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A Comparative Analysis of the Financial Ratios of Indian Oil Corporation Limited and its Competitors in India

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Abstract
The paper starts with an introduction to the oil and gas industry, including their revenue model and action plan. Next, Indian Oil Partnership Limited is presented, along with details about all the products they provide, including bitumen, ointments, petrochemical fills, oil energy, liquified powers, flying turbine fills and regular gas. Information about their goals, accomplishments, and strategy for becoming India's energy mainstay.
Comparative analysis, which covers financial measures and how they can be utilised to show how a company is performing over time, is the focus of the study. Ratios are used by investors to assess an organisation's financial health by examining its historical performance and current financial statements. The profitability, liquidity, and solvency performance of the three main oil marketing companies—IOCL, BPCL, and HPCL—are assessed using financial ratios. The goal of this research is to use profitability, market value, leverage, activity, liquidity, and profitability ratios to assess the financial statements of these OMCs.

Keywords: Oil and gas industry, Indian Oil Corporation Limited (IOCL), Comparative analysis, Financial Measures, Ratios of oil marketing companies (OMCs), IOCL, BPCL, HPCL.

1.0 Introduction
The world's energy requirements for power generation, transportation, and heating are mostly met by the oil and gas sector, which is a prominent worldwide participant. Through employment creation and building new infrastructure, propels economic development and makes a significant contribution to the annual GDP of many countries. Governments receive a substantial amount of tax money from major companies in the industry, which ranks among the top revenue-generating businesses worldwide. Technological developments in drilling, exploration, refining, and transportation have benefited numerous other industries in addition to increasing industrial efficiency and safety. The global shift towards sustainable practices is posing novel possibilities as well as obstacles for the sector.
India ranks sixth in the world for oil consumption. There exists a notable disparity between the supply and demand of petrol and oil in India. The country imports more than 70% of its crude oil needs.

Typically, the petroleum and gas sector's divisions are divided into three categories: upstream, midstream, and downstream.
Many investors find the large volume of numbers in a company's financial statements to be daunting and confusing. Yet, the financial accounts provide a wealth of information if you know how to examine them. A corporation releases information about its financial performance through financial statements. Fundamental analysis proponents base their investment decisions on data extracted from financial accounts.
The paper continues like this. In part 2, we go into detail regarding the literature research that covers the accounting and financial procedures used by Indian refineries, as well as the practices of petroleum, oil, and gas corporations. The research problem, aims, and comprehensive technique are applied in Section 3. The insights and findings for every financial ratio used to assess the performance of OMCs are presented in Section 4.

1.1 IOCL and its Competitors

Indian Oil Corporation Limited (IOCL) faces competition in the oil and gas sector from several domestic and international companies. Since the Public Sector Oil Marketing Companies (OMCs), Indian Oil Corporation Limited, Bharat Petroleum Corporation Limited, and Hindustan Petroleum Corporation Limited, oversee the retail marketing and distribution of petroleum products, this division is under their administrative control.

1.1.1 IOCL

Indian Oil’s "Vision with Values," adopted in its Golden Jubilee year (2009), outlines ambitions for expansion, broadening horizons, and instilling new-age vitality in its workforce. Comprising six foundations, this vision aims to make Indian Oil "The Energy of India" and a "globally admired company." The vision is closely tied to key values – Care, Innovation, Passion, and Trust – integral to the organisation's growth and annual success.
Leading integrated energy business Indian Oil reported 9,792.16 crores in net profit and 9,34,952.66 crores in revenue for FY 2022–2023, placing it at number 142 on the Fortune 500 list. It operates internationally throughout the hydrocarbon value chain and is present in the UAE, Mauritius, and Sri Lanka. With 15,000 KM of pipelines, 58,000 consumer touch points, and a refining capacity of 70.05 MMTPA, Indian Oil guarantees widespread access to petroleum products. The organisation combines corporate goals with social responsibility, supporting water access, education, environment, family welfare, and the development of underrepresented communities. In accordance with DPE rules, Rs. 18.43 crore was allotted for each of the 18 Aspirational Districts and Rs. 194.72 crore for Health and Nutrition, with a focus on Covid-related initiatives in 2021–2022.

1.1.2 BPCL

Bharat Petroleum Corporation Limited (BPCL), a major participant in India's oil business, was founded in 1952. In 1886, oil exploration got underway in northern Assam. The first oil was discovered in India in 1889, close to Digboi by the Assam Railway and Trading Company. Following its acquisition of the Burmah Shell Group by the Indian government in 1976, Bharat Petroleum Limited was renamed Bharat Petroleum Corporation Limited in 1977. It was the first refinery in the country to process the recently discovered native crude from Bombay High.

Petroleum and oil-related product exploration, production, and retailing are the main objectives of BPCL. Over 8,000 industrial clients are served by its retail business section, which also handles marketing initiatives and provides a broad selection of items. Through 2,137 distributors, the LPG industry provides service to 25 million residences. BPCL can process crude oil to a total of 12 MMTPA of refining capacity, with refineries located in Kochi and Mumbai. The business is a major provider of naphtha to Andhra Pradesh, guaranteeing an adequate supply for power plants.

1.1.3 HPCL

With its headquarters located in Mumbai, Maharashtra, Hindustan Petroleum Corporation Limited (HPCL) is an Indian oil and gas business. HPCL is a downstream firm that specialises in the refining, marketing, and distribution of petroleum products. It is a Navratna CPSE and a subsidiary of ONGC, which is the largest oil and gas exploration company in India. With a combined yearly refining capacity of more than 18 million metric tonnes, HPCL owns and runs significant refineries in Visakhapatnam and Mumbai. Not only does HPCL refine petroleum products, but it also actively markets and retails them via its vast network of "HPCL Retail Outlets." Liquefied petroleum gas (LPG), petrol and diesel are among the fuels that the company offers. Airports in India, both domestic and international, are supplied with aviation turbine fuel (ATF) by HPCL.

To broaden its business, HPCL has expanded into the natural gas industry, encompassing production, distribution, city gas distribution (CGD), and compressed natural gas (CNG) for automobile use. In addition, the business produces and sells lubricants, petrochemicals, and specialty goods. As a major participant in the Indian oil and gas sector, HPCL is essential to supplying the nation's industries and consumers with the energy they require.

2.0 Literature Review

Anisali Habibali Hassan Ali, Nadeem Fatima(2023) uses secondary data to investigate the scope and direction of financial performance governance in downstream Indian oil and gas companies. The ability of downstream Indian oil and gas companies to produce profits and return on total resources is positively impacted by the growth of their total resources, albeit not significantly. While there is no correlation between total resources and firm solvency in downstream Indian oil and gas enterprises, there is a small degree of sensitivity between the expansion of total resources and short-term payment ability. With differing degrees of sensitivity, the expansion of total resources determines the downstream Indian oil and gas companies' profitability, short-term payment capacity, and solvency.

Anisali Habibali Hassan Ali, Nadeem Fatima in their previous paper of 2022 looks at the financial results of Indian oil and gas companies before and after Covid-19 and how the epidemic affected those results. According to the research, there was a post-COVID-19 relational growth in total income, total expenses, earnings, profitability, and liquidity—especially when comparing Indian oil and gas firms with smaller-scale output to those with larger-scale production. In their opinion, Indian oil and gas businesses that produce on a greater scale can increase their profitability by optimising cost and managerial effectiveness and by including outside funding in their capital structure.

Priyanka Dineshgiri Meghanathi, Alok Kumar Chakrawal (2022) assesses a few Indian oil and gas firms' financial stability and profitability. During the study period, Reliance Industries Ltd., Oil and Natural Gas Corporation (ONGC), Indian Oil Corporation (IOCL), Bharat Petroleum (BPCL), and Gas Authority of India Ltd. (GAIL) were the top five listed businesses based on market capitalization. The

study's research design entails evaluating the chosen organisations' liquidity as well as profitability circumstances. To assess the financial and profitability positions of the selected organisations, the study employs four ratios: the current ratio, quick ratio, net profit ratio, and return on invested capital.
There is compelling evidence in a recent piece showing India's dependence heavily on Middle Eastern crude oil imports to become the world's sixth-largest consumer of oil and petroleum products. Over two-thirds of India's total primary energy needs are met by the oil and gas sector, which is one of the nation's major economic sectors. This research examines the profitability ratios of a sample of Indian oil exploration and production businesses over a period of ten years, with an emphasis on their financial performance. The study makes use of secondary data obtained from CMIE to investigate the variables affecting these businesses' profitability. With Reliance Petroleum Limited slated to commission a new refinery, potentially making it the largest single-site refinery in the world, the refining business in India is growing. (P.Venkataraman, Dr. K.Subramaniam(2022))
Aditya Anand Lanjewar, Saroj Kumar Mishra, Harish Kumar Anand, Anant Vikram Tyagi (2020) review of the literature explains rapid development in the Indian Oil and Gas industry which plays a crucial role in the Indian economy. Across 57 cities in India, there are 420 companies that deal with petroleum, oil, gas, and refineries. Three sub-industries make up the industry: downstream, midstream, and upstream.

3.0 Research Methodology

3.1 Research Problem and Objectives

The primary focus of the article is comparative analysis, which encompasses financial statistics and their potential application in demonstrating a company's performance over an extended period. Investors utilise ratios to evaluate a company's financial health by carefully scrutinising its most recent financial statements as well as previous data.
Additionally, this study particularly seeks to achieve the following goals:

1. To analyse the profitability, liquidity, and solvency performance of the three largest oil marketing companies, IOCL, BPCL, and HPCL.
2. To analyse the financial statements of these OMCs.
3. To assess how effectively a company manages its operations. The effectiveness of the company's extraction, refinement, and distribution of petroleum products will be evaluated.
4. To identify and quantify financial risks given the erratic nature of the energy markets. Exposure to pricing changes, regulatory modifications, geopolitical risks, and supply chain disruptions is evaluated through financial analysis.
5. To determine the liquidity and solvency of oil and gas enterprises. This research assists in establishing the company's long-term financial stability as well as its capacity to satisfy short-term obligations like debt payments and operating expenses.

3.2 Descriptive Statistics

The results of several financial ratios for IOCL, BPCL and HPCL for the period of 2022 - 2023 are shown in the Table. It includes Debt Equity Ratio, Debt Service Coverage Ratio (Times), Interest Service Coverage Ratio (Times), Net Worth (in Crores), Current Ratio (Times), Bad Debts to Account Receivable Ratio (Times), Current Liability Ratio (Times), Total Debts to Total Assets (Times), Trade Receivables Turnover (Times), Inventory Turnover (Times), Operating Margin (%) and Net Profit Margin (%).

Table 1: Ratios of IOCL, BPCL, HPCL

Ratios	HPCL	IOCL	BPCL
Debt Equity Ratio	2.33	0.98	1.13
Debt Service Coverage Ratio (Times)	-0.21	1.42	0.66
Interest Service Coverage Ratio (Times)	-1.45	3.96	3.65
Net Worth (in Crores)	27713.14	139720.24	51905.62
Current Ratio (Times)	0.59	0.76	0.75
Bad Debts to Account Receivable Ratio (Times)	0	0	0
Current Liability Ratio (Times)	0.58	0.69	0.56
Total Debts to Total Assets (Times)	0.42	0.32	0.32
Trade Receivables Turnover (Times)	70.68	53.55	64.78
Inventory Turnover (Times)	14.37	8.04	13.27
Operating Margin (%)	-2.54	1.84%	0.56%
Net Profit Margin (%)	-1.92	1.23%	~1

4.0 Comparative Analysis and Insights

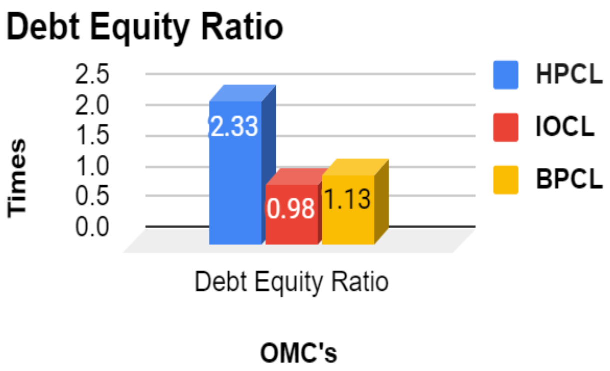
4.1Analysis

4.1.1 Debt Equity Ratio:

Ideal Value: Lower ratios are often preferred, with industry standards guiding acceptable levels.

1) With a debt-to-equity ratio of 2.33, HPCL has the highest ratio and has more debt than equity.
2) The debt-to-equity structure of IOCL is better balanced, as seen by its 0.98 debt-to-equity ratio.
3) With a debt-to-equity ratio of 1.13, BPCL is in the middle of HPCL and IOCL.

Figure 4.1



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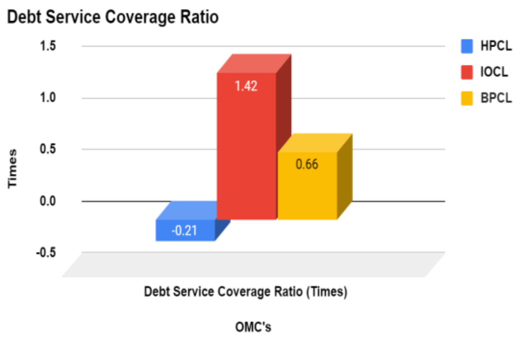
4.1.2 Debt Service Coverage Ratio:

Ideal Value: A ratio below 1 may signal insufficiency in covering debt payments.

1. With a debt payment coverage ratio of 1.42, IOCL can comfortably service its debt.
2. The debt service coverage ratio for BPCL is 0.66, which indicates a reduced capacity to pay back its financial commitments.
3. HPCL's debt service coverage ratio is negative (-0.21), indicating that it will be challenging to pay down its debt.

Figure 4.2

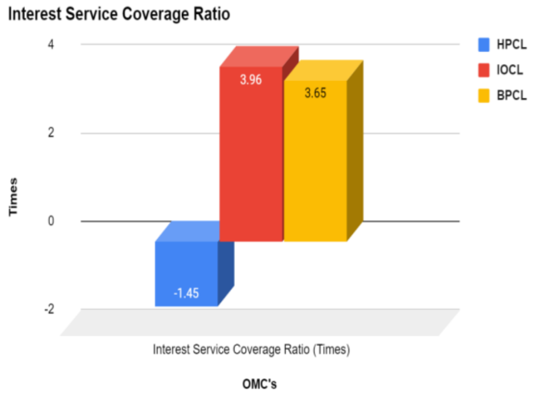


4.1.3 Interest Service Coverage Ratio:

Ideal Value: A higher interest coverage ratio indicates stronger financial health – the company is more capable of meeting interest obligations.

1. With an interest service coverage ratio of 3.96, IOCL has the highest rate, demonstrating a good capacity to pay interest costs.
2. The interest service coverage ratio for BPCL is 3.65, which is also above average.
3. With an interest service coverage ratio of -1.45, HPCL has the lowest, indicating difficulty in covering interest costs.

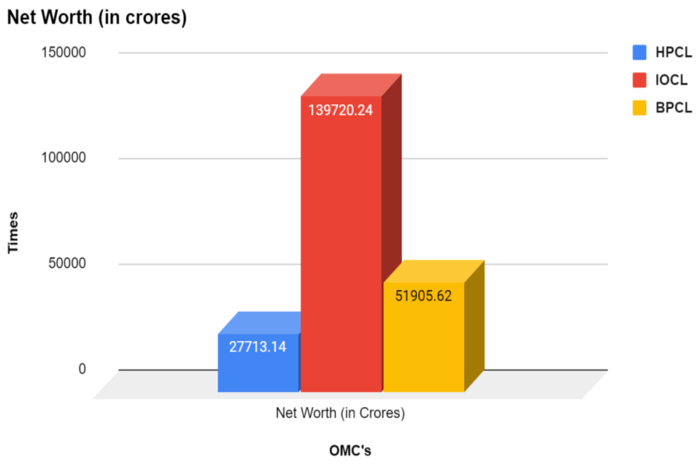
Figure 4.3



4.1.4 Net Worth (in crores):

The largest company, IOCL, has a net value of 1,39,720.24 crores. BPCL is second with 51,905.62 crores and HPCL is third with 27,713.14 crores.

Figure 4.4

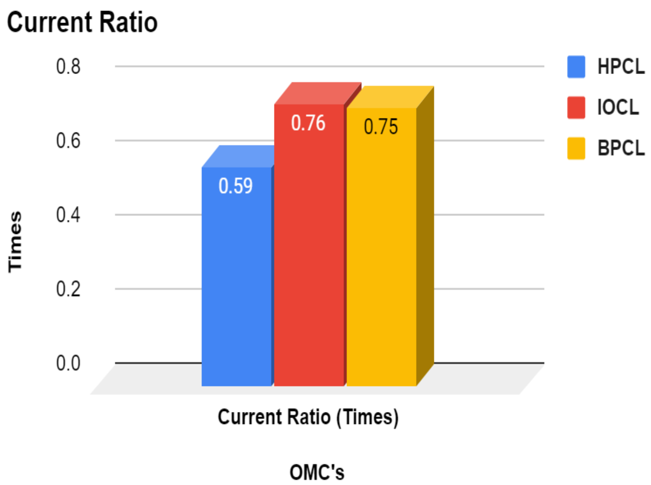


4.1.5 Current Ratio:

Ideal Value: Generally, a current ratio above 1 indicates liquidity, but an excessively high (not more than 3) ratio may suggest inefficiency.

1. The company with the greatest current ratio, 0.76, is IOCL, which suggests a substantially higher capacity for meeting obligations due soon.
2. Similar current ratios of 0.75 and 0.59 for BPCL and HPCL, respectively, indicate a poorer liquidity position.
3.

Figure 4.5



4.1.6 Bad Debt to Account Receivable Ratio:

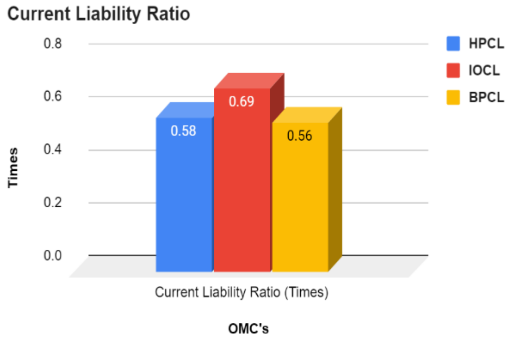
All three companies have a ratio of 0, indicating no bad debt recorded against accounts receivable.

4.1.7 Current Liability Ratio:

Ideal Value: Should be between 1.2 to 2, which indicates that the business has 2 times more current assets than liabilities to cover its debts.

1. The company with the greatest current liability ratio, 0.69, and a substantially higher percentage of current liabilities is IOCL.
2. At 0.56 and 0.58, respectively, BPCL and HPCL have comparable current liability ratios.

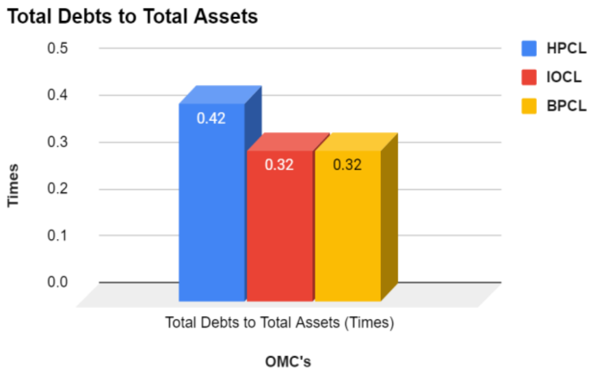
Figure 4.6



4.1.8 Total Debt to Total Assets:

1. With a total debt to total assets ratio of 0.42, HPCL has the highest percentage of debt compared to total assets.
2. Similar ratios of 0.32 for IOCL and BPCL imply that they use less debt to finance their assets.

Figure 4.7

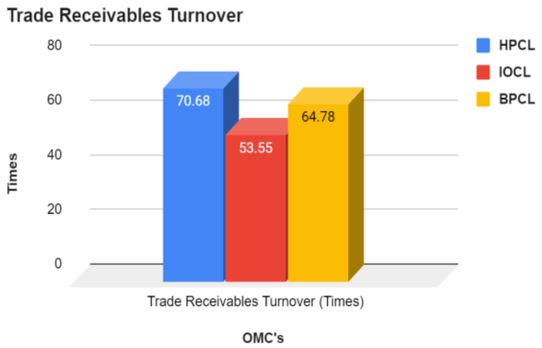


4.1.9 Trade Receivables Turnover (Times):

Ideal Value: A lower ratio suggests faster receivables turnover.

1. With a debtor turnover ratio of 70.68, HPCL leads the pack in terms of faster receivables collection.
2. Debtor turnover ratios for IOCL and BPCL are 53.55 and 64.78, respectively.

Figure 4.8

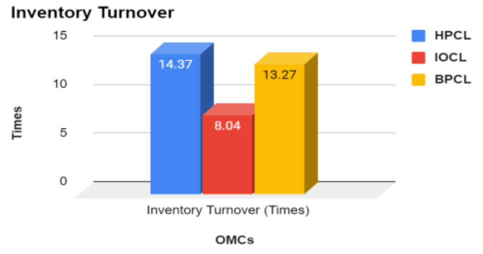


4.1.10 Inventory Turnover:

Ideal Value: Higher ratios indicate efficient inventory management.

1) With an inventory turnover ratio of 14.37, HPCL has the highest figure, indicating a rather quick turnover of inventories.
2) Inventory turnover ratios for IOCL and BPCL are 8.04 and 13.27, respectively.

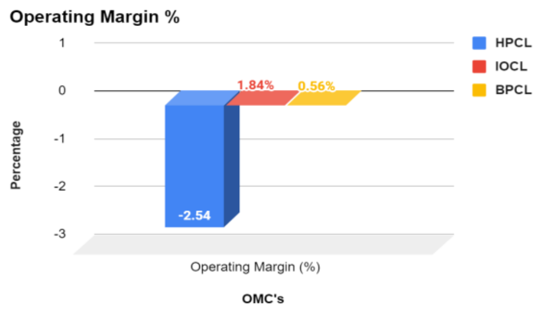
Figure 4.9



4.1.11 Operating Margin:

1. In terms of operating margin, IOCL has the highest at 1.84%, followed by BPCL at 0.56%.
2. A loss at the operating level is indicated by HPCL's negative operating margin of -2.54%.

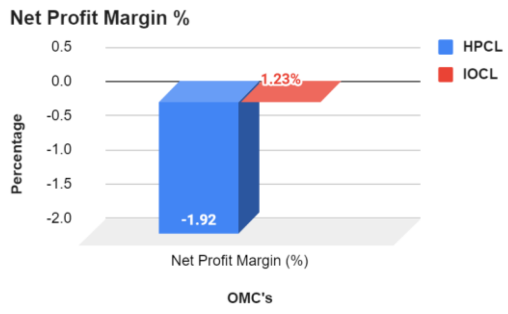
Figure 4.10



4.1.12 Net Profit Margin:

1. Indicating a favourable profitability ratio, IOCL has a net profit margin of about 1.23%.
2. A little over 1% of BPCL's revenue goes to net profit.
3. With a net profit margin that is negative (-1.92%), HPCL is experiencing a loss.

Figure 4.11



4.2 Insights

IOCL, in comparison to BPCL and HPCL, often has stronger financial ratios. The profitability margins, current ratio, debt service coverage, and interest service coverage are all higher for IOCL. Compared to other companies, BPCL and HPCL perform less well in these categories.

5.0 Conclusion and Suggestions

5.1 Conclusion

The following results are drawn following a thorough financial ratio examination of the three OMCs:

1. In terms of revenue, earnings, and total assets, IOCL emerges as the leader. Considering IOCL's size and scope, it boasts larger revenue, income, and PAT than its two competitors.
2. The Central Government, through the Ministry of Petroleum and Natural Gas, owns more than 50% of each of the three OMCs. HPCL has the biggest investment from overseas portfolio investors, however among its competitors, BPCL has the highest interest from mutual fund houses. The IOCL has the highest public investment of the three companies.
3. In terms of size, volume, and the quantity of crude oil it handles, IOCL is the biggest OMC. However, the market might be assigning larger valuations to HPCL and BPCL, the other two biggest oil marketing companies in the nation. With a vast network of gas stations and gasoline pumps across the entire nation, all three are government-controlled and significantly contribute to the growth and development of the country. As a result, it can be concluded that altogether, IOCL is the most financially solid business.

5.2 Suggestions

The following ideas can be taken into consideration to assist Indian Oil Corporation Limited (IOCL) in attaining financial growth:

1. Diversification of Revenue Streams: Seek into ways to generate wealth from sources other than typical oil and gas products. To take advantage of emerging markets, think about funding renewable energy initiatives, infrastructure for charging electric cars, and other sustainable energy projects.
2. Efficiency of Operations: Prioritise cost control and operational excellence. Incorporate lean methodologies, automation, and technology-driven approaches to optimise processes, minimise expenses, and improve overall effectiveness.
3. Cost Reduction: Seek out chances to cut expenses across the board for the organisation, including in administrative and supply chain management. Provide cost-cutting measures that don't sabotage consumer happiness or product quality.
4. Risk Management: Create all-encompassing risk management plans that take market, environmental, and geopolitical threats into account. To lessen possible interruptions, diversify your sources of supplies and put backup plans in place.
5. Research and Development: To promote creativity and create proprietary technologies, spend money on research & development. This may result in the development of fresh goods and services that draw clients and bring in more money.
6. Market Expansion: Determine unexplored markets and broaden the network of distribution. To expand the clientele and bring in additional money, consider chances in both local and foreign markets.

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