**FINAL PROJECT**

**Company Name: EXXON MOBIL**

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**Abstract**

**Blockchain is a decentralized and open alternative to traditional centralized services. This is the force that drives Exxon to be compatible with future technology. This abstract explores the scope of incorporating blockchain into Exxon’s operations. This Technology has a wide range of benefits for the company. This report will address the core application, benefits, challenges, and ethical considerations associated with incorporating blockchain into Exxon. This report also addresses the potential impact on firm value and costs involved in implementing this technology.**

**Keywords: Blockchain, Technology, Application, Challenges, Firm Value, Costs.**

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* **Business Overview**
* **Exxon Mobil is a U.S.-based oil and gas company which was formed in 1999 through the merger of Exxon Corporation and Mobil Corporation.**
* **The company was founded by John D. Rockefeller in 1882 and is headquartered in Irving, TX.**
* **Exxon Mobil Corporation has several divisions and hundreds of affiliates, many with names that include ExxonMobil, Exxon, Esso, Mobil or XTO.**
* **Exxon Mobil Corp. engages in the exploration, development, and distribution of oil, gas, and petroleum products.**
* **The ExxonMobil global presence map shows the company's operations in over 50 countries around the world.**
* **The company's major upstream regions include the United States, Canada, Brazil, Angola, Nigeria, Kazakhstan, and Russia.**
* **Its major downstream regions include the United States, Europe, Asia, and Latin America.**
* **The company's major chemical regions include the United States, Europe, Asia, and the Middle East.**
* **ExxonMobil has over 12,000 gas stations in the United States with 62,000+ Employees.**
* **Segments: Upstream, Downstream and Chemical.**
* **The Upstream segment produces crude oil and natural gas.**
* **The Downstream segment manufactures and trades petroleum products.**
* **The Chemical segment offers petrochemicals.**
* **Blockchain Technology**
* **Blockchain is a decentralized and distributed ledger which is the best alternative to traditional centralized systems.**
* **This system helps to keep a record of transactions across numerous networks of computers.**
* **This technology is used in cryptocurrencies, which are considered to have a bright future like Bitcoins.**
* **This technology provides us with various benefits like:**

1. **Decentralization: Blockchain works on peer-to-peer networks. Where the producer and customer are connected directly without the need for any kind of intermediaries.**
2. **Distributed ledger: The transaction between two parties are recorded in ledgers which is made available to both of them. All the transactions are recorded in a block and each block is linked to the previous block with the help of a chain.**
3. **Incentive mechanism: This system is recommended for producers as well as customers as their needs are matched in the same platform and here the incentive for producers would be bitcoins and it could be easily liquidated.**
4. **Conesus Mechanism: Proof of work is something unique in this technology which prevents fraudulent transactions, and this helps to keep the space secure and user-friendly.**
5. **Validation of Transaction: The miners are held responsible for solving math problems to validate the transaction, only if they succeed, they get the benefit out of it. It is more of luck and probability to arrive at the right solution.**
6. **Smart contracts: Smart contracts would channel the procedure involved in making payments. This would be a cost-effective measure.**

* **This Technology has various drawbacks which should also be considered:**

1. **Energy consumption: Mining requires a lot of energy to solve and validate the transactions and the creation of blockchain Tech demands a high volume of energy and has a direct impact on our eco-system.**
2. **Anonymity: Tractions are anonymous, meaning the identity of the person would not be disclosed in these transactions. Which is a great risk for the customers.**
3. **Regulatory measures: There are still no proper regulatory measures for blockchain technology. This creates a high volume of uncertainty, and the government is working on this measure moreover it is seen to be considering it as a mode of exchange soon. For instance: Tesla had accepted for a certain period as a currency. Hope many companies in future will do the same.**

* **Application of Blockchain in Exxon**

**Energy Trading and Settlement.**

**Blockchain enables peer-to-peer energy trading and settlement, a decentralized and efficient energy market. Exxon can directly trade with each other or consumers, promoting the integration of renewable energy sources and reducing reliance on traditional intermediaries. This may reduce the cost spent on brokers and may increase the revenue overall. I am expecting a revenue increase of 6%. The costs may include transaction fees includes 0.2%, Administration fee- of 0.3%, restructuring costs- of 0.5% and labour of 0.9%.**

**Real-world example:**

**This blockchain technology has been used by some companies: Coinbase, and constellations that trade oil and energy like stocks and this is done in intercontinental exchange. Similarly, I recommend that Exxon should implement blockchain technology into its field of business.**

**Assumptions:**

1. **The revenue will increase by 6%. This assumption is made by comparing real-world companies like Coinbase which generates the same amount of revenue from blockchain tech being incorporated in their business.**
2. **I went to Edgar. And made a note of the charges involved when a company incorporated the same with some modifications based on my assumptions.**

**(Excel Working Incorporated along with this word doc).**

**-Ethical Consideration**

1. **Privacy: Blockchain technology provides a transparent ledger which has raised privacy issues for many customers. This technology has an inbuilt monitoring system which can be a potential threat.**
2. **Facilitation of illegal activities: The decentralized nature could be a potential platform for many illegal activities like money laundering.**
3. **Lack of control: Many financial institutions like the government will lose their power, still there is a huge scope for manipulation and corruption within decentralized systems.**
4. **Economic inequality: Blockchain has the power to eliminate intermediaries and reframe economic policies overall.**

**Latest News on Exxon:**

EXXON MOBIL SETS PLAN TO BOOST EARNINGS ( CASHFLOW)

NEWSPAPER: THE  WALLS STREET JOURNAL

PUBLISHED ON: 7TH DECEMBER 2023

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**-Reference /Citation**

[**https://www.sec.gov/ix?doc=/Archives/edgar/data/0001679788/000167978823000031/coin-20221231.htm**](https://www.sec.gov/ix?doc=/Archives/edgar/data/0001679788/000167978823000031/coin-20221231.htm)

[**https://medium.com/@MATCHAIN/exploring-the-ethical-implications-of-blockchain-technology-14709b55a30d#:~:text=Blockchain%2Dbased%20systems%20have%20the,or%20corruption%20within%20decentralized%20systems**](https://medium.com/@MATCHAIN/exploring-the-ethical-implications-of-blockchain-technology-14709b55a30d#:~:text=Blockchain%2Dbased%20systems%20have%20the,or%20corruption%20within%20decentralized%20systems)

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