

Business Analysis & Transformation (BAT) Monitoring & Normalizing Plan (MAN) Statoil Petroleum and Wind Energy

Karan Jain (I.D- 13603800)

Master's of Business Administration (Leadership)
James Cook University (Brisbane, Australia)

Email- jainkaran766@gmail.com

Abstract: Over 80% of the world's energy needs are provided by coal, oil and gas. Although 80% of technologies to extract fossil fuels have changed over the decades, the core products themselves have never been challenged until now. Pressure to reduce carbon emissions is putting the future of Statoil Company in jeopardy, encouraging the growth of alternative methods to generate and distribute power. In the past eight years the value of the Statoil Company has halved leaving the company to redefine its role in this new energy world. Across the world Statoil company is facing disruption on an unprecedented scale. The pressure to adapt into this new energy world has now become the major concern for Statoil Company. So in the following paper I would like to discuss about the new methods that would replace the old process of Statoil Company to compete with the new energy world.

Keywords: Indicators (Specific), SWOT Analysis, Transformation Plan, Monitoring System, Pressure-State-Response (PSR), Statoil Company.

1. INTRODUCTION

Statoil is a multinational energy based company was founded in 1972. It is petroleum and wind energy based company (Yergin, 1990) which operates in about 40 countries. In 2001, Statoil was a well publically listed company and ten years later (Downey, 2009) Statoil was well on its way of becoming global energy producer. In 1974, Statoil made its first footprint by discovering start field oil in the North Sea and it continued (Burrough, 2009) up the coast of Norway. Statoil's ability to develop and apply technology has been challenged many times by the Norwegian continental shelf nature.

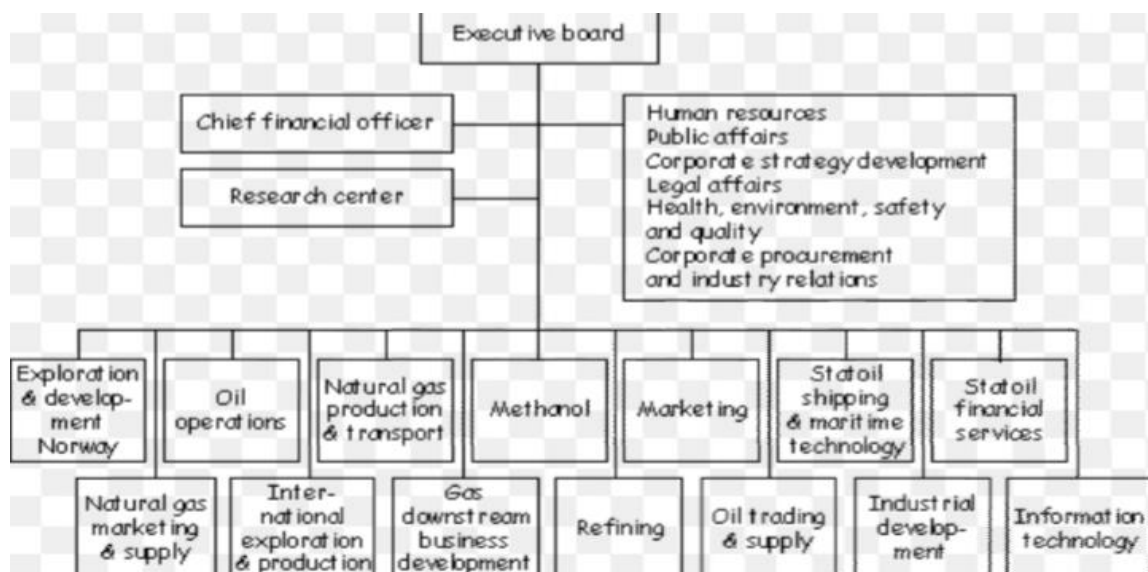


Figure 1- Working and functioning of Statoil Petroleum & Wind Energy

It was the harsh weather that Statoil faced everyday (Raymond, 2006)but it made Statoil into one of the absolute frontrunner by applying new technology. Away from Norway, Statoil went to find new horizons in Peregrino Field (Brazil).Soon; Statoil merged with Heathrow Statoil became the number one offshore operator in the world. Statoil’s strength and future is technology focused and Statoil has shaped its profile (Tarbell, 2008)as an upstream energy producer. Through global exploration of screw guard and discoveries at the Norwegian continental shelf, the peregrine south (Inkpen, 2011) brazil and early moves into unconventional sources in north America, future steps have already been taken representing the same optimism on which Statoil was founded. For 10 years (Coll, 2012)Statoil has discovered sector leaving shareholder return through developing a sustainable and value based businesses and culture.

2. WHAT NEEDS TO BE CHANGED?

The green society needs to be managed. Here, Statoil needs to manage millions of feed in and consumption sites including many sharing (Zuckerman, 2013)economies which might have under and over consumption at times. This management equation, big data mining, technical competence is obviously something the world (Kleveman, 2003)needs and Statoil must strive for being a capable partner in that.

Statoil should be encouraged for any kind of (Silverstein, 2014)partnerships with any partner, with any customer and it is a new attitude and Statoil don’t need to control the world. By this Statoil can produce many renewable (Carter, 2005) energy products. Encouraging and embracing these alternative technology forward thinking oil and Gas Company can withstand the disruption caused by renewable revolution.

3. BUSINESS CASE

3.1 SWOT Analysis

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> ✓ 2nd in the gas supply in Europe. ✓ Added 1.25 bbr of oil equivalent. ✓ Current ratio is higher than competitors. ✓ Innovative technology in upstream. ✓ Expect to complete 70 wells by 2020. 	<ul style="list-style-type: none"> ✓ LNG imported in Europe fell about 23% ✓ Political instability in regions where operates ✓ Financial net income decrease 39.2 bnNok from 65 bnNOK in 2012. ✓ Increase competition with other more powerful players.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ✓ Annual growth on oil demands 1.3 brd every year. ✓ Increase gas demand, 1% Europe, 2% N. America, 5% Asia. ✓ New large field wells after 2018 ✓ NOC-IOC partnerships ✓ Increase liquidity. 	<ul style="list-style-type: none"> ✓ Unstable political environment in operational regions. ✓ E.U. policies to decrease CO2 emissions. ✓ Gradual decrease in oil prices

3.2 Grand Strategy matrix



Figure 2- Grand Strategy Matrix for Statoil

3.3 Strategy Formulation (Simplified Methodology)

- Brand name closely connects with heavy machinery, (Stevenson, 1998)working efficiently in extreme situations, reliability.
- High annual growth compared (Doran, 2016) with other markets (10.6%).
- Spread worldwide with firms brand name and reputation by products more widely use.

Proposed Strategic operations.	Internal- External matrix	SWOT Analysis	Grand Strategy Matrix
Invest in R&D in renewable technology		X	
Expand retail networks in Asia.	X	X	X
Partnerships with strong NOC	X	X	X
Liquidation			X
Expand pipeline network in EU.	X	X	X
Unrelated diversification/ small tools and accessories			X

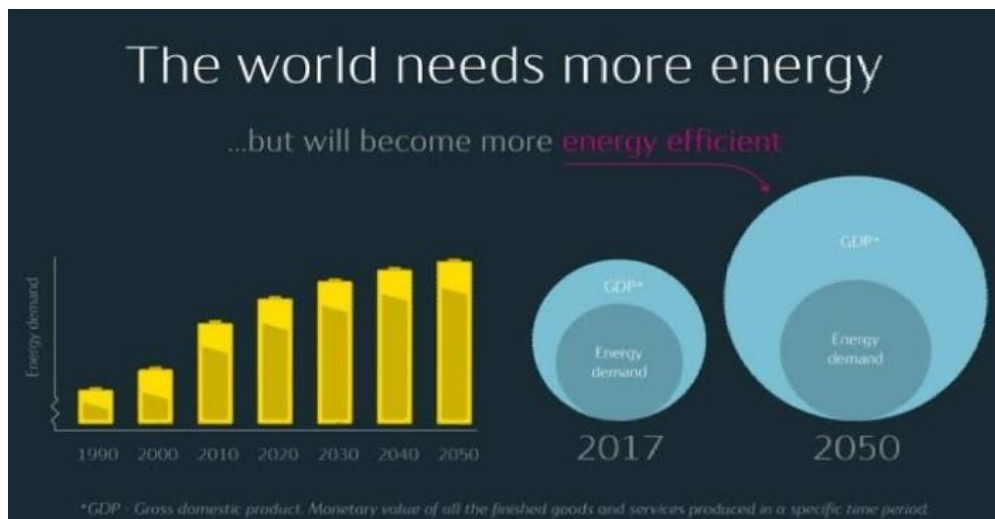


Figure 3- GDP to Energy demand Comparison

4. TRANSFORMATION PLAN

Everyone in the Statoil Company agrees that (Carter P. , 2007) there will different futures of power sources. In fact,5 trillion dollar deal during Paris agreement for green society may cause a seismic shift but that doesn't means that (Mitchell, 2011)company should give up its fossil fuels that made it so rich. Instead Statoil should start banking on new methods to clean up the oil process. The company should start attempting to (Ross, 2012) become the most carbon efficient oil and gas producer in the world. Unfortunately, Statoil's business still relies on the harmful burning of fossil fuel by its customers. But at least (Sabin, 2004) Statoil can try and reduce its own carbon footprint.

4.1 Transforming Offshore oil rigs

Statoil can transform some of its (Conaway, 1999)offshore oil rigs with technology that enables engineers to separate the carbon dioxide and pump it under ground. Statoil's Sleipner gas rig is the world's first offshore carbon capture (Mealer, 2018)storage plant. At Sleipner we have to look a lot to CO2 gas. So, we have to capture CO2 and separate it from the gas stream and outlet into the subsurface 1000 meters down the ground through a (Maass, 2009) well and then we can store the CO2 in subsurface forever and ever. By this Statoil can store up to 1 million tones of CO2 making extraction less carbon intensive.

4.2 Transforming Priorities

Prioritizing gas over more harmful fossil fuels (Smil, 2008)will further reduce global warming and keep it relevant for decades to come. One of the advantage of gas it's very abundant, reliable and flexible. You can turn the gas stream on and off which (Sinclair, 1998) makes it regulate the flow of gas very regularly.

4.3 Transforming into Subordinate companies

Statoil should make a decision to fully commit to renewable revolution. The company can be broken up into two subordinate (Mackay, 2008) companies. All the commodities businesses, the traditional fossil, power plants can be put into one of the subordinate company and the remaining with the renewable sources to the other half (Marketable renewable energy: Concepts, Business Models and cases, 2017) of the company.

Statoil can spin of majority share of its fossil fuel assets by the end of 2020 and scale up its investment on wind and solar. But rather than (Tantau, 2017)generating renewable power, Statoil can also generate its opportunity to diversify its power supplies on an industrial scale.

4.4 Transforming management systems

The green society needs to be managed. Here, Statoil needs to manage millions of feed in and consumption sites including many sharing (Lea-Retd, 2013) economies which might have under and over consumption at times. This management equation, big data mining, technical competence is obviously something the world needs and (Berger, 2000)Statoil must strive for being a capable partner in that.

Statoil should be encouraged for any kind of partnerships with any partner, with any customer and it is a new attitude and Statoil don't need (Tantau A. D., 2017) to control the world. By this Statoil can produce many renewable energy products. Encouraging and embracing these alternative technology forward thinking oil and Gas Company can withstand the disruption caused by renewable revolution.

5. MONITORING SYSTEM

5.1 Scope and Boundaries

Boundaries for sustainability are challenging due to (Eckerson, 2005) in-depth management equation, big data mining, technical competence and other operational arrangements. Statoil strive to maintain adequate transparency level (Lind, 2014)about fluctuation in boundaries

- ✓ Economic data is equity based and is reported at regular intervals.
- ✓ Only permanent employees are reported in workforce data.
- ✓ Health and safety data is reported for subsidiaries, facilities and all other operating units.
- ✓ Environmental data is reported for subsidiaries, facilities and all other operating units.

5.2 Dimensions

<i>Company</i>	<i>Statoil</i>
<i>Industry</i>	Oil and gas
<i>Products</i>	Petroleum Natural gas Petrochemicals Electrical power
<i>Revenue</i>	US\$62 billion
<i>Owner</i>	Government of Norway (65%) Government Pension Fund of Norway (5%) GEK Terna(3%) Others (27%)
<i>Number of employees</i>	21,876 (2018)
<i>Operating oil and gas fields</i>	Australia, Algeria, Angola, Azerbaijan, Brazil, Canada, China, Libya, Nigeria, Russia, United States and Venezuela.
<i>Trading Offices (crude oil and petroleum)</i>	London, Stamford, Connecticut, Singapore

5.3 Pressure-State-Response (PSR)

<i>Pressure</i>	<i>State</i>	<i>Response</i>
<i>Stress on Non-renewable Sources on energy.</i>	<i>Crude oil and other fossils On the verge of getting Exhausted.</i>	<i>Ensuring investments on renewable sources of energy.</i>
<i>Poor valorization Of assets</i>	<i>Poor sustainability of supplying Crude oil and gas.</i>	<i>No unplanned shutdowns, securing operational assets.</i>
<i>Weak measure for environmental Safety.</i>	<i>Decreasing stringent standards.</i>	<i>Ensuring transparent environmental management activities.</i>
<i>Complex operations to control cost.</i>	<i>Poor market prices, fluctuating demand.</i>	<i>Optimizing performance of employees, facilities, assets</i>
<i>Week collaboration with oil field services.</i>	<i>Inefficient and immature oil rigs.</i>	<i>Improving logistics and better supply chain management.</i>
<i>Issues on employee on boarding, retention and training.</i>	<i>Poor performance culture.</i>	<i>Adequate training systems in ongoing management.</i>

5.4 Indicators (Generic)

5.4.1 Economic (Profit)

Generally, Gross Domestic Product (GDP) is the (Social Media listening and monitoring for busines applications, 2016)economic indicator for oil and Gas Company. Increase in GDP signifies to the increase in demand of oil.

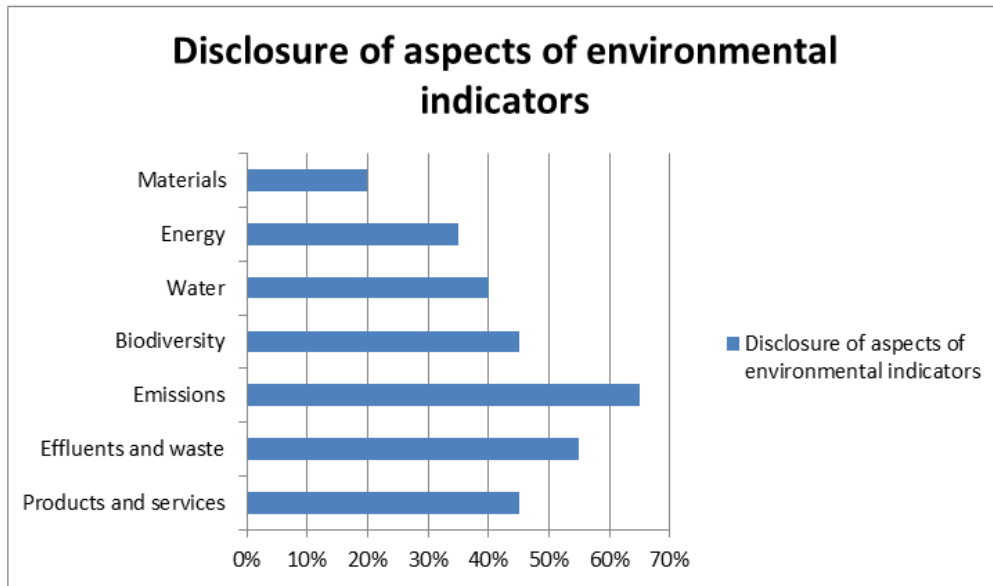
Some of the other economic indicators that the needs to be looked at are as follows:

- ✓ Oil inventories- Countries like U.S. store oil for future use.
- ✓ The changes in the stock level shows the trends of production.
- ✓ Refinery use and Production-Requirement of maximum use of refinery can generate higher oil prizes.
- ✓ Government policy- Increased taxation on petroleum may lead to hike in prizes.

5.4.2 Environmental (Planet) Following are the generic indicators that considers environmental factors

Aspects		Description
Materials	EN1	Materials used by weight or volume.
Energy	EN3	Direct energy consumption by primary energy source.
Energy	OG2	Total amount invested in renewable energy.
Energy	OG3	Total amount of renewable energy generated by source.
Water	EN8	Total water withdrawal by source.
Water	EN9	Water sources significantly affected by withdrawal of water.
Biodiversity	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.
Biodiversity	OG4	Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored.
Emissions	EN16	Total direct and indirect emissions greenhouse gas emissions by weight.
Emissions	EN17	Other relevant indirect emissionsgreenhouse gas emissions by weight.
Emissions	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.
Emissions	EN20	NO _x , So _x , and other significant air emissions by type and weight.
Effluents and Waste	OG5	Volume of formation or produced water.
Effluents and Waste	EN22	Total weight of waste by type and disposal method.
Effluents and Waste	EN23	Total number and volume of significant spills.
Effluents and Waste	OG6	Volume of flared and vented hydrocarbon.
Effluents and Waste	OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal.
Products and Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
Products and Services	OG8	Benzene, lead and sulfur content in fuels.

Figure 4 – Environmental indicators- Oil and gas industry



5.4.3 Socio-Cultural (People)

Following principles are covered in (Priestery, 2016) Socio-Cultural indicators.-

- ✓ **Comprehensive-** All well being must be ensured all important aspects.
- ✓ **Limited-** Highly significant set of indicators must be allotted to every aspect.
- ✓ **Directly measures well being**
- ✓ **Includes Objective and subjective measures**

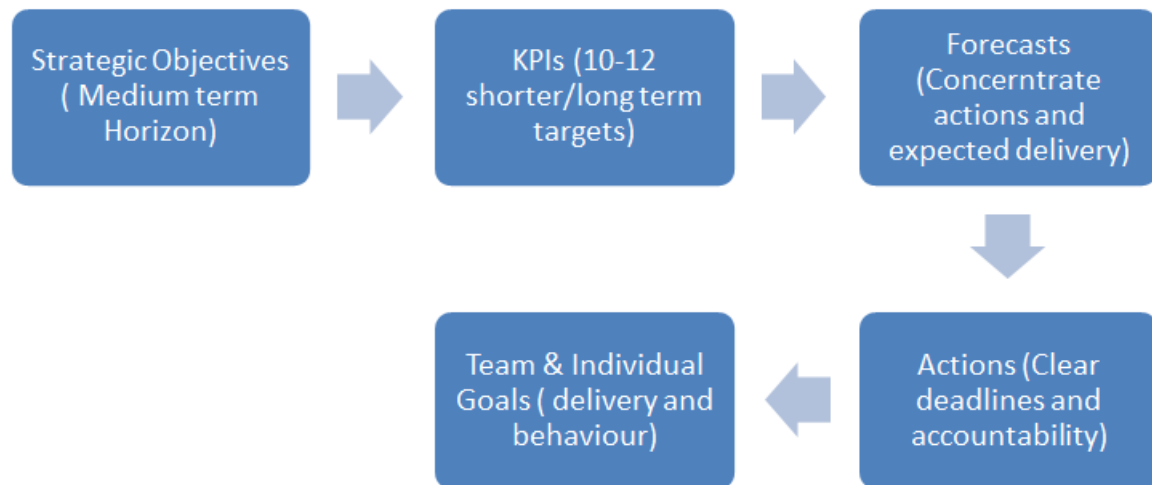
A. HEALTH	A-1 The probability of a healthy life through all stages of the life cycle. A-2 The impact of health impairments on individuals.
B. INDIVIDUAL DEVELOPMENT THROUGH LEARNING	B-1 The acquisition by children of the basic knowledge, skills and values necessary for their individual development and their successful functioning as citizens in their society. B-2 The availability of opportunities for continuing self -development and the propensity of individuals to use them. B-3 The maintenance and development by individuals of the knowledge, skills and flexibility required to fulfill their economic potential and to enable them to integrate themselves in the economic process if they wish to do so. B-4 The individuals satisfaction with the process of individual development through learning, while he is in the process. B-5 The maintenance and development of the cultural heritage relative to its positive contribution to the well-being of the members of various social groups..
C. EMPLOYMENT AND QUALITY OF WORKING LIFE	C-1 The availability of gainful employment for those who desire it. C-2 The quality of working life. C-3 Individual satisfaction with the experience of working life.
D. TIME AND LEISURE	D-1 The availability of effective choices for the use of time.
E. COMMAND OVER GOODS AND SERVICES	E-1 The personal command over goods and services. E-2 The number of individuals experiencing material deprivation. E-3 The extent of equity in the distribution of command over goods and services. E-4 The quality, range of choice and accessibility of private and public goods and E-5 The protection of individuals and families against economic hazards.
F. PHYSICAL ENVIRONMENT	F-1 Housing conditions. F-2 Population exposure to harmful and/or unpleasant pollutants. F-3 The benefit derived by the population from the use and management of the environment.
G. PERSONAL SAFETY AND THE ADMINISTRATION OF JUSTICE	G-1 Violence victimization and harassment suffered by individuals. G-2 Fairness and humanity of the administration of justice. G-3 The extent of confidence in the administration of justice.
H. SOCIAL OPPORTUNITY AND PARTICIPATION	H-1 The degree of social inequality. H-2 The extent of opportunity for participation in community life, institutions, and decision-making.

Figure 6- List of concerns that are covered in Socio-Cultural indicators.

5.5 Indicators (Specific)

5.5.1 Company & industry performance

Statoil completely focuses on converting ambitions into actions.



5.5.2 Use & Reuse of all resources

Statoil should make a decision to fully commit (Goldsmith, 1991) to renewable revolution. The company can be broken up into two subordinate companies. All the commodities businesses, the traditional fossil, power plants can be put into one of the subordinate company and the remaining with the renewable sources to the other half of the company.

Statoil can spin off majority share of its fossil fuel assets by the end of 2020 and scale up its investment on wind and solar. But rather than generating renewable power, Statoil can also generate its opportunity to diversify its power supplies on an industrial scale.

6. CONCLUSIONS AND RECOMMENDATIONS

The green society needs to be managed. Here, Statoil needs to manage millions of feed in and consumption sites including many sharing economies which might have under and over consumption at times. This management equation, big data mining, technical competence is obviously something the world needs and Statoil must strive for being a capable partner in that.

Statoil should be encouraged for any kind of partnerships with any partner, with any customer and it is a new attitude and Statoil don't need to control the world. By this Statoil can produce many renewable energy products. Encouraging and embracing these alternative technology forward thinking oil and Gas Company can withstand the disruption caused by renewable revolution

BIBLIOGRAPHY

- [1] Berger, J. (2000). Charging Ahead: The business of renewable sources of energy.
- [2] Burrough, B. (2009). The Big Rich. Penguin Books.
- [3] Carter, P. (2005). Don't tell Mom: Work on the rigs.
- [4] Carter, P. (2007). This is not just a Drill: Just another Glorious day in oilfield.
- [5] Coll, S. (2012). Private Empire : ExxonMobil and American Power.
- [6] Conaway, C. F. (1999). The petroleum industry.
- [7] Doran, P. B. (2016). Breaking Rockefeller: The Incredible Story.
- [8] Downey, M. (2009). Oil 101.
- [9] Eckerson, W. W. (2005). Performance Dashboards: Measuring, monitoring and managing your business.

- [10] Goldsmith, F. (1991). Monitoring and conversation.
- [11] Inkpen, A. (2011). The Global oil & Gas Industry: Management and Strategy Finance.
- [12] Klevevan, L. (2003). The New Great Game.
- [13] Lea-Retd. (2013). Business model for renewable energy in the built environment.
- [14] Lind, P. (2014). Monitoring business performance: models, methods and tools.
- [15] Maass, P. (2009). Crude world: The violent twilight of oil.
- [16] Mackay, D. J. (2008). Sustainable energy- Without the oil air.
- [17] (2017). Marketable renewable energy: Concepts, Business Models and cases.
- [18] Mealer, B. (2018). The King of Big spring.
- [19] Mitchell, T. (2011). Carbon Democracy: Political Power in the age of oil.
- [20] Priestery, D. (2016). What's your business worth? the entrepreneur and advisor guide.
- [21] Raymond, M. (2006). Oil and gas Production in Nontechnical Language.
- [22] Ross, M. L. (2012). The oil curse: How petroleum wealth shaped the development of nations.
- [23] Sabin, P. (2004). Crude Politics: The California oil market, 1900-1940.
- [24] Silverstein, K. (2014). The Secret of New Oil world.
- [25] Sinclair, U. (1998). Oil.
- [26] Smil, V. (2008). Oil :A beginner Guide.
- [27] (2016). Social Media listening and monitoring for business applications.
- [28] Stevenson, J. W. (1998). Fundamentals of Oil and gas Accounting.
- [29] Tantau, A. (2017). Business Models of renewable sources of energy initiatives.
- [30] Tantau, A. D. (2017). Entrepreneurship and business development in the renewable energy sector.
- [31] Tarbell, I. (2008). The History of the Standard oil company.
- [32] Yergin, D. (1990). The Prize: The Epic Quest for Oil, Money and Power. Simon and Schuster.
- [33] Zuckerman, g. (2013). The Frackers.