique, which is a useful way to analyze an organization (Houben et al., 1999). SWOT method is applicable to both kinds of environments, and it gains systematic support and approaches to the most appropriate decisions. In addition, SWOT does not include any method that determines the significance of any factor/ decision alternatives (Kangas et al., 2003).

Today, most companies regularly conduct SWOT analysis to plan their businesses strategically before finalizing the strategy formulation (Houben et al., 1999; Roth and Washburn, 1999). In the nutshell, it is a key/critical success factor that is

based on top-ranking techniques to conduct strategic analyses after accomplishing their empirical surveys (Glaister and Falshaw, 1999). Many literature studies covered the topic of strategic planning and most of them have a cyclical iteration that has following elements:

- Strategic planning initiates with corporate goals and mission.
- Organization analyzes he external competition.
- Internal organizational operating environment is studied.
- Selecting target organizational strategies.
- Implementing the chosen strategies.

SWOT is the last step that involves the organizational structure design and control for implementing the selected policy (Hax & Majluf 1996). This article focuses on Step 2, which is external analysis, and Step 3, which is internal analysis. The external analysis is conducted with a purpose to find opportunities and try to get information about the threats, wheras internal analysis focuses on the organizational weaknesses and strengths.

# 1.2.4. Model of Swot Analysis

It is a basic straightforward model, which gives direction and forms basis to develop strategic plans. This is done through assessing the organizational strengths to understand what the organization is capable of and weaknesses inform what is not possible for the organization. Opportunities show certain favouring conditions and threats show what is unfavourable for the organization.

This analysis is significant for planning but some critics underestimate its value despite its simplicity. SWOT analysis plays a role to gather the environmental information and separates it into internal and external issues. After accomplishing this, SWOT analysis tries to find whether the collected information has useful things, which can assist an organization to accomplish its objectives using strengths/opportunities while it should minimize or eliminate if there is some significant weakness or threat (Ferrell, Hartline, Lucas, and Luck, 1998).

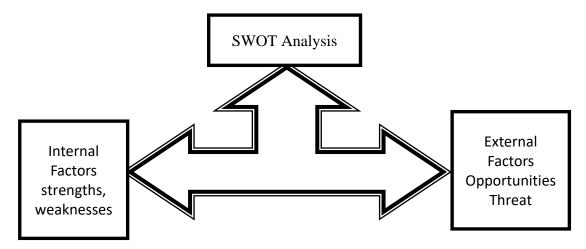


Figure 2. SWOT Analysis

This form of analysis acts as a tool to do strategic planning/management in the corporate world. It is effective to build organizational and competitive strategies. The system approach suggests that the environmental interaction leads to many subsystems.

For this, an organization has to deal with two environments: its own environment and the outer one. These environments are essential to analyze for making the right strategies. It is a process that examines an organization with all its factors.

SWOT analysis is powerful but easy to streamline the organizational deficiencies and capabilities in addition to threats and market opportunities (Thompson et al., 2007: 97).

SWOT offers a framework for strategic planning to evaluate a plan, project or organization. It is certainly important for situational analyses to identify environmental and organizational factors. It stops an organization from getting insular and working with inappropriate feedback.

## 1.2.5. Definition of a SWOT Analysis

It examines an organization weaknesses and strengths. In addition, it also identifies new growth opportunities and locates threats, which deter its survival. Basically it was designed for other industries but in healthcare, it gained popularity. It

generates helpful information to match the organizational/group programs, goals, and capacities for improving the social environment.

### **1.2.5.1. Strengths**

They comprise capabilities/resources that form the basis to gain competitive edge. They are both tangible and intangible, which are mainly internal and within the organizational control. Strengths mean that the organization is efficient at performing a task or producing something (Thompson and S. 2005: 109). Moreover, strengths can be used as a resource, or skill that competitors lack in the markets where an organization operates or plans to operate. Strengths are distinctive competencies, which, as mentioned earlier, give comparative advantage to an organization to win big in one or more markets. They are mainly reputation, financial resources, market leadership, relations with buyers/suppliers, or control over a specific raw material (Pearce and Robinson, 1991: 182).

#### **1.2.5.2. Weakness**

They are those major or minor factors, which detract the organization from attaining its desired goals. They are mainly areas where the organization can improve.

It is what an organization lacks/performs poorly than other players, which bring it to a certain disadvantage (Thompson and Strickland, 2001: 109).

Weaknesses limit or lose skills, resources, and capabilities, which impede the organizational effectiveness. They include lack of some critical facilities, management capabilities, financial resources, reputation, brand image, or marketing skills (Pearce and Robinson, 2001: 182).

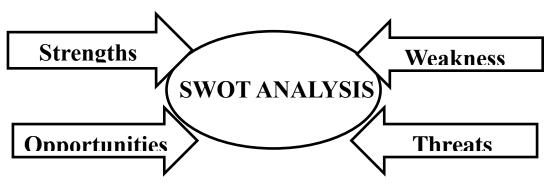
### 1.2.5.3. Opportunities

The potential areas of an organization's potential growth and profit-making should be identified. These external factors show the reason why an organization develops/exists. Opportunities represent conditions, which are appropriate for some activity. It means a definitive chance of gaining some advantage. It shows favorable and positive characteristics. If opportunities appears at a time when the environment provides the organization with a chance for goal achievement that would give positive results. Opportunities are external conditions, which help an organization to improve

strengths while simultaneously overcoming organizational weaknesses/neutralizing environmental threats (Harrison and St. John, 2004: 164).

#### 1.2.5.4. Threats

A threat might have the capability to jeopardize the activity actualization with negative characteristics. External environment changes might result in threats to some organizations because in some cases they are beyond the organizational control, and this can lead to putting the organizational operation/mission to stake. Organizations, which have contingency plans, can deal with them. Some forms of threat make it impossible or difficult to accomplish the organizational goals. They emerge when some changes happen in the immediate/distant environment/s which do not let the organization maintain its survival/superiority in a marketplace (Ülgen and Mirze, 2010: 161).



**Figure 3.** Definition of SWOT Analysis

## 1.2.6. Advantages of SWOT Analysis

SWOT is simple yet powerful; so, it leverages strengths, helps eliminating weaknesses, getting rid of threats, and availing opportunities. It has many positives, including collaboration opportunities and formulation of strategic plans. It has several structured processes that make it easier to gather ideas. The ideas help minimizing the reaction time, and letting the group mentality sabotage the strategic decision-making. Quieter and less participating participants get encouragement to participate in this friendlier process. It provides the capability to dominate the process. Priorities exist in each category, which give clear understanding of what the most pertinent topics are.

Companies commonly use SWOT analysis for strategic management because it is a valid strategic management tool. Its major advantages, from a different perspective, are as follows:

- It is an analytical process that has general prospects and ability to address specific issues; however, other forms of analyses are also useful when combined with it. Thus, SWOT analysis prepares a roadmap to guide the management from generalized to definitive approach to make strategies.
- It is attractive because it is proven and familiar besides being understandable for a majority of people. It is a structured device to sort out ideas regarding the organisation's capabilities to improve in the future (Piercy and Giles, 1989).
- It's a simple concept that is readily and immediately accessible without sophisticated equipment for making quality decisions in less time.
- This model is useful with no need for corporate information systems, and still, it is flexible enough.
- The SWOT analysis results appear in the profiles of units/organisations, which can be used to find out the internal alignment of the organization (Sherman, Rowley, and Armandi, 2006).
- It is a device that structures an awkward combination of quantitative/qualitative data of familiar/unfamiliar information to help strategic marketing. Following the four major conclusions of a SWOT analysis (Sherman, Rowley and Armandi, 2007):
- Strengths are more/more important than weaknesses, opportunities are more/more important than threats; it means that the organization should pursue a growth strategy.
- Strengths are more/more important than weaknesses, threats are more/more important than opportunities; it means that the organization should pursue a maintenance strategy.
- Weaknesses are more/more important than strengths, opportunities are more/more important than threats; it means that the organization should pursue a harvest strategy.
- Weaknesses are more/more important than strengths, threats are more/more important than opportunities; it means that the organization should pursue aretrenchment strategy.

There are four important advantages to work using the SWOT analysis. These benefits are that it gives an overview, it supports discussion, they are fast to do, and they promote resilience. The reality that a SWOT analysis gives is obvious: overview helps to see the number of opportunities that deal with the number of threats. The SWOT analysis has a visible order that is formed up in four quadrants, which provide a quick overview of the organizational condition.

SWOT analysis has another benefit that it helps discussion. It can be a very powerful resource to have higher levels of management in the room discussing the strengths/weaknesses and then defining opportunities/threats. Another advantage is that it is quick and easy. You can create a SWOT analysis over the course of a meeting for the overall business strategy and use it to serve as a quick way to collect ideas through a brainstorming session. The fourth advantage is that it is very flexible.

It is used to guide the overall business strategies, but can also be narrowed down for a specific segment such as sales, marketing, or production. This helps a business see how the overall business strategy was developed through the SWOT analysis, and how it filters down into the different segments and departments of the business. Since the SWOT analysis is so flexible, quick, and easy to do, you can also work in reverse; starting with the departments/segments, and then moving up to the overall business strategy (Eisner, Lumpkin, Dess, and McNamara, 2015).

# 1.2.7. Disadvantages of SWOT Analysis

To determine vulnerabilities and strengths, the organization should conduct a SWOT analysis; however, there are a few drawbacks. Oftentimes, when a SWOT analysis is done, businesses tend to rely solely on the data compiled from the report to make a decision about planning for a new product. Instead, this data should be used as a source of information to help the organization determine where there may be some vulnerability within the organization. Because it relates to the planning method and business strategy, the organization should be using the SWOT with other resources such as focus groups to determine the best planning strategy for the business.

Companies tend to fall prey to a short list of weaknesses due to lack of reality and honesty. This portrays an appearance that the organization is not vulnerable when they may in fact be. This is a disadvantage of the SWOT. The SWOT analysis lists the

four components without identifying their significances versus others in the list or in the separate lists; so, additional analysis is needed despite the SWOT analysis (Nordmeyer, 2016).

The SWOT analysis is criticized despite its common use, and the criticisms are mostly around: it is not sufficiently effective to be a part of the overall organizational strategy, or it may not go beyond defining the current circumstances; so policy makers should not accept it as a technique. It was first used in the 1960s, so some people believe that it is outdated (Hill, and Westbrook, 1997).

A logical point for this analysis lies in finding out what threats and opportunities actually exist because they come from the external environment, so they are beyond its control, so they should be administered using the weaknesses and strengths. A comprehensive and systematic assessment of internal/external factors helps understanding the growth potential and the competitive position of an organization. This process was introduced during stale periods; so, some critics have an opinion that it is invalid technique in the fast-paced world that has quickly changing situations and competition. Structural/dynamic changes are observable at the super system, subsystem and basic system levels, which affect the entries' validity when the SWOT Matrix is applied (Weihrich, 1982).

According to studies, SWOT analysis was poorly formulated; so, it needs training experience to systematically construct and apply it. It has problems as an analysis technique, which is both qualitative and quantitative. To apply SWOT, several factors are identifiable but their extent/quantity does not reflect their quality; so, determining the priorities is not possible. Besides, it is not possible to get their details, solve discrepencies, and make additions of suggestions and views (Mintzberg, 1990).

It is a costly analysis with few benefits. Moreover, strengths might transform into weaknesses, if they are not maintained. If competitors avail those opportunities, they might turn into threats. It starts with current realities; however, for making useful strategies, this analysis should be continuously revised for achieving the real benefits of the true picture of situations. Creating strategies depends on past or present but not the future. Moreover, SWOT analysis does not compare with the competitors. This deficient quantitative index does not let the competitive analysis accomplish even in

interdependent settings, which keeps the information limited about the competitive gaps, which organizations require for performance assessments of close competitors.

## 1.2.8. Building SWOT Analysis

The value judgments of each company are different. But the list of topics that needs to be addressed by each organization may be in the form of a list (Basic Information). The value judgments can be listed as past results, current status, market analysis, customers and consumption trends, financial institutions, purchasing powers, products/services, prices, production machinery and infrastructure, profitability, finance, information retrieval, and computer-based decision-making, and preparations to deal with dangers.

It is applied to effectively build organizational/personal strategies. It involves steps that are essential for executing strategy-based analysis that involves internal/external factor identification (using the popular 2x2 matrix), their evaluations, and selection of the most significant factors, internal-external factors' interrelationships (Blake, Wijetilaka, 2015).

For example, strong strength-opportunity relation means good conditions that allow implementing an aggressive strategy. Moreover, strong weakness-threat interaction can be a warning to use defensive strategies (Osita, Onyebuchi, and Nzekwe, 2014).

## 1.2.9. The Purpose of SWOT Analysis

Since it is popular, it is part of several companies' strategic planning because it links objectives with strategies/actionable moves. Generally, it is part of situation analysis, which enables a company determine what changes are needed keeping in view four vital areas. In social work, SWOT analysis is helpful because it assists the management to find out the achieveability of an objective; so, it helps organizations to set goals, which are achievable to further social changes. This helps organizations to use visions and generate the right outcomes to assure a lasting change, which supports organizations to collect useful data for maximizing their potentials (Quincy, and Huang, 2012).

Force analysis is conducted to assess individual weaknesses and strengths of a firm besides threats and opportunities in a current/future market. In other words, in the determination of competition power in the market, it is a method, through which, the firm strategy is formed according to the outcomes of the competition. The market, perhaps most importantly, has its own structural status that is clearly stated and competitiveness is measured. In this context, as the country's exports, its power analysis, and the strengths and weaknesses affecting the exporting power of the country are introduced by the country managers themselves, and they are expressed as the assessment of the potential new opportunities and risks in the international market and the emergence of long term measures. It may be, indeed, what is aimed here is primarily the determination of strengths and weaknesses of Libya in the international markets. For this purpose, possible developments have been taken into consideration and it has been emphasized what measures should be taken in the direction of these developments and the direction of the creation of the export strategy.

# 1.2.10. Limitations of SWOT Analysis

This analysis technique has certain shortcomings. When the organizational attributes are listed, their managers get the raw materials used to perform in-depth analysis but SWOT alone does not show how to gain competitive edge. Thus, SWOT analysis is not an end in itself, which just raises awareness about the current position and issues but fails to suggest concrete steps, which are essential for bringing impressive strategic transition. The limitations, according to experts, include:

- Strengths might not transform into advantages or no competitive advantage may be achieveable despite having strengths.
- It narrowly focuses on environment; by doing so, decision-makers might rely on traditional definitions that narrow down perspectives on current technologies, customers, and competitors.
- It appears as a "one shot" picture of a moving target; so, being static is the key weakness of SWOT has. In this way, the organization's attention is only focused on a single point in time.
- It overemphasizes a single strategic dimension, specifically when they the companies get preoccupied because of some key feature/single strength of

- their products/services, which they offer while ignore other critical factors required to gain competitive success.
- This analysis type is seldom applied at sub-organization level because it is
  risky to assume that some strategic units have different strengths/weaknesses
  as compared to others, which might lead to wrong strategies, which are
  implemented in the organization.
- It is useful and very popular in the business world because it has substantial insights to offer; however, that makes it just a starting point. It is only a situational analysis that needs an even more comprehensive review, which is ultimately required to plan and achieve the organizational goals.
- SWOT analysis is mainly a summarizing methodology tool for assisting the process of decision-making process or analyzing some specific situation but still, it may prove to be valuable (Dess et al., 1997: 78; Koch, 2000; King, 2004).
- SWOT analysis has limitations but many experts stayed silent or did not dare to express. Some companies are unable to objectively address phenomena that have a wide approach. Consequently, they cannot gain any real benefit based on vague or common information. Moreover, it may not have any factual knowledge regarding the company's operations or its environment (Suominen, 2012).

### 1.2.11. SWOT Analysis of Strategic Planning Process in Companies

## 1.2.11.1. Strengths, Weaknesses, Opportunities and Threats

For strong operations in this context, an organization concentrates on its future goals based on its strengths and averts matters pertaining to to their weaknesses. In the nutshell, responding to internal weaknesses/strengths is certainly fundamental to the strategic management (Hisrich and Peters, 1989).

For making profits out of the situation, threats/opportunities in the external environment must be focused. The internal strengths/weaknesses or external opportunities/threats help creating the foundation. In this study, we focused on the internal/external environments; therefore, identifying all fours of SWOT are essential.

Strengths connect with the competitive advantage/s while other competencies can also be exploited. An organization should find and rely on its distinguishing competence (Mintzberg, Ghoshal, Lampel, and Quinn, 2003).

## 1.2.11.2. SWOT Analysis in the Strategic Management Cycle

The strategic management is in fact the capability to make decisions by business managers in a counsel, engaging all the organizational levels determine the long-run course of action. The primarily concern for improvement and being competitive is results and long-term profit growth that achieves better returns. The secondary results depend on a company's specific situation. The overall strategic management process comprises strategy formulation, implementation and strategic evaluation. Formulation stage requires a definitive vision and/or mission, while external threats/opportunities prepare grounds for taking necessary actions (Hax, and Majluf, 1996).

When the management decides to move forward, it should first analyze the external/ internal environments before moving on. As mentioned earlier, the internal environment is merely an overview of a company's weaknesses orstrengths while threats/opportunities are external. The external environments are outside the company's control because they are the reasons why a company functions/exists. External environments have two sub-divisions: direct and indirect external environments. Here, direct environment implies certain groups or elements, on which, the company has a direct influence. They include the government, shareholders, local authorities, suppliers, creditors, local authorities, clients, competitors, and the labor unions. Certain indirect environments have general forces that substantially affect the company's long-run decision-making through socio-cultural, economic, juridical, technological, and political leverages (Krijnen, 1992).

The internal company environments have their own variables, which the company management cannot influence in short-run. Such variables make the context, in which, the work is done. It includes the organizational structure, culture and resources (Wheelen, and Hunger, 1987).

The strategy is formuled, so as to take action on actionable insights. The company managers set long-run as benchmarks of achieving success. A company

should realize its policy and implement its strategy for devicing programming actions. It is also in line with operational planning and its required standards.

A plan generally has different stages and actions for necessary execution. At an operational level, it transmutes the strategy into actions. The budget is the financial translation of a programme. For successful implementation of a strategy, actionable programmes are made and budgets are allocated to carry out the required procedures. All this has a lot to do with operational planning; so, a programme is a collection of stages and actions essential for execution.

A budget provides details of the program cost and its evaluation. Certainly, evaluation and control help follow up a company's activities and results of execution. Business management units utilize all the mentioned information to solve issues and take corrective actions. Although evaluation and control are the concluding steps in strategic management, they help starting another cycle when they indicate shortcomings/weaknesses during the last implementation. Thus it assures a continuous process.

### 1.2.11.3. Studying Strengths, Weaknesses, Opportunities and Threats

Analyzing all four important areas has been and is still popular both in the academic and practical business communities. Companies need to take actions to express their capabilities in terms of weaknesses, strengths, threats, and opportunities.

It is evident from history that doing so is not easy, and several companies just have hazy idea about their competencies and resources. Sincethere is no global company overview; it is not possible to get a clear picture about a company. Although it is a real problem, competitive strategy is harly developed based on actual characteristics/capabilities/issues of companies. SWOT analysis should be actually measured for different organizational, group, goods, or even demand levels (Jain, 1990).

It is insufficient to just mention a few weaknesses, strengths, threats, and opportunities. For using SWOT analysis, reducing/averting threats and weaknesses is important. The management should look at weaknesses, and make efforts to transform into strengths. Besides, it should transform threats into opportunities; therefore,

opportunities and strengths will matched the organizational potential. Using SWOT helps achieving benefits for an organization (Ferrell, Hartline, Lucas, and Luck, 1998).

SWOT analysis is particularly helpful to the people, who want unbiased and impartial analysis of their companies. A manager must make a solid plan to utilize the potential of the companies performing marketing activities to get advantage based on the existing capacities, avert threats, and transform weaknesses; however, managers should have many directions to pursue. Since the resources are mostly restricted, achieving everything at once is difficult. Managers should prefer making marketing plans, initiating certain marketing activities, and improving their goals/objectives (Boone and Kurtz, 1992).

# 1.2.12. What Makes A SWOT Analysis Work?

To make swot analysis perform, some qualities are needed for success, and the SWOT analysis brings confidence to deal with threats and weaknesses, although it can make the management temporarily uncomfortable. In the organizational culture, potential threats and weaknesses should be open-heartedly and objectively faced before change is implemented. Professionals, who conduct SWOT analysis, must represent the overall planning team, and they should spend time for honest and detailed SWOT analysis, which will give benefit in terms of developing an actionable plan.

The SWOT analysis is a familiar technique for many decades, it is easily comprehensible for users and besides, it acts as an impressive structuring tool that forms the foundation for the future and the organizational readiness to exploit it. This form of analysis might have certain payoffs, which can be used to generate certain strategic insights. For this, we have provided some straightforward guidelines for achieving the mentioned goals.

The way SWOT analysis is applied or neglected while planning largely depends on the applicability of this technique; we believe that this technique should be used only for exceptionally rich strategic insight. We proposed certain rules to use SWOT for producing dynamic outcomes, shared vision, focused planning, environmental analysis, customer orientation, and structured strategy development (Andersen, 2004).

Focused SWOT: We should define the aspects of the SWOT analysis. Focusing on specific issues and eliminating excessive material is essential in this context. First, we should focus on critical planning issues in our planning to build up a realistic picture based on a focused analysis. Focusing starts with highlighting knowledge gaps, the managers' hidden strategic assumptions.

Shared Vision: The SWOT analysis works when a managerial team or a planning group works on it for collection of information and perspectives to produce significant outcomes, so it provides a concrete process to express ideas regarding issues. It pushes teams to set aside differences and move towards agreement. Such gains are only possible whenthe teams of diverse interests participate in the planning process.

Customer Orientation: This technique is very helpful specifically in the briefform. For evaluating our weaknesses and strengths, the resources/capabilities should be fully introduced and recognized in terms of providing value to the customers. The concerns and ideas of custmers should also be a part of the planning process because it is valueable; otherwise, there will be nostrength in the purpose. If the customers feel that the employees are treated well, it leads to establishing long-term relationships. This technique can be very helpful if it forces executives to understand the differences between their own opinions and their customers' opinions.

Environmental Analysis: Generally, correction is needed when threats or opportunities are analyzed in terms of the external environment in a specific market that has its own issues and customers. All those things should be listed that makes the environment attractive/unattractive. It is a reality that both threats and opportunities emerge from the outside world.

Structured Strategy Development: After filling out all four SWOT matrix cells, we should rank each of them assigning them a sequence of importance, the matrix automatically generates strategies.

- Strengths that cannot be used to avail any feasible opportunity have little or no immediate value.
- The conversion strategies should be applied through designing proper responses to significant threats and weaknesses with the aim to convert them into opportunities and strengths.

Creative Strategies are also very significant because they generate new ideas
to develop any business. We should never discard good ideas because of
their uncommon nature. All the strategic thinkers and managers should note
down their creative ideas even when they are not currently useful (Piercy
and Giles, 1989).

# 1.2.13. SWOT Characterization

Any organization, no matter what its capacities, goals and programs are, has to operate in specific social environment and need for vital information in this regard is fulfilled by SWOT analysis. Whether it is strategic planning or business planning, this instrument is valid in all the areas. It becomes a contributory process when combined with dialogue. (Benito CA. 2001). A professor of strategic management from Staffordshire University came up with paraphrasing of definitions, which do not show any pattern. Traditionally, enhanced quality, valuable resources and support are traits of strength; whereas, deficient attributes, resources and competence are traits of weakness in the organizational context. Similarly, the act of seeking advantage through which chances of accomplishment could be increased is called opportunity; whereas, substandard investigation can cause by external threats (Capon, 2004).

## 1.2.14. Internal and External Case Indicators in SWOT Analysis

External opportunities/threats imply Political, governmental, social, economic, legal, cultural, governmental, technological, competitive and demographic events and trends and events together form external threats and opportunities that an organization can either benefit from or suffer in th long run that could benefit/harm the future of an organization. Since they are external, no organization has control over threats and even the factors that opportunities arise from; however, an organization does have control over internal weaknesses and strengths, they could be performed either in poor or reasonable way. Accounting, management information system, research and development production, marketing, management, production, finance, and operations are areas where there is always room for improvement. Essential strategic management activity is to evaluate and identify organizational weaknesses and strengths in the relevant functional areas of a business. Internal weaknesses can be eliminated and

strengths can be utilized well with useful strategies being pursued (David, 2003: 10-11).

While forming defense against particular potential external threats; there is need for organization to overcome particular resource weaknesses as well; however, the degree of urgency may vary from case to case; the bottom line is to harmonize the market opportunities and organization's resource capabilities with its core business strategy and thereof need for evaluation of strengths, weaknesses, opportunities and threats arises (Thompson and Strickland, 2001: 127).

In order to be successful, an organization must align external realities with internal activities. Threats and opportunities are external; whereas, weaknesses and strengths are internal components that the framework of SWOT analysis is made up of. For optimum results, one must take full advantage of all available opportunities while minimizing the internal weaknesses. Desired progress or growth is achievable through improved vision which can be derived from a refined picture based on information resulting from assessment of both internal and external factors. (Pahl and Richter, 2009: 4-5).

### 1.2.15. Internal Factor and External Factors of SWOT

According to Barney (2011), a SWOT analysis is based on internal characteristics and external attributes. A difference between both the environments of the company is used in many strategy analyzing programs but SWOT is the best known for this approach (Grant, 2003). Nevertheless, without the application of analytical instruments for analyzing a company environment and its internal capacities, SWOT makes little more than only identifying the strategic questions that a company should ask itself (Barney, 2011). The important role of SWOT is to support an organization to improve and develop a perfect understanding of all the factors that may positively or negatively affect decisions and their strategic preparation. In reality, when done perfectly, it can steer the organization to fulfilling good strategic decisions about its products and services (Goodrich, 2013). Identifying SWOT is compulsory because later planning procedure may be derived out of it. And then, the TOWS Matrix will supply alternative strategies of cluster development. Developing SWOT is the next step in developing substitutional strategies. SWOT matrix provides a

wherewithal to develop strategies founded on rational combinations of factors (Weihrich, 1982).

#### 1.2.15.1. Internal Factors

The core objective of strategies is to overcome weaknesses and enhance internal capabilities and strengths and survival of all companies depend on good and well-crafted strategies addressing the funcational areas of business (David, 2005). Parts that do not contribute to value creation could be detected through value string analysis; similarly, the process is also helpful in processes that will build value; and therefore, it is an excellent tool. Firms will succeed and grow into profit-making organizations when they would get information about the company's fundamental parts (Foon, and Nair, 2010).

#### 1.2.15.2. External Factors

A company always has threats to be avoided and limited listing of opportunities to improve and develop as stated by David (2005) who supports external environment analysis, Political, sociological, technological, manufacturers, global trends, consumer trend and demographical factors are various diverse components that external environment is made up of; but in overview; one finds the external environment divided into broader categories of competitors' environment, and industry.

#### 1.2.16. The SWOT Matrix

The SWOT matrix analyzes the external as well as internal ones to guide the future strategies could easily be created with the help of SWOT matrix that assesses weaknesses and strengths, as well as opportunities and threats (Ralph, 2007). Strategic supervision warrants environmental administration and planning of future programs; the matrix provides primary basis for varibale conditions (Nikolaou and Evangelinos, 2010). Information to devise strategies comes to an end in the input stage since it is where superior external and internal factors are examined. Throughout the second step, which is called the comparison stage is the second step in the matrix and it deals with study of likely strategies; although the best possible strategy is not determined or sought at this stage but it overviews all feasable strategies. Policy makers have four types of strategies that they can employ to the matrix design.

**Table 1.** Matrix: SWOT Analysis

	Strengths	Weaknesses
Opportunities	Gain opportunities that closely match the organizational strengths	Deal with weaknesses for gaining opportunities
Threats	Using strengths for reducing organizational vulnerabilities	Minimize weaknesses, not letting them make the organization susceptible to threats

Source: Chermack and Kasshanna, 2007: 387.

The Matrix Model has been derived from SWOT analysis; opportunities, weaknesses, threats and strengths are selected and analyzed through this matrix and factored in this profile. Reduced weaknesses and enhanced strengths could have enormous contribution to defense against threats and increase in opportunities; insight into the required tactical policies and improved tactical plans based on distinct locations would be provided by the matrix model (Weihrich and Cannice, 2010).

Firstly, the W-O (mini-maxi) Strategy pursues opportunities and overcome weaknesses. The strategy maximizes opportunities that result out of external environment reducing the organization's internal weaknesses that restrain company's growth are overcome and external opportunities are maximized through this strategy.

Use of contemporary technology has great relevance to oil production and effort to make growing demand can encounter failure if the company is not equipped with relevant technology; company that is lagging behind in use of latest technology can seek to build partnerships with other companies that have accesss to state-of-the-art methods and techniques used for oil production. The company can also outsource the function, as second option, to those with proficiency in the field. The competitors would come and fill the vacuum if the action is not taken on time. Implementation and ability can be transformed into good results and effect of weaknesses is neutralized. Minimal effect of weaknesses would enable the organization to capture opportunities arising from external environment. You have these strategies with their utility and in combination with the vision aimed at promotion of the company's interests,

achievements through surprise tactics, change for improvement and need for policy to address difficult issues, it could be even more rewarding, exciting and stimulating. Hence, it applies strategies, such as use of new technologies that is vital and beneficial and it would also enhance chances of opportunities being utilized properly and weaknesses addressed on right time to implement the methods to use opportunities.

**Table 2.** The SWOT Analysis Matrix Model

	Inte		
Positive	Strengths	Weaknesses	Negative/ potentially
	0pportunities	Threats	negative
	External		

Source: SWOT matrix developed model (Farhangi, Far, and Danaei, 2012).

Opportunities and strengths could be maximized with use of S-O (maxi-maxi) strategy. Efficiency could be increased through more investment in logistics management and process improvement. Finding most convenient and speedy to execute strategy with implementation of that the company will have its strengths utilized in best way; that in return would improve both its logistics market access network and efficiency. Feasibility study and fast planning for action are also included in this strategy.

Threats in the bigger environment, competitors and the industry can be avoided through enhanced internal strengths and this is what S-T (maxi-mini) is all about. Strengths could be used in more than one way to avoid external threats and overcome weaknesses. The external environment's threats need to be addressed properly and attentively by every organization even if it has strong market power. In the international market, competition is ever growing and to addess this issue, an organization would be in need for a right system. Shell, which has big share in oil and gas market are facing HP and Exxon as its main competitors (Amobi, 2014).

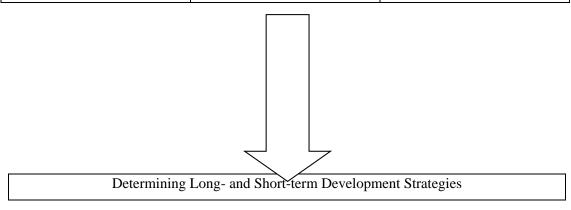
Libyan oil companies, for a long time, have been involved in oil theft which is another major problem. Industries and organizations are striving to remove or reduce the effects of threats through implementation of their strategies the need for which arose after revelation of oil theft from oil pipelines and unlawful sale of crude oil overseas by aggressive local groups.

If you are required to minimize both threats and weaknesses at the same time it means you are confronted by worst scenario in competitive environment. An organization, which is vulnerable to external threats andweaknesses, can safeguard itself with help of a foolproof defensive plan. Optimization of opportunities, remedy to weaknesses, leverage formation, maintenance of strengths, innovation, and counterstrategy would be key components of such a plan. The tobacco industry encounters external powers as a threat which is difficult to avoid. Lawsuits and regulation found in many countries are a big issue that manufacturers have to deal with for their survival; and they often resort to preemptive strategy.

There is very little liklihood that two SWOT reports would be identical becuase they are always subjective. It should not be used as prescription; however, it could be used as pattern becuase involvement of more persons will make its output more effective. Since the analysis could be subjective, it could not be taken as resolution; it can act as an agent; similalry, it is useful as a guide but not be good as solution. Chances of reports written by two different persons being iden tical are very low.

**Table 3.** An Alternative SWOT Matrix

SWOT ANALYSIS	Strengths	Weaknesses
Opportunities	Offensive-make the most of these <b>S</b> – <b>O</b>	Defensive-watch competition closely <b>W</b> – <b>O</b>
Threats	Adjust-restore strengths S – T	Survive-turn around <b>W</b> – <b>T</b>



Source: The SWOT matrix and strategy determination method (Thompson and Strickland, 2003; Kauffman, 2002)

Threats of external environment could be prevented and internal weaknesses overcome with use of this strategy and companies' interests would remain protected. Bankruptcy can force an organization to merge with other organizations and that also affects scope and level of its activities; but then there are contractions as well as submission strategies (David, 1997).

The commonly applied framework that organizes/uses information or data that is collected through situation analysis, which deals with both external and internal environments, which is an effective tool to analyze the environmental information.

**Table 4.** Overview SWOT Matrix

SWOT Analysis	POSITIVE/HELPFUL  To achieve goals	NEGATIVE/HARMFUL Risk to achieve goals	
Internal Origin	Strengths	Weaknesses	
Facts/factors of an organization	Factos, which are good, so they should be maintained and build further to use as leverage	Bad factors that need change, stop or remedy .	
External Origin	Opportunities	Threats	
Environmental facts/factors,	Goof-for-future factors,	Bad-for-future factors that	
in which, the organization operates	which should be prioritized, captured, and optimized	need to be neutralized	

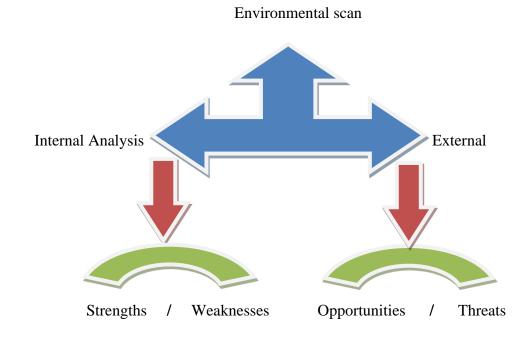
Source: SWOT matrix developed model (Farhangi, FaR&Danaei, 2012).

## 1.2.17. Applications of SWOT Analysis

A SWOT analysis applies to product evaluation, personal development, operations concourses, competitor evaluation, planning, problem-dissolve, decision making with a force domain analysis and brainstorm sessions. For many different situations, it is a very effective and powerful method, it is not only for business and marketing but it can also evaluate a company determining that company's viability in the market, a likely partnership, resource or pursuit, regulation, qualifications and knowledge, change and selection, the company's ranking in the market, relationships, project management and design planning, special career development, family

preparation, exchanging a supplier, an opportunity to obtain an acquisition, personal financial planning, outsourcing a service, an investment possibility a brand or commodity, a strategic opportunity, relationships, determination making, launch of a new product and entry in a new market. No matter who has envisaged the SWOT analysis or where it is being applied, the results or implications must be pursuant to the core purpose of its evaluation.

Though, lack of proper skills required for analysis and data collection can hinder the capacity to carry out a meaningful SWOT analysis, a common objective of such analysis is to present an impartial but real picture of the external environment and the company's internal strengths. Independently provable and empirically obtained information and data are crucial in the process as on the basis of which, factors such as external threats and opportunities, and the company's weaknesses and its internal strengths would be determined. Research and marketing services are provided by leading companies specializing in SWOT analysis. Managers, consultants and often stakeholders take the lead to formulate business strategy and carry out analysis identifying factors essential for growth. Easy perceptual data about external and internal factors affecting organization's success are evaluated and assessed by stakeholders with distinct corporate thought.



**Figure 4.** SWOT Analysis Framework

The systems for carrying out SWOT analysis are as effective as they are varied; those who need alternative means to get desired results can take advantage of SWOT analysis which can also point out flaws in the existing decision making process (Leigh, 2009).

### 1.2.18. Simple Rules for a Successful SWOT Analysis

While making a plan, your organization's weaknesses and strengths ought to be examined realistically and smartly; grey areas should be avoided. SWOT should be kept simple and short and pursuant to the organizational vision and mission. SWOT should be empowered with PESTLE and PRIMO-F and over analysis should be avoided. Over analysis and complexity should be avoided; furthermore, analysis should enable you to predict about growth or success of your organization in future relative to both the company's current position and its ranking among competitors.

If your competitors have the same strengths and opportunities as yours then there is no point in relying on them for competitive advantage.

# 1.2.19. Steps/Process to Do SWOT Analysis

Correct SWOT Analysis should lead your organization to a perfect strategy capable of producing a competitive advantage; probability of success will increase when the process that involves collection of options and analyses and future of the company enviosioned rightly as well as realistically.

Mission is the second stage or phase of this process which can be defined as the company's long-term objective. The second stage of SWOT Analysis process is the mission. A company's mission is its long-range purpose. Mission can be termed as combination of long-term key objectives and strategy to evade current potential threats. Goals are the third stage of this process, which are defined as specific objectives an organization wants to attain. Similarly, external and internal analysis is what comes in the next phase of this analysis. Significant threats and opportunities from the environment are classified as external factors. The specific environment where both opportunities and threats are coming from is likely to evolve in future; so the analysis will involve study about how that environment would evolve.

Still, the external analyses concentrate on the environmental opportunities/threats. An organization can encounter both opportunities and threats from the environment at the same time whereas organizational weaknesses and strengths are covered by internal analysis. It assists an organization can derive competitive advantage from its capacities and sources.

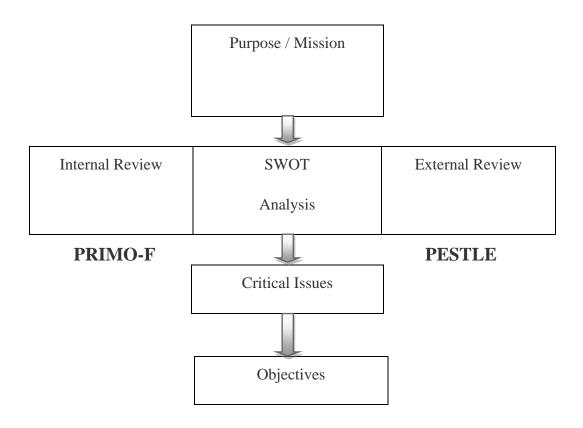


Figure 5. Business Planning Process

An organization's suitable strategy will be based on SWOT analysis. Strategic selections and decisions pursuant to goals, mission and vision can be made with the help of external and internal analysis. If organization is capable enough to understand the theory of competitive advantage, it would achieve it. The next stage is enforcement of strategy is the next stage of this process. Strategy will be of no use unless not implemented. To achieve competitive advantage in the environment of competition will be the final stage of the process; organization's practicies and policies must be in accordance with the overall long-term strategy (Barney and Hesterly, 2006: 6-11).

### 1.2.20. Who Needs SWOT Analysis

SWOT analysis addresses the competitive advantages, sales prospects, product development, profitability and risk-aversion. When you are required to develop contingency plans to tackle unforeseen issues and problems, develop your product and make marketing plan, get insight of sales prospects and to gain competitive advantage, need for this analysis arises. Moreover, it is also a method that identifies where you are vulnerable and strong, where you should attack and defend, the result is the plan of action, which is the result of the process. It can be performed on a company, a product, or a service or an individual. Clear picture showing needed plan of action, and the factors that can ensure prosperity and affect survival of the company will appear if the analysis is done properly. To find strengths of the company and take full advantage of the assets and their further improvement is aim of the process. Competitive disadvantages or advantages are determined by certain factors contributing to the company's weaknesses which should be removed or avoided. Weaknesses can lead to competitive disadvantage; one can neutralize weaknesses and reduce their negative effects even if it is not possible to overcome them completely (Muurinen, 2018).

The SWOT frame enjoys excellent reputation among both practitioners and researchers and has gained significance in strategic management in recent decades. The process of analysis of a company's strengths and weaknesses is called organizational analysis; whereas, assessment of threats and opportunities is called environmental analysis.

SWOT is a business control tool to understand weaknesses and strengths as well as external threats and opportunities in the environment. Your company's progress, negative or positive, will depend on external and internal factors that are analyzed in this process. Realistic business goals can be obtained and potential risk factors can be addressed through the knowledge coming from the analysis.

Your company's decision making is directly supported by methodical approach of assessment of internal and external environments. The SWOT is convenient with specific internal and external factors that provide the shape of a strategic matrix, which makes sense. The organization can manage the internal factors, such as marketing, finance, operations, and other fields; however, political and economic dynamics,

arrival of new technologies and evolving competition are external factors which are not in company's control (Weihrich, 1982).

The SWOT analysis became popular in 50s and 60s as a situation analysis instrument that is the most important source. Some classic examples are available that testify SWOT matrix as a very important instrument for analysis of a given environment and situation and even in the 1960s, SWOT analysis evolved into SWOT matrix. SWOT has been referred to as strategic planning in most of the sources. Resource-based planning and competency-based planning that are relatively newer concepts have made SWOT matrix appear outdated. Together with recent methods, SWOT becomes even more flexible framework. Thousands of research papers have utilized SWOT besides other instruments in recent years (Dyson, 2004).

## 1.2.21. Using SWOT With an Objective

It runs a risk of being an exercise if defined clear objective or end is missing. A SWOT analysis can serve as strategic planning model. If a clear objective has been identified, it helps in the pursuit of the strategic objective provided the objective is clearly defined. In SWOT analysis, strengths are described as attributes that are helpful or favorable to achieving the objectives, whereas, weaknesses as attributes unfavorable to the objectives. Similarly, threats and opportunities represent external unfavorable and favorable conditions, respectively. The resulting analysis will serve as guidance for the decision makers to determine the attainability of the objectives. If an objective isn't attainable, the organization must select a different objective and the process is repeated.

It can be summarized that weakness and strengths to look inward at a company's experience and resources, which are its strengths whereas, lack of experienced workers, weakness. For example, a weakness may be coming from the human resource department or recent events or activities Threats and opportunities, however, are based on external assessments. Economic issues and the trends in the market are few examples of a threat. Although threats and weaknesses are both crucial to make judgments using SWOT, but the weaknesses focus defects or faults of the organization. A business or organization must capitalize on opportunities when creating a strategic plan. They must also keep an eye on outsider threats and work to

protect the organization from such threats. These external factors can make or break an objective (Bruzda, 2012).

# 1.2.22. SWOT Analysis Characteristics in Companies

There are several major characteristics of SWOT analysis that enable the organization to highlight and capitalize on their strengths while working towards concurring weaknesses that directly impact the growth of a business. It should also help identifying issues and generate an agenda of priorities. Though it does have its drawbacks, the SWOT helps addressing a variety of situations and creating a strategic plan that can best suit an organization's needs and best interest. It has these characteristics

- There are several major benefits of SWOT analysis, for example, it is inexpensive that anyone can do and easy to implement.
- It provides structured strengths for corporate building.
- Exploiting opportunities leads to improve business if properly and appropriately applied.
- The main characteristics of a SWOT analysis are the initiation of conformance and conversion strategy.
- It helps to show past, present and expectations of the future, so it uses past, current, and future data.

### **CHAPTER TWO**

### SHELL SWOT ANALYSIS

#### 2.1. Introduction

More than hundred years ago, Shell started its brand with yellow and red colours and initiated operations at the international level.

At that time, seven giant organizations controlled oil and gas production and marketing: The British Petroleum Company (BP), Royal Dutch Shell, Standard Oil Company of California, Gulf Oil (now Chevron), Standard Oil Company of New Jersey (now ExxonMobil), Texaco (Hoyos, C. 2007), and Standard Oil Company of New York.

The newly discovered fields of oil and gas in Saudi Arabia, Kuwait, and Iran led to inception of Shell, a British multinational company. Today, shell is a major player among the six oil and gas giants and based on its revenues, it is the sixth largest company. Shell is a Fortune 500 company with revenues equal to 84% of the Netherlands' GDP. That number clearly shows the efficiency of Shell's operations (Daniel, 2013).

Some companies were engaged in relavant ventures but now they are part of the Shell's umbrella. It is doing various petroleum sector businesses and also dealing in energy-related and chemical businesses.

It has multidisciplinary operations: downstream, upstream, and corporate. The upstream category deals with natural gas and crude oil fields, often in tandem with national and international organizations. Its downstream business deals with transformation of crude oil into ready-to-use and refined petroleum products, which are transported to global markets for use in industries and transport. Shell's corporate business performs support initiatives.

Shell has been controversial based on environmental and other risks specifically with the acquisition of properties. Similarly, it is taking risk by doing business in the developing world, which is a major risk; for example working in a country like Nigeria. Other threat factors may be expropriation and obsticles in terms

of contract with the government departments, unforeseen change in the demands of product, and fluctuation in the prices of natural gas and crude oil.

This research has been conducted to do SWOT analysis of Shell's business. Shell has vast setup and its management is engaged in production, exploration, development and sale of gas and oil in upstream, downstream, and midstream segments. Shell's operations are spanning over 80 countries, with over 90,000 employees working with the company, as many as 30 chemical plants and oil refineries, which are being operated under its umbrella as per report of 2016. It is conducted SWOT analysis to determine and describe Shell's external and internal environments along with insight into its past performance and predict its strategic direction in the future (Shell, 2016). It is leading the market with 25,000 US gas locations that is also company's unparalelled extensive network. LPG, diesel fuel, and gasoline are available at all Shell stations. Saudi Aramco Company, a Saudi Arabian government-owned oil company and Shell Oil Corporation have been equal partners. They own and operate three oil refineries loacated on the US Gulf Coast (Shammas, 2000).

Shell has expertise in oil production, exploration, oils, vehicles, transport machinary, and replacement services. In Martinez, California, Shell Oil Refinery had the first strainer in the US supplying products on Texaco and Shell stations in the West and Midwest (Zhang, Klusener, and Liu, 2016).

### 2.2. History of Shell Oil Company

Around 1907, the Royal Dutch Shell Group was founded when Royal Dutch Petroleum Company (founder: Jonkheer John Hugo Loudon) and the British Shell Transport and Trading Company Ltd finally merged.

It was a move fueled and motivated by the need for survival and excel in the global competetive environment of oil exploration and production. Royal Dutch Petroleum initiated its operations in 1890 with an oil field located in Sumatra. For various reasons, the newly established enterprise worked as a double listed company, whereas the other rival firms secured their legal existence but still worked as a single disciplined entity for trade purposes. The terms and conditions of merger made Royal

Dutch Petroleum owner of 60 percent of shares whereas forty per cent went to the British (Aftalion, 2001).

Beneath Dutch law, Royal Dutch established two-tier management with a supervisory council and an administration board; whereas, Shell Transport went on operating under the British governance system with a unitary council.

As mentioned earlier, Royal Dutch Petroleum started operating in 1890 to develop an oil field in Sumatra. For different causes, the new company worked as a listed company, whereby the amalgamate firms managed their legal status but worked like a single-unit for trade. Amalgamations contributed 60% possessions of the new group (Royal Dutch Petroleum) and 40% to the British (Gerretson, F. C. 1953).

In 1897, the Shell transport company, which was originally a British company, was founded by Marcus Samuel. National interests didn't permit any complete merger/takeover of any of the mentioned organizations; thus manufacturing and production was given into the control of a Dutch company, the Nederlandsche Petroleum, at Hague. A new British company Anglo-Saxon Petroleum Company was formed in London, to direct and supervise product warehousing and transport (Falola, T., and Genova, A. 2005).

In the World War I, Shell Company was a primary supplier of fuel to the British Forces; similarly supply of flying fuel was also its responsibility. Shell tookover Mexican Eagle Petroleum Company in 1919, and established Shell-Mex Limited in 1921 that marketed products in the UK using Shell and Eagle brandnames. Shell Chemicals was established in 1929. Before 1930s, Shell became world leader with over 11% of the global crude oil supply and production; furthermore, it owned 10% tanker loads. Shell Mix House started operations in 1931 as the company's promotion center; it operated Shell's worldwide marketing activities. In 1932, Shell-Mex amalgamated its UK-based marketing operations with British Petroleum, a firm that signed partnership until the brands parted their ways in 1975 (Morris, 2012).

The Maxican assets of Shell were taken over by the local government in 1930. As a consequence of the Gernman annexation of the Netherlands in 1940, the Dutch companies' offices were shifted to Curacao. In 1945, Shell's Danish head office was attacked in Copenhagen by Royal Air Force during the Operation Carthage. Shell was the first owner and user of computers in the Netherlands in 1952. Ferranti Mark was

the name of the computer that was used at the Shell's laboratory located in the Netherlands. It started with a mining company Billiton back in 1970s, and now it operates as BHP Billiton (De Goey, 2002).

In 1997, Texaco and Shell entered joint ventures, Equilon enterprise setup was inclusive of their midwestern and western operations. Motiva Enterprises was the other one that joined the Eastern and Star Enterprise and Shell Oil's Gulf Coast operations that was shared venture between Saudi Aramco and Texaco. In 2001, Chevron joined hands with Texaco, when Shell purchased Texaco's shares in their mutual projects [8]. Shell Oil Company transformed the Texaco services in 2002, the transmission project, which were expected to complete in June 2004, was considered as the largest retail initiative in the history of America. Shell's down and midstreams remained confined to petroleum, chemical, and petrochemical products. Royal Dutch Shell, aftwerard, formulated a new segment of natural gas that was part of power businesses and termed it as Integrated Gas. Shells former natural gas and energy divisions are located in North America but it has presence across North America with headquarter in the outskirts of Houston (Martins, 2016).

Shell group of companies was going to form a new umbrella corporation to be called Royal Dutch Shell, with listing on both the Netherlands Stock Exchange, and the London Stock Exchange, with its head tax residency and office in Hague while its recorded office was operational in London. After some dismay, created by the idea that Shell had artifically increased its oil stock prices from 2004 to July 2005, the union stopped operations, and the primary partners delisted their shares. The London Stock Exchange put aside Shell Trading and Transport Company and on 18 November 2005, Royal Dutch Petroleum was also removed from the New York Stock Exchange in November 2005.

The shareholders of Royal Dutch purchased 40 percent shares to form the Shell group of companies, which had now the remaining 60 percent shares. Iraqi oil production services tabled a bid back in 2009 that resulted in an agreement, under which, Shell secured 45% and Petronas 30% production from the Majnoon field in Iraq because both the companies were allowed to extract almost 12.6 billion barrels from Iraq (Simon and Michael, 2009). Cosan and Shell established a fifty-fifty joint venture to expolre and exract from Raizen, as a part of Cosan's Brazilian energy production,

ethanol production, sugar projects and fuel production initiatives, while Royal Dutch Shell was retailing Brazilian flying apportionment and fuel businesses. Shell sold part of its properties, such as LPG unit in March 2010 to finance the \$28bn capital spending plan. Shell offer indicative bids to buyers for collecting \$2bn to 3bn through marketing. In June 2010, Royal Dutch Shell sold its business East Resource for \$4.7 billion. This included gas fields, which were sold. In 2013, Shell marketed its US shale gas assets. It also cancelled its US\$20 billion gas plan in the United States. At that time, Ben van Beurden became the new CEO of Shell. When it sold its Australian property in 2014 and the company was planning to sell its properties located in Italy, Australia, and Brazil for \$15billion. In 2015, Shell did a £47 billion (US\$70 billion) deal with the BG Group (Cook, M., 2018).

In 2016, Shell planned to make an ethane cracker plant near Pittsburgh, Pennsylvania, and gave official environmental cleanup proposition. In 2017, it also allowed marketing £2.46bn worth of North Sea property that was handed over to Chrysaor Oil Exploration Company. Moreover, Shell markets its oil sands property to the Canadian Natural Resources in the interchange of approximately 8.8% shares. In 2017, Shell planned to sell out its shares to Canadian Natural Resources completely exiting the oil sands business (Williams and Nia, 2017).

### 2.3. Industry Overview

On global level, the oil industry is a major revenue-generating sector of several economies. Since it has deep linkages with major economic pillars; this industry has strong multiplier effect on several economies' industrial growth. This productivity and efficiency indirectly and directly help accelerating efficiency and growth of other sectors.

In this way, the industry drives economic growth by substantial contribution to the GDP. Many forums have recognized it as a high-potential sector that increases employment and exports. It helps achieving critical objectives: manufacturing, industrial development and employment growth.

The oil industry is a very large industry that provides forty percent of U.S. energy needs. Nevertheless, this kind of energy is the one that has the biggest effect on the environment. In this thesis, we will analyses the internal and external environment

of Shell Royal Dutch Company and Arabian Gulf Oil Company Libyan with the help of SWOT analysis. This company was chosen because it is a global company are leading company that their actions may have a huge influence on the industry and the way it operates (Alotaibi, J., Bakader, T., Deninna, A., Herrera, J., and Malibari, M. 2015).

#### 2.4. Action Plan

Shell Oil Company is working for meeting today's demand for power in sustainable and Shell is making efforts to fulfil the ongoing energy needs sustainably through operational safety, and secure operations, increasing their impact on the environment and the societies. It is focused on reducing carbon emissions in power generation, reduced environmental impact and communities' shared benefits. It involves efforts to generate low-carbon energy (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

## 2.5. Stakeholder Engagement

While the Royal Dutch Shell plc has placed bountiful resources to positive motivations in an effort to give benefit to the stakeholders; so, they are following a program of corporate social responsibility (CSR) and a display of goodwill and satisfaction towards environment and the society, the critics of the negative impacts of these corporations most surely are deleterious not only towards each of these corporations, but more importantly on the whole oil industry (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

Royal Dutch Shell recruits/rewards employees and trains them to build business skills and supports them to take part in the social responsibility plans. It has a social license since an Alaskan court ordered to end the Arctic Drilling Units or face a series of escalating fines. On the other hand, Royal Dutch Shell won't renew membership to ALEC because it doesn't support work against weather change (Frumhoff, Heede, and Oreskes, 2015).

### 2.6. Internal Stakeholders

Suppliers and employees are primary internal stakeholders of Royal Dutch Shell. Profits and dividends are forms of reward that are given to shareholders when a company scores surplus or exceeds its targets in performance becuase its performance is largely attributed to its shareholders i.e. its employees and suppliers who are vital capital needed to run the business. The shareholders elect a council of Directors to represent them and gave guidance to the corporation is provided by team of directors that represent the shareholders. Strategy is a long-term program and it sets direction for the company; that strategy and reports on its implementation is the responsibility of the managers.

## 2.6.1. Employees

Employees are another main internal group of stakeholders. There are over 90,000 employees including managers with expertise in gas and oil exploration, marketing, finance and sales and many other disciplines working with Shell across the globe. Similarly people from other walks of life for example; site engineers, geologists, business analysts, oil platform workers and office administrators are associated with Shell as its shareholders. Shell's policies can affect its employees and vice versa. Shell, which enjoys upper hand in the field of oil exploration and distribution, owes its position to the quality of work of its employees whose dedication to excellence in safety and health make it happen. Otherwise, employees can suffer and the compamy's reputation can also get damaged due to the mistakes that are needed to be avoided. Employees of the company are well-respected by virtue of the policy guideline in which competitive terms of employment and safe working conditions are given high priority. Employees remain motivated when they get safe environment and caring attitude from the company's high-ups.

**Table 5.** Royal Dutch Shell's number of employees from 2012 to 2019

Year	2011	2012	2013	2014	2015	2016	3017	2018
employees	90000	87000	92000	94000	93000	91000	83000	81000

Source: statistics/2019/number-of-royal-dutch-shell-employees

In 2018, the number of employees in Shell, which is one of the super majors or top five gas and oil corporations and also found working in every related sub-field of gas and oil industry, was around 81,000. By and large, the company is one of the

biggest corporations and has presence in many countries worldwide. The region that outperforms other continents in terms of number of employees is Asia where the number of Shell's employees exceeded 28,000; Europe, North America and Africa are second, third and forth with number of employees being 24,000, 21,000 and 4,000 respectively. South America and Oceania have 2,000 employees each. In 2018, Shell ranked 10th largest corporation worldwide in terms of number of employees. Petro China was the largest gas and oil employer worldwide is Petro China with number of employees over 494,300. Gazprom Company of Russia employeed 469,000 people and another gas and oil giant France's Total Company had 98,300 employees (Statista/number-of-royal-dutch-shell-employees 2019).

## 2.6.2. Suppliers

The company's production chain would remain incomplete if suppliers are not taken into account as its leading stakeholders; they form bridge between petrol stations and wells. Every policy of the Shell Company has reflection of its core values that are of paramount importance to its reputation. These values are so important that Shell expects its partners and contractors to display and practice them and only then they would be on a par with Shell's own standards of performance and delivery.

#### 2.7. External Stakeholders

#### **2.7.1.** Customers

No business can survive without strong customer base. Commercial, technological and environmental processes develop services and products that would attract customers inclined to exchange their money for things that customers believe are worthwhile or has not impacted environment, safety, quality or price in negative way; these values would help the company earn the customers' trust and confidence. Availability of high quality fuel at affordable price is want customers desire as they believe that would be fair deal. Biofuel is an alternative of traditional fuel and it also guarantees cleaner, healthy and pollution-free environment; therefore, it is becoming increasingly popular among customers concerned about pollution. As more and more people are inclined toward traveling, there has been an increase in level of interest in production of biofuel lately, which are a global concern, can also be controlled by use

of biofuel. Customers' expectations are heeded well by Shell; therefore, it is receptive to change in customers' views and expectations.

#### 2.7.2. Local Communities

Social and economic development are also what Shell is focusing on while ensuring that negative impacts are eradicated in the process of gas and oil operations. The community's wellbeing is one of the company's foremost investment priorities. Safety of communities inhabiting the hinterland of oil refineries is a serious concern; therefore essential measures are being taken by the company so the apprehensions of the affected communities could be addressed. Spreading awareness among communities regarding what needs to be done in time of emergency and safety at plant is a part of the company's policy; formation of partnerships with local communities reflects the company's sincerity about wellbeing of people. From development of universities and schools to establishment of health facilities; the company's welfare program encompasses various projects and initiatives for example, Shell LiveWire; that young entrepreneurs can seek guidance from and also acquire resources and information essential for their business initiatives (Mawile, 2014).

#### 2.7.3. Interest Groups

Interest groups are opinion and decision makers and Shell's success is partially dependent on them. The company can get influenced by opinions and decisions made by influential individuals. Whether they are business leaders, media professionals, academics, the financial community, government and non-government organizations; all have direct and indirect interaction with and their influence on the company. Energy generation and supplies, employment opportunities and tax collection are primary tasks of government; similarly, regulation on CO2 emissions is area where the government's attentions is needed and Shell can play its role in all these issues.

International partners and other local and government oil and gas companies work together and in partnership with Shell whose operations and projects can get affected by work of hundreds of other companies and vice-versa. Establishment of new gas and oil refineries and supply pipelines is done in tandem with other government or private companies.

Magazines, television and newspapers can affect the company's reputation and media's role in popularity or decline of a competitive company like Shell cannot be underestimated. Both the company's clientele and its market reputation would get affected either favorably or unfavorably as a result of media coverage. Health, environment and human rights are issues that the non-government organizations focus on; non-government organizations can be found functional in diverse groups at international, national and local levels. Often campaigning and lobbying organizations hire services of non-government organizations indulging in various expertise, services and methods. Different NGOs work in tandem with the Shell Company, and renowned multinational brands including Shell are susceptible to influence from non-governmental organizations. In 40 countries, Shell works for energy conservation issues with scientific approach to the environment and is in touch and has partnerships with over 100 global organizations. (Marielle Mawile, 2014).

#### 2.7.4. Measurement

Conformity with IPIECA standards is essential and mandatory for all companies. While some companies have their own standards, Chevron and Shell follow API's standars. Social, economic and environmental performance of companies is assessed by Dow Jones Sustainability Index and Carbon Disclosure Project that are based on information supplied by Shell.

American Petroleum Institute (API), IPIECA to whom development of gas and oil industry guidelines are attributed and Global Reporting Initiative (GRI) version 3.1 and the International Association of Oil and Gas Producers (IOGP) are international entities governing rules and standards for economic, social and environmental sustainability (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

### 2.8. Strategy of Company

Business planners are increasingly giving importance to safety as a social responsibility becuase they also need to show compliance with the lately evolved international safety rules and regulations; another factor that has evolved Shell's objective is need for development of cleaner energy solutions and need for a shift to low carbon energy.

Partnerships with governments, stakeholders, investors, buyers and business allies are beneficial for Shell. The world's energy sector in the world around is changing substantially and in the process new opportunities are arising so there would be need for strategies to ensure the company is capitalizing on those new opportunities. In future, one can predict that customers would be inclined to utility of various other energy sources; for example, challenges like evolution in technology, climate change and the need for fulfillment of a topnotch living standard of growing world population would compel gas and oil companies to go for low-carbon alternative energy sources. Change in the world's structure entails attention to additional responsibilities that Shell, which is a leading energy sector international organization, is in position to fulfill by encouraging the situation and resorting to low-carbon and gas. Working partnerships and cohesiveness are formed by values of security and social duty. In February 2016, projects like water-oil in Brazil, condensed gaseous petrol (LNG) and profound gas creation were undertaken by Shell; so the BG Groups was secured as partner.

Shell is deflecting away from the policy of sudden returns and is more inclined towards free revenue per share; thus a transition from a complex structure to a simpler organizational mechanism is underway at present. Through putting sources into persuasive tasks, moving non-centre organizations and driving down expenditure, are reshaping Shell Oil Company into a more powerful, centred and powerful organizational structure in the making; the expenses are being reduced and non-centre organizations are being moved and similarly, sources are also being directed toward persuasive channels (Shell's strategy, 2019).

Change in Shell's outlook and leadership mentality toward strategic formulation is seen; which is motivated and driven by factors of greater external focus, alteration in business strategy and greater need for conservation of resources and environment; the company's strategic planning was budget-based, thoughtful, formalized and recurrent (Meyer, 1998).

Strategic change will continue to remain relevant in organization's performance; in the 20th century, organizational structure, hierarchy and organizational bureaucracy were part of the company; despite that the company strived to make a shift and get recognized as market leader instead of producer leader; the

market factors increasingly became important in the course of transition (Wheeler, Rechtman, Fabig, and Boele, 2001).

### 2.9. Shell Operations

Shell operations makes the operational spine of business processes that help present Shell's business solutions across the world and is concentrated on leadership excellent company performance that can Shell to operate in a world competitive and developing. business environment. Shell Operations is one of the competitive characteristics for Shell, allowing for optimisations toward the world portfolio. Strengths include the application and development of technology and innovation, project management skills and the financial that allow developing great and difficult projects, administration of integrated value chains and the selling of power products. The distinguishing Shell pecten, a brand in use since in 2000, and brands in which the global Shell appears improve raise the profile of trademark worldly operations.

## 2.10. Social and Environmental Importance

Royal Dutch Shell has allocated more than hundreds of millions of dollars to social and environmental plans. Nevertheless, the predominant focus of the company is obviously on environmental actions, which their marketing operations affect the most. Social Royal Dutch Shell expends millions on project development, road safety, and energy access. Some local plans covering development of local communities, biodiversity, disaster relief education, and health have been initiated. Royal Dutch Shell also purchases services and goods from local suppliers in order to support local manufacturers. Furthermore, Royal Dutch Shell is keen to assure that the suppliers must comply with the criteria for sustainability and assure satisfactory working conditions; human rights, labor practices, for example, avoidance of forced labor, prohibition of child labor, and compromising business integrity. Royal Dutch Shell worked to control the greenhouse gases through improving the operating power efficiency in its facilities. It additionally evaluates the availability of water and designs to decrease water usage (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

# 2.11. Third Party Endorsements and Recognition

Shell was recognized by different institutions either for their CSR or their

performance towards sustainability nationally and/or internationally and gained Energy Company of the Year, and Platts Global Energy Awards 2013. Moreover, it also achieved Commodity Excellence Award for Natural Gas (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

## 2.12. Value Chain Integration

Royal Dutch Shell integrates sustainability into its organization's activities; some try to standardize their operations in a way that would ensure compliance with international sustainability standards such as Shell, while other companies expanded their activities through government and community engagement in order to pursue continuous improvement. Sustainability works across Shell activities are primarily conducted on three levels. Business operations in a safe and profitable way, safety management, community involvement, reduction in the environmental impact, job creation, procurement of local goods and services, develop businesses, and royalty and tax payments.

It helps shaping better energy future, invests in low-carbon profiles, and focuses on carbon pricing. It has been continuously growing in the areas such as advanced biofuels, hydrogen and other alternative fuels (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

## 2.13. Pierce and Doha Strategic Initiatives

It is not possible for companies to assure sustainable improvement without the contribution by the government, the community and humanitarian organizations; therefore, each company involves other stakeholders in its approach to sustainability even though it doesn't have a huge impact on the environment. They are exemplifying goodwill through their objectives evolving around reducing the negative impact generated by their operations.

Shell has collaborated with the civil societies and the governments to explore clean energy solutions, and besides, informed debate is promoted for reducing CO2 emissions. In the past, it has engaged governments, such as the Chinese and Dutch governments, which helps designing policy frameworks to develop the energy systems.

The company is cooperating with planners and authorities in major cities to find new energy usage methodologies, systems, and technologies for assuring least emission levels (Alotaibi, Bakader, Deninna, Herrera, and Malibari, 2015).

## 2.14. CSR Leadership in the Industry

Development is about change for the best, and such change should include acceptable improvement and it should be adequate in terms of general welfare technologically, socially culturally, and economically. For making the change positive and progressive, it must include the full cooperation of beneficiaries, there must be justice and equity, and change must be possible, because true development is not just economic but also life-changing (Hugo, 2009).

The United Nations advertisement on the right to describe development as an inclusive social, economic, political and cultural process, that aims at the constant development of the well-being of all the population and individuals on the basis of active, meaningful and participative, and fair distribution of benefits resulting from the development (Assembly, U. G. 1986).

According to Rodney (2018), the meaning of development suggests that the human community has a multi-dimensional existence. At the scale of the individual, it implies increased capacity and skill, greater democracy, responsibility, material well-being, creativity and self-discipline. Some of these are virtually ethical denominations and they are difficult to estimate at the level of social organizations. Development means increasing capability to regulate both external and internal relations, the term is used to define economic progress, which symbolizes other social variables as well. There is no wonder that Shell shares the crude oil and gas production that in turn, contributes towards the economic and social development of countries like Nigeria (Rodney, 2018).

Shell engages in numerous activities as a part of its social responsibility to assess their effectiveness, which contributes to the corporate strategy of the company. Shell Nigeria has taken initiatives as a part of its CSR policy to control external factors, including community relations, human rights, and environmental protection, while internal factors, including codes of practice, principle rights of stakeholder and employees, product stewardship, and transparency (Idemudia, 2009). The entire group,

especially Shell Nigeria, actively participated in developing codes of conduct and practices, which govern workplaces with a vision to greater engagement in the societies (Royal Dutch Shell, 2012b; UN, 2011).

Shell has promoted health, education, agriculture, construction, transport, and commerce by giving direct benefits to the local communities (Olowu, 2011). Moreover, like other players in the oil and gas sector, Shell has gained leadership in CSF promoting programs in various ways, which has facilitated Shell's sophisticated approach called as its community development initiative that cares about political responsibility, social welfare, environmental responsibility, human rights, and other matters pertaining to CSR (UN, 2011). It results in higher stakeholder engagement that brings together several establishments such as humanitarian organizations, local and national governments, and community leaders to implement and identify projects, which assure higher transparency, local ownership, and accountability (Idemudia, 2009).

### 2.15. Top Global Oil and Gas Companies

Since oil and gas sector comprises the largest industries, it extracts, refinements, explores, transports and markets fuels. Some industries depend on oil and gas, other fuels, and byproducts, which are raw materials for chemical products. Such companies are top companies in the world. Chinese Sinopec and Royal Dutch Shell are respectively fourth and fifth largest organizations in the world, which have US\$294 and 272 billion revenues (2016).

**Table 6.** Ranking of Leading Global Gas and Oil Companies Based On Net Income in 2018 (in Billion U.S. Dollars)

Leading Global Gas And Oil Companies	Net Incomes (In Billion U.S. Dollars)
Royal Dutch Shell	\$17.34 billion
Exxon Mobil	\$14.41 billion
Gazprom, Russia	US\$11.94 billion
Sinopec, Chins	US\$8.34 billion
Chevron, U.S.	US\$8.13 billion
Total S.A., France	US\$8.12 billion
Lukoil, Russia	US\$7.38 billion
Reliance Industries Ltd, India	US\$5.35 billion
BP	US\$5.27 billion
Equinor, Norway	US\$4.81 billion

Resource: US Energy Information Association

Many top oil and gas marketing and exploration companies are multinationals, which operate globally, and they have generated millions of jobs so far. Moreover, they are criticized and they are facing cases of causing serious environmental pollution.

#### 2.16. Financial Performance

Rise in financial performance is considered to be correlated with sustainable development goals. Around \$9218 million was earned by Shell per annum; however, this was based on current cost of supplies (CCS), in which, special items were not included. Principles of accounting are not always universal; therefore, in the Netherlands and the United States, financial performance is not taken as equivalent to adjusted CCS earnings. In 2001, rise in prices of oil was recorded.

Although, the refining margins remained very low for a span of almost a decade; interestingly, in 2001, the average Brent crude price was \$24.45 but it rose to \$25.05 in the following years. The petrochemical trade went through a phase of underperformance and could not even reach the mid-cycle levels; however, return on average capital (ROACE) was 14% at par with peers, which meant that the group managed to score an operational cash flow of \$16.4 billion despite a rough patch. How well a company used its assets can be measured by ROACE.

Gazprom, which is a Russian company, has net income of \$12 billion per annum; and it was ranked third largest company by the Financial Times Equity, the journal that has produced statistical data along with 2018 ranking of top 10 gas and oil business giants; the key criterion used for ranking was the net income of these gas and oil giants (Statista, 2019; Global, 2019).

## 2.17. Royal Dutch / Shell Global SWOT Analysis

## 2.17.1. Strengths in the SWOT Analysis of Shell

## 2.17.1.1. Strong Market Position

Shell Pulp and Shell V-Energy are two of the Shell company's numerous international brands; the company operates in over 70 countries and is one of the biggest gas and oil commercial organizations of the world. Shell is a global leader with downstream and upstream operations and this gives the company upper hand when it comes to bargaining.

### 2.17.1.2. Vertical Integration

Whether it is crude oil production or natural gas exploration on commercial basis around the globe; the activities and operations are well integrated and this is also a secret to the company's success in the global competition. The company's policy is to maintain quality of its products while making them more cost effective; furthermore, Shell has made its presence felt by partaking in manufacturing of the finest quality products that are available in the market; still, the company's engagement with the upstream market and its involvement in production and exploration of gas and oil is also impressive.

## 2.17.1.3. Strong Exploration Capacity

The United States that once used to meet its oil needs by importing from the Gulf States is on its way to self-sufficiency in oil production. In recent years; the Shell company inclined to use of state-of-the-art exploration methods and techniques, including use of geophysical and airborne data, and ensured extensive use of technology, development of which cost the company heavy investment; however, exploration of gas and oil became more efficient as a result of this investment.

### 2.17.1.4. Strong Research and Development

Invention of many products is accredited to Shell; thus the company has acquired many patents and has always invested liberally in projects of research and development; moreover, research and development is key source of competitive advantage; and it has enabled the company to produce low-carbon oil and develop new exploration methods that would require less effort to produce oil.

### 2.17.1.5. Total Presence in All Aspects of Oil & Gas

Whether it is petrochemical products, natural gas, extraction of bitumen from mined oil sands, conversion of gas to liquids, liquefication of gas, logistics of gas and oil, marketing of fuels, and manufacturing of fuels; the company has extensively invested in all fields. The downstream and upstream segments and integrated network of supply of refined gasoline from crude form of oil together make the company's portfolio a comprehensive one (Marketing91.swot-analysis-of-royal-dutch-shell).

### 2.17.1.6. Business Strategy

Sustainable development remains the focus of the Shell Company even though the future strategic goals have evolved for it; the company has also entered in phase of low carbon energy production and supply while still being a market leader and dominant player in field of conventional gas and oil.

### 2.17.1.7. Ability to Change

The inclination toward change and steadfast commitment to new ventures' success has been the main characteristic of the company. Sale of shells, silk, machinery and rice was the company's original business; however, it shifted toward manufacturing and trade of kerosene oil and later; the company also began investing in the business of petrochemicals.

#### **2.17.1.8.** Core Values

Whether there are guidelines for employees to follow, ethical behavior or norms at the workplace; all are in compliance with the company's moral values; which is another key factor in the company's success. Shell's dominant position is accredited to the core values of its business; such as respect for people, integrity and honesty.

### 2.17.1.9. Strong Customer Relationships

Both business customers and motorists can benefit from what Shell company offers. Whether they are business customers or private ones; the company has regard for both and its foremost priority is to meet their expectations and needs; regular customers of Shell, including motorists, are offered a number of different incentives; for example, they can avail value-added services, loyalty cards and credit cards (marketing91 swot-analysis-of-royal-dutch-shell).

## 2.17.2. Weaknesses in the SWOT Analysis of Shell

The company can improve its business and reputation by overcoming its weaknesses; there would be room for improvement in some weaker business areas:

### 2.17.2.1. Violating Corruption Laws

The company's goodwill and reputation can suffer a setback due to violation of laws and financial loss, which is another outcome of such violations; for example, \$30 million penalty was imposed on Shell due to violation of corruption laws in the United States; the \$30 million fine resulted from the use of Panalpina Company by Shell under the Foreign Corrupt Practices Act (FCPA).

### **2.17.2.2. Growing Debt**

Rise in debt is another major issue Shell has been confronting with; the company's total debt was \$58379 million in 2015. Increase in debt affects cash flows, causes uncertainty about future and leaves business susceptible to risk.

Heavy cost is associated with exploration of gas and oil; alternative sources of supplies are imperative requirements of the company.

Burning gas can cause pollution and environmentalists have serious concerns over pollution caused by using natural gas at oil sites; so Shell needs to address this aspect of its operations.

The company's staff and engineers in war-torn countries; such as, Nigeria are vulnerable to attacks by terrorists; lack of security in a country can force Shell to recede from there and moving its operations and resources elsewhere; however, its production targets could suffer setback leaving its clients affected as well.

The company is supposed to make a shift towards alternative energy sources to protect natural environment but its possible investment in a wind power project has called its commitment to production and brought the use of low-carbon fuel into question.

### 2.17.2.3. Sustainability Challenges

Use of advanced technology can safeguard alternative and existing resources of large gas and oil companies; an estimate up to 30% of the energy resources could be saved by the companies for consumption in the decades to come. There is a need for Shell and other gas and oil companies to come up with solutions ensuring sustainable development. The company's strategy is to meet customers' needs without compromising the natural resources.

### 2.17.2.4. Slashing of Resources

Loss of reserves is another big issue the company is facing; it had to cut down its resources by 3.9 billion barrels of oil due to security problems in Nigeria; the company encountered this problem in Norway as well; around 150 million barrels of oil reserves in Ormen Lange area were lost.

#### **2.17.2.5.** Ethical Issues

Shell's customers have often leveled allegations of unfair price against the company. The price issue is an ethical one. Spillage and waste of oil is another big unethical matter; however, the company is reluctant to accept responsibility for that (Marketing91 SWOT analysis of Royal Dutch Shell).

### 2.17.3. Opportunities in the SWOT Analysis of Shell

### 2.17.3.1. Innovation and Technology

Innovation has a fundamental importance in the company's strategy and has strong relevance to the company's growth as a market leader in decades to come. Low-carbon energy solutions and advanced technologies have enabled Shell to be more innovative. Success and growth of the company's operations depend on environment, safety and communities. The social and economic development of local communities and areas is also Shell's main concern; the company, in tandem with the governments, strives to improve communities and ensures development; one way of doing this is to

generate more employment opportunities, payment of royalties and taxes and engagement with local suppliers. To meet the future demands, the company was in need for innovative strategy; therefore, Shell has embarked on Prelude Floating LNG (FLNG) project.

Gas fields in other countries are difficult to develop and access to those fields is an issue in itself but Prelude Floating Liquefied Natural Gas (PFLNG) project would enable Shell to do this and this project would also contribute to fulfillment of future demands.

### 2.17.3.2. Increasing Global Energy Demand

In 2040, energy consumption will increase by 40%, as mentioned by the US Energy Information Administration (EIA) in its report. Alternative energy resources would be sought in future. Since Shell is a market leader and has immense resources, its position to meet future demands and come up with alternative energy resources; such as Liquefied Natural Gas (LNG), is better than other gas and oil companies. The company is enjoying upper hand in the competition of LNG market and through joint ventures; such as that of Shell and Gazprom, it can enter different economies of the world.

Gazprom has 51% partnership with Shell in the Sakhalin Energy project; Shell's partnership is 27.5%; the other two partners are Mitsubishi Corporation and Mitsui & Co with 10% and 12.5% shares, respectively. Deep water shelf abroad and Arctic shelf of Russia was to be searched for exploration of gaseous hydrocarbons, for which, a memorandum was signed between Shell and Gazprom. The deal would result in substantial market share taken by Shell. Other firms were reluctant to operate in Ukraine due to security issues but Gazprom and Shell are looking forward to form a valuable partnership and making Sakhalin 11 projects happen.

#### 2.17.3.3. Strategic Merger of the BG Group

In 2016, BG Group merged with Shell and the latter's position in Australia and Brazil got better. Merger created a competitive advantage for Shell since both Australia and Brazil are rich in gas and oil.

### 2.17.3.4. Planned Expansions

Energy needs of developing and advanced countries would continue to grow in future and here Shell has an opportunity to expand its network around the globe and gain strategic advantage by fulfilling needs of developing countries; ingress into China's markets and merger with Chinese and other foreign companies is part of that strategy.

Planet Earth has numerous gas and oil reserves that remain undiscovered to date so discovery of new reserves is in the offing. The company has also started working in war-torn areas; such as Iraq, though previously, it was difficult for the company to work in those countries.

Shell is improving its relations with environmentalists by being welcoming constructive criticism it confronts due to activities unacceptable to the environmental groups. Fossil fuels are of great importance for developing countries. New markets trading in alternative fuels and products are likely to open up in future.

### 2.17.3.5. Alternative Energy

In future, the need for alternative energy and fuels is likely to rise; the company is all set to embark on the journey of alternative options and basic steps are being taken. Whether it is smart cities, sustainable transportation systems or green fuels, the company has invested in all project types.

## 2.17.4. Threats in the SWOT Analysis of Shell

#### 2.17.4.1. Climate Change Concerns

Carbon dioxide emissions are a serious concern for Shell; so the company's priority is to curtail these emissions while being able to meet the future energy demands. Regulatory entities can make Shell accountable for pollution or carbon dioxide emissions if the company did not control them on time.

## 2.17.4.2. Susceptible to Political Volatility

Over the past century, gas and oil were the most talked about issues in the discussions among advanced countries. Growing demand for energy and production is a main factor that influenced countries' interests and their relations. Political development can affect Shell because it has operations in dozens of countries.

### 2.17.4.3. High Competition

Exxon Mobil overrides Shell in its production capacity; today, due to its network worldwide, Exxon Mobil, is a main competitor of Shell in the global gas and oil industry (Anon, 2013). Other gas and oil companies adopt different strategies; therefore there is intense competition in this industry (Moffitt, 2011).

#### 2.17.4.4. Shell Faces Threat of Alternative Fuels

Natural gas and chemicals can be replaced in future. Shell can improve its products and services under guidance from SWOT analysis. Local communities' participation would be of great help for Shell in this regard; use of technology would also help the company a lot in the long run. Environment needs to be safeguarded during the course of development or shift to alternative energy options.

### 2.17.4.5. Fluctuating Price of Crude Oil

Gas and oil exploration is becoming more costly with time. Crude oil's price declined in the United States as a result of Shale gas production. In a very short span of time, Shell made substantial progress in Shale production in the United States. The price of crude oil is getting affected worldwide due to unpredictable situation. Amount of \$1 billion was recently approved for the US Shale program by the Shell Company.

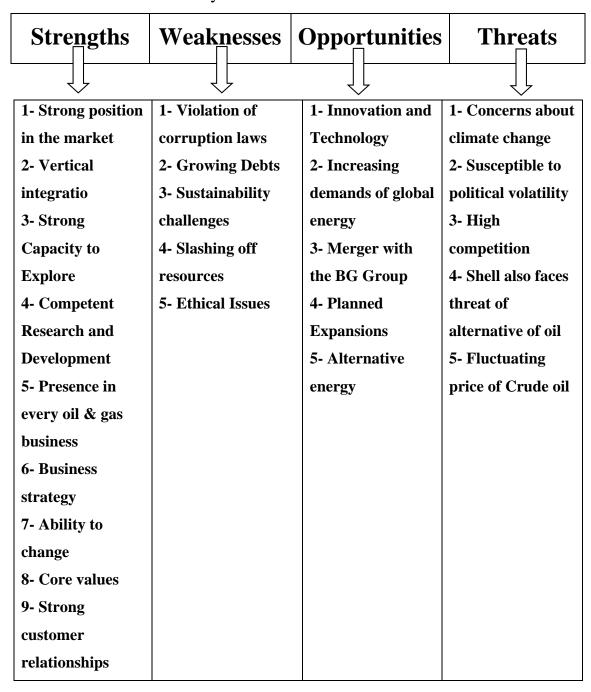


Figure 6. Shell Global SWOT Analysis

 Table 7. Shell Global SWOT Analysis

Strengths	Weaknesses
1- Strong position in the market	1- Violation of corruption laws
2- Vertical integration	2- Growing Debts
3- Strong Capacity to Explore Fuel	3- Sustainability challenges
Reserves	4- Slashing off resources
4- Competent Research and	5- Ethical Issues
Development	
5- Presence in every oil & gas	
business	
6- Business strategy	
7- Ability to change	
8- Core values	
9- Strong customer relationships	
Opportunities	Threats
1- Innovation and Technology	1- Concerns about climate change
2- Increasing demands of global	2- Susceptible to political volatility
energy	3- High competition
3- Merger with the BG Group	4- Shell Faces Threat of Alternative Fuels
4- Planned Expansions	5- Fluctuating price of Crude oil
5- Alternative energy	

### **CHAPTER THREE**

### ARABIAN GULF OIL COMPANY

### 3.1. Introduction

Libya earns more from the gas and oil sector than from any of its other industries; thus the gas and oil sector is major contributor to growth of the Libyan economy. Similarly, the companies involved in the gas and oil business also take care of health and education facilities of the Libyan people.

The gas and oil sector employees were trained by Libya as it was the country's responsibility. In 2012, findings of a survey by British Petroleum (BP) revealed presence of 40.1 billion barrels in Libya (RT, 2013).

Libya's economic development can be accredited to National Oil Corporation (NOC) that has arranged petroleum specific vocational training institutes and arranged special education programs, which proved to be extremely beneficial for those associated with the gas and oil industry. The Libyan government's job was made easier by these training programs as they resulted in decrease of unemployment.

## 3.2. History of Libya

The total area of Libya, which is a North African country, is around 1.8 million square kilometers; the country has Tunisia and Algeria in the west; Egypt in the east; Mediterranean Sea in the north and Chad and Niger in the south. It is the 17th largest country in the world and forth in its own continent (Škrjanc, D. 2013).

The largest city is Tripoli which is located in the country's western part; furthermore, it is a capital city and inhabited by over 3 million people. Libya's total population is over 6 million. The other city is Benghazi that is home to 1.5 million people.

Libya owes establishment of its commercial centers and states in eastern part of the country to Phoenicians and ancient Greeks respectively. The country evolved into early center of Christianity during the era of Roman Empire and before that Persians, Carthaginians, Greeks and Egyptians enjoyed reign over Libya from time to time. Islam arrived in Libya in the seventh century; and that brought an end to occupation of Libya by Roman Empire and other influential nations of the region. Beginning of the Ottoman rule in Libya in 1551 marked the end of era of Knights of St. John and Spanish Empire. In th years of the Second World War, Libya was a war zone in the North African campaign; between 1911 and 1947, the country also remained Italy's colony and that period of colonialism was led by departure of the Ottoman Empire.

The Italian people withdrew from Libya after World War II. The country's original and primitive inhabitants were known as Libue; since the country is located at the Mediterranean seashore and edge of North Africa; it has footprints of different Mediterranean civilizations. Libya is located in east of River Nile. In 1934, original name for Northwest Africa, which used to be Libue, was revived by Italians; Libue's history dates back to ancient Greek civilization (Libúē).

In 1903, Italian geographer Federico Minutilli revived the use of term Libya. Libya's coastal region was ruled by the Ottoman Empire from 1551 to 1911; that led to Ottoman Tripolitania and Eyalet of Tripolitania and there specific terms that were evolved and used by people living under the Ottoman Empire (Deeb, 2005).

# 3.3. The Geography of Libya

Total area of Libya is 1.7 million square kilometers or 679,362 square miles; it is 17th largest country in the world being equal to Alaska yet smaller than Indonesia. The country has Tunisia and Algeria in the west; Egypt in the east; Mediterranean Sea in the north and Chad and Niger in the south (Bahgat, 2012).

The Libyan coast is higher than any African country overlooking the Mediterranean Sea with 1,770 kilometers (1,100 miles) length. A part of Mediterranean is in Northern Libya, also called the Libyan Sea. Its climate is predominantly dry in most of the country and the landscape is between desert and semi-desert. The northern regions that have a temperate climate, or the Mediterranean climate, are excluded (Keshlaf, 2014).

Mineral resources like Gypsum, natural gas, and oil are the main income sources of the country. Libyan oil reserves are almost 41.5 billion barrels, which make it a top African country. Only oil provides 30% of GDP, 94% Libyan foreign exchange and 60% government revenues. Every day, Libya produces 1.5 million barrels, and

now it is planning to increase the production to about 3 million barrels/day (Menyah and Wolde-Rufael, 2010).

Natural resources, Natural gas, Gypsum. Oil and gas is the main source of income in the country. Oil reserves in Libya account for 41.5 billion barrels, making it the top African country. Oil accounts for 94% of Libya's foreign exchange revenues, 60% of government revenues and 30% of GDP. Libya produces 1.5 million barrels per day of oil and plans to increase Production to 3 million barrels per day in the future. Oil production: 1.5 million barrels / day, from a proven reserve of 41.5 billion barrels (Menyah, K., & Wolde-Rufael, Y. 2010).

The gas production rate is 399 billion cubic feet from a proven reserve of 52.7 trillion cubic feet. Libya's revenues are \$36.34 billion, public spending is \$24 billion, public debt is 8% of the total national income, exports are \$38.5 billion, and imports are \$10.41 billion. Currently, the major Libyan industries are iron, cement, steel, fertilizers, building materials, potatoes, olives, vegetables, fruits and meat. In Libya, subsidized prices of basic food commodities are charged. Fuel and electricity prices are also subsidized and education and health services are provided free of charge (Supersberger and Führer 2011).

#### 3.4. Libya's Tourism Characteristics

Libya has one of the most Roman archaeological sites outside the Italian peninsula along its coast. It has one of the longest coasts of 1935km along the Mediterranean. Its desert is one of the largest, which attracts tourists who are fond of safaris such as the high-saline Lake Awn in the South-West, there are areas that are considered natural habitats in the Eastern Libya, such as the region of Jabal al-Akhdar. They have a Greco-Roman history in several locations such as Libda, Sabratha, Qurna, Tolmitha, Apollonia, Yusprides, Tukra and the Palace of Libya. They have the ability to attract tourists because Libya is classified as a tourist destination again, the tourism sector's ability to attract investments create a balance in the general state budget, which currently relies entirely on oil and gas.

#### 3.5. Economy of Libya

Oil and gas is the largest industrial sector of Libyan economy and its contribution to exports is 97%; moreover, the revenues from the gas and oil sector are

also equivalent to half of the country's total GDP. The country is extremely rich in oil reserves and has outstanding record among other African countries in export of sweet and light crude oil to global market. Libya's oil production was equivalent to 54% of its GDP in 2010; it was the time when rate per barrel was \$80. Gypsum and natural gas are two other minerals of Libya. The country's GDP growth suffered decline of around 60% in 2011; however, in 2012 and 2013, it was 122% and 16.7%, respectively (Pargeter, 2016).

According to a World Bank report, seven African countries, including Libya, are defined as upper middle income economies. Libya enjoys one of the highest per capita incomes among African countries due to less population and high oil production. The country's performance with regard to development of facilities in education, housing and social security sectors is impressive (Freedman, 2013).

In 2003, over 100 state-owned enterprises from real estate, oil refining and tourism sectors were privatized by the government; the number of foreign owned companies was 29. Exxon Mobil and Shell restored their operations in Libya and the country's oil production restored back to where it was before the 2011 conflict when 1.6 million barrels of oil was produced in a day; and by and large, recovery of the economy was achieved. Wintershall, Total, Respol, Occidental and Eni, which are major oil and gas companies, returned to Libya and their return resulted in oil production rising to the level of 1.4 million barrels per day. One company vowed to raise production to 900,000 barrels per day in the coming year. The oil production used to be 1.6 million barrels per day but it was 900,000 barrels per day after the decline caused by war (Mitkov, 2015).

## 3.6. Country Analysis of Oil in Libya

Oil was one of the cornerstones of the renaissance of the Libyan state. Its discovery and extraction in commercial quantities helped realizing the socio-economic and urban renaissance witnessed by the state. In a few years, the Libyan State has occupied a prominent position in oil and gas exploration and marketing and developed this diverse industry through exploration, drilling, production, refining, manufacturing petrochemicals and exporting petrochemicals to the outside world to explore, produce and manufacture hydrocarbons. In this regard, the State of Libya has not overlooked

the major axis of the oil industry, which is to preserve the Libyan environment and to work out plans and programs that achieve sustainable development.

Libya is one of the Organizations of the Petroleum Exporting Countries (OPEC) members that have largest proven crude oil deposits in Africa and fifth-largest natural gas reserves

It joined OPEC in 1962, after which, it started exporting oil. Because of its large crude oil and gas reserves, it has been an important economic contributor because of its supplies such as low sulfur and light crude oil that was mostly exported to Europe.

On 12 November, 1970, the National Oil Corporation (NOC) started its operations, which replaced the General Libyan Petroleum Corporation to gain the total responsibility of the oil business.

Even now, NOC is continuing production and exploration of oil and gas through its affiliates, and it has formed partnerships with other organizations and signed investment agreements. They are other than local and foreign oil and gas marketing operations; therefore, NOC fully owns companies that develop, explore and produce fuels. It has signed some agreements with international companies, which resulted in production and exploration in accordance with the international rules.

NOC enjoys ownership of refineries, and fuel processing companies, which are operational in Ras Lanuf and Zawia refineries, urea, methanol, and ammonia plants, gas processing plant and Ras Lanuf petro-chemical complex. For establishing petrochemical units, ethylene plant was another stage, which has been built (OPEC, October 2015).

The company owns national service companies that perform drilling operations, maintain pipelines, maintain and build oil and gas storage, provide drilling equipment, and conduct technical efficiency studies. They also provide other services, such as equipment procurement assistance, catering, employment of international staff, and their training.

Since Libya is reconsidering its growth and investment strategies because recovery is obvious in the global markets. New trends in demand, supply, and investment continue to emerge because traditional and new players are chasing their projects with new estimates. After the rebalancing of the Libyan and global markets, companies are now planning to invest and expand to earn profits in the Libyan oil market in the medium-term. Threats and opportunities pertaining to new projects, emerging market growth, changes in supply-demand equations, and new demand and supply segments have also been observed (OPEC).

Since Libya is an OPEC member, it has huge oil reserves after Algeria and Nigeria, which, according to the estimates published in the Oil and Gas Journal, are 46.4 billion barrels. Almost 80% Libyan oil reserves are found in Sirte basin where most of the country's oil is produced.

According to estimates, Libya can increase its oil reserves, which provide incentives to additionally explore in remote and established oil producing areas. Recent foreign investment increases started to slow down amid uncertainties in the infrastructure constraints, OPEC quotas, and contract renegotiations (E.I.A., Country Analysis Libya, 2011).

## 3.7. The Oil Industry in Libya

This industry is a primary exporter of Libya. Moreover, it helps promoting the economic development of Libya. It contributes to the country by promoting health and post-modern educational services. Moreover, this industry provided training to the oil and gas development and exploration workers. According to BP oil company's survey (2012), Libya has 41 billion barrels of oil reserves (Press, R. T. I. 2013)...

NOC has been performing a productive role for the country's economic development. It has established its own technical institutes for providing special-quality education to the workers and employees of this oil and gas industry. Primarily they are training institutes catering to the needs of the oil industry. They also help Libya by reducing unemployment. The Umm Jawaa Oil Services is operational in London as a representative of the NOC. Libyan oil products are distributed and its lubricants are supplied to Switzerland, Italy, and Germany (Bulkasim, Mutalib, Abdulaziz, and Ibrahim, 2016).

It is told by ministry officials that Libya can improve its oil production by 1.5-1.7 million barrels a day. The government can explore further reservoirs to meet the safety and gas needs (Woodrow and Guest, 2014).

This industry includes a huge significance for Libya, accordingly, it's the first priority for the new government to produce high growth rate of oil and gas exploration (Oil & Gas Libya, 2013). The Libyan government is focusing on these issues:

- It is willing to update its oil laws and contracts.
- It wants to collect estimates of new opportunities.
- It would improve infrastructure with the objective to promote foreign investors.
- It would concentrate on human development.
- It is willing to adapt latest techniques to increase oil production.
- It would explore new markets and opportunities.

The government also wants to establish good relations with the European countries. For investors, safety has been a concern; so, the government will provide more security to the oil and gas workers. Utilizing all the available recourses is vital for this sector's future development. The Libyan government wants to improve its war-affected economy using this sector's all the recourses (Libyan Intelligence Group, 2013).

# 3.8. Libya Crude Oil Production

In Libya, crude oil production has reduced to 926bn barrels/annum 670bn barrels/day in 2018. In 1973, the average crude oil production was 1344.90 BBL/D/1K but it went to record low of 7 BBL/D/1K in 2011.

**Table 8.** Libya Crude Oil Production (1973/2018)

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
926	670.00	2370.00	7.00	1973/2018	BB/D/1K	Monthly

Source: trading economics.com/organization of the petroleum exporting countries

According to latest reports, Libyan crude oil has had historic highs and lows, which are obvious from short and long-run surveys, reports and news. In December of 2018, the last update on Libya crude oil production was published.

In Libya, crude oil was 916.57BBL/D/1K while when the quarter ended, it was 905.05 BBL/D/1K after 12 months. In 2020, it is expected to rise to 906.38BBL/D/1K based on OPEC econometric models.(OPEC,2019).

Economic performance is shaped by changing oil revenues. Given the average annual real growth rate of GDP, this rate remains weak and volatile, reflecting the inefficiency of economies, and the stagnation of oil production and revenues, As a result of what the targeted economy left behind, the public sector still occupies three quarters of employment, while the investment sector remains stagnant, as it does not exceed 2% of GDP (Libyan Intelligence Group, 2013).

**Table 9.** World crude oil production by country (2012/2018)

(1,000 b/d)

C/Y	2012	2013	2014	2015	2016	2017	2018	% change
								16/15
Africa	8,216.5	7,638.9	7,159.5	7,094.8	6,660.1	6.955	7.645	-6.1
Algeria	1,199.8	1,202.6	1,192.8	1,157.1	1,146.3	1.059	798.9	-0.9
Angola	1,704.0	1,701.2	1,653.7	1,767.1	1,721.6	1.645	1.420	-2.6
Congo	294.5	280.7	266.2	266.7	306.0	263.0	291.3	-14.8
Egypt	570.31	567.60	573.90	579.40	544.40	-	533.5	-6.0
Equatorial Guinea	238.80	223.10	236.90	245.30	236.30	170.1	319.1	-3.70
Gabon	241.60	226.40	225.90	224.70	220.20	202.1	225.3	-2.0
Libya	1,450.01	993.30	479.90	404.30	390.21	710.1	385.5	-3.5
Nigeria	1,954.1	1,753.7	1,807.0	1,748.2	1,427.3	1.622	1.979	-18.4
Sudan	119.3	232.3	285.6	278.6	264.5	ı	97.27	-5.1
Others	444.1	457.9	437.6	423.5	403.3	409.4	412.5	-4.8

Note: Totals may not add up due to independent rounding.

Source: OPEC Secretariat

## 3.9. Libya Balance of Trade

According to estimates, Libya had a 6712mn LYD trade surplus in 2017, while its Balance of Trade (BoT) was 10741.94mn LYD (1990-2017) that increased to 51089mn LYD in 2008 while the record low was -14120.70mn LYD in 2014.

Since it has significant oil exports, Libya generally has trade surplus. Food and technologies are the main imports while its major trading partner is Italy, and the second one is China and Germany is the third most important Libyan trade partner. Its important data is given below (OPEC, 2019):

**Table 10.** Libya's Balance of Trade (1990-2017)

Actual	Previous	High	Low	Dates	Unit	Frequency
6712.0	-2645.0	51089.0	-14120.7	1990-	LYD	Per
				2017	(Millions)	annum

Source: trading economics.com/organization of the petroleum exporting countries.

# 3.10. Libya Capital Flows

According to data, Libya had a 530mn LYD current account deficit in 2017. In Libya, capital flows were, on average,-6456.06mn LYD (2004-2017), which reached all-time high 514.90mn LYD in 2005 while record low was -23905mn LYD in 2008.

The data below shows different aspects of capital flows in Libya (2004-2017) (OPEC, 2019).

**Table 11.** Libya's Capital Flows (2004/2017)

Actual	Previous	High	Low	Dates	Unit	Frequency
-530.0	-3468.00	514.9	-23905	2004-	Million	Per
				2017	LYD	annum

Source: trading economics.com/organization of the petroleum exporting countries

## 3.11. Libyan Current Account to GDP

Libya witnessed 2.2% current account surplus of GDP in 2017. This ratio averaged 8.86% (1990-2017) that became all time high at 55.20% in 2006 while record low was -41.80% in 2015.

**Table 12.** Libya Current Account to GDP (1990/2017)

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
2.20	-37.80	55.20	-41.80	1990/2017	%	Yearly

Source: trading economics.com/organization of the petroleum exporting countries

The current account to GDP ratio helps indicating international competitiveness level. Normally, high current account surplus shows export-dependent economy with high savings but the country has weak domestic businesses/local trade. Moreover, current account deficit means excessive imports with low savings and higher consumption. The data given below shows different aspects of Libyan Current Account to GDP ratio and its relevant values (OPEC,2019).

## 3.12. Libyan Exports

In 2017, Libyan exports increased to LYD 19,885 million from LYD 9400 million (2016) with average exports LYD 24,150.48 million (1990-2017) with all-time high in 2008 (LYD 77027) while it was least in 1998 (LYD 2449 million).

**Table 13.** Libya Exports (1990/2017)

Real	Previous	High	Low	Years	Currency	Frequency
19885	9402	77027	2449	1990-	Million	Per
				2017	LYD	annum

Source: tradingeconomics.com/organization of the petroleum exporting countries

As mentioned earlier, Libya possesses magnanimous oil reserves in Africa; therefore, the sale of hydrocarbons is more than 95% exports, 70% GDP, and 90% government revenue. Its major export partners include Germany, Italy, France, and China. The statistics of Libyan exports are given in the table above (OPEC,2019).

# 3.13. Libyan Gold Reserves

The overall gold reserves are constant at 116.60 tons in 2018 with averaged 133.67 tons (2000-2018) with maximum 143.82 tons in 2000 and minimum 116.60 in 2018. Libyan Central Bank controls the gold reserves, which are given in Table 14 (OPEC, 2019).

**Table 14.** Libya Gold Reserves (2000/2018)

Real	Previous	High	Low	Years	Units	Frequency
116.6	116.6	143.8	116.6	2000- 2018	Tones	4-month

Source: trading economics.com/organization of the petroleum exporting countries

## 3.14. Libyan Imports

Libyan imports increased to LYD 13,173 million (2017) from LYD12,047 million (2016). Libyan imports were on average 13,412.11 million (1990-2017) that became maximum LYD 43242.90 million (2013) and minimum at LYD 2106 million (2000).

**Table 15.** Libya Imports (1990-2017)

Current	Previous	Maximum	Minimum	Years	Units	Frequency
13173	12047	43242.9	2106	1990-2017	LYD	Annual
					Million	

Source: trading economics.com/organization of the petroleum exporting countries

The main imports of Libya include foods, equipment, and consumer goods, which are imported from partner countries, such as China, Turkey, Tunisia, Germany and Italy. The details are provided in the table above (OPEC, 2019).

**Table 16.** Latest Value of Libyan Crude Oil Production LYD Million from 1990 until 2018

Libyan Trade	Last	Previous	Maximum	Minimum	Units
Balance of Trade	6712	6712	51089	-14120.7	Million LYD
Exports	19885	9402	77027	2449	Million LYD
Imports	13173	12047	43242.9	2106	Million LYD
Current Account	1337	-5734	45983	-26181.8	Million LYD
Current Account to GDP	2.21	-37.8	55.2	-41.8	Million LYD
Capital Flows	-530	-3468	514.9	-23905	Million LYD
Gold	116.6	116.6	143.81	116.6	Million LYD
Production of Crude Oil	926	670	2370	7	Million LYD
Terrorism	7.27	7.27	7.28	0	
Foreign Direct Investments	-153	-610.9	2680	-3358	Million LYD

Source: tradingeconomics.com/Central Bank of Libya.

# 3.15. About National Oil Corporation (NOC)

NOC was constituted in 1970 through passing a law. It is covering all activities to explore and market oil in Libya. NOC and its oil companies in various aspects of the industry range from the discovery of new fields to the production of fuel for cars, aircrafts, ships, agriculture and power plants. Moreover, the corporation provides basic petrochemical products for manufacturing many products necessary for our daily life.

The NOC is headquartered in Tripoli, which coordinates the strategies of its subsidiaries, supervises its activities, finances its operations and follows up the crude oil marketing, oil and gas refinement and transport. It also helps the Libyan Oil Ministry in its dealings with other OPEC members and contributes towards strengthening the activities of the marketing sector in the institution and its subsidiaries. This is based on their short and long-term strategies within the framework of preparing regional market analysis while establishing strong working relationships with the major oil companies, enhancing market share in these markets, and access to

new markets. The corporation has many activities that include all aspects of the hydrocarbon industry in the land and marine areas; so, it includes refining, exploration, marketing, production of petrochemicals and maritime transport. In addition, it has many aims but the most important aim is raising performance levels through integration because it's integrating its operations. Another aim is to upgrade its crude oil through a series of value-added operations from extracting, refining and transportation to selling to the final consumer, thereby achieving vertical bottom-up integration and production to outlets (noc.ly/index.php).

# 3.16. The Political Crisis In Libya

Libya relies on just one sector as a source of domestic output or national income. This phenomenon indicates that there is an imbalance in its exports, where one commodity is a primary commodity. Usually, a large proportion of the total volume of exports comes from oil.

In the Global Market, oil is considered as the main Libyan commodity, which accounts for 95% of the total exports. Since 2003, Libya has maintained a production rate of about 1.6mn barrels/day. It represents about 30% of GDP, 94% foreign revenues, and 60% government revenues. Libya has a 41.5 billion barrels reserve, and it was planned in 2011 to increase productivity by about 3 million barrels per day, and the per capita income, which was 4,400 dinars.

Libya has witnessed tough circumstances since the outbreak of the crisis, where oil revenues fluctuated and decreased to witness a fall of about 307 billion dinars in 2016. It fell to 770 billion dinars in 2011 and the inflation rate jumped from 9.5% to 24% during the same period. All these factors contributed to the deterioration. The economic situation and the cessation of most economic activities, especially manufacturing, agriculture, construction and tourism, and the deterioration of the education and health sector, as well as a sharp decline in total exports and the reduction in foreign reserves have led to alarming situation.

The impact on production of the oil sector, which has been stalled for months, has led to deterioration in living conditions and lack of liquidity in banks. Optimism for the economic recovery after the "revolution" is rapidly dissipating. At the end of 2012, protests and administrative disputes began to affect production. This resulted in

closure of some gas and oil plants and reduction in exports to below 200,000 barrels in April 2013 (noc.ly/index.php).

Since the closure of oil ports in the last quarter of 2013 with the reduction in the prices of crude oil in 2014 from 105.8 dollars per barrel in 2013 to 45 dollars a barrel in 2016, Libya decreased crude oil production from 1.5mn barrels/day to 400,000 barrels/day in 2016. The prices fell, which negatively reflected on the economy of Libya.

According to the estimates of the Libyan Central Bank, crude oil revenues decreased from \$53.3bn (2012) to \$4.8bn (2016), public revenues decreased from KD 70.1 billion in 2012 to KD 8.6 billion in 2016. Public spending reduced from LDY 62bn in 2012 to 28.8bn in 2016 and GDP at current prices reduced from 112.6bn dinars (2012) to 21.3bn dinars (2016). An unprecedented deficit in the general budget of about 20.2 billion dinars was noticed in 2016. An unprecedented deficit in the balance of payments since 2013 amounted to 9.7bn dinars (2016) while it was 16.4bn dinars (2015) and 27.4 billion dinars (2014). The devaluation of the Libyan dinar in the parallel market and the continued speculation on it in the light of vagueness of speculation about the situations in the country led to the prevailing "uncertainty" (Devarajan, Mottaghi, Do, Brockmeyer, Joubert, Bhatia, and Abdel-Jelil, 2016).

## 3.17. Subsidiaries of the Libyan National Oil Corporation (NOC)

- Sirte Oil Company
- Ras Lanuf Oil and Gas Processing Company.
- Arabian Gulf Oil Company.
- Brega Petroleum Marketing Company.
- Zawia Oil Refining Company.
- Jowfe Oil Technology Company.
- Waha Oil Company.
- Zueitina Oil Company.
- Mellita Oil & Gas Company.
- Mabruk Oil Operation Company.
- Akakus Oil Operation Company.
- Harouge Oil Operation Company.

• Nafusah Oil Operation Company.

# 3.17.1. Waha Oil Company

# 3.17.1.1. Profile of Waha Oil Company

Over 3200 employees are working with Waha Oil Company (WOC), which is the second largest oil producing company in Libya and subsidiary of National Oil Corporation (NOC) along with other oil companies such as Marathon 352, Hess and ConocoPhillips.

Table 17. Profile of Waha Oil Company (2018)

Type	Waha Oil Company (WOC)
Headquarters	Tripoli
Industry	petroleum industry
Founded	1986
International	Conoco Philips, Hess, Marathon
Partners	
Products	Fuel oil / LPG / Naphtha / Crude oil
% owned by NOC	59.1%
% owned by IOCs	Marathon (16.33%), ConocoPhillips
	(16.33%), Hess (8.16%)
Output	350 thousand barrels/day
Website	http://www.Wahaoil.com

Source: wiki.openoil.net/Waha\_Oil\_Operation\_(woc)

## 3.17.1.2. History of Waha Oil Company

WOC has been operating in Libya since 1986, whereas, the same company operated as Oasis Oil Company from 1956 to 1986. Oasis Oil Company was established in 1955.

#### 3.17.1.3. Activities of Waha Oil Company

The production capacity of Waha is around 350,000 barrels/day. In addition to work of its own oil fields, a number of other companies depend on WOC's production lines between Sidra terminal and Sirte Basin; thus WOC provides its lines to those companies.

# 3.17.2. Zuetina Oil Company (ZOC)

## 3.17.2.1. Snapshot of Zuetina Oil Company

At least 2474 employees are working with Zuetina Company; almost all of employees are local. OMV, NOC and Occidental oil companies are in partnership; it was this joint venture that led to establishment of Zuetina Oil Company.

**Table 18.** Snapshot of Zuetine Oil Company (2018)

Туре	Oil Company (ZOC)
Headquarter	Tripoli
Industry	petroleum industry
Founded	1986
Products	Fuel oil / LPG / Naphtha / Crude oil
% owned by NOC	88%
% owned by IOCs	12%
Output	60 thousand barrels per day (bpd)
Website	http://www.ZuetinaOil.com

Source: wiki.openoil.net/Zuetina\_Oil\_ Company \_(zoc)

## 3.17.2.2. History of Zuetine Oil Company

Zuetine Oil Company's creation happened in 1986 following action against occidental's assets under the Production Sharing Agreement (PSA) that OMV, NOC, Occidental and International Oil Companies (IOC) were signatories to it. PSA IV agreements were signed at the time when IOCs and American companies returned to Libya and assets of Occidental were restored and it again became international partner of NOC but under new agreement 88 percent of share in Zuetina's budget was owned by NOC.

#### 3.17.2.3. Activities of Zuetine Oil Company

Zuetine has its own international brand called Zuetina Blend and the brand has been known to the market since 1960s; it is exported to international market from its own terminal. Zuetina's production capacity is around 60,000.

### 3.17.3. Harouge Oil Company

#### 3.17.3.1. Snapshot of Harouge Oil Company

Harouge Oil Libya was previously a German company Gelsenberg AG and it entered joint venture with Mobil Oil in 1955 for development and exploration of oil and shared production rights with Mobil Oil; the agreement was signed to solve the investment issue. Veba Oil which was formed in 1955 was later renamed as Harouge Oil.

Petro Canada, which is a Canadian oil company formed a joint venture with NOC to establish Harouge Oil Operations (HOO); it was previously known as Veba Oil Operations.

In 2016, the number of employees working in HOO was over 2000. The company's main offices were located in Benghazi and Tripoli. Its camps are located in Ghani, En Naga, Jofra, Amal and Tibisti; the field camps are self-sufficient; in RasLanuf, the company has built its terminal.

#### 3.17.3.2. History of Harouge Oil Company

Sirte basin, which is located in central Libya, had eight destinations, from where, oil was to be exploited, explored and developed; for this purpose, Veba Oil Libya and NOC entered a joint venture and formed Veba Oil Operations in 1987. Petro Canada later took charge of exploration and development and also took over rights from Veba Oil Libya in these eight places. Further development took place in 2008, when Petro Canada and NOC entered six Production Sharing Agreements (PSAs) in eight concessions allowing HOO to develop oil fields with Petro Canada being responsible for exploration.

**Table 19.** Snapshot of Harouge Oil Company (2018)

Туре	Harouge Oil Operations
Headquarters	Tripoli and Benghazi
Industry	petroleum industry
Founded	1987
Partners	Petro Canada
Products	Fuel oil / LPG / Naphtha / Crude oil
NOC owned%	51%
IOC owned %	49%(Petro Canada)
Output	100,000 barrels per day (bpd)
Website	http://www. HarougeOil.com

Source: wiki.openoil.net/Harouge\_Oil\_ Company \_(hoc)

## 3.17.3.3. Activities of Harouge Oil Company

HOO was working in over 20 fields and five contract areas in 2009. Crude oil is exported from Ras Lanuf terminal to where it is brought through pipelines from various oil fields; tankers and tanks are used to export and store oil. Other operators have also hired HOO's shipping services.

# 3.17.4. Akakus Oil Company

# 3.17.4.1. Snapshot of Akakus Oil Company

Spain's Repol, National Oil Corporation (NOC), France's Total and Austria's OMV companies all are stakeholders of the company called Akakus; its previous name was Repsol Oil Operations (ROO). Its headquarters are located in Tripoli. Akakus later worked on development of its oil facilities in Ubari, which is an old city of Libya and in Murzuq Basin, which is in hinterland of Akakus Mountain range located in the Libyan Desert's south-western region.

#### 3.17.4.2. Activities of Akakus Oil Company

Akakus Oil Company worked on development of NC-186 and NC-115; their alternative name is El-Sharara Field concessions. Tank farm of Akakus Oil Operations is situated on coast of Libya and in the outskirts of Zawia city; the tank farm is facility for oil storage and export to international market; the 723 kilometers oil pipeline runs

through the Sahara Desert; crude oil is transferred from two concessions to the tank farms through these pipelines. Hamada NC-8 station's function is to ensure transfer of oil without any problem; this station is located midway of the 723 kilometer route.

**Table 20.** Snapshot of Akakus Oil Company(AOC) (2018)

Type	Akakus Oil Company(AOC)	
Headquarters	Tripoli	
Industry	petroleum industry	
Founded	1996	
International Partners	Repsol, OMV, Total	
Products	Fuel oil / LPG / Naphtha / Crude oil	
NOC-owned	88%	
IOC-owned	12%	
Output	340 thousand barrels per day	
Website	http://www.akakusoil.com	

Source: wiki.openoil.net/Akakus\_Oil\_Operation\_(AOO)

To manage the communication system over the pipelines' area, tank farm and export terminal; there was need for a network of fiber optics; all communication is carried out through fiber optics. NC-115 complex is a power production plant and it has key role in the operations of Akakus. Source of fuel of the turbines generators is gas and crude oil. Power distribution is done with the help of transmission distribution lines.

Akakus built a network of roads to connect various facilities with one another in the sandy and hard desert. Road infrastructure has made journey for engineers and supporting staff easier and safer. NOC's share in the NC-186 facility is 88 percent; whereas, Repsol's is 12 percent.

#### 3.17.5. Mabruk Oil Company

#### 3.17.5.1. Snapshot of Mabruk Oil Company

France's Total company and Libyan National Oil Corporation (NOC) entered joint venture and formed Mabruk Oil Company (MOC). The number of employees

working in MOC was 379; 59 were foreign nationals; whereas, the rest were nationals of Libya. The main office of the company is in Tripoli and it has three operational sites where staff is working. In 1968, Aquitaine Libya acquired license for exploration at Al-Jurf field. NOC owned 50 percent share under EPSA Agreement that was signed in 1997; the agreement was later approved by Libyan government with validity expiry due in 2017. Wintershall and Total were granted 12.5 and 37.5 percent shares, respectively. NOC renamed Mabruk joint venture as Mabruk Oil Operations in accordance with Libya's geography and history; Harouge and Akakus are other two examples of Libyan history and culture. In June 2009, the Libyan government changed the agreement governing the joint venture as revealed in the US State Department's cables; Statoil-Hydro and Total were given lower production share under the revised agreement. The two companies also paid \$500 million to the Libyan government as a signing bonus. Payment of \$300 million was to be made upon confirmation of feasibility of gas exploration and development at Al-Jurf field. Contracts for Al-Jurf and Mabruk fields will expire in 2032.

**Table 21.** Snapshot of Mabruk Oil Company(MOC) (2018)

Type	Mabruk Oil Company(MOC)	
Headquarters	Tripoli	
Industry	petroleum industry	
Founded	1997	
International Partners	Total	
Products	Fuel oil / LPG / Naphtha / Crude oil	
NOC-owned	n/a	
IOCs owned	n/a	
Output	45 thousand barrels per day (bpd)	
Website	http://www. mabrukoil.ly	

Source: wiki.openoil.net/Mabruk\_Oil\_Operations\_(MOO)

#### 3.17.5.2. Activities of Mabruk Oil Company

National Oil Corporation (NOC) of Libya owned 73 percent share at one of Mabruk's fields; Statoil Hydro and Total were also business partners with 6.75 and 20.25 percent shares respectively. Al-Jurf was offshore; whereas, Mabruk was onshore

field under the joint venture. In 2009, production capacities of Al-Jurf and Mabruk fields were 45,000 and 20,000 barrels per day respectively. NOC enjoyed 73 percent of share at Al-Jurf; whereas, German Wintershall and Total enjoyed 10 and 30 percent respectively.

# 3.17.6. Arabian Gulf Oil Company (AGOCO)

#### 3.17.6.1. Snapshot of Arabian Gulf Oil Company

National Oil Corporation (NOC) owns Arabian Gulf Oil Company (AGOC) and it is one of NOC's subsidiaries; along with being second largest government oil company. The number of its employees is 6,000, one third of whom worked in Benghazi.

**Table 22.** Snapshot of Arabian Gulf Company Oil (AGOCO) (2018)

Туре	Arabian Gulf Oil Company(AGOCO)
Headquarters	Benghazi
Industry	petroleum industry
Founded	1989
International Partners	BP, Chevron, Taxaco
Products	Fuel oil / LPG / Naphtha / Crude oil
NOC-owned	40%
IOCs' ownership	60%
Production	440 thousand barrels/day
Website	http://www.agoco.ly

Source: wiki.openoil.net/Arabian\_Gulf\_Oil\_Company\_(AGOCO)

## 3.17.6.2. History of Arabian Gulf Oil Company

Arabian Gulf Oil Company (AGOC) came into being in 1971 as a result of nationalization policy of then government. Assets of Texaco, BP and Chevron were nationalized which led to formation of Libyan Arabian Gulf Oil Company. The company's production capacity is around 400,000 barrels per day.

#### 3.17.6.3. Activities of Arabian Gulf Oil Company

AGOCO has the credit of producing 40 percent of national crude oil; the company's has fields in Libya's south-western region; the production capacity of these fields is 440,000 barrels per day. Naffor, Hammada, Sarir, Beda and Messla are major oil fields run by the company. Sarir and Tobruk are the places where refineries are located. Production of crude oil, pumping and transfer of oil from fields to the coastal terminal is the main business of AGOCO. The oil pipelines carry crude oil over hundreds of kilometers in desert and take it to the coastal city in Northern Libya.

# 3.17.7. Mellitah Oil and Gas Company (MOGC)

#### 3.17.7.1. Snapshot of Mellitah Oil and Gas Company

Mellitah is a joint venture, in which, the National Oil Corporation, Libya (NOC) and Eni (Italian oil company) have equal partnership (NOC 50% Eni 50%).

## 3.17.7.2. History of Mellitah Oil and Gas Company

Mellitah Company's Libyan Branch was set up after an agreement with the NOC and Eni (North Africa) in the year 2008.

#### 3.17.7.3. Activities of Mellitah Oil and Gas Company

As per Mellitah's website, the company was producing 323 thousand barrels of oil (boe) per day in 2006 that equals almost the highest production rate. Natural gas, condensates and crude oil were included in their products.

The platform called Sabratha is operated by the venture, situated offshore 110 km Tripoli's North West, and manufactures gas from one of the largest field Bahr Essalam in Libya, which is also a major source of supplying gas for the local consumption of gas in Libya and the Green stream pipeline.

Preceding the revolution in Libya (2011), records have suggested that Mellitah NOC and Eni were operating together for restarting production, both are having Sabratah's platform at the offshore location 110km away from the Libyan coast at the Mellitah complex having associated treatment and processing facilities.

**Table 23.** Snapshot of Mellitah Oil and Gas Company(MOC) (2018)

Type	Mellitah Oil and Gas(MOC)	
Headquarter	Tripoli	
Industry	petroleum industry	
Founded	2008	
International Partners	Eni	
Products	Fuel oil / LPG / Naphtha / Crude oil	
NOC ownership	50%	
IOCs ownership	50% Eni	
Production	323 thousand barrels per day (bpd)	
Website	mellitahog.ly	

Source: wiki.openoil.net/ Mellitah \_Oil\_Company\_( MOC)

# 3.17.8. Sirte Oil Company (SOC)

#### 3.17.8.1. Profile of Sirte Oil Company

The Oil Company Sirte(SOC) head office is located in Brega. SOC's operations include search, creation and manufacturing products. US State Department considered it to be one of the leading companies.

## 3.17.8.2. History of Sirte Oil Company

Esso Sirte companies handed over their 50% shares to the Sirte Company and Exxon's share in Esso Sirte (Exxon: ExxonMobil as well as Esso which was purchased and owned by the NOC and created the Sirte Oil Company. In 1986, the Grace Petroleum assets were taken over by SOC.

#### 3.17.8.3. Current Activities of Sirte Oil Company

The Sirte runs the Raguba field located at the center of Sirte Basin. The field is joined by pipeline to the main line between Libya's largest field known as Nasser field, and Marsa el-Brega. Apart from Nasser, two other gas fields – Attahadi and Assumud – and the Marsa el-Brega (LNG) plant are controlled by SOC. They are one of the largest fields Libya is currently having. Attahaddy produces 270 m cubic feet a day, in addition to 35,000 barrels per day.

**Table 24.** Profile of Sirte Oil Company (SOC) (2018)

Type	Sirte Oil Company (SOC)	
Headquarters	Brega	
Industry	petroleum industry	
Founded	1986	
International Partners	Esso and ExxonMobil	
Products	Fuel oil / LPG / Naphtha / Crude oil	
NOC-owned	50%	
IOCs' share	50% Esso and ExxonMobil	
Production	35,000 barrels per day (bpd)	
Employees	6652	
Website	Official Website	

Source: wiki.openoil.net/Sirte\_Oil\_Company

# 3.17.9. Raslanuf Oil and Gas Processing company (RASCO)

## 3.17.9.1. History of Raslanuf Oil and Gas Processing Company

RASCO which was established as per the statement No: 137 \ 1982 which was revised in accordance with statement No: 523\1986, a company with Libyan contribution, owned to (NOC) and obliged with the terms and rules of NOC basic regulations and were given in the General institution statement No. 1\1987.

The company was originated to set up all the processes of oil production and petrochemical, fibers and organic plastic, the place of industrial compound was selected for the purpose and stated by technical and economic studies which consider the following:

The location is next to areas of oil production located by the costal way which links it with the rest of Libyan cities. Moreover being surrounded by the sea makes water supplement easier along with export of petroleum products.

#### 3.17.9.2. Vision of the Raslanuf Oil and Gas Processing Company

Our vision is to develop an economical base and gain the highest possible economical incoming of oil and gas processes besides providing markets and products with best quality and competitive ability.

#### 3.17.9.3. Goals of the Raslanuf Oil and Gas Processing Company

**Table 25.** Ras Lanuf Oil and Gas Processing company (2018)

Type	Ras Lanuf Oil and Gas Processing company	
Industry	petroleum industry	
Founded	1983	
Headquarters	Ras Lanuf Libya	
Products	Fuel oil / LPG / Naphtha / Crude oil	
Production output	60.000 bpd	
Parent	National Oil Corporation	
Website	www.raslanuf.ly	

Source: wiki.openoil.net/ raslanuf \_Oil\_Company

#### 3.17.9.4. Products of the Raslanuf Oil and Gas Processing Company

The outstanding and reforming company Ra's Lanuf started operating in 1984 and manufactured approximately 220,000 bbl./d (35,000 m³/d), it is a solely a hydro skimming refinery, but their products meet market specific requirements due to their high standard crude oil. Rasco manufactures fuels, gas oil, LPG, naphtha and kerosene. Additionally, it produces petrochemicals, by making use of naphtha as a feed stock to an ethylene plant having a capacity of 1.2 million (tons per year). The key products include ethylene (330,000 tpy), propylene (170,000 tpy), Mix C4 (130,000 tpy) and P Gasoline 335,000 tpy (Hamududu, B., & Killingtveit, A. 2012).

## 3.17.10. Zawia Oil Refining Company

#### 3.17.10.1. Snapshot of Zawia Oil Refining Company

**Table 26.** Snapshot of Zawia Oil Refining Company (2018)

Туре	Zawia Oil Refining Company	
Industry	petroleum industry	
Founded	1976	
Headquarters	Libya	
Products	Kerosene / Naphtha / Crude oil / Gasoline	
Production	60 thousand bpd	
Website	www.arc.com.ly	

Source: wiki.openoil.net/Zawia\_Oil\_Company

The Zawi Company (ARC) is a subsidiary of the (NOC) integrated under Law of Libyan Commercial dated back to 1976. ARC manages the Zawia Refinery, situated in 1974 in Italy. Zawia is at present country's second leading and largest oil refinery after the RASCO. Main products include naphtha, gasoline, kerosene, light vacuum gas oil (VGO), fuel oil, base lubricating oils, and asphalt.

#### 3.17.10.2. Activities of Zawia Oil Refining Company

In 1974, Zawia started their production and the company's capacity doubled to 120 thousand bpd. The refinery is served with associated units for needs such as steam and power production through boilers, desalination units, air compressors and a tank farm to reserve crude oil, finished and semi-finished products. Only two a plants have the capacity to process nearly all the Libyan crude oil and can also produce naphtha, heavy gas oil kerosene light, and fuel oil. The desalter is part of the crude distillation unit, which separates and reduces salt content to desirable levels; both units use stabilizers to pull out lighter gases routed towards fuel gas system.

Two naphtha hydro-treats, separates and reduces sulfur compounds, nitrogen and other heavy metallic compounds and makes feedstock ready for catalytic reformers. Each of the unit along with a splitter splits the light and heavy naphtha. The two units make use of heavy naphtha as feedstock which then produces reformate, used as blending stock for manufacturing gasoline. The platforming unit also

makes LPG as a bye-product. Two kerosene hydrotreaters are employed to produce kerosene or Jet A-1. Each unit is having a capacity of 9,650 bpsd. NOC is believed to re-tender contract of engineering, procurement and construction for the purpose of reforming and upgrading the Zawia oil refinery.

# 3.18. Reasons to Choose Arabian Gulf Oil Company

AGOCO operates in the city called Benghazi. The profile of Benghazi is the main reason for choosing AGOCO. It is one of the subsidiaries of NOC with 400,000 barrels/day pre-crisis production capacity, which is the greatest in Libya.

Its fields include Sarir (200,000 bbl/d capacity) and Messla (100,000 bbl/d capacity), which are important ones. Its important infrastructure includes the Marsa al-Hariga (terminal and Ras Lanuf refinery. During the conflict, AGOCO showed sporadic performance when all other companies were shut down but AGOCO restored production in September 2011. In 2012, AGOCO produced almost 350,000bbl/d. It is have chosen the Libyan local oil companies to compare the best productive oil company in Libya and after comparing, these companies we found to be topnotch Libyan oil companies especially the AGOCO where this company was selected and compared to international companies, which is the subject of this research (Labbok, 2012).

**Table 27.** Libyan Oil Output by Oil Company (2000 - 2018)

Companies	Production (in 1000 barrels/day)	Percentages
AGOCO	436.0	24.7%
WOC	340.0	19.3%
Eni	286.0	16.2%
Repsol	256.0	14.5%
Sirt Oil	101.0	5.7%
Wintershall	112.1	6.3%
Veba Oil Operations	97.0	5.5%
Zueitina	60.1	3.4%
Others	73.1	4.1%
Total	1761.3	100%

Source: tradingeconomics.com/ libya/crude-oil-production

# 3.19. Arabian Gulf Oil Company (AGOCO)

AGOCO is a joint-stock company operating in the Libyan state. The company is a wholly owned and operated as a state-owned fuel production and exploration company. It's a major oil and gas company in the world.

It is performing refining, marketing, producing, and transporting petrochemicals. It operates integrated operation all over the world, and it is both effective and efficient because it maximized the value and shareholders' financial returns through optimally utilizing the Libyan hydrocarbons. It played a significant role to develop the national workforce, revitalize and support the local economy, maintain high technical and commercial expertise and manage matters pertaining to HSE. To perform its activities, it set it's the strategic direction to steer the oil sector towards continuous success.

# 3.19.1. History of the Gulf Arab Oil Company

It is known as AGOCO that became operational in 1971, after the nationalization of the BP, which was then Arabian Gulf Exploration Company, a completely owned national company Libya, and carries out all functions of an oil and gas company. Its main activities include exploration, crude oil production, natural gas supplies, and other petrochemicals.

This company started managing one oil field, the oil bed field, and a port for exporting crude oil, which is port of Hiraika oil in Tabruk, and now after the forty-four-years, it has several fields: Masala field, Majid field, Al Sahabi field and Umm Al-Faroud Field. Two refineries are operating in Tobruk which are mentioned earlier. Twenty thousand barrels of crude oil is produced per day with several oil derivatives, including aviation fuel, gasoline, and light fuel. Most of these data cover part of the local market consumption, the company also handles feeding some local refineries' crude oil from its need, where handles feed Ras Lanuf refinery by about two hundred thousand barrels a day in its full refining capacity and supplies the refinery about 10% of its needs. The company operates at the port of Harika to export crude oil produced from some of its fields, and pumps another part of its production for export from ports operated by other companies, including the port of Zuitina and Ras Lanuf port on the Libyan coast.

Geographically, the company is spread over a large area of Libya, where its sites and franchises are distributed in most areas of Libya and its headquarters are located in the city of Benghazi. The company is headed by a president, it has four members, eight executive departments, and specialized units. As mentioned earlier, it produces 400,000 barrels of crude oil every day besides producing more than 110 million cubic feet of gas every day. It has 6.000 employees belonging to various nationalities with different specialties and disciplines.

## 3.19.2. Vision of the Gulf Arab Oil Company

AGOCO wants to manage human and material resources efficiently and effectively to maintain the best rates of fuels, increase its reserves, and provide high quality oil products for supporting the national economy and to achieve prosperity.

Arabian Gulf Oil Company achieved a leading global position in the industry, maximizing strategic value of fuels, achieving maximum gas capacity, increasing reserves for a sustainable future, enhancing safety, health, security and environmental commitment for achieving excellence in performance.

# 3.19.3. Mission of the Gulf Arab Oil Company

AGOCO seeks to achieve high performance levels and maintain its growing position while surviving in competitive environments, taking into account the preservation of Libyan natural resources to efficiently extract oil and gas.

The Arab Gulf Oil Company is well aware that most of the operations have negative impact on people, environment and property. Thus, they work according to local and international laws to minimize all these negative effects. This commitment is reflected in all plans, decisions, and procedures of the company, users and its contractors. In support of its principles and objectives, the company has incorporated all its administrative attention to health and safety operations besides environmental management.

## 3.19.4. Goals of the Gulf Arab Oil Company

- Maintaining the public safety of individuals and equipment.
- Operating production equipment with maximum efficiency.

- Preserving the environment and minimizing the company's environmental impact.
- Work continuously to raise the efficiency of the employees.
- Maintaining high standards of quality, environment and occupational health.
- Building national capacities and deepening the technical knowledge base in all areas of oil operations.

# 3.19.5. Strategy of the Gulf Arab Oil Company

Energy surveys agree with AGOCO's vision that the oil industry will remain a major player in the global economy for decades to come. Gulf Arab Oil company appreciates the strategic role of fuels in economic development. It takes the global demand for energy seriously. In order to guarantee the revenues of the Libyan people, the most feasible way is operating up/downstream operations. Both in long and short term, AGOCO strives to maintain high standards of performance and keeps its sites healthy and growing among competitors. Goals, such as oil extraction and economic investment are not the only focus, they also have a great care package of health, safety and environmental management. Principles emphasize the reduction of negative environmental impacts and ensure work under reliable HSE conditions.

AGOCO plays its strategic role to fulfill global energy requirements and it is expected to do so in the coming decades. It ensures that they fuels are both extracted as well as delivered safely. The company is aware of the most efficient water extraction, chemical treatment, and other treatments, so it seeks to achieve a high degree of performance and maintains the maximum and makes efforts to grow in the long term, and then within the competitive environment, taking into account the preservation of Libyan natural resources while extracting oil and gas in a variety of feasible ways. The company has been included in all administrative and related tasks.

## 3.19.6. AGOCO's Departments

A number of public technical and service departments have contributed towards the achievements of the company. These departments include the General Directorate of Exploration and the General Administration of Production, which are

responsible for implementing the phases of oil upstream operations, namely exploration and production.

Support of technical departments has a significant role to play in the execution of the operations, namely the General Administration of Information Technology, the General Administration of Engineering and Projects, the General Administration of Logistics and Services, the General Administration of Finance and Human Resources, and the General Department of Legal Affairs. The Department of Planning and Follow-up, the Department of Internal Audit, the Department of Health, Safety and Environment, the Industrial Security Department, the Management Committee, Qanfouda, the Tripoli Office, the Field Development Committee, the Tender Committee and other supporting committees also support AGOCO.

It is worth mentioning that every department or committee in the Gulf Company is considered as a part of its backbone of this historic institution.

# 3.19.7. Output and playback of the Gulf Arab Oil Company

Production engineering processes have their own production engineers, and their specialty is to monitor the oil delivery to the surface and towards the refineries. The operations department carries out most of the technical activities in the field of oil industry. It operates the equipment and the treats the accompanying materials besides monitoring the condition of the equipment and the systems in the sites. Also, through the operations department, proposals for maintenance, refurbishment or operation of machinery and equipment are directly related to production processes such as large pumps, basic air compressors, gas turbines, counters, separators, salt removers, heat exchangers and main lines.

# 3.19.8. Operations of the Gulf Arab Oil Company

The operations management has a core task to monitor the production operations 24 hours for maintaining them in the fields. It generates reports pertaining to pumping, production, inventory, and test wells. It also follows up purchases and inter-departmental coordination to maintain and renew equipment and machinery. The General Production Directorate executes all the engineering operations like drilling, monitoring performances, and producing oil. Its departments are as follows:

Management of Reservoir Engineering, Production Engineering Department, and Drilling Engineering Department.

# 3.19.9. Production Engineering Department of the AGOCO

**Table 28.** Production Engineering Department of the Gulf Arab Oil company (February 2018)

Natural Flows	ESP	Sucker Rods	Gas Lifting
13	662	97	123

Source: trading economics.com/organization of the petroleum exporting countries

The Production Engineering Department is an oil production pillar of AGOCO, because it follows up the oil delivery to the surface and then to the refineries. A director and three supervisors oversee the production engineering functions. Moreover, other professionals at the headquarters, and Production Information Coordinators at the Department of Production Engineering oversee reservoir engineering, drilling engineering, and geology, while the technical cooperation, maintenance, and well-testing are other important functions. The methods of drilling wells in the fields of the company substantially vary (OPEC).

The work and activity of the department is focused on the following: Preparation of drilling completion programs and preparation of maintenance programs for wells that are suspended from production. They include several functions water insulation associated with oil - re-drilling, installation of a new packaging pipe, repair of leaks in the internal pipes of the well. Inside wells - test leakage packing pipe, recompletion, control of sand production, installation and changing lifting valves' gas, and handle hydraulic cracking. Moreover,, the preparation of programs for wells, those are unable to produce as a result of oil depletion or very high rise in the proportion of water or those with large leaks that cannot be repaired and converted to note wells.

Preparation of maintenance programs for submersible electric pumps and follow-up failures are done and then, preparation of designs and maintenance with specialized companies, and follow-down landing pumps for the production of water used in the injection field fountain and water wells, which are used by the departments of prevention of losses and operations. In addition, the following tasks are related to the maintenance of pumps (OPEC):

- Maintenance of submersible electric cable cables.
- Maintenance of rubber insulators in all fields of the company.
- Design and maintenance of mechanical pumps and reuse in fields of Hamada.
- Design and repair of gas valves in the fountain field. This is done to continue to obtain the production narratives by the units owned by the company and qualified engineers.
- Prepare daily and monthly production reports, production distribution reports, annual reports and the report of the oil movement.
- Participate in the preparation of the annual report of the crude oil inventory.
   Follow-up shipping operations in Hariga port.
- Assist the reservoir engineering department for preparing the company's oil
  and gas reserves report by conducting well tests and measuring the subsurface pressures of the wells and evaluate them.
- Prepare production report to find out the production capacity.
- Training and development of users in coordination with the Training and Development Department.
- Purchase production equipment for wells for productive or sub-development fields that will be put to production

# 3.19.10. Drilling works of the Gulf Arab Oil Company

The Department for Drilling is an important technical department of the company, and it carries out the work of drilling wells development in accordance with the approved plan, which is prepared by the Department of Reservoir Engineering, as well as drilling exploration wells according to the approved plans prepared by the Department of Geology.

The Department also digs water wells for the purpose of supplying water for drilling fluids and for other industrial purposes of various departments of the company. It also provides drilling rigs, materials, equipment and technical support services for drilling operations. Among the tasks of drilling engineers are the engineering designs of various drilling programs and the preparation of technical and periodic reports through coordination and effective supervision as well as careful follow-up of drilling

operations besides the induction of latest technologies in the field of drilling engineering and keeping abreast in terms of development. Quality for drilling materials and fluids is also assured.

## 3.19.11. Management of Reservoir Engineering of the AGOCO

The reservoir management department undertakes various reservoir studies for the purpose of assessing the quantities of oil and gas discovered and sorted according to their types, and then the driving force of gas and water is calculated to report the initial recovery factor. It is also interested in using the best methods to extract the largest amount of economic oil from the fields by increasing the rate of recovery by conventional and unconventional methods. The reservoir engineers also undertake future forecasts of production by developing a plan for the development and depletion of the fields through a schedule, in which, the drilling and production operations are coordinated taking into account proven quantities of oil reserves and available budgets.

# 3.19.12. Refining at the Gulf Arab Oil Company

The refining activity of Arabian Gulf Oil Company is done at Bedrof and Tobruk refineries, which were commissioned on 01/07/1989 and 01/12/1990, respectively, after the National Petroleum Corporation was directly managed by NOC. The Tobruk Refinery's products are pumped through the pipeline to warehouse at Brega to market the oil, or transport by ship to the rest of Libya. The surplus from domestic consumption is exported abroad with the latest methods used in this area. The bed filter supplies the agricultural bed projects with the diesel needed to operate the project equipment, and the rest of the products through the land fleet of Brega oil marketing to various regions of Libya.

#### 3.19.13. Employees of the Gulf Arab Oil Company

AGOCO has over 6,000 employees, and large numbers of them are operating at the port of Harika, which exports crude oil from oil fields. They are also deployed at the ports such as Zouitina and Ras Lanuf in the center of the Libyan coast. NOC owns AGOCO, and its 2,000 employees are deployed in Benghazi.

# 3.19.14. Exploration and Development of the Gulf Arab Oil Company

GOCO is specialized in a wide range of oil products, as it operates in the upstream and downstream industries; so it can be classified as an international company.

The company manages eight oil fields, a crude oil export port and two refineries. The company is also working on building itself by building new technical, administrative and financial departments, and developing and organizing the fields and maintaining them.

# 3.19.14.1. Exploration of the Gulf Arab Oil company

The General Directorate of Exploration identifies and evaluates public areas for exploration and to obtain exploration concessions as well as conduct geophysical surveys. Based on the results of the technical studies and the geological and geophysical assessment of the exploratory areas, all exploratory operations are carried out, which get new oil and gas discoveries in the areas that are drilled. Accordingly, the department ensures that an oil reserve compensates for what was lost as a result of extraction and production processes. In addition to its primary role, the nature of the work of the Directorate General for Exploration that is an important support for the technical department, and a technical information source related to the company's main assets (record wells, concession lands, fields and locations, and sub-surface oil geology) (OPEC).

#### 3.19.14.2. Reservoir of the Gulf Arab Oil Company

The engineers of the reservoirs are responsible for the third pillar of oil reservoir engineering alongside drilling and production engineers. The reservoir engineers study the verification of the amount of driving forces with the help of gas and water. They also take care of the best ways to extract the largest amount of oil from the fields. Reservoirs and fuel quantities are assessed, which can be economically extracted. The computer-based management is used to conduct the analysis, in addition to the laboratory test accompanying each process and each stage of the work in drilling, production and reservoirs.

## 3.19.14.3. Drilling of the Gulf Arab Oil Company

Drilling Department is a highly-technical department, and it carries out the work of drilling wells in accordance with the approved plan prepared by the Department of Reservoir Engineering, as well as drilling for exploration of new wells according to the approved plan prepared by the Department of Geology. The drilling department also digs water wells for the purpose of supplying water for drilling fluids and for other industrial purposes of the various departments of the company. It also provides drilling rigs, materials, equipment and technical support services for drilling operations. Moreover, it uses and makes engineering designs for various drilling programs with careful follow-up of drilling operations.

# 3.19.15. The CSR of the Arab Gulf Oil Company

#### 3.19.15.1. The Society of the Gulf Arab Oil Company

The Gulf Company operates under NOC, which is an official state institution and not a private for-profit organization. Like many international oil companies, which have economic and social roles and interaction with the society and the surrounding environment, Gulf Company also assumes its social responsibilities towards society and the environment. Based on its economic role in Libya, its geographical location and social status, the company has continued to provide support in all its forms to the community in Benghazi, to all sectors of the country and to many Libyan cities since its inception. Its roles are as follows:

- Social benefits such as contributing to housing projects for IDPs and providing kind assistance to the displaced.
- Extinguishing fires for public entities and citizens in Benghazi and abroad and providing fire extinguishers to other companies.
- Provide cars and spare parts to some state institutions, including the guards of oil installations.
- Maintenance of machinery, equipment and spare parts at the beginning of the incidents in 2011.
- Assisting graduate students of higher education and various institutions by providing them with information and research materials.
- Providing training aids in several areas of the state.

- Practical summer employment to the university students.
- Submit books and references to some of the university colleges.
- Providing technical, material and consulting assistances to the state institutions.
- Drilling water wells for some municipalities (such as the municipalities of Tobruk and Zintan).
- Hosting many meetings for various sectors of the state in the company sites and halls.
- Sending medicines, health services, blankets, and meals to the areas where they are needed.
- Raising awareness of the community and carrying out some preventive measures related to safety and the environment.

#### 3.19.15.2. Environment, Health and Safety at the Gulf Arab Oil Company

Gulf Arabian Oil Company aims to achieve the best standards in compliance with international conditions of environmental protection and pollution protection such as ISO 14000 and ISO 14001.

The senior management expressed its keenness to ensure the safety of its facilities and sites to support pollution prevention and environmental protection according to economic and social needs for achieving this goal and assisting field operations.

## 3.19.15.3. Occupational Safety and Health of the Gulf Arab Oil Company

The workers must be protected from the hazards of work and the importance of safety to prevent the occurrence of accidents, injuries or losses is definitive, which is essential to consider at an initial design stage to avoid injuries and accidents later.

#### 3.19.15.4. Safety Objectives of the Gulf Arab Oil Company

- Preventing accidents is a vital issue for preserving national wealth.
- Accidents cause economic and social losses and reduce individual and collective production.
- Accidents cause panic and result in the worst effects, such as delaying progress in the standard of living.

#### 3.19.15.5. Social Safety Objectives of the Gulf Arab Oil Company

There is always a fundamental need to preserve human life. Failure to provide the reasons for prevention and safety in the workplace is in itself a crime against society, and there is no doubt that the health of workers in terms of care for the provision of health and safety is the most important thing to do.

## 3.20. Arabian Gulf Oil Company SWOT Analysis

# 3.20.1. Strengths in the SWOT Analysis of Arabian Gulf Oil Company

### 3.20.1.1. Strong Market Position

The company enjoys a high position among the international oil companies because of its productive capacity and huge oil reserves, where the average production of crude oil under the current operating conditions is about 378 thousand barrels per day, and the implementation of development projects may increase it to 455 thousand barrels per day.

### 3.20.1.2. Customer Relationships

Libyan Arab Gulf Oil Company operates track as well as influence customer behaviour through End-to-end partnership management, co-brand product management, partner self-service capabilities, helps the Libyan Arab Gulf Oil Company transform their marketing departments from cost centres to profit centres, whilst increasing the value for partners and customers alike.

#### 3.20.1.3. Strong Exploration Capacity

The company's exploration activity covers franchising and participation contracts distributed across the different regions in Libya, with a total area of hundreds of thousands of square kilometers throughout the country.

#### 3.20.1.4. Strong Research and Development

The company carries out all oil operations related to the production, processing, purification, storage and distribution of crude oil to refineries and export ports. The company produces world-class oil-based raw materials, including bed ore, safe crude and sertica ore, which is compared with Brent crude.

#### 3.20.1.5. Business Strategy

A goal that it seeks to achieve, through strategy, where the Libyan Arab Gulf Oil Company has set a group of the Libyan Petroleum Corporation's strategy that is to expand the refining capacity in the long term by increasing energy in order to meet energy requirements and expand refineries and build new refining capacity or by using Local technology. Achieving maximum integration between refining and petrochemical operations in the future.

## 3.20.1.6. Ability to Change

Libyan Arab Gulf Oil Company operates largely thanks to technological developments and changing economic factors, including a growing global population, Increasing energy consumptions from changing consumer behaviour climate and change and sustainability. In addition, to be successful in their oil job, engineers themselves are faced with emergent expectations regarding their behaviour, one of which is the ability to adapt. Technology is increasingly used across all facets of the economic changes, and evolves continuously.

# 3.20.2. Weaknesses in the SWOT Analysis of Arabian Gulf Oil Company

### 3.20.2.1. Political Stability

The company suffered substantially after the revolution of 2011 in the country. Here are some of the issues: Libya has serious political insecurity, and the security issue has repercussions for staff and projects. In future, if the situation persists, the organization might pull back, which will result in losing assets and compromised ability to meet the commitments.

#### 3.20.2.2. Ethical Issues and Corruption

AGOCO aims to undertake steps to encourage competition in the oil industry to limit unethical practices and focused on building economic relations with other oil companies and creating gains in the international market.

## 3.20.2.3. Shutting Wells Due to Power Shortage & Ageing Infrastructure

Sarir oilfield's total area is around 500 square kilometers that requires continuous power supply to operate the Sarir oil field, for example transformers and

converter stations, which are not available as yet; the previous wells had to be shutdown because of old infrastructure. In 2014, two turbines arrived at Sarir but they are yet to be made functional; the previous turbines that were installed in 1960s were replaced. Arrival of three mobile turbines with capacity of 15 Megawatts of electricity combined temporarily solved the power issue; however, more turbines are still needed

#### 3.20.2.4. Shortages of Some Spare Parts

AGOCO is confident about overcoming the issue of interruption in power supply from power plants that are operated on gas in the Nafoura field by March 2018. The main cause behind frequent power disruption is depreciation in power plant's capacity and ability due to either lack of spare parts or its age because some of the gas compressors were installed in 1960s; manufacturing of the same gas compressors stopped years back and their spare parts were not available in the market. Interruption in power supply affects production in a negative way.

#### **3.20.2.5.** Work Ethics

Codes of ethics and in a broader meaning ethics management are essential instruments for integrating ethics principles and norms of ethics into everyday company practice., which contributes to the successful introduction of the ethics code and to promoting the development of ethics in company culture.

#### 3.20.2.6. Difficulty In Logistics Practical Issues

The Libyan government has not yet overcome the problem of logistics issues, foreign investors prefer countries with reasonable communications infrastructure and modern roads, lack of modern infrastructure is not only a problem; it is more of a threat to Libyan economy. The government can make the country even more attractive for foreign investors by building a network of highways and connecting roads. Similarly, sufficient quantity of hotels is not available in Libya; furthermore, visa regime and processing is inflexible and troublesome; other related issues are lack of logistics and flights. The banking sector of Libya is still inept to provide services to foreign investors on par with the international market. Besides this, the government would also have to develop capacity of seaports.

# 3.20.3. Opportunities in the SWOT Analysis of Arabian Gulf Oil Company

#### 3.20.3.1. Increased Foreign Investments

Libya became favorite destination of international oil and gas companies because of the country's massive oil reserves. Foreign investors and European companies were encouraged by the Libyan government through licenses issued for exploration and development of gas and oil fields. Attractive incentives and preferential financial terms were offered to foreign investors by the Libyan Government. Since it was difficult for the Libyan Government to exploit and develop oil fields on its own, it sought role of foreign investors from the gas and oil sector. A number of leading organizations arrived in Libya and started working on oil fields. Libya's economy benefited from direct foreign investment in oil and gas sector.

#### **3.20.3.2.** Future Trends

The Libyan government can increase rate of economic growth by giving priority to development of oil and gas sector. In 2019, the Libyan Government, reportedly, raised production from 1.5 to 1.7 million barrels per day. The country's economy can grow rapidly and with high rate if the oil and gas sector gets due attention and priority. In order to grow the oil industry, the government would also have to solve the security problem in fields. The new Libyan government is all set to explore and develop the gas and oil industry; exploration of new fields of gas and oil is in the offing. Following tasks would be performed by the government (Oil & Gas Libya, 2013):

- Existing contracts and laws would be modified
- Information about new opportunities would be encouraged
- Foreign investors would be given incentives, even in the form of development of infrastructure
- Human resource development was essential part of this program
- Production would be enhanced through use of technology and unique techniques
- Markets' survey would be carried out to figure out potential business opportunities

#### 3.20.3.3. Renewable Energy Sources

Libya is rich in solar radiation which is an alternative energy option; parts of the country are under high solar radiation so that makes Libya a country where alternative energy options are available and AGOCO is planning to utilize them. Libya can get 10 percent of its energy from wind and solar power. AGOCO has designed various plans to utilize the other energy options.

#### 3.20.3.4. Global Energy Demand

Deep disparities define today's energy world oil markets and geopolitical tensions, carbon emissions and climate targets, the promise of energy for all and the lack of electricity access, where AGOCO operates to meet climate, energy access and air quality goals while maintaining a strong focus on the reliability and affordability of energy for a growing global population.

## 3.20.3.5. Innovation and Technology

Innovation and Technology go hand in hand within the petroleum and petrochemical industry. Oil price volatility, geopolitics, and economic uncertainty, all contribute towards the continued need to innovate and technologically advance if petroleum and petrochemical companies are to survive in this highly competitive industry.

## 3.20.4. Threats in the SWOT Analysis of Arabian Gulf Oil Company

## 3.20.4.1. High Competition

The oil and gas industry is taking in having a big demand all over the world, considering that the prices for different commodities are stabilizing in the global competitive market, this industry now faces a global surge in terms of demand from a variety of other industries. Another factor that plays a big role in the increase of demand is the innovation of modern technologies that heightened the economical viability of unconventional resources.

#### 3.20.4.2. Government Interventions and Environmental Laws

Existence of corrupt practices in the country has drawn the Libyan government's attention toward this serious issue. International transparency organizations are critical of corruption in state institutions in Libya. Lack of transparency in business puts adverse effects on development and growth of economy.

The issue of lack of transparency could be addressed if the government modifies contract rules for business.

#### 3.20.4.3. Susceptible to Political Volatility In The World

Investors are often reluctant to invest in Libya's gas and oil industry mainly due to law and order and instability issues. Stability is a prerequisite for steady economic growth. The gas and oil sector has immense significance for the country's economy. The current major challenge of the Libyan government is to overcome the security problems and ensure political stability (Oil & Gas Libya, 2013).

## 3.20.4.4. Libya Civil War and Crisis Management of Crude Oil Shortage

In 2011, Libya's oil capacity suffered a setback due to war and infighting among various militant groups; the crisis was intensified when Libyan crude oil was excluded from the international market. Since there is instability in the war-torn country and the situation is quite volatile, the crude oil is also being stolen from pipelines by terrorist groups involved in the civil war. AGOCO has been facing the theft issue and decline in production capacity caused by attacks on pipelines for a long time. New production limit was to be set by Organization of Petroleum Exporting Countries (OPEC) through consensus among stakeholders and member countries; however, in their meetings they were unable to achieve any consensus. Brent Blend, that serves as a reference price for buyers and sellers of crude oil, argued that crude oil reference pricing based on quality of oil; not quantity of oil. Stolen crude oil is unlawfully sold in global markets. Special Petroleum Reserves (SPR) and International Energy Agency (IEA) are more concerned about developed countries' economies and they did not offer their role to rescue Libya from crisis of decline in production capacity (Glick, 2011).

#### 3.20.4.5. Fluctuating Price of Crude Oil

Oil is one of the important strategic energy to guarantee the development of industry and economy and is also an important resource, which is scrambled by each interest group in the world.

Oil price fluctuation is always regarded as the barometer of the worldwide economy, and with the development of the world's economy, the types of these influencing factors would increase and the influencing intensity, which presented by the various factors that affect the oil price, would also different in different historical periods.



Figure 7. Arabian Gulf Oil Company SWOT Analysis

# 3.21. A Comparison Between Shell Oil Company and Arabian Gulf Oil Company

## 3.21.1. Action Plan

Shell

**AGOCO** 

Shell is making efforts to fulfill the ongoing energy needs sustainably through operational safety, reduced environmental impact and communities' shared benefits. It involves in efforts to generate low-carbon energy.

The company seeks to achieve a high degree of performance and maintain the maximum and grow in the short and long term, and besides, it is willing to survive in the competitive environment, taking into account the preservation of Libyan natural resources to extract oil and gas in a variety of feasible ways.

#### 3.21.2. Social Issues

Shell

**AGOCO** 

It has spent millions of dollars on road safety, enterprise development, and access to energy. Moreover, besides specifically designed community development initiatives, education, disaster relief, biodiversity, and health. It procures services and goods from local suppliers for supporting local businesses. Additionally, it complies with the key criteria to assure sustainability through human rights, good working conditions, and labor practices.

Gulf Company assumes its responsibilities towards the society based on its social status. Since its inception, the company has continued to provide support in all its forms to all the sectors of the country in many Libyan cities. For example, social benefits such as contributing to housing projects for IDPs, providing cars and spare parts to some state institutions, sending medicines, blankets and meals to the deserving rendering health services, raising awareness about the community, and practical summer employment for university students are some of its initiatives..

## 3.21.3. Strategy of the Company

The company appreciates the strategic role of fuel exploration played to develop the economy and expects global demand for energy supply. The aim of Shell is strengthening its position as a company that provides, Shell follows the most feasible way. Shell strives to maintain high standards of performance and keeps the sites healthy and growing among competitors. Goals, such as oil extraction and economic investment, are not the only focus. Shell has a great care package of health, safety and environmental management. Its principles emphasize the reduction of negative environmental impacts and ensure work under reliable HSE conditions.

AGOCO

Shell

The aim of AGOCO is strengthening its position as a top energy company that provides low-carbon fuels, oil, and gas according to the demands of the changing energy systems. Social responsibility and safety are fundamental to

the business of AGOCO.

#### 3.21.4. Environmental Issues

Shell

Shell manages direct GHG emissions by working to promote its facilities' energy efficiency. It assesses water availability in its operational areas and finds ways for its facilities to economize the water usage.

AGOCO

Gulf Arabian Oil Company aims to achieve the best standards in compliance with international conditions in environmental protection and pollution protection such as ISO 14000 and ISO 14001. The senior management expressed its keenness to ensure the safety of its facilities and environmental protection on its sites besides prevention from pollution fulfilling social and economic requirements to achieve this goal and to assist the field operations.

## **3.21.5.** People (Employment)

Shell

The number of Shell employees are almost 86,000 as it is one of the top five global oil and gas companies, which operates in several areas of the hydrocarbon industries. The company has headquarters in Hague, Netherlands, and it is one of the largest companies on this planet.

AGOCO

The number of AGOCO employees are almost 6,000, it is one of the top contributors to the Libyan economy. It operates the port of Harika to export crude oil produced from some of its fields, and pumps another part of its production for export from ports operated by other companies.

#### 3.21.6. Operations

Shell

Operations department is the backbone of any business, and they help delivering the business solutions that Shell offers globally, which are focused on corporate performance as a key indicator to operate in ever-changing global markets through the oil marketing to various regions.

**AGOCO** The core operations management functions include monitoring production and operations 24 hours for continuing operations in the oil fields, besides

production, technical reporting, pumping, test wells, and inventory. The General Directorate of Production supervises the execution of all the operations related to oil engineering like drilling wells, monitoring reservoirs performance, and oil production.

#### 3.21.7. Political Issues

Shell

Since gas and oil are very significant topics of discussions between leaderships of different countries, politics has largely been about energy production. Since it is present in many countries, Shell has been victimized because of political developments.

**AGOCO** 

For AGOCO, political instability has been an issue because miscreants challenged the writ of the government in many areas of Libya; that's why, foreign investors do not feel secure about investment in Libya because of its security issue and political instability. Since the closure of oil ports after the global oil price decline in 2014 by \$45 dollars/barrel; so, the Libyan crude oil production reduced from 1.5 million bpd to 400 thousand bpd in 2016, which negatively reflected on the situation of the Libyan economy

## **3.21.8.** Corporate Social Responsibility (CSR)

**Shell** 

Shell has been engaged in numerous activities to assure its presence as a socially responsible organization, which include its CSR, which is responsible for community relations, environmental protection, and human rights. It also takes care about the internal aspects including practice codes, stakeholder, transparency, product stewardship, and employee rights. In addition, Shell has also initiated welfare programs including health, education, construction, commerce, benefiting local communities, transport, and agriculture,. Moreover, it also joins hands with other key players to promote CSR assuring a paradigm shift in terms of social welfare, environmental responsibility, and political responsibility.

AGOCO The Arab Gulf Oil Company has initiated a structured program of comprehensive social responsibility, which was launched based on three main dimensions: social dimension, environmental dimension and economic dimension. The following are a number of models that reflect the commitment of the sector to sponsor and actively participate in social and environmental activities. For example, encourage education, helping the sick, blood donation campaigns, supporting civil society organizations, and positive steps to reduce electricity consumption.

**Table 29.** Arabian Gulf Oil Company SWOT Analyses

Strengths	Weaknesses	
-Market Position	-Shutting Wells Due To Power Shortage And	
-Exploration Capacity	Ageing İnfrastructure	
-Research And Development	-Political Stability	
-Ability To Change	-Ethical Issues And Corruption	
-Business Strategy	-Shortages Of Some Spare Parts	
-Customer Relationships	-Work Ethics	
	-Difficulty In Logistics Practical Issues	
Opportunities	Threats	
-Foreign Investments	-Libya Civil War And Crisis Management Of	
-Renewable Energy Sources	Crude Oil Shortage	
-Future Trends	-High Competition	
-Global Energy Demand	-Susceptible To Political Volatility In The	
-Innovation And Technology	World	
	-Government Interventions And	
	Environmental Law	
	-Fluctuating Price Of Crude Oil	

### **CHAPTER FOUR**

#### DISCUSSION AND RECOMMENDATIONS

#### 4.1. Introduction

This chapter has four subsections: First section is about introduction, second, presents analysis and findings of the survey, third one presents results and analysis of the questionnaire while the fourth section comprises results, discussion and recommendations of this study, and the determination of the strengths and weaknesses of the Libyan oil companies for the international market. To describe and analyze the possibilities for Libya to create a socio-economic environment whether domestic petroleum firms can become competitive in the global markets.

Hence, this study attempts to know this effect. As described in detail in the previous chapters, the questionnaire was used to collect data, and many changes were made for making it friendly for respondents.

## **4.2. Data Collection Tool Design (Questionnaire)**

The questionnaire was approved as a main tool for collecting data and information related to the subject of the study. The questionnaire was designed after reviewing several previous studies. The researcher relied on the study of (Otieno,2017) and (Al-Zubaidi, 2017) and (Fadia, 2016) in his design.

The questionnaire included general information and demographic characteristics of the individuals targeted in the study, and the questionnaire consisted Of the 5 basic variables, as follows:

#### 4.2.1. Part One: Strengths

Includes 6 phrases related to the strengths of petroleum companies.

## 4.2.2. Part Two: Weaknesses

Includes 6 phrases related to the weaknesses of petroleum companies.

## 4.2.3. Part Three: Opportunities

Includes 5 phrases related to providing opportunities in petroleum companies

## 4.2.4. Part Four: Threats

Includes 6 phrases related to threats facing petroleum companies.

## 4.2.5. Part Five: Competitive Advantage

Includes 7 phrases related to competitive advantage in petroleum companies.

## 4.3. Encode the Answers According to The Scale Used

Table 30. Coding answers according to scale used

Answer	Very high	high	Moderate	Low	Very Low
Code	5	4	3	2	1

After completing the coding of the answers and entering the data using SPSS (statistical package for social sciences), which was used for data analysis.

## 4.4. Pilot Study

Before distributing the questionnaire to the study sample, its reliability was confirmed in terms of structural consistency and stability through an experimental study, the questionnaire was distributed to (100) individuals. The researcher studied the extent of sample members' understanding of the questionnaire questions and verified the structural consistency and reliability of the questionnaire.

## 4.5. Validity of Structural Consistency

In order to determine the consistency of each question of the questionnaire with the dimension to which it belongs. The validity of the content was identified by calculating the correlation coefficient between each question and the total dimension to which it belongs and with the total questionnaire.

#### 4.5.1. Strengths

Through Table 31, it was found that correlation coefficients were high, and the values of statistical significance (P-value) were less than 0.05 and this indicates the significance of the relationship between each of the variables of the scale and the total

of the scale, This indicates that the Validity of structural consistency for the strength scale was appropriate.

Table 31. Correlation coefficients between Strengths scale questions and total scale

Variables	Correlation coefficient	P-value
Market Position	0.967**	0.000
Exploration Capacity	0.965**	0.000
Research and Development	0.977**	0.000
Ability to change	0.971**	0.000
Business strategy	0.977**	0.000
customer relationships	0.976**	0.000

## 4.5.2. Weakness

Table 32. Correlation coefficients between Weakness scale questions and total scale

Variables	Correlation coefficient	P-value
Shutting wells because of ageing infrastructure and a lack of energy	0.98**	0.000
Political stability	0.979**	0.000
Ethical Issues and Corruption	0.968**	0.000
Shortages of some spare parts	0.985**	0.000
Work ethics	0.984**	0.000
Difficulty in Logistics practical issues	0.975**	0.000

From Table No. 32 it was found that, correlation coefficients were high, and the values of statistical significance (P-value) were less than 0.05 and this indicates the significance of the relationship between each of the variables of the scale and the total of the scale, This indicates that the Validity of structural consistency for the weakness scale was appropriate.

## 4.5.3. Opportunities

**Table 33.** Correlation coefficients between Opportunities scale questions and total scale

Variables	Correlation coefficient	P-value
Foreign Investments	0.986**	0.000
Renewable energy sources	0.963**	0.000
Future Trends	0.961**	0.000
global energy demand	0.984**	0.000
Innovation and Technology	0.979**	0.000

From Table No. 33 it was found that, correlation coefficients were high, and the values of statistical significance (P-value) were less than 0.05 and this indicates the significance of the relationship between each of the variables of the scale and the total of the scale, This indicates that the Validity of structural consistency for the Opportunities scale was appropriate.

#### **4.5.4.** Threats

From Table No. 34 it was found that, correlation coefficients were high, and the values of statistical significance (P-value) were less than 0.05 and this indicates the significance of the relationship between each of the variables of the scale and the total of the scale, This indicates that the Validity of structural consistency for the Threats scale was appropriate.

**Table 34.** Correlation coefficients between Threats scale questions and total scale

Variables	Correlation coefficient	P-value
Libya civil war and crisis management of crude oil shortage	0.989**	0.000
High competition	0.96**	0.000
Susceptible to political volatility in the world	0.987**	0.000
Government interventions and Environmental laws	0.989**	0.000
Fluctuating price of Crude oil	0.956**	0.000

## 4.5.5. Competitive Advantage.

**Table 35.** Correlation coefficients between Competitive Advantage scale questions and total scale

Variables	Correlation coefficient	P-value
Staff competence	0.948**	0.000
Handling of complaints about the services	0.977**	0.000
Flexibility and easily adopts to changes in the environment	0.979**	0.000
Always pro-active and take the 1st step	0.976**	0.000
Have short term (5years) strategic goals	0.977**	0.000
Encourage and reward innovative behavior	0.967**	0.000
Market share	0.969**	0.000

From Table No. 35 it was found that, correlation coefficients were high, and the values of statistical significance (P-value) were less than 0.05 and this indicates the significance of the relationship between each of the variables of the scale and the total of the scale, This indicates that the Validity of structural consistency for the Competitive Advantage scale was appropriate

## **4.6.** Cronbach Alpha (α) Test For Credibility and Stability

We applied Cronbach Alpha ( $\alpha$ ) to test he stability and reliability of the answers to the questions asked in the questionnaire. Alpha coefficient "a" was used to represent alpha, as displayed in the following table:

The data set presented in Table 36 shows that Cronbach alpha ( $\alpha$ ) coefficient values for stability and credibility were high (more than 0.6) (Uma Sekaran, 2003: 311) and the Cronbach alpha results for overall questionnaire was 0.914, that shows the reliability of the results obtained so far.

**Table 36.** Cronbach's Alpha for each of the phrase groups

The part	Phrases	Alpha coefficient value
First	Strengths	0.988
Second	Weaknesses	0.99
Third	Opportunities	0.986
Fourth	Threats	0.987
Fifth	Competitive Advantage	0.989
Cronbach Alpha test of the overall questionnaire		0.914

## 4.7. The Study Society

The community of this study includes managers, department heads and employees serving in the Libyan Arab Gulf Oil Company, who are almost 6000 persons; so, a random sample has been selected from the managers, department heads and employees working in Libyan Arab Gulf Oil Company. The sample size has been calculated through KREJCIE and MORGAN equation as follows:

$$n = \frac{X^2 N P(1-P)}{d^2 (N-1) + X^2 P(1-P)} =$$

$$\frac{3.841*6000*0.5(1-0.5)}{0.05^{2}(6000-1)+3.841*0.5(1-0.5)} \cong 361$$

- X2 = Table value of chi-square at 1 freedom degree at confidence level (3.841).
- s = required sample size.
- N = Population size.
- P = Population proportion (0.50) to provide the maximum sample size.
- d = the degree of accuracy expressed as a proportion (.05).

The calculations show that the sample size should not be less than 361 respondents, and to ensure that this number is obtained, the researcher distributed 400 questionnaires and 366 questionnaires were obtained that are valid for analysis at a rate of 91.5% %, and testing the credibility of the answers of sample individuals to the questions set out in the questionnaire form.

**Table 37.** Questionnaire distribution among the selected respondents

Distributed	Collected questionnaires		Collected questionnaires Missed questionna		l questionnaires
questionnaires No. %		No.	%		
400	366	91.5%	34	8.5%	

#### 4.8. Statistical Methods

## 4.8.1. Cronbach Aphfa ( $\alpha$ ) Test for Credibility and Stability

Cronbach's Alpha test has been applied to measure the credibility of the questions and answers of the questionnaire.

## 4.8.2. Repetitive Distribution

It is applied for describing the answers' nature regarding some specific phenomena, and the repetitive answers to the expressions, which indicates study samples (individuals), who answered to different expressions.

#### 4.8.3. Accounting Average

It is a main trends measurement method that represents the individuals' answers to different questions.  $\bar{x} = \frac{\sum x_i f_i}{\sum f_i}$ 

#### 4.8.4. The Standard Inclination

It is a spread-out measurement method that shows similarities and differences among the sample individuals' answers to specific questions:

$$s = \sqrt{\frac{\sum x_i^2 f_i - \frac{\left(\sum x_i f_i\right)^2}{n}}{n-1}}$$

# 4.9. Presentation and Analysis of Data Related to The Company's Employees

For identifying a few characteristics of the samples, we analyzed some of them, including age, gender, Experience, job title, and educational level, which are presented below:

## 4.9.1. Directors' Demographic Characteristics

### 4.9.1.1. Distribution of Sample Individuals With Respect to Their Gender

**Table 38.** Percentage and repetitive distributions of the sample individuals with respect to gender.

Gender	No.	Percentage
Males	318	86.9%
Females	48	13.1%
Total	366	100

The data provided in Table 38 shows the distribution of the sample individuals based on gender. The percentage of males was 86.9%, while as 13.1% were female out of the total study participants, who shows that jobs in petroleum companies are more suitable to men than women.

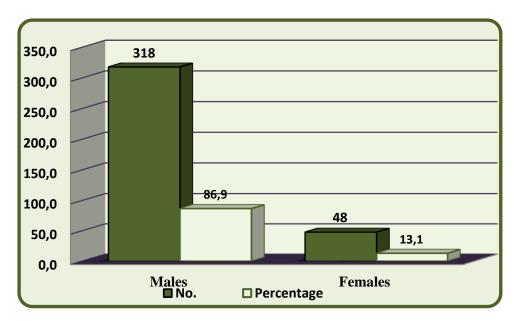


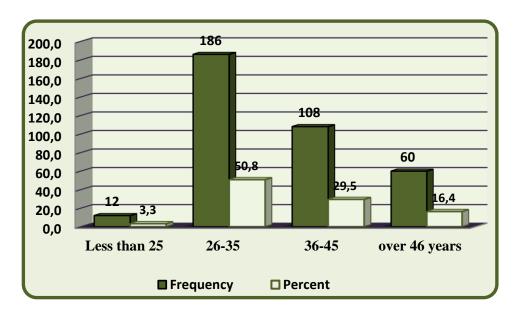
Figure 8. Percentage and repetitive distributions of individuals based on gender

## 4.9.1.2. Distribution of Sample Individuals According to The Age

**Table 39.** Percentage and repetitive distributions of the sample individuals with respect to age.

	Frequency	Percent
Less than 25	12	3.3
26-35	186	50.8
36-45	108	29.5
over 46 years	60	16.4
Total	366	100.0

Table 39 shows that most respondents were 26 to 35 years old, the percentage reached 50.8%, then 36 to 45 years old people were second most significant with 29.5% employees, followed by age group 46 years and over with 16.4% employees. Finally, the age group less than 25 years old were only 3.3%.



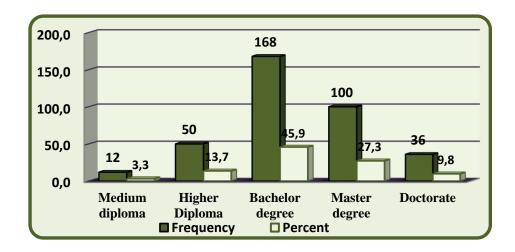
**Figure 9.** Percentages and repetitive distributions of the sample individuals with respect to age

## 4.9.1.3. Distribution of Sample Individuals With Respect to Educational Level

**Table 40.** Percentages and repetitive distributions of the sample individuals according to educational level

	Frequency	Percent
Medium diploma	12	3.3
Higher Diploma	50	13.7
Bachelor degree	168	45.9
Master degree	100	27.3
Doctorate	36	9.8
Total	366	100.0

The results showed in Table 40 show that most of the respondents (45.9%) had university qualifications (Bachelor degree). While 27.3% had master degree, and 50 respondents (13.7%) had Higher Diploma qualifications, 36 respondents (9.8%) had Doctorate degrees, and only 12 respondents (9.8%) had a Medium Diploma. It appears that 83% of the respondents have university qualifications or higher, and this gives the researcher higher confidence levels in the data collected from the respondents.



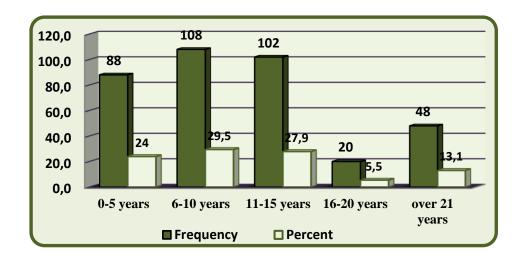
**Figure 10.** Percentages and repetitive distributions of the sample individuals with respect to educational levels

## 4.9.1.4. Distribution of Sample Individuals With Respect to Experience

**Table 41.** Percentages and repetitive distributions of the sample individuals with respect to Experience

	Frequency	Percent
0-5years	88	24.0
6-10years	108	29.5
11-15years	102	27.9
16-20years	20	5.5
over 21 years	48	13.1
Total	366	100.0

Table 41 shows, that most respondents have 6-15 years' experience (57.4%), while 88 respondents (24%) had 5 years or less experience, and 48 respondents (13.1%) had over 21 years' experience; finally, 20 respondents (5.5%) had 16-20 years' experience. From the discussion above, the respondents' experience reassures the researcher about the credibility of collected data



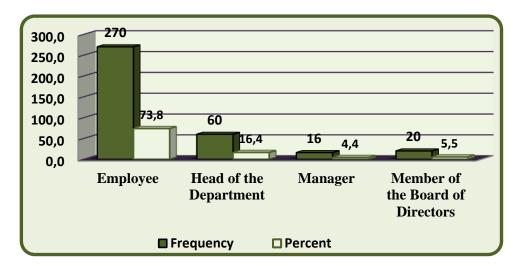
**Figure 11.** Percentages and repetitive distributions of the sample individuals with respect to experience

## 4.9.1.5. Distribution of Sample Individuals According to The Job Title

**Table 42.** percentages and repetitive distributions of respondents with respect to job title

	Frequency	Percent
Employee	270	73.8
Head of the Department	60	16.4
Manager	16	4.4
Member of the Board of Directors	20	5.5
Total	366	100.0

Table 42 shows that the majority of participants (73.8%) were employees, 60 participants (16.4%) were department heads in the company, 16 of them were managers while 20 respondents were members of the Board of Directors.



**Figure 12.** Percentages and repetitive distributions of the sample individuals according to job title

#### 4.9.2. SWOT Analysis

#### **4.9.2.1. Strengths**

From Table 43, it is concluded the company's place in the market; 20.2% of respondents indicated that it was low or very low, while 46.5% of them confirmed that they are high/very high, and the arithmetic average/mean was 3.39 that indicates that the company is well positioned, this result is consistent with the results of previous studies (Otieno, 2017; Thompson, 2005). The company's ability to explore new reserves was assessed, 26.3% of respondents indicated that it was low/very low, while 42.1% of them confirmed that they are high or very high, the mean value was 3.26, which indicates that the company was able to explore new reserves. Company's ability to research and develop was analyzed; 44.8% of respondents indicated that it was low or very low, while 20.8% of them confirmed that they are high or very high; so, it was found that the arithmetic average value was 2.74, which indicates that there was a weakness in the level of research and development in the company under study. In addition, the company's ability to change was also low. 58.2% of the respondents indicated that they are low or very low, while 25.1% of them confirmed that they are high or very high.

It turned out that the average value was 2.61. As far as the company's business strategies are concerned, 44.8% of respondents indicated that they are low or very low, while 26.3% of them confirmed that they are high/very high, and the average was 2.74 It indicates that the company is suffering because of some business strategies; finally,

the company's relationship with its customers was judged; 36.1% respondents indicated that it was low or very low, while 30.6% of them confirmed that it was high/very high. Results showed that average value equals 2.98, and this indicates that the level of the company's relationship with its customers was moderate.

**Table 43.** Statistical description for Strengths

S.N	Expressions		Very Low	Low	Moderate	High	Very High	Mean	Std. Deviation
1	Market Position	No.	34	40	122	90	80	3.39	1.206
1	Warket Fosition	%	9.3	10.9	33.3	24.6	21.9	3.39	1.200
2	Exploration	No.	20	76	116	98	56	2.26	1 115
2	Capacity	%	5.5	20.8	31.7	26.8	15.3	3.26	1.115
	Research and	No.	56	108	126	28	48		1.201
3	Development	%	15.3	29.5	34.4	7.7	13.1	2.74	
4	Ability to	No.	66	147	61	48	44	26	1.26
4	Change	%	18.0	40.2	16.7	13.1	12.0	1	1.26
_	Business	No.	56	108	106	68	28	0.74	1 155
5	Strategy	%	15.3	29.5	29.0	18.6	7.7	2.74	1.155
	Customer	No.	42	90	122	56	56	2.00	1 214
6	Relationships	%	11.5	24.6	33.3	15.3	15.3	2.98	3 1.214
		Str	engths					2.95	1.154

To determine the firm's strengths level, the mean value was 2.95 it indicates that the firm's strengths level was moderate, which indicates low level of the competitive advantage for the Gulf Oil Company, this result supported by result of previous studies (Barney, 2007).

#### 4.9.2.2. Weaknesses

From Table 44, it is concluded that the closure of wells is happening due to ageing of infrastructure and lack of energy, it turned out that the mean value was 2.5 and it indicates that the company does not suffer much because of ageing infrastructure and lack of energy.

Table 44. Statistical descriptions for Weaknesses

S.N	Expressions		Very Low	Low	Moderate	High	Very High	Mean	Std. Deviation
	Shutting wells due	No.	96	90	112	36	32		
1	to power shortage and ageing infrastructure	%	26.2	24. 6	30. 6	9.8	8.7	2.5	1.225
		No.	96	72	126	32	40		
2	Political stability	%	26.2	19. 7	34. 4	8.7	10.9	2.58	1.266
	Ethical Issues and	No.	42	108	120	64	32	2.83	1.119
3	Corruption	%	11.5	29. 5	32. 8	17.5	8.7		
	Shortages of some	No.	146	96	72	20	32		
4	spare parts	%	39.9	26. 2	19. 7	5.5	8.7	2.17	1.256
		No.	142	96	72	12	44		
5	Work ethics	%	38.8	26. 2	19. 7	3.3	12.0	2.24	1.322
	Difficulty in	No.	168	53	49	44	52		
6	Logistics practical issues	%	45.9	14. 5	13. 4	12.0	14.2	2.34	1.497
		Weak	nesses					2.44	1.243

It is noticed a high response rate of 50.8% for low and very low, compared to 18.5% for high and very high. Assessing political stability, the value of the mean is equal to 2.58 and indicates that the Gulf Oil Company suffers from political instability. The response rate was 45.9% for both the answers, which means it was low and very low compared to 19.6%, who believed it was high/very high. As for ethical issues and corruption, 41% of respondents indicated that they are low or very low, while 26.2% of them confirmed that they are either high/very high, and the arithmetic average was 2.83 that indicates that the company does not suffer much from ethical and corruption issues. Regarding the shortage of some spare parts, 66.1% of respondents indicated that they are low or very low, while 14.2% of them confirmed that it was high/very high, and the arithmetic average was 2.17 that indicates that the company does not suffer much from shortages of some spare parts, as for work ethic, 65% of respondents

indicated that they are low or very low, while 15.3% of them confirmed that it was either high/very high, and the arithmetic average was 2.24, which indicates suffering due to lack of cogs/spare parts. Finally, with regard to the difficulties faced by the company in practical logistical issues, 60.4% of respondents indicated that they are low or very low, while 26.2% of them confirmed that they are either high/very high, and the arithmetic average was 2.34, which indicates that the company does not suffer much from difficulties in practical logistic issues.

To determine the firm's weakness level, the mean value was 2.44 it indicates that the firm's weakness level was low.

## 4.9.2.3. Opportunities

In Table 45, it is discussed foreign investment; it was found that 51.9% believed that it was low/very low, while 26.2% informed that it was high/very high. 2.65 was the mean value that indicates that foreign investment was low. As for renewable energy sources, it was found that 59.3% respondents believed that it was low/very low, while 18.6% believed that it was high/very high. The arithmetic mean was 2.29. As for the company's planning about increasing its future production, 31.2% of respondents replied that it is very low/low while 30.6% respondents replied: It was high/very high with arithmetic mean 3.05, which indicates that the company's thinking about increasing its future production was moderate. This indicates that the level of future trends was moderate, and for global energy demand, it was found that 53.5% believed that it was either low/very low, and 28.4% mentioned that it was either high/very high. The arithmetic mean was 2.67, which indicates low levels of global energy demand. As for Innovation and Technology in the company, the results indicated that 47.5% of respondents believed that they are low or very low, while 25.1% of them confirmed that they are high or very high. The mean value was 2.74, and it indicates that there is a decrease in the level of Innovation and Technology in the company.

To determine the level of opportunities, the arithmetic mean was 2.68, which confirms that there was a decrease in the level of opportunities for the company, this result is consistent with the results of previous studies (Helms and Nikson, 2010).

**Table 45.** Statistical Descriptions for Opportunities

S.N	Expressions		Very Low	Low	Moderate	High	Very High	Mean	Std. Deviation
1	Foreign Investments	No.	78	112	80	52	44	2.65	1.29
	1 oreign investments	%	21.3	30.6	21.9	14.2	12.0	2.03	
	Renewable energy	No.	160	57	81	20	48	2.20	1.407
2	sources	%	43.7	15.6	22.1	5.5	13.1	2.29	
		No.	38	76	140	52	60		
3	Future Trends	%	10.4	20.8	38.3	14.2	16.4	3.05	1.192
4	.1.1.1	No.	70	126	66	64	40	2.67	1 271
4	global energy demand	%	19.1	34.4	18.0	17.5	10.9	2.67	1.271
5	Innovation and	No.	52	122	100	52	40	2.74	1 101
3	Technology	%	14.2	33.3	27.3	14.2	10.9	2.74	1.191
		Opport	tunities					2.68	1.236

### 4.9.2.4. Threats

From Table 46, it is concluded that Libya Civil War and Crisis management of crude oil shortage was noted that 35% answered that it was low or very low while 49.2% answered that it was high or very high. The mean value was 3.2. It indicates a high level of Libya Civil War and Crisis management of crude oil shortage. As far as competition is concerned, it was noted that 40% answered that it was low or very low while 28.4% answered that it was high or very high with mean value 2.87. It indicates low level of competition for the company. Susceptible to political volatility in the world, it was observed that 32.8% answered that it was low or very low while 46.4% answered that it was high or very high, and the mean value was 3.2 It indicates that Susceptible to political volatility in the world was high. Regarding government interventions and environmental laws, it is noted that 33.9% answered that it was low or very low while 50.3% answered that it was high or very high, and the mean value was 3.25.

**Table 46.** Statistical descriptions for Threats

S.N	Expressions		Very Low	Low	Moderate	High	Very High	Mean	Std. Deviation
1	Libya civil war and	No.	74	54	58	84	96	2.2	1 402
1	crisis management of crude oil shortage	%	20.2	14. 8	15. 8	23.0	26.2	3.2	1.483
		No.	56	90	116	52	52		1.248
2	High competition	%	15.3	24. 6	31. 7	14.2	14.2	2.87	
	Susceptible to	No.	66	54	76	82	88		
3	political volatility in the world	%	18.0	14. 8	20. 8	22.4	24.0	3.2	1.422
	Government	No.	70	54	58	84	100	2.25	
4	interventions and Environmental laws	%	19.1	14. 8	15. 8	23.0	27.3	3.25	1.477
	Fluctuating price of	No.	88	36	110	60	72		
5	5 Crude oil	%	24.0	9.8	30. 1	16.4	19.7	2.98	1.42
		Thr	eats					3.1	1.384

It indicates that there was impact on the company as a result of government interventions and environmental laws. Finally, in the context of price volatility of crude oil, it showed that 33.8% indicated that the price instability of crude oil was as low or very low, while 36.1% indicated that it was high or very high, and the mean value was 2.98. It indicates that the level of fluctuations resulting from the change in crude oil prices was moderate.

To determine the level of threats, it was found that the mean value of the arithmetic equals 3.1 and indicates high level of threats the company is facing, this result is consistent with the results of previous studies (Khan, U. A., Alam, M. N., & Alam, S., 2015).

#### 4.9.2.5. Competitive Advantage

From Table 47, it is assessed that the staff competence in the Arab Gulf Oil Company compared to other companies, it was noted that 19.1% of the respondents indicated that the competence of the staff was low or very low, while 48.1% of them confirmed that the staff competence was high or very high, and the mean value was 3.35 that showed the high level of staff competence in the Arab Gulf Oil Company as compared to other companies. Handling complaints about services in the Arab Gulf Oil Company compared to other companies was assessed; it was found that 55.7% answered that it was low or very low, while 17.5% of them answered that it was either high/very high, and the arithmetic value was 2.47 that indicates that the level of dealing with complaints of services in the Arab Gulf Oil Company compared to other companies was not enough. The degree of flexibility in the Arab Gulf Oil Company and the ease of changes in the environment was assessed; it was found that 55.7% indicated that it was low or very low, while 16.4% answered that it was high or very high and the mean value was 2.49 that indicates that the degree of flexibility in the company and the ease of changes in the environment were low. When the initiative or taking the first step was assessed, 43.7% respondents reported that it is low/very low, while 19.7% indicated it was high/very high and the arithmetic value was 2.74, which indicates that the level of initiative to take the first step was weak.

 Table 47. Statistical Description for Competitive Advantage

S.N	Expressions		Very Low	Low	Moderate	High	Very High	Mean	Std. Deviation
	G	No.	30	40	120	124	52	2.27	1 10-
1	Staff competence	%	8.2	10. 9	32. 8	33.9	14.2	3.35	1.107
	Handling	No.	70	134	98	48	16		
2	complaints about the services	%	19.1	36. 6	26. 8	13.1	4.4	2.47	1.077
	Flexibility and easily adaptability	No.	74	130	102	28	32	• • •	1.156
3	to changes in the environment	%	20.2	35. 5	27. 9	7.7	8.7	2.49	
	Always remain pro-	No.	56	104	134	24	48		1.192
4	active and take the 1st step	%	15.3	28. 4	36. 6	6.6	13.1	2.74	
	Have short term	No.	84	76	126	48	32		
5	(5years) strategic goals	%	23.0	20. 8	34. 4	13.1	8.7	2.64	1.217
	Encourage and	No.	128	76	86	48	28		
6	reward innovative behavior	%	35.0	20. 8	23. 5	13.1	7.7	2.38	1.288
		No.	38	126	118	48	36		1.112
7	Market share	%	10.4	34. 4	32. 2	13.1	9.8	2.78	
	Com	petitive	e Advan	tage				2.69	1.128

As for the short-term strategic objectives (5 years) to compete with other companies, it turned out that 43.8% believed that it is either low/very low, while 21.8% of them believed that it is high/very high and the value of the arithmetic mean is 2.64, which indicates that the company suffers from weakness in the short-term strategic plan. As far as encouragement and rewards are concerned, the results showed that 55.8% reported that they are low/very low, and in contrast, 20.8% believed that it is either high/very high and the arithmetic mean was 2.38 that indicated that the level of encouragement and rewards for work was low. The participation of the Arab Gulf

Oil Company compared to other companies in the global oil market was assessed, 44.8% reported that it is low/very low, while 23% respondents believed that it is high/very high and the value of the arithmetic mean is 2.78, which indicates the weak participation of the Arab Gulf Oil Company in the global market as compared to other companies.

The mean value for competitive advantage is 2.69, which indicates low level of the competitive advantage for the Gulf Oil Company, this result supported by result of previous studies (Barney, 2007).

## 4.10. Differences in SWOT Analysis by Demographic Variables

## 4.10.1. Differences in SWOT Analysis by Gender

**Table 48.** Independent Sample T-Test for SWOT Differences within groups in terms of Gender

	Gender	N	Mean	Std. Deviation	Mean differences	P-Value	
Strengths	Male	318	2.9177	1.15650	0.2629	0.142	
Suenguis	Female	48	3.1806	1.12453	0.2029	0.142	
Weaknesses	Male	318	2.4104	1.21998	0.2493	0.196	
Weakliesses	Female	48	2.6597	1.37993	0.2493	0.190	
Opportunities	Male	318	2.6497	1.23306	0.2336	0.223	
Opportunities	Female	48	2.8833	1.25127	0.2330	0.223	
Threats	Male	318	3.0767	1.38979	0.1733	0.42	
Tilleats	Female	48	3.2500	1.35238	0.1733	0.42	
Competitive Advantage	Male	318	2.6604	1.12305	0.2384	0.172	

From Table 48, it was found that the statistical significance values were all more than 0.05, and indicate that no significant differences exist with statistical significance in the elements of SWOT by gender, This indicates that the opinions of males don't differ from those of females for the assessment of the company's strengths and opportunities, weaknesses and threats and competitive advantage.

## 4.10.2. Differences in SWOT Analysis by Age

Table 49. Anova Test for SWOT Differences Within Groups in Terms Age

		N	Mean	Std. Deviation	F	Sig.	
	Less than 25	12	1.5278	1.23262			
	26-35	186	2.1487	.56763			
Strengths	36-45	108	3.4614	.49954	628.388	0.000	
	over 46 years	60	4.8111	.24446			
	Total	366	2.9522	1.15427			
	Less than 25	12	1.4444	1.03800			
	26-35	186	1.5269	.48167			
Weaknesses	36-45	108	2.9336	.45740	822.404	0.000	
	over 46 years	60	4.6000	.47854			
	Total	366	2.4431	1.24295			
	Less than 25	12	1.5333	1.24560		0.000	
	26-35	186	1.7699	.47959			
Opportunities	36-45	108	3.2352	.54675	763.147		
	over 46 years	60	4.7333	.41443			
	Total	366	2.6803	1.23625			
	Less than 25	12	1.6333	1.47915			
	26-35	186	2.0968	.85265			
Threats	36-45	108	3.9556	.61589	409.492	0.000	
	over 46 years	60	4.9600	.10923			
	Total	366	3.0995	1.38435			
	Less than 25	12	1.4881	1.14035			
G	26-35	186	1.8848	.51807			
Competitive Advantage	36-45	108	3.1812	.39721	691.86	0.000	
Auvantage	over 46 years	60	4.5524	.43336			
	Total	366	2.6916	1.12751			

From Table No. 49, it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and they indicate the presence of significant differences in the estimation of SWOT elements by age. It was found that the age groups less than 25 years very poorly evaluated the elements of SWOT, unlike respondents from the category 46 years and over.

## 4.10.3. Differences in SWOT Analysis by Educational Level

From Table 50, it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and indicates the presence of significant

differences in the estimation of SWOT elements in terms of educational level. It was found that there were differences in the estimation of SWOT elements between respondents who hold intermediate and higher diploma qualifications and respondents with higher qualifications (master's and doctoral).

**Table 50.** Anova Test for SWOT Differences Within Groups in Terms of Educational Levels

		N	Mean	Std. Deviation	F	Sig.
	Medium diplomas	12	1.5278	1.23262		
	Higher Diplomas	50	1.3400	.25413		
Strongths	Bachelor degrees	168	2.5804	.39245	419.144	0.000
Strengths	Master degrees	100	3.8300	.63872	419.144	0.000
	Doctorate degrees	36	4.9630	.07027		
	Total	366	2.9522	1.15427		
	Medium diplomas	12	1.4444	1.03800		
	Higher Diplomas	50	1.0667	.08248		
Weaknesses	Bachelor degrees	168	1.8581	.53071	444.211	0.000
weaknesses	Master degrees	100	3.3333	.59929	444.211	0.000
	Doctorate degrees	36	4.9444	.11269		
	Total	366	2.4431	1.24295		
	Medium diplomas	12	1.5333	1.24560		
	Higher Diplomas	50	1.1360	.15877		0.000
Opportunities	Bachelor degrees	168	2.1631	.44352	416.228	
Opportunities	Master degrees	100	3.6400	.69399	410.228	
	Doctorate degrees	36	4.9556	.12749		
	Total	366	2.6803	1.23625		
	Medium diplomas	12	1.6333	1.47915		
	Higher Diplomas	50	1.0240	.06565		
Threats	Bachelor degrees	168	2.6952	.71559	317.598	0.000
Tilleats	Master degrees	100	4.3080	.67415	317.396	0.000
	Doctorate degrees	36	5.0000	.00000		
	Total	366	3.0995	1.38435		
	Medium diplomas	12	1.4881	1.14035		
	Higher Diplomas	50	1.1771	.15424		
Competitive	Bachelor degrees	168	2.3197	.47037	398.337	0.000
Advantage	Master degrees	100	3.4443	.56486	370.33/	0.000
	Doctorate degrees	36	4.8413	.22073		
	Total	366	2.6916	1.12751		

## 4.10.4. Differences in SWOT Analysis by Experience

From Table 51, it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and indicated the presence of significant differences in the estimation of SWOT elements by experience. It was found that the experience groups less than 5 years very poorly evaluated the elements of SWOT, and it differs from the rest of the experienced categories.

Table 51. Anova Test for SWOT Differences Within Groups in Terms Experience

	Years	N	Mean	Std. Deviation	F	Sig.	
	0-5	88	1.5795	.58010			
	6-10	108	2.5185	.22480	]		
Ctuan atha	11-15	102	3.4690	.32896	570 216	0.000	
Strengths	16-20	20	3.9833	1.03294	570.316	0.000	
	over 21	48	4.9167	.10872	]		
	Total	366	2.9522	1.15427			
	0-5	88	1.1477	.39508			
Weaknesse	6-10	108	1.8086	.41193			
	11-15	102	2.9134	.33228	724.064	0.000	
S	16-20	20	3.5333	.88125	734.964	0.000	
	over 21	48	4.7917	.29274			
	Total	366	2.4431	1.24295			
	0-5 88 1.3318 .519	.51985					
	6-10	108	2.0704	.23252	]		
Opportunit	11-15	102	3.2176	.37770 708.229		0.000	
ies	16-20	20	3.8000	.96245	108.229	0.000	
	over 21	48	4.9167	.19278	]		
	Total	366	2.6803	1.23625			
	0-5	88	1.2818	.61896			
	6-10	108	2.6704	.49242			
Threats	11-15	102	3.9608	.40788	523.811	0.000	
Tilleats	16-20	20	4.4600	1.18606	323.611	0.000	
	over 21	48	5.0000	.00000			
	Total	366	3.0995	1.38435			
	0-5	88	1.3815	.50227			
<b>a</b>	6-10	108	2.2354	.25489			
Competitiv	11-15	102	3.1653	.19567	701.87	0.000	
e Advantage	16-20	20	3.6500	.91822	/01.8/	0.000	
1 ia vantage	over 21	48	4.7143	.29469			
	Total	366	2.6916	1.12751			

## 4.10.5. Differences in SWOT Analysis by Job Title

From Table 52, it was found that the values of the statistical significance (P-Values) were all equal to zero (less than 0.05), and indicated the presence of significant differences in the estimation of SWOT elements by job title. It turns out that a category of employees differs in their evaluation of the Swot elements from their other colleagues with different job titles.

Table 52. Anova Test for SWOT Differences Within Groups in Terms of Job Title

		N	Mean	Std. Deviation	F	Sig.
	Employee	270	2.4253	0.76266		
	Head of the Department	60	4.1167	0.68636		
Strengths	Manager	16	4.9167	0.08607	197.606	0.000
Buonguis	Member of the Board of Directors	20	5.0000	0.00000	177.000	
	Total	366	2.9522	1.15427		
	Employee	270	1.8500	0.71656		
	Head of the Department	60	3.6222	0.64504		
Weaknesses	Manager	16	4.8333	0.21082	295.925	0.000
Weakinesses	Member of the Board of Directors	20	5.0000	0.00000	273.723	0.000
	Total	366	2.4431	1.24295		
	Employee	270	2.0867	0.73351		0.000
	Head of the Department	60	3.9600	0.66363		
Opportunities	Manager	16	5.0000	0.00000	273.629	
Opportunities	Member of the Board of Directors	20	5.0000	0.00000	273.02	
	Total	366	2.6803	1.23625		
	Employee	270	2.5081	1.06802		
	Head of the Department	60	4.6200	0.70706		
Threats	Manager	16	5.0000	0.00000	130.29	0.000
Tineats	Member of the Board of Directors	20	5.0000	0.00000	130.27	0.000
	Total	366	3.0995	1.38435		
	Employee	270	2.1931	0.74366		
	Head of the Department	60	3.6357	0.64717		
Competitive	Manager	16	4.7143	0.18070	201.061	0.000
Advantage	Member of the Board of Directors	20	4.9714	0.05863	201.001	0.000
	Total	366	2.6916	1.12751		

## 4.11. Effect of SWOT on Competitive Advantage.

## **4.11.1.** Effect of Strengths on Competitive Advantage.

**Table 53.** Regression analyses to determine the effect of Strengths on Competitive advantage

Pearson correlation	Effect rate	P- Value	Regression coefficients		
			Constant	Strengths	
.0989	97.9%	0.000	- 0.161	0.966	

F Calculated value = 16628.784 , df (1, 364) , F Tabular Value = 3.8415 P-value<0.05 Significant, P-value>0.05 Insignificant, P-value<0.01 Highly significant

The result showed that P-value was equal to 0.000, which was less than 0.05, indicating statistically significant effect of Strengths on Competitive advantage. The effect rate was 97.9%. The F-value was calculated, which was more as compared to the tabular value, and it confirms the effect.

The regression model parameters can be estimated by the regression equation as follows:

$$Y = -0.161 + 0.966 x_1 + e$$

Where: Y = Competitive advantage,  $x_1 = Strengths$ , e = Random error.

## 4.11.2. Effect of Weaknesses on Competitive Advantage

**Table 54.** Regression analyses to determine the effect of Weaknesses on Competitive advantage

Pearson correlation	Effect rate	P- Value	Regression coefficients		
			Constant	Weaknesses	
0.17 -	%2.9	0.026	3.069	0.155 -	

 $\label{eq:FCalculated} F \ Calculated \ value = 10.897 \qquad , \quad df \ (1 \ , 364) \qquad , \quad F \ Tabular \ Value = 3.8415 \\ P-value < 0.05 \quad Significant, \quad P-value < 0.05 \quad Insignificant, \quad P-value < 0.01 \quad Highly \ significant$ 

The result showed that P-value was equal to 0.026, which was less than 0.05, It indicates a significant negative statistical effect of weaknesses on competitive advantage. The effect rate was 2.9%. The F-value was calculated, which was more as compared to the tabular value, and it confirms the effect.

The regression model parameters can be estimated by the regression equation as follows:

$$Y = 3.069 - 0.155 x_2 + e$$

Where: Y = Competitive advantage,  $x_2 = Weaknesses$ , e = Random error.

## **4.11.3.** Effect of Opportunities on Competitive advantage.

**Table 55.** Regression analyses to determine the effect of Opportunities on Competitive advantage

D 1.2	Effect	P- Value	Regression coefficients		
Pearson correlation	rate		Constant	Opportunities	
.0985	97.1%	0.000	0.283	0.899	

 $\label{eq:FCalculated} F\ Calculated\ value = 12162.359 \quad , \quad df\ (1\ ,364) \quad , \quad F\ Tabular\ Value = \ 3.8415 \\ P\ -value < 0.05 \quad Significant, \quad P\ -value < 0.05 \quad Insignificant, \quad P\ -value < 0.01 \quad Highly\ significant$ 

The result showed that P-value was equal to 0.000, which was less than 0.05, indicating statistically significant effect of Opportunities on Competitive advantage. The effect rate was 97.1%. The F-value was calculated, which was more as compared to the tabular value, and it confirms the effect.

The regression model parameters can be estimated by the regression equation as follows:

$$Y = 0.283 + 0.899 x_3 + e$$

Where: Y= Competitive advantage,  $x_3$ = Opportunities, e = Random error.

#### 4.11.4. Effect for Threats of Competitive Advantage

**Table 56.** Regression analyses to determine the effect of Threats on Competitive advantage

D 1.0	Effect rate	P- Value	Regression coefficients		
Pearson correlation			Constant	Threats	
0.39 -	%15.2	0.000	3.69	0.321 -	

 $\label{eq:FCalculated} F \ Calculated \ value = 65.446 \qquad , \quad df \ (1\ ,364) \qquad , \quad F \ Tabular \ Value = 3.8415 \\ P-value < 0.05 \quad Significant, \quad P-value > 0.05 \quad Insignificant, \quad P-value < 0.01 \quad Highly \ significant$ 

The result showed that P-value was equal to 0.000, which was less than 0.05, It indicates a significant negative statistical effect of Threats on competitive advantage. The effect rate was 15.2%. The F-value was calculated, which was more as compared to the tabular value, and it confirms the effect.

The regression model parameters can be estimated by the regression equation as follows:

$$Y = 3.69 - 0.321 x_4 + e$$

Where: Y = Competitive advantage,  $x_4 = Threats$ , e = Random error.

## **4.11.5.** Effect of SWOT on Competitive Advantage

**Table 57.** Regression analyses to determine the effect of SWOT on Competitive advantage

Pearson	Effect	P-	_	ession icients			
correlation	rate	Value	Constant	Strengths	Weaknesses	Opportunities	Threats
0.991	98.2%	0.000	0.089	0.575	- 0.012	0.362	- 0.012

F Calculated value = 4857.452 , df (4, 361) , F Tabular Value = 2.3719 P-value<0.05 Significant, P-value>0.05 Insignificant, P-value<0.01 Highly significant

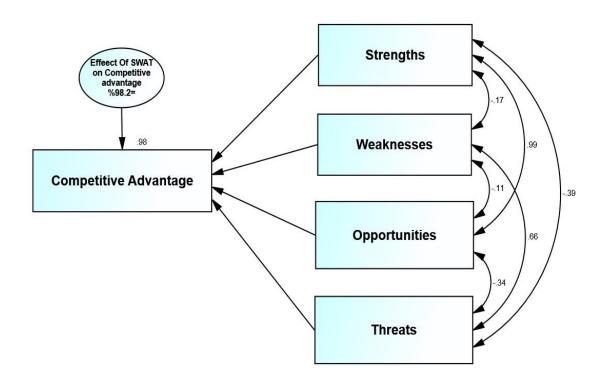
The result showed that P-value was equal to 0.000, which was less than 0.05, It indicates a significant negative statistical effect of SWOT on competitive

**advantage**. The effect rate was 98.2%. The F-value was calculated, which was more as compared to the tabular value, and it confirms the effect.

The regression model parameters can be estimated by the regression equation as follows:

$$Y = 0.089 + 0.575X_1 - 0.012 \ X_2 + 0.362 \ X_3 \ - 0.012 \ X_4 + e$$

Where: Y= Competitive advantage,  $X_1$  = Strengths ,  $X_2$ = Weaknesses ,  $X_3$ = Opportunities,  $X_4$ = Threats, e = Random error.



**Figure 13.** Results of Amos Analysis of The Effect for SWOT on Competitive Advantage

#### **CHAPTER FIVE**

#### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. CONCLUSIONS

It is conducted a field study on the Libyan Gulf Oil Company for SWOT analysis, the study approved a sample of 366 respondents, and the study reached its logical conclusion in the form of a set of results. The significant results are given below:

The level of strengths of the Libyan Gulf Oil Company was moderate, the value of the arithmetic mean reached 2.95 according to the five-step scale. This result can be attributed that this is due to the existence of some positive strength indicators such as the company's position in the market and its ability to explore oil reserves.

Some negative strength indicators this result can be attributed such as research and development and its weakness, which is resistance to change in addition to the company's weak work strategy.

It has been found that the Libyan Gulf Oil Company does not have many weaknesses. Where the value of the arithmetic average was 2.44 and This result can be attributed that this is due to the lack of ethical issues and corruption in the company.

In addition, It has been found that the Libyan Gulf Oil Company is facing issues such as lack of power, unavailability of basic spare parts, and difficulties in practical logistical issues.

It was found that the level of opportunities was weak in the company, the average value was 2.68 and the study shows that the weak opportunities were due to the lack of foreign investments in the company and few renewable energy sources.

It was found through the analysis that the level of threats faced by the Gulf Oil Company were average with value of arithmetic mean equal to 3.1. The study shows that this was due to the presence of some threats affecting the company, such as political changes in the world in addition to government interventions and environmental laws. Some threats that did not affect the company include the presence of a strong competitor in the local market.

It was found that there was a decrease in the company's competitive advantage because the mean value was 2.69. The study reached the conclusion that this happened due to the lack of adequate activation of the system of rewards for distinguished and innovative people and their lack of encouragement. The lack of short-term strategic goals and appropriate solutions for complaints related to services are some other issues the company needs to handle.

In the study, Independent-Samples t-Tests, One-Way Anova Test, correlation and regression analysis was performed, differences in SWOT analysis by gender, it was found that the statistical significance values were all more than 0.05, and differences in SWOT Analysis by Demographic Variables were to indicate that no significant differences exist with statistical significance in the elements of SWOT by gender. This indicates that the opinions of males don't differ from those of females for the assessment of the company's strengths and opportunities, weaknesses and threats and competitive advantage.

Differences in SWOT analysis by age it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and they indicate the presence of significant differences in the estimation of SWOT elements by age. It was found that the age groups less than 25 years very poorly evaluated the elements of SWOT, unlike respondents from the category 46 years and over.

Differences in SWOT analysis by educational level it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and indicates the presence of significant differences in the estimation of SWOT elements in terms of educational level. It was found that there were differences in the estimation of SWOT elements between respondents who hold intermediate and higher diploma qualifications and respondents with higher qualifications (master's and doctoral).

Differences in SWOT analysis by experience it was found that the values of the statistical significance (P-Value) were all equal to zero (less than 0.05), and indicated the presence of significant differences in the estimation of SWOT elements by experience. It was found that the experience groups less than 5 years very poorly evaluated the elements of SWOT, and it differs from the rest of the experienced categories.

Differences in SWOT analysis by job title it was found that the values of the statistical significance (P-Values) were all equal to zero (less than 0.05), and indicated the presence of significant differences in the estimation of SWOT elements by job title. It turns out that a category of employees differs in their evaluation of the Swot elements from their other colleagues with different job titles.

It was found that strengths have a positive and statistically significant effect on competitive advantage, as the effect rate was 97.9%. This positive effect is a result of the Gulf Oil Company's ability to explore, research and develop, and its ability to change, which has an active contribution to raising the level of the company's competitive advantage.

It was found that weaknesses have a statistically significant negative effect on the competitive advantage, because the impact ratio was 2.9%; this low negative impact is due to the limited deficiency of some parts and the presence of limited difficulties in practical logistics.

It was found that opportunities have a statistically significant positive effect on the competitive advantage, as the impact rate was 97.1%. This positive impact was observed because of the company's continued quest to increase its oil production in the near future, in addition to exploiting some alternative energy sources in the company's future plan and it is significant for improving the competitive advantage.

It was found that threats have a statistically significant negative effect on the competitive advantage because the impact ratio was 15.2%, The reason for this negative impact the current situation that the country is going through, which represents a real threat to the company, in addition to the explicit government interventions with the company's work as well as interventions resulting from environmental laws, which negatively affect the competitive advantage of the company.

It was found that SWOT had a statistically significant positive effect on the competitive advantage, as the impact rate was 98.2%. This effect was a result of the strengths of the company and the opportunities available to it, which contribute to raising its competitive advantage.

#### **5.2. RECOMMENDATIONS**

This part outlines the conclusions from the research findings, which highlighted the limitation of the study as they relate to the objective of the study. They include suggestions to conduct further researches on adopting SWOT analysis in the Libyan oil sector. They are based on this study and its conclusion:

After accomplishing the research process, it is recommended that the oil companies should invest in developing renewable energy sources to reduce the negative environmental impact.

The oil and gas marketing and exploration companies should find alternative energy resources, including geothermal forces because they have minimum environmental impact.

The companies should divert their investments to alternative energy sources because it can make a company an industry leader, and it will also benefit the environment and the society in addition to earning enormous profits.

Most of the oil companies should focus on drilling new oil wells and avoid future oil spills.

The companies should improve their current work processes and reduce the power usage to minimize the impact of their operations on the society and the environment.

In the nutshell, oil is currently a main source of energy source, and at the moment, no other alternative is as effective to meet the current needs. R&D should be initiated to discover or create methods to use the available technologies to reduce the oil-dependence; therefore, some additional research is needed in this area.

The oil sector is too competitive to be successful and sustainable; so, there is a need to develop a strong competitive advantage. This competitive advantage can be achieved by effectively adopting SWOT strategies.

The environment, in which, the oil companies operate is dynamic and volatile. This study, therefore, recommends that the oil companies, which are operational in Libya, should come up with strategies to adapt to a changing environment that will ensure their survival and success.

The oil sector in Libya should continuously conduct an environmental analysis to detect any change that would affect them and come up with strategies for protection.

The information from the study will help the policymakers to understand the oil sector from a new perspective and aid in the formulation and enforcement of legislation that would facilitate the learning about the competition between the international oil companies.

The study forms basis for academic and further research and knowledge of the oil industry.

The recommendations of this study are expected to enhance management and general performance of the oil sector and it might result in accurate communication and implementation of plans.

It will help fill the gap between theory and practice as applied in the major international oil companies.

Though facing various challenges, the oil sector is evolving fast and new strategies are formulated by the market players to ensure that they stay in business.

The oil sector should be focused and given proper attention because it generates considerable revenue for Libya.

This study propose to the Libyan government to set its future expectations for the coming years using the latest advanced technology to build local public and private oil companies in Libya so that Libya might emerge as a good example for other countries to follow.

#### **REFERENCES**

- Abulkasim, M. I. M., Mutalib, M. A., Abdulaziz, A. M., & Ibrahim, M. (2016). The impact of human resource management (HRM) practices on labour productivity in Libyan national oil corporations: the mediating role of social skills. Mediterranean Journal of Social Sciences, 7(2), 201.
- Agarwal, R., Grassl, W., & Pahl, J. (2012). Meta-SWOT: introducing a new strategic planning tool. Journal of Business Strategy, 33(2), 12-21.
- Alotaibi, J., Bakader, T., Deninna, A., Herrera, J., & Malibari, M. (2015). A Comparative Analysis of ExxonMobil, Conoco-Phillips, BP, Chevron, and Shell Societal and Environmental Sustainability Strategies, University of Dallas (2015).
- Al-Zubaidi, Ghani Daham Tanai; Mahmoud, Ahmed Abdul; Hussein, Hussein Walid. (2017). Analysis of the Dimensions of Intellectual Capital in Educational Institutions Using Swot Technology, University of Babylon Journal of Pure and Applied Sciences, No. 1, Volume 25, pp. 215-238.
- Amobi, V. (2014). SWOT Analysis of Royal Dutch Shell Plc. [online] Academia.edu. Available.at: <a href="https://www.academia.edu/9622779/SWOT\_of\_Dutch\_Shell\_Plc">https://www.academia.edu/9622779/SWOT\_of\_Dutch\_Shell\_Plc</a> [Accessed 3 Jun. 2018].
- Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. Journal of management studies, 41(8), 1271-1299.
- Andersen, T. J. (2013). Short introduction to strategic management. Cambridge University Press.
- Ansoff (1987). Corporate Strategy (update edition), Penguin Books: London (first published by McGraw-Hill in 1965).
- Assembly, U. G. (1986). Declaration on the Right to Development. Resolution, 41(128), 4.
- Azimi, R., Yazdani-Chamzini, A., Fouladgar, M. M., Zavadskas, E. K., & Basiri, M. H. (2011). Ranking the strategies of mining sector through ANP and TOPSIS in a SWOT framework. Journal of Business Economics and Management, 12(4), 670-689.
- Ayub, A., Razzaq, A., Aslam, M. S., & Iftekhar, H. (2013). A conceptual framework on evaluating SWOT analysis as the mediator in strategic marketing planning through marketing intelligence. European Journal of Business and Social Sciences, 2(1), 91-98.
- Bahgat, G. (2012). Arab Spring's impact on oil and gas in Egypt, Libya Oil and Gas Journal, 110 (1), 58.
- Barney, J. B. & Hesterly, W. S. (2006). Strategic Management and Competitive Advantage, USA: Prentice Hall.
- Barney, J. 2007, Gaining sustaining competitive advantage. 3rd Edition. Prentice Hall.
- Barney, J. (2011). Gaining and sustaining competitive advantage. Reading, MA: Addison- Wesley. (pp. 108–109).

- Beeho, A. J.; Prentice, R. C. 1997. Conceptualizing the experiences of heritage tourists: A case study of New Lanark World Heritage Village, Tourism Management 18(2): 75–87. doi:10.1016/S0261-5177(96)00103-3
- Blake, M., & Wijetilaka, S. (5). tips to grow your startup using SWOT analysis. Sydney. Retrieved August, 13, 2015.
- Boone, L. E., & Kurtz, D. L. (1992). Contemporary marketing. Dryden Press.
- Bruzda, A. (2012, September). SWOT Analysis: The difference of weaknesses and
- threats. Megan Daley Word Press. Retrieved from https://megandaley.wordpress.com/
- 2012/09/12/swot-analysis-the-difference-of-weaknesses-and-threats/
- Capon, C. (2004). Understanding organisational context: Inside and outside organisations. Pearson Education.
- Chaffee, E. E. (1985). Three Models of Strategy. The Academy of Management Review, 10(1), 89-98.
- Chandler, A. D. (1990)., Strategy and Structure: Chapters in the History of Industrial Enterprise, The MIT Press: Cambridge, MA, 1990 (first published in 1962).
- Chermack, T. J. & Kasshanna, B. K. (2007). "The use and misuse of SWOT Analysis and implications for HRD professionals", Human Resource Development, 10 (4), pp. 383-399.
- Chioma, Vivian Amobi , Strategic Management- SWOT Analysis of RoyalDutch Shell Plc 04/12/2014.
- Coman, A., & Ronen, B. (2009). Focused SWOT: diagnosing critical strengths and weaknesses. International Journal of Production Research, 47(20), 5677-5689.
- doi:10.1080/0020754080214613
- Cook, M. (2018). Alberta's Oil Sands: An Unsecured Asset? An Analysis of the Mine Financial Security Program in Relation to Surface Mining of the Alberta Oil Sands. Alberta Law Review, 56(1), 177-205.
- Collis, J. and R. Hussey (2013). Business research: A practical guide for undergraduate and postgraduate students, Palgrave macmillan.
- Coulter, M. 2008, Strategic management in action. 4th Edition. Pearson Education. New Jersey. United States.
- Crane, A., McWilliams, A., Matten, D., Moon, J., & Siegel, D. S. (2009). The Oxford handbook of corporate social responsibility. Oxford Handbooks.
- Daniel, J. (2013). Shell, Glencore, and other multinationals dominate their home economies. Business Week, April, 4, 2013.
- David, F. R. (1989). How companies define their mission. Long range planning, 22(1), 90-97.
- David F. R. (1997). Strategic Management; Sixth Edition, Prentice Hall International, Inc
- David, F. R. (2003). Strategic Management-Concepts and Cases, (9th Edition), USA: Pearson Education.

- David, F. R. (2005). Strategic Management Concepts and Cases, (10th Edition), USA: Pearson Education.
- David, F. R., & David, F. R. (2016). Strategic management: A competitive advantage approach, concepts and cases. Pearson.
- De Goey, F. (2002). Henri Deterding, Royal Dutch/Shell and the Dutch market for petrol, 1902-46. Business History, 44(4), 55-87.
- Dealtry, T. R. (1992). 'Dynamic SWOT Analysis': Developer's Guide. Intellectual Partnerships.
- Deeb, M. J. (2007). Great Socialist People's Libyan Arab Jamahiriya. The Government and Politics of the Middle East and North Africa, 423-446.
- Dess, G. G., Lumpkin, G. T., & Eisner, A. B. (2008). Strategic Management: Creating Competitive Advantages.
- Devarajan, S., Mottaghi, L., Do, Q. T., Brockmeyer, A., Joubert, C., Bhatia, K., & Abdel-Jelil, M. (2016). Middle East and North Africa Economic Monitor, October 2016: Economic and Social Inclusion to Prevent Violent Extremism. World Bank.
- Drucker, P F (2006). The Effective Executive, Gale Publication. (Revised edition Harper Paperbacks, 2006).
- Drucker, P. F. (2008). The five most important questions you will ever ask about your organization (Vol. 90). John Wiley & Sons.
- Drucker, P. (2012). Management. Routledge..
- Dyson, R. G. (2004). Strategic development and SWOT analysis at the University of Warwick. European journal of operational research, 152(3), 631-640. doi:10.1108/00251740210441063.
- Eisner, A., Lumpkin, G. T., Dess, G., & McNamara, G. (2015). Strategic Management: Creating Competitive Advantages. McGraw-Hill Higher Education.
- E.I.A., Energy information administration. "Libya Country Analysis Brief." Country Analysis Briefs, accessed February 2005, <a href="http://eia.doe.gov">http://eia.doe.gov</a>
- E.I.A., Energy Information Administration, "Country Analysis Briefs—Libya ," accessed Feb. 2011 (http://www.eia.doe.gov).
- Fadia, Z., (2016). The role of SWOT in improving organizational performance (Master's thesis).
- Falola, T., & Genova, A. (2005). The politics of the global oil industry: an introduction. Greenwood Publishing Group.
- Farhangi, A. A., Far, M. S., & Danaei, A. (2012). Development SWOT Matrix for Strategic Planning in Media Organizations. International Journal of Business and Commerce, 1(5), 1-12.
- Ferrell, O., Hartline, M., Lucas, G., & Luck, D. (1998). Marketing Strategy, and Orlando.
- Finnegan, M. J. (2010). Evaluating SWOT's value in creating actionable, strategic intelligence (Doctoral dissertation, Mercyhurst University).

- Foon, L. S., & Nair, P. B. (2010). Revisiting the Concept of Sustainable Competitive Advantage: Perceptions of Managers in Malaysian MNCs. International Journal of Business & Accountancy, 1(1).
- Freedman, R. (2013). The United Nations Human Rights Council: A Critique and Early Assessment. Routledge.
- Frumhoff, P. C., Heede, R., & Oreskes, N. (2015). The climate responsibilities of industrial carbon producers. Climatic Change, 132(2), 157-171.
- Gerretson, F. C. (1953). History of the Royal Dutch. Brill Archive. p. 346.
- Ghemawat, P. (2002). "Competition and Business Strategy in Historical Perspective", Business History Review, 76 (01),pp. 37-74.
- Glaister, K. W., & Falshaw, J. R. (1999). Strategic planning: still going strong?. Long Range Planning, 32(1), 107-116.
- Glick, D. (2011). A Look at the IEA 2011 Release of Strategic Oil Reserves.
- Goodrich, Ryan. SWOT analysis: examples, templates & definition. Business News Daily, 2015, 01-01.
- Grant, R. M. (2003). Cases in contemporary strategy analysis: USA, UK, Australia.
- Hamududu, B., & Killingtveit, A. (2012). Assessing climate change impacts on global hydropower. Energies, 5(2), 305-322.
- Harrison, J. S. & St. John, C. H. (2004). Foundations İn Strategic Management, Usa: South Western.
- Harrison, J. P., & Association of University Programs in Health Administration. (2010). Essentials of strategic planning in healthcare (Vol. 19, No. 3). Chicago, IL: Health Administration Press.
- Hax, A. C., & Majluf, N. S. (1996). The strategy concept and process: a pragmatic approach (Vol. 2, pp. 360-375). Upper Saddle River, NJ: Prentice Hall.
- Helms, M. M., & Nixon, J. (2010). Exploring SWOT analysis—where are we now? A review of academic research from the last decade. Journal of strategy and management, 3(3), 215-251.
- Hill, T., & Westbrook, R. (1997). SWOT analysis: it's time for a product recall. Long range planning, 30(1), 46-52. doi:10.1016/S0024-6301(96)00095-7
- Hindle, T., Guide to management ideas and gurus: John Wiley & Sons, 2008.
- Hisrich, R. D., & Peters, M. P. (1989). Entrepreneurship: Starting, developing and managing a new enterprise (Homewood, IL: BPI/Irwin).
- Houben, G., Lenie, K., & Vanhoof, K. (1999). A knowledge-based SWOT-analysis system as an instrument for strategic planning in small and medium sized enterprises. Decision support systems, 26(2), 125-135.
- doi:10.1016/S0167-9236(99)00024-X
- Hoyos, C. (2007). The new Seven Sisters: oil and gas giants dwarf western rivals. Financial Times, 12.
- Hugo, G. (2008). International migration in Indonesia and its impacts on regional development. In Global migration and development (pp. 61-83). Routledge.

- Humphrey, S. A. (2005). "SWOT Analysis for Management Consulting", SRI Alumni Association Newsletter, December.
- Jain, S. C. (1990). Marketing Planning & Strategy, South–Western Publishing Co.
- John Pearce, II, and Fred David, (1987). "The Bottom Line on Corporate Mission Statements," Academy of Management Executive 1, no. 2 (May 1987): 109.
- Johnson, P. G., Scholes, P. K., & Whittington, P. R. (2006). Exploring Corporate Strategy: Enhanced Media Edition Text Only. Financial Times/ Prentice Hall.
- Kajanus, M., Leskinen, P., Kurttila, M., & Kangas, J. (2012). Making use of MCDS methods in SWOT analysis—Lessons learnt in strategic natural resources management. Forest Policy and Economics, 20, 1-9.
- Kangas, J., Kurttila, M., Kajanus, M., & Kangas, A. (2003). Evaluating the management strategies of a forestland estate—the SOS approach. Journal of environmental management, 69(4), 349-358.
- doi:10.1016/j.jenvman.2003.09.010
- Kauffman R (2002). Strategic Planning in Education, McGraw-Hill Publication, 2nd Edition.
- Keshlaf, M. (2014) Beekeeping in libya. Int. J. Biol. Biomol. Agric. Biotechnol Eng, 8, 32-35.
- Khan, U. A., Alam, M. N., & Alam, S. (2015). A critical analysis of internal and external environment of Apple Inc. International Journal of Economics, Commerce and Management, 3(6), 955-961.
- Kraus, S. & Kauranen, I. (2009). "Strategic Management and Entrepreneurship: Friends or Foes?", International Journal of Business Science and Applied Management, 4 (1), pp. 38-50.
- Krijnen, H. G. (1992). Strategie en management: een inleiding tot de beleidsproblematiek van ondernemingen. Wolters-Noordhoff.
- Labbok, M. H. (2012). Global baby-friendly hospital initiative monitoring data: update and discussion. Breastfeeding Medicine, 7(4), 210-222.
- Lamarre, M. C., & Weinberg, L. (2013). NGOs Addressing NCDs Through a Health Promotion Lens. In Global Handbook on No communicable Diseases and Health Promotion (pp. 159-167). Springer, New York, NY.
- Leigh, D. (2009). SWOT analysis. Handbook of Improving Performance in the Workplace: Volumes 1-3, 115-140.
- Libyan Intelligence Group, 2013. What does the future hold for the Libyan oil & gas sector. Retrieved from <a href="http://www.libyaintelligence.org/content/what-does-future-hold-libyan-oil-gas-sector">http://www.libyaintelligence.org/content/what-does-future-hold-libyan-oil-gas-sector</a>
- Lolav, A. K.[2016], Strategic Management in Banking, University Of Yuzuncu Yil Institute Of Social Science Department Of Business Administration Science, 23.
- Lowy, A. & Hood, P. (2004). The Power of The 2x2 Matrix: Using 2x2 Thinking to Solve Business Problems and Make Better Decision, USA: Jossey-Bass.

- Mabel Darkwah May (2012). Strategic Analysis Of Brazil's National Oil Company (Petrobras).
- Marielle Mawile, (2014). Description Simple Case Study how The Arctic Issue is affecting the brand equity of Shell Global. <a href="https://www.scribd.com/document/241549082/Shell-Case-Study">https://www.scribd.com/document/241549082/Shell-Case-Study</a>.
- Martins, M. E. (2016). FORM 20-F.
- Menyah, K., & Wolde-Rufael, Y. (2010). CO2 emissions, nuclear energy, renewable energy and economic growth in the US. Energy Policy, 38 (6), 2911-2915.
- Meyer, R. (1998). Strategy: process, content, context: an international perspective. Cengage Learning.
- Mintzberg, H. (1990). "The Design School: Reconsidering The Basic Premises of Strategic Management", Strategic Management Journal, 11, pp. 171-195.
- Mintzberg, H., Ghoshal, S., Lampel, J., & Quinn, J. B. (2003). The strategy process: concepts, contexts, cases. Pearson education.
- Mitkov, Z. (2015). Civil War After The Arab Spring: A Comparative Study Of Libya, Syria, And Yemen. Central European University.
- Morris, P. W. (2012). Cleland and king: Project management and the systems approach. International Journal of Managing Projects in Business, 5(4), 634-642.
- Morris, W. (1980). The Houghton Mifflin Canadian Dictionary of the English Language. Markham, Ont.: Houghton Mifflin Canada.
- Muurinen, T. (2018). Toimintatutkimus Helsingin Jalkapalloklubi ry: n strategiaprosessista.
- Nordmeyer, B. (2016). Advantages and disadvantages of SWOT analysis. Retrieved from Chron: http://smallbusiness. chron. com/advantages-ampdisadvantages-swot-analysis-41398. html.
- Oil and Gas Libya, 2013. Oil Minister opens Oil & Gas Libya 2013. Retrieved from <a href="http://www.oilandgaslibya.com/">http://www.oilandgaslibya.com/</a>
- Organization of the Petroleum Exporting Countries, "Libya facts and figures," (accessed October 2015).P2-4.
- Osita, I. C., Onyebuchi, I., & Nzekwe, J. (2014). Organization's stability and productivity: the role of SWOT analysis an acronym for strength, weakness, opportunities and threat. International Journal of Innovative and Applied Research, 2(9), 23-32.
- Otieno, B. O. (2017). Adoption of SWOT analysis to generate competitive advantage in transport industry. a case study of transline Sacco limited (Doctoral dissertation, University of Nairobi).
- Otungu, O. A., Nyongesa, J. W., Ochieng, E. O. & Simeon, K. (2011). "Strategic Management: The Link Between The Agency Theory and The Company's Competitive Advantage", International Journal of Business and Social Science, 2 (23), Special Issue, pp. 232-237.

- Pahl, N. & Richter, A. (2009). SWOT Analysis-Idea, Methodology and A Practical Approach, Germany: Grin Verlag.
- Pakkanen, T. M. (2012). Internal and external analysis.
- Pargeter, A. (2016). Libya: from 'Reform'to Revolution. North African Politics: Change and Continuity, 178-195.
- Pearce, J. A. & Robinson, R. B. (1991). Strategic Management, (4th Edition), USA: Irwin, Inc.
- Pearce, J. A., Robinson, R. B., & Subramanian, R. (2000). Strategic management: Formulation, implementation, and control. Columbus, OH: Irwin/McGraw-Hill.
- Peter Drucker, Management: Tasks, Responsibilities, and Practices (New York: Harper & Row, 1974), 611.
- Piercy, N. and Giles, W. (1989) 'Making SWOT Analysis Work', Marketing Intelligence & Planning. Vol 7(5/6): 5-7. doi:10.1108/EUM000000001042.
- Porter, M. E. (2008). Competitive strategy: Techniques for analyzing industries and competitors. Simon and Schuster.
- Press, R. T. I. (2013). Externalities of Transportation Fuels: Assessing Trade-offs Between Petroleum and Alternatives.
- Quincy, R., Lu, S., & Huang, C. C. (2012). SWOT analysis: Raising capacity of your organization. Rutgers School of Social Work.
- Ritson, N. H. (2011). American multi-national corporations in the UK oil industry: sectoral differentiation in diffusion and adaptation. Labor History, 52(4), 441-460.
- Rodney, W. (2018). How europe underdeveloped africa. Verso Trade.
- Roth, B. N., & Washburn, S. A. (1999). Developing strategy. Consulting to Management, 10(3), 50.
- R.T., 2013. Libya lost \$1 billion in oil industry chaos, Retrieved from http://rt.com/business/libya-oilproduction-crisis-629
- Rue, L. W., & Byars, L. L. (2002). Management: Skills and Application (10th ed.). Irwin/McGraw-Hill.
- Salamon, L. M., Sokolowski, S. W., & List, R. (2004). Global civil society (Vol. 2). Bloomfield, CT: Kumarian.
- Santos, J. M. P. D. (2016). The Rathbone Hotel (Doctoral dissertation).
- Scheel, A. C. (2013). CSR and Oil Companies.
- Sekaran, U. (2003). Research Methods for Business: A skill-bulding approach. New York: John Willey and Son. Inc Year.
- Selznick, P. (2011). Leadership in administration: A sociological interpretation. Quid Pro Books.
- Sevklı, M., Oztekın, A., Uysal, O., Torlak, G., Turkyılmaz, A. & Delen, D. (2012). "Development of a Fuzzy ANP Based SWOT Analysis for the Airline Industry in Turkey", Expert Systems with Applications, 39, pp. 14-24.

- Shammas, P. (2000). Saudi Arabia: petroleum industry review. Energy exploration & exploitation, 18(1), 1-86.
- Shell's strategy Royal Dutch Shell | June 4-5, 2019. Shell com. <a href="https://www.shell.com/investors/shell-and-our-strategy">https://www.shell.com/investors/shell-and-our-strategy</a>
- Shell, 2014. Shell Investor Highlights. [Online] <u>Available at: http://s07.static\_shell.com/\_content/dam/shell\_new/local/\_corporate/\_corporate/\_downloads/\_pdf/investor/\_\_investor-highlights/shell-investor-highlights-may-2014.pdf [Accessed 24 Nov 2014].</u>
- Sherman, H., Rowley, D. and Armandi, B. (2007) 'Developing a Strategic Profile: The Pre-planning Phase of Strategic Management', Business Strategy Series. Vol 8(3): 162-171.
- Sherman, H., Rowley, D. and Armandi, B. (2006) Strategic management: An Organization Change Approach. University Press of America, New York.
- Simon W. & Michael C., Editing by James Jukwey, DECEMBER 11, 2009. Iraq holds oil auction, Shell wins the giant field. <a href="https://in.reuters.com/article/idINIndia-44646120091211">https://in.reuters.com/article/idINIndia-44646120091211</a>
- Škrjanc, D. (2013). Analiza krize v Libiji (Doctoral dissertation, D. Škrjanc).
- Statista 2019 /number-of-royal-dutch-shell-employees., last edited Aug 2019, Royal Dutch Shell 2009-2018. <a href="https://www.statista.com/statistics/279425/number-of-royal-dutch-shell-employees.">https://www.statista.com/statistics/279425/number-of-royal-dutch-shell-employees.</a>
- Statista 2019 / Global 2019 ranking of oil and gas companies based on net income, last edited Jul 22, 2019, Royal Dutch Shell 2019. <a href="https://www.statista.com/statistics">https://www.statista.com/statistics</a> /272711/ top-global-oil-and-gas-companies-based-on-net-income/
- Suominen, S. (2012). Osaava johtaminen kolmannen sektorin palvelutuotannossa.
- Supersberger, N., & Führer, L. (2011). Integration of renewable energies and nuclear power into North African Energy Systems: An analysis of energy import and export effects. Energy Policy, 39(8), 4458-4465.
- Tek, B.Ö., Özgül, E., 2010 ""Modern Pazarlama Ġlkeleri"", BirleĢik Matbaacılık, S:33, 467-468, 476, 482.
- Thompson, A. A. & Strickland, A. J. (2001). Strategic Management-Concepts and Cases, (12th Edition), USA: McGraw-Hill.
- Thompson Arthur Jr, Strickland AJ (2003), Strategic Management: Concepts & Cases, McGraw-Hill / Irwin, 13th Edition
  - Thompson, S. (2005). Competing through services: Strategy and implementation., Prentice Hall, Hemel Hempstead.
- Thompson A. A., Strickland, A. J. & Gamble, J. E. 2007. Crafting and executing strategy-concepts and cases, (15th Edition), USA: McGrawHill/Irwin
- Thomsen, S. (2008). A minimum theory of boards. International Journal of Corporate Governance, 1(1), 73-96.
- Tovstiga, G. (2015). Strategy in practice: A practitioner's guide to strategic thinking. John Wiley & Sons.

- Ülgen, H. & Mirze, S. K. (2010). İşletmelerde Stratejik Yönetim, (5. Baskı), İstanbul: Beta Basım Yayım.
- Waterman, R. H. (1987). The renewal factor: How the best get and keep the competitive edge.
- Weihrich, H. (1982). The TOWS matrix—A tool for situational analysis. Long range planning, 15(2), 54-66. doi:10.1016/0024-6301(82)90120-0.
- Weihrich, H., & Cannice, M. V. (2010). Management. Tata McGraw-Hill Education.
- Wheelen, T. L., & Hunger, J. D. (1987). Using the strategic audit. SAM Advanced Management Journal, 52(1), 4.
- Wheeler, D., Rechtman, R., Fabig, H., & Boele, R. (2001). Shell, Nigeria and the Ogoni. A study in unsustainable development: III. Analysis and implications of Royal Dutch/Shell group strategy. Sustainable Development, 9(4), 177-196.
- White, B. M., Lundberg, W. L., & Pierre, J. F. (2015). Accomplishments, Status, and Road Map for the US Department of Energy's Fossil Energy SOFC Program. ECS Transactions, 68(1), 23-38.
- Whittington, R. (2001). What is strategy-and does it matter?. Cengage Learning EMEA.
- Williams, Nia (24 May 2017). "Shell, ConocoPhillips oil sands share selloff risks flooding market". Reuters. Retrieved 10 June 2017.
- Woodrow, C., & Guest, D. E. (2014). When good HR gets bad results: Exploring the challenge of HR implementation in the case of workplace bullying. Human Resource Management Journal, 24(1), 38-56.
- Yaghoubi Fadia: The Role of Swot Analysis in Improving Organization Performance, Master Thesis in Strategic Planning, from the University of Mohamed Khader, Algeria, 2016.
- Yin, R. (2003). Case study research: Design and methods . Beverly Hills, CA: Sage publishing.
- Zhang, R., Klusener, P. A. A., & Liu, Z. (2016). U.S. Patent Application No. 14/914.541.

https://tradingeconomics.com/libya/crude-oil-production.

https://www.wikizeroo.org/index.php?q=aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnL3dpa2kvUm95YWxfRHV0Y2hfU2hlbGw.

https://in.reuters.com/article/idINIndia-44646120091211.

https://www.statista.com/statistics/279425/number-of-royal-dutch-shell-employees.

https://tradingeconomics.com/Central Bank of Libya.

https://in.reuters.com/article/idINIndia-44646120091211.

https://www.marketing91.com/swot-analysis-of-royal-dutch-shell.

https://noc.ly/index.php/en/.

https://tradingeconomics.com/libya/crude-oil-production organization of the petroleum exporting countries.

https://en.wikipedia.org/wiki/National\_Oil\_Corporation.

https://www.linkedin.com/company/ras-lanuf-oil-and-gas-processing-company.

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#### LIST OF ATTACHMENTS

## **Appendix I: Questionnaire**

The research has been about the external environment factors in companies' Swot Analysis, which are competing in the international market, A case study of comparison of the gap between Shell Royal Dutch Company and National Oil Company Libya has been conducted. Questionnaires were used to collect data for purely academic purposes. All information will be treated with strict confidence. The questionnaire does not include any name or identification. Answering all the questions was compulsory and the respondents could either fill in the blank or tick the option that applies. Thank you for your contributions in advance.

Dr. Neşe Yildiz

HASSIN AITWILE

#### 1. Demographic information

1. Gender	() Male () Female
2. Age:	Less than 25 () 26-35 () 36-45 () over 46 years()
3. Educational level	Medium diploma () Higher Diploma () Bachelor degree () Master degree () Doctorate ()
4.Experience	0-5 years ( ) 6-10 years ( ) 11-15 years ( ) 16-20 years ( ) over 21 years ( )
5.Job title	Employee ( ) Head of the Department ( ) Manager ( ) Member of the Board of Directors( )

# 2. SWOT Analysis

Rate the following items as applied to your organization using a five-point scale of 1-5 with Very low =1, Low =2, Moderate=3, High= 4, Very high =5

Strengths	Very	Low	Moderate	High	Very
	Low				high
Market Position					
Exploration Capacity					
Research and Development					
Ability to change					
Business strategy					
customer relationships					
Weaknesses	Very	Low	Moderate	High	Very
	Low				high
Shutting wells because of ageing					
infrastructure and a lack of energy					
Political stability					
Ethical Issues and Corruption					
Shortages of some spare parts					
Work ethics					
Difficulty in Logistics practical					
issues					
Opportunities	Very	Low	Moderate	high	Very
	Low				high
Foreign Investments					
Renewable energy sources					
Future Trends					
global energy demand					
Innovation and Technology in the					
Innovation and Technology in the	Very	Low	Moderate	high	Very
Innovation and Technology in the company	Very Low	Low	Moderate	high	Very high
Innovation and Technology in the company	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats  Libya Civil War and Crisis	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats  Libya Civil War and Crisis management of crude oil shortage	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats  Libya Civil War and Crisis management of crude oil shortage High competition	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats  Libya Civil War and Crisis management of crude oil shortage High competition Susceptible to political volatility in	_ •	Low	Moderate	high	_
Innovation and Technology in the company Threats  Libya Civil War and Crisis management of crude oil shortage High competition Susceptible to political volatility in the world	_ •	Low	Moderate	high	~

# 3. Competitive Advantage

Rate how competitive your organization is compared to the competitors in the following aspects using a five-point scale of 1-5 with Very low =1, Low =2, Moderate =3, High= 4, Very high =5.

Competitive Advantage	Very low	Low	Moderate	High	Very high
Staff competence					
Handling of complaints about the services					
Flexibility and easily adopts to changes in the environment					
Always pro-active and take the 1st step					
Have short term (5years) strategic goals					
Encourage and reward innovative behavior					
Market share					

## **Appendix 2: Questionnaire**

## استمارة استبيان

هذا الاستبيان لتجميع البيانات لأغراض أكاديمية بحتة. سيتم التعامل مع جميع المعلومات بثقة تامة. لا تضع أي اسم أو هوية على هذا الاستبيان. أجب على جميع الأسئلة كما هو موضح إما عن طريق ملء الفراغ أو تحديد الخيار الذي ينطبق. شكرا على مساهماتكم مقدما.

## أولاً: المعلومات الديموغرافية

انثی ( ) نکر( )	1- الجنس
أقل من 25 () 36-35 () 46-45 () أكبر من 46 عامًا()	2- العمر بالسنوات
درجة الماجستير () الدكتوراه () الدبلوم المتوسط () الدبلوم العالي () درجة البكالوريوس ()	3- المستوى التعليمي
5-0 سنوات () 6-10 سنوات () 11-15 سنة () 16-20 سنة () أكثر من 21 سنة()	4- الخبرة
عضو مجلس الإدارة () موظف () رئيس قسم () مدير ()	5- المسمى الوظيفي

# ثانيا : تحليل نقاط القوة و الضعف و الفرص و التهديدات في الشركة

مرتفع	مرتفع جدا	معتدل	منخفض	منخفض جدا	نقاط القوة
					مكان الشركة في
					السوق
					قدرة الاستكشاف لدى
					الشركة
					البحث والتطوير
					القدرة على التغيير
					استراتيجية العمل
					علاقات العملاء
مرتفع	مرتفع جدا	معتدل	منخفض	منخفض جدا	نقاط الضعف
					البنية التحتية ونقص
					الطاقة
					تحديات الاستدامة
					مخالفة قوانين الفساد

		نقص بعض قطع الغيار
		نقص بعض قطع الغيار
		صعوبة في القضايا
		اللوجستية العملية
		الفرص
		الاستثمارات الأجنبية
		مصادر الطاقة
		المتجددة
		اتجاهات المستقبل
		الطلب العالمي على
		الطاقة
		طاقة بديلة
		التهديدات
		إستقرار سياسي
		الشفافية في
		الممارسات التجارية منافسة
		منافسة
		إدارة الأزمات من
		النفط الخام
		التدخلات الحكومية
		والقوانين البيئية
		تقلب سعر النفط الخام

# 

قيّم مدى الميزة التنافسية لمؤسستك مقارنة بالمنافسين في الجوانب التالية باستخدام مقياس مكون من خمس نقاط من 1-5

(1= معدل منخفض جدًا ،2= منخفض ، = متوسط ،4= مرتفع ،5= مرتفع جدًا).

مرتفع	مرتفع جدا	متوسط	منخفض	منخفض	ميزة تنافسية
				جدا	
					درجة كفاءة الموظفين
					في الشركة
					معالجة الشكاوى حول
					الخدمات
					درجة المرونة للشركة
					وسهولة التغيرات في
					البيئة
					دائمًا نشطًا واتخاذ
					الخطوة الأولى
					الشركة لديها أهداف
					استراتيجية قصيرة
					الأجل (5 سنوات)
					تشجيع ومكافاة
					المتميزين في العمل
					مدى مشاركة الشركة
					في السوق العالمي



## T.C. KARABÜK ÜNİVERSİTESİ REKTÖRLÜĞÜ Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurulu

Sayı: 78977401-050.02.04-E.164 11/01/2020

Konu : Etik Kurul Kararları

Sayın Dr. Öğr. Üyesi Neşe YILDIZ

İlgi: 06/01/2020 tarihli ve E.528 sayılı yazı.

Üniversitemiz Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurulu'nda alınan 09/01/2020 tarih ve 2020/01-10 sayılı kararı yazımız ekinde sunulmuştur.

Gereğini rica ederim

e-imzalıdır

Prof. Dr. Fatih BAYRAM

Kurul Başkanı

Ek: Etik Kurul Kararı (1 sayfa)



#### T.C. KARABÜK ÜNİVERSİTESİ SOSYAL ve BEŞERİ BİLİMLER ARAŞTIRMALARI ETİK KURULU KARARLARI

TOPLANTI TARİHİ : 09.01.2020 TOPLANTI NO : 2020/01

Karabük Üniversitesi Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurulu toplanmış ve aşağıdaki kararı almıştır.

#### Karar 10:

06/01/2020 tarihli Dr. Öğr. Üyesi Neşe YILDIZ'ın Etik Kurul form ve ekleri görüşüldü.

Karabük Üniversitesi öğretim üyesi Dr. Öğr. Üyesi Neşe YILDIZ'ın danışmanlığında yürütülen "Uluslararası Pazarda Rekabet Eden Şirketlerin SWOT Analizinde Dış Çevre Faktörleri Üzerine Bir Araştırma: Petrol Şirketlerine Bir Örnek" konulu çalışma kapsamında uygulanmak üzere ekte sunulan çalışmasının etik kurallara uygunluğu oy birliği ile kabul edilmiştir.

ASLI GIBIDIR

Prof. Dr. Fatih BAYRAM Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurul Başkanı

## **CURRICULUM VITAE**

Name : Hassin Altwile

**Date of Birth:** 1964

Place of Birth: JANZOUR

## **QUALIFICATIONS**

Master Degree of Economy at Universities Tripoli 2009-2010

Bachelor Degree of Economic at Universities Tripoli 1987-1988

Diploma University of Tripoli 1982-1983

## **CONTACT INFORMATION**

Address: Karabuk University Institute of Social Sciences Department of Business

Administration

**Phone** : 00905419003777

**Email**: twill56@yahoo.com / altwill56@gmail.com