

Project Report

“A Study on Strategy and marketability of coal for customer satisfaction in India”

Submitted to

**G.S. College of Commerce & Economics
Nagpur**

**In partial fulfillment for the award of the degree
of
Bachelor of Business Administration**

**Submitted by
Tanaya Surankar**

**Under the Guidance of
Prof. Leena Kapse**

**G.S. College of Commerce & Economics, Nagpur
Academic year 2022-2023**





CERTIFICATE

This is to certify that “Tanaya Surankar “has submitted the project report titled (*A Study on Strategy and marketability of coal for customer satisfaction in India*), towards partial fulfillment of BACHELOR OF BUSINESS ADMINISTRATION degree examination. This has not been submitted for any other examination and does not form part of any other course undergone by the candidate. It is further certified that he/she has ingeniously completed his/her project as prescribed by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Prof. Leena Kapse
Name of Project Guide

Dr. Afsar Sheikh
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Place:Nagpur
Date:

**G.S. College of Commerce & Economics, Nagpur
Academic year 2022-2023**



DECLARATION

I here-by declare that the project with title “*A Study on Strategy and marketability of coal for customer satisfaction in India*” has been completed by me in partial fulfillment of BACHELOR OF BUSINESS ADMINISTRATION degree examination as prescribed by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and this has not been submitted for any other examination and does not form the part of any other course undertaken by me.

Tanaya Surankar

Place: Nagpur

Date:



ACKNOWLEDGEMENT

With immense pride and sense of gratitude, I take this golden opportunity to express my sincere regards to Dr. Swati Kathaley, Principal, G.S. College of Commerce & Economics, Nagpur.

I am extremely thankful to my Project Guide Prof. Leena Kapse for his/her guideline throughout the project. I tender my sincere regards to Co-Ordinator, Prof. Dr. Af-sar Sheikh for giving me outstanding guidance, enthusiastic suggestions and invaluable encouragement which helped me in the completion of the project.

I will fail in my duty if I do not thank the non-Teaching staff of the college for their Co-operation. I would like to thank all those who helped me in making this project complete and successful.

Tanaya Surankar

Place:Nagpur

Date:

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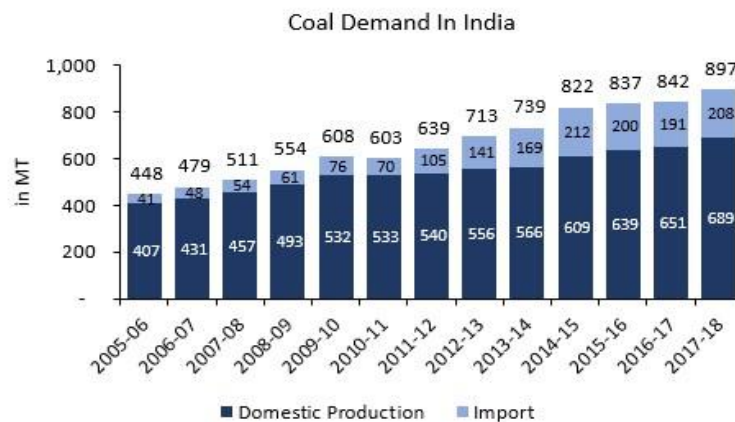
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INTRODUCTION

Coal marketing strategy is a process that can allow an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage. Implementation of a large Coal Marketing Strategy to nurture and enhance their competitiveness, based on domestic and international competition, highlighting the enterprise features, to create first-class brand of service, and enhance the core competitiveness of enterprises to embark on the fast track of rapid development. Implementation of the large Coal Marketing strategy should build high quality sales force, trade and economic entity to ensure the market share, quality products to dominate the market, emancipate the mind, new ideas, establish a full Marketing awareness. Marketing strategies serve as the fundamental underpinning of Marketing plans designed to fill market needs and reach marketing objectives. Plans and objectives are generally tested for measurable results. Commonly, marketing strategies are developed as multi- year plans, with a tactical plan detailing specific actions to be accomplished in the current year. Time horizons covered by the marketing plan vary by company, by industry, and by nation. However, time horizons are becoming shorter as the speed of change in the Environment increases. Marketing strategies are dynamic and interactive. They are partially planned and partially unplanned. India urgently needs modern energy to support its large, expanding population and growing economy. India's coal mining industry is dominated by Coal India Limited (CIL) the country's main coal mining company which produces around 80% of the resource. CIL has had substantial difficulties in increasing its output in recent years. The reasons for this are manifold: Firstly, environmental constraints with regard to land acquisition, forest clearing, and environmental pollution index norms, as well as resettlement and rehabilitation issues, have slowed down capacity expansion and caused project slippage. Secondly, infrastructure constraints such as a lack of rail capacity and mechanized equipment currently hinder increasing coal movements at some collieries. Finally, industrial action, mismanagement and bad weather conditions have impeded efforts to increase production locally. A stronger focus on underground mining might help to alleviate some of the environmental constraints, although this will also lead to higher costs. The country has vast coal resources which for many years have supplied a major share of its primary energy supply. The ever-increasing use of domestic coal has brought great benefits, but also poses serious challenges. By supplanting traditional biomass energy to a very large degree, coal has improved both the quantity and quality of the energy available to the Indian people. Coal also contributes decisively to India's energy security, since the country has limited oil and natural gas production. Strong economies are indispensable in reaching the

widely recognized goal of sustainable development. For India, a strong economy will depend on a strong and efficient coal industry. Coal industry also play similar role for marketability of coal in consumer market. Coal distribution through e-Auction has been introduced with a view to provide **access to** coal for such buyers who are not able to source coal through the available institutional mechanism. In the long run it is expected that e-Auction may help in creating spot as well as future market of coal in the country. The purpose of e-Auction is to provide equal opportunity to purchase coal through single window service to all intending Buyers. E - Auction has been introduced to facilitate across the country wide ranging access to book coal on-line for all sections of coal Buyers enabling them to buy coal through a simple, transparent and consumer friendly system of marketing and distribution of coal.

Coal Demand, Production & Imports in India :



- In 2017-18 coal imported in India was worth ~Rs 1,38,500 crores (\$20.17 bn) which was up 38.2% compared to previous year and up ~9% in volume terms.

Literature review

The literature review of a study on the strategy and marketability of coal for customer satisfaction in India would aim to provide an overview of the existing literature on the coal industry in India, including government policies and regulations, market trends, and customer preferences. Some of the key points that may be covered in the literature review are:

1. Government policies and regulations: The Indian government has introduced several policies and regulations to govern the coal industry, such as the National Mineral Policy, the Coal Mines (Special Provisions) Act, and the Coal India Limited (CIL) Act. The literature review would analyze the impact of these policies and regulations on the coal industry, including their effect on coal prices, quality, and availability.
2. Market trends: The literature review would also examine the current market trends in the coal industry in India, including the demand and supply dynamics, the role of imports, and the pricing trends. The review may also cover the impact of global factors such as climate change, technological advancements, and renewable energy on the coal industry in India.
3. Customer preferences and expectations: The literature review would analyze the customer preferences and expectations for coal in India, including the factors that influence their purchasing decisions. This may include factors such as the environmental impact of coal, the cost of alternative sources of energy, and the availability of sustainable coal production practices.
4. Technological advancements: The literature review would also examine the technological advancements in the coal industry in India, including the development of clean coal technologies and the use of automation in coal mining and production. The review would analyze the potential impact of these technologies on the marketability of coal and customer satisfaction.
5. Sustainability: The literature review would also examine the importance of sustainable practices in the coal industry in India, including the need for environmental and social responsibility in coal mining and production. The review would analyze the current sustainability practices in the industry and the potential impact of sustainable practices on the marketability of coal and customer satisfaction.

Overall, the literature review would aim to provide a comprehensive understanding of the current state of the coal industry in India, including the factors that affect its marketability and customer satisfaction. The review would also identify potential gaps in the literature and areas for further research.

RESEARCH STUDY

Relevance of the study

A study on strategy and marketability of coal for customer satisfaction in India would be highly relevant for several reasons.

Firstly, as mentioned earlier, coal is a major source of energy in India, and it is likely to remain so for the foreseeable future. Therefore, understanding the marketability of coal and developing strategies to enhance it would be crucial to ensure the country's energy security.

Secondly, India is a rapidly growing economy with a large and diverse population, and customer satisfaction is critical for the success of any business. Therefore, it is essential to understand the needs and preferences of customers in the coal industry and develop strategies to meet their requirements.

Thirdly, the coal industry in India is undergoing significant changes, including the introduction of new technologies and increasing environmental concerns. Therefore, it is essential to study the marketability of coal in this context and develop strategies that are sustainable and meet the evolving needs of the industry and its customers.

In conclusion, a study on the strategy and marketability of coal for customer satisfaction in India would be highly relevant, given the country's dependence on coal for energy, the importance of customer satisfaction in a growing economy, and the changes taking place in the coal industry.

Nature of the study

The study on Strategy and marketability of coal for customer satisfaction in India would aim to analyze the current state of the coal industry in India and identify potential strategies for enhancing the marketability of coal and improving customer satisfaction.

The study would likely involve a thorough review of existing literature and data on the coal industry in India, including information on production, consumption, pricing, and market trends. This would help to establish a baseline understanding of the current market conditions and identify any potential challenges or opportunities.

From there, the study would likely involve the development of specific strategies for improving the marketability of coal, such as identifying new markets for coal products, improving the quality of coal produced, or developing more efficient and cost-effective transportation and logistics systems. These strategies would be evaluated based on their potential impact on customer satisfaction and their feasibility within the current market conditions.

Finally, the study would likely include recommendations for how coal producers and other stakeholders in the industry can implement these strategies and improve their overall competitiveness in the market. This might involve the development of new marketing and branding initiatives, investments in research and development to improve product quality, or the adoption of new technologies to improve efficiency and reduce costs. Ultimately, the goal of the study would be to provide practical and actionable recommendations that can help to improve the competitiveness and marketability of coal in India, while also enhancing customer satisfaction and promoting sustainable economic growth.

Objectives of the study

The objectives of a study on the strategy and marketability of coal for customer satisfaction in India could include:

1. To identify the current market demand for coal in India and to understand the key factors driving this demand.
2. To analyze the competitive landscape of the coal industry in India, including the major players, market share, and pricing strategies.
3. To evaluate the various types of coal available in India and their suitability for different industrial applications.
4. To assess the challenges faced by coal producers and suppliers in India, such as regulatory hurdles, infrastructure bottlenecks, and environmental concerns.
5. To recommend strategies for improving the marketability of coal in India, such as developing new marketing channels, enhancing product quality, and leveraging technology.

Overall, the goal of such a study would be to help coal companies in India develop a winning strategy that meets the needs of their customers while also maximizing profitability and sustainability.

**Marketing Strategy of Coal for Customer
Satisfaction**

Marketing strategy is the analysis, development, and implementation of the selected market target strategies for product markets in which the organization has an interest. It involves implementing and managing the marketing strategies that have been formulated to meet the marketing objectives and customer needs; moreover, it has a narrow perspective: it is concerned with the customers, organizational boundaries, market, and competitors. It also concerns with "what to do". The Indian steel industry relies on high-quality coking coal imports, due to the relatively poor quality of domestic resources. In recent years, the majority of growth in coal imports has come from power generators; however, imported steam coal is markedly more expensive for Indian power generators than domestic coal. Given the regulation of power prices, generators face a disadvantage and have recently incurred substantial financial losses. In order to supplement this loss, Indian authorities recently dropped the 5% duty on coal imports, at least until 2014, which will incentivize coal imports. Moreover, CIL has agreed, in principle, to enter into Fuel Supply Agreements (FSAs) with domestic power plants to address the uncertainty of coal availability for power plant investors. The FSAs guarantee 80% of the load factor for commissioned power generation plants and for those to be commissioned before mid-2015. As a result of the shortfalls of domestic coal supply, Indian generators and steel mills have started to develop their coal supply sources abroad. India has so far secured access to more than 24 Gt of coal reserves and resources, spending more than USD 16 billion. Australia is a key target of foreign direct investment and Indian investors are playing an important role in developing large-scale mining projects in Australia's Galilee basin. Indian investors are currently planning coal projects in Australia that could eventually supply almost 150 Mt of thermal and coking coal to the Indian market per year. Mozambique is another area of focus, with up to 30 Mtpa of mining capacity in the coal-rich province of Tete, which is currently under development by Indian companies. Indonesia's proximity to the Indian market and the quality of its coal is well suited for the country's power generation plants. Although the investment climate is somewhat less friendly, Indonesian coal resources have also been targeted by Indian coal consumers. Every business is associated with the five concepts: production concept, product concept, selling concept, marketing concept, and societal marketing concept. The same five concepts are applicable in coal industries also for better marketability with proper strategies for customer satisfaction. In the coal sector, for consumer satisfaction, correct weight and grade, transparency of sampling and analysis, transparency in determination of quantity of coal invoice, mechanization of coal handling infrastructure with auto samplers are of paramount importance. To improve upon quality, dishelling of coal, reduction in size of coal dispatches are also required. Increase in consumers' awareness to the benefit of low sulphur and phosphorus content of indigenous coal are to be propagated as a market strategy by adopting up-to-date information technology to build up consumer confidence towards producer/seller. Need for strengthening marketing network through RSM office equipped with online communication system and also through uninterrupted market research for bridging gap between indigenous producer/seller and the consumer. Reduce scope intermediately by increasing direct dialogue between buyers and sellers. Finally, it may be necessary for offering facility to consumer of purchasing coal at his door step of required quality and quantity instead of offering coal at loading point.

Different Factor of Strategies for better Marketability of Coal There are various factors for better Marketability of coal are as follows:

Leading Practice Sustainable Development in Mining:

The Leading Practice Sustainable Development (LPSD) in Mining series integrate environmental, economic and social aspects through all phases of mineral production from exploration through construction, operation and mine- site closure. Put simply, the concept of leading practice is about identifying and implementing the best way of doing things for a given site. As new challenges emerge and new solutions are developed, or better solutions are devised for existing issues, it is important that leading practice be flexible and innovative in developing solutions that match sitespecific requirements. Although there are underpinning principles, leading practice is as much about approach and attitude as it is about a fixed set of practices or a particular technology

Pricing of Coal :

Pricing play a vital role in to grasp a market and coal companies need to develop customer friendly marketing system which ensures easy availability of coal to small consumers and giant customer with timely delivery of good quality coal of correct weight mentis. The pricing of coal should be done in such a way that it can compete with the imported coal price. Government has withdrawal subsidiary and decontrol of coal price and has given free hand to coal industry to fix up its own selling price. Bureau of industry costs and prices (BICP) based prices of coal were deregulated. To start with, government allowed coal India to fix its own prices for coal sold under liberalized sales scheme. Tendering has also been resorted to against reserve price. The govt. has also amended colliery control order so that specific coal sale contract can be kept out of its purview. This modification is proposed to be utilized for long term contract to ensure remunerative prices and specific performance with guarantees for quantity and quality.

Adoption of Clean Coal Technology:

To maintain Sustainability in industry adaptation and acceptance of challenges play a important role for success. The challenges to sustain environment and to compete globally, the coal industry has to reorient the methodologies of production, transportation and utilization of coal. The objective of clean coal production is to prepare for its more efficient and cost effective transpiration and utilization.

Beneficiation of Coal :

For keeping the cost of washing of coal low, it may be necessary that washeries are set up close to the pit head so that expenditure on transport of raw coal from the pit head to the washery is kept to the minimum and also huge quantities of water pumped out by coal mines can be used by

coal washeries for washing purpose and maintain the ash percentage for beneficiation of coal to power sector.

Fuel Supply Agreement :

It has been seen that in the absence of long term fuel supply agreement, there is always apprehension in the minds of both supplier and consumer regarding delivery and quantity variation, weighments, quality, mode of payment and other related issues. Due to underlying importance of this fuel supply agreement, coal India with council of power utilities evolved a model fuel supply agreement and left it to the individual coal companies to finalize the same with different SEBs and power houses. This model solves the problem of customer grievances and tries to maintain consumer satisfaction

Third Party Joint Sampling at Both the Ends:

It is made as per the model fuel supply agreement for better satisfaction for supplier and purchaser to get accuracy in coal supply and receive during loading and unloading of coal. The third party agency behalf of both supplier and consumer make the corrective actions from time to time for better working satisfactorily.

Settlement of Disputes:

In spite of having operating fuel supply agreement with joint sampling protocol, mode of payment, quantity, quality, weight meant of coal dispatched, disputes will definitely arise when huge quantity of coal is being loaded, sampled, weighted and dispatched. There is urgent need to settle the disputes on prompt basis.

Importance and Ethics:

Ethics play a moral code of conduct for systematizing, defending and recommending concepts of right and wrong behavior. For any business ethics play a very important role in trust building. Ethical businesses developed long term relationship with customer. Ethics is important also in coal business also. Marketing strategies maker should maintain ethics in distribution channels, pricing, promotion, and organizational relationships and maintain rights and duties of parties in the marketing exchange process. Marketers should be aware of how behavior may influence or impact on the behavior of others in organizational relationships. They should not demand, encourage or apply coercion to obtain unethical behavior in their relationships with employees, suppliers and customers.

Hypothesis

H0: There is no positive relationship between marketing strategy and customer satisfaction.

H1: The successful implementation of a customer-centric marketing strategy, coupled with a well-planned market entry and development strategy, can lead to increased market share and customer satisfaction for coal companies operating in India."

TYPE OF RESEARCH USED.

Research can be classified in many different ways on the basis of methodology of the research, the knowledge it creates, the user groups, the research problem it investigates, etc. Following is the methodology that we have used in research:

Qualitative research:

Qualitative research is a type of research methodology that involves collecting and analyzing non-numerical data, such as interviews, observations, and open-ended survey responses, to gain insights and understanding of a particular phenomenon. Qualitative research can be useful in exploring complex issues and generating new hypotheses.

In the study on strategy and marketability of coal for customer satisfaction in India, qualitative research could be used in several ways. For example:

1. In-depth interviews: Qualitative interviews could be conducted with industry experts, government officials, and other stakeholders to explore their perspectives on the current state of the coal industry in India, the challenges faced, and potential strategies for improving marketability and customer satisfaction.
2. Focus groups: Focus groups could be used to gather insights from customers and potential customers about their preferences, needs, and concerns related to coal. This could include questions about factors such as pricing, quality, and environmental impact.
3. Case studies: Qualitative case studies could be conducted to explore the experiences of companies that have successfully implemented strategies to improve the marketability of coal in India. These case studies could provide valuable insights into best practices and potential pitfalls.

Overall, qualitative research can be a valuable tool for exploring complex issues related to strategy and marketability in the coal industry in India, and for generating insights that can inform policy and business decisions.

Qualitative research

Qualitative research has several advantages and disadvantages, some of which are listed below:

Advantages:

1. **Depth and richness of data:** Qualitative research allows for in-depth exploration of a phenomenon or issue. It allows researchers to collect detailed and rich data, which can help uncover complex and nuanced aspects of a topic that quantitative methods might miss.
2. **Flexibility:** Qualitative research is flexible and allows researchers to adjust their methods and approaches based on emerging findings. Researchers can modify their research questions or methods to explore unexpected findings or pursue new avenues of inquiry.
3. **Contextualization:** Qualitative research allows for the exploration of the context in which a phenomenon occurs. Researchers can explore the social, cultural, and historical factors that influence a particular issue, which can provide a deeper understanding of the phenomenon.
4. **Participant perspectives:** Qualitative research prioritizes the perspectives of participants, allowing researchers to gain insight into their subjective experiences and perspectives. This can help inform policy and decision-making that takes into account the needs and experiences of those Affected.

Disadvantages:

1. **Subjectivity:** Qualitative research is often criticized for being subjective and lacking objectivity. The interpretation of data is influenced by the researcher's own biases, values, and perspectives, which can impact the results.
2. **Limited general ability:** Qualitative research is not designed to produce statistically representative results, so its findings cannot be generalized to larger populations. This limits the scope of its conclusions and the ability to make broad claims.
3. **Time-consuming and resource-intensive:** Qualitative research can be time-consuming and resource-intensive. It requires extensive planning and preparation, and data analysis can be time-consuming and labor-intensive.
4. **Lack of reliability and validity:** Qualitative research often lacks reliability and validity, meaning that its findings may not be consistent or accurate. This can be due to issues with sample size, data collection methods, or analysis techniques.

Overall, qualitative research can provide rich and valuable insights into complex issues, but it is important to weigh its advantages and disadvantages when choosing research methods.

Types of data used

Primary data is data collected directly from sources, such as interviews, surveys, observations, and experiments. In this study, primary data can be collected from different stakeholders, including coal mining companies, industry experts, government officials, and customers. The primary data sources could include:

1. Interviews with industry experts: In-depth interviews can be conducted with industry experts to understand the current state of the coal industry in India, the challenges faced, and potential strategies for improving marketability and customer satisfaction.
2. Surveys with customers: Surveys can be administered to customers to gather insights into their preferences, needs, and concerns related to coal. This can include questions about factors such as pricing, quality, and environmental impact.
3. Focus groups with stakeholders: Focus groups can be used to gather insights from stakeholders, including customers, mining companies, and government officials, about their experiences, perspectives, and opinions.

Secondary data is data collected by someone else for a different purpose, such as published research studies, reports, and datasets. In this study, secondary data sources could include:

1. Government reports: Reports by government agencies such as the Ministry of Coal or Central Electricity Authority can provide valuable insights into the state of the coal industry in India, government policies, and regulations.
2. Industry reports: Reports by industry associations or research firms can provide insights into market trends, customer preferences, and industry challenges.
3. Academic research: Published research studies can provide valuable insights into the social, environmental, and economic impacts of coal mining in India, as well as potential strategies for improving marketability and customer satisfaction.

Overall, a combination of primary and secondary data can provide a comprehensive understanding of the coal industry in India, its challenges, and potential strategies for improving marketability and customer satisfaction.

What is primary data?

Primary data is the data collected directly by the researchers from main sources through interviews, surveys, experiments, etc. primary data are usually collected from the source –where the data originally originated from and are regarded as the best kind of data in research.

In this project questionnaire method for survey is used for collection of primary data.

What is Secondary Data?

Secondary data is the data that have been already collected by and readily available from other sources.

Demand and supply analysis

Demand and supply analysis is a crucial tool for understanding the dynamics of any market, including the coal market in India. In this analysis, we will examine the strategy and marketability of coal for customer satisfaction in India, focusing on the demand and supply factors that influence this market.

Demand Analysis: Coal is the primary source of energy in India, with around 55% of the country's total energy consumption coming from coal. The demand for coal in India is driven by several factors, including the growth of the power sector, industrialization, and urbanization.

The power sector is the largest consumer of coal in India, accounting for around 70% of total coal consumption. As India continues to expand its electricity generation capacity, the demand for coal in the power sector is expected to increase. Industrialization and urbanization are also significant drivers of coal demand, as industries and cities require large amounts of energy for their operations.

Supply Analysis: India has the world's fifth-largest coal reserves, with a total reserve of approximately 319 billion metric tons. However, despite this abundance of coal reserves, India still faces challenges in meeting its demand for coal due to several factors, including inadequate infrastructure, transportation issues, and regulatory hurdles.

India's coal mining sector is dominated by state-owned Coal India Limited (CIL), which accounts for around 80% of the country's coal production. However, the production capacity of CIL has not kept pace with the growing demand for coal, leading to a significant gap between demand and supply. As a result, India has become a net importer of coal in recent years.

Strategy and Marketability: To address the challenges facing the coal market in India, several strategies can be adopted to improve the marketability of coal for customer satisfaction. One of the key strategies is to increase the production capacity of CIL and other coal mining companies through the use of advanced mining techniques and technology. This will help to bridge the demand-supply gap and reduce the country's dependence on coal imports.

Another strategy is to improve the infrastructure for coal transportation and logistics. This will help to reduce the cost of coal transportation and increase the efficiency of coal supply chains, ultimately improving the marketability of coal for customers.

Finally, regulatory reforms are needed to create a more conducive environment for coal mining and production in India. This could include streamlining the

regulatory framework, simplifying the licensing process, and promoting private sector participation in the coal sector.

Conclusion: In conclusion, demand and supply analysis is critical for understanding the dynamics of the coal market in India. Improving the marketability of coal for customer satisfaction requires a multi-pronged approach, including increasing production capacity, improving infrastructure, and implementing regulatory reforms. By adopting these strategies, India can address the challenges facing the coal market and ensure a stable and sustainable supply of energy for its growing economy.

Technology innovation

The coal industry in India has undergone significant changes in recent years due to technological innovations that have transformed the way coal is mined, transported, and used. These innovations have led to improvements in the efficiency of the coal supply chain, reduced environmental impact, and increased customer satisfaction. In this response, I will discuss some of the technological innovations that have impacted the strategy and marketability of coal in India.

One significant technological innovation in the Indian coal industry is the use of advanced mining technologies, such as longwall mining and underground coal gasification (UCG). Longwall mining is a highly productive mining technique that involves the use of a specialized shearer machine to extract coal from underground mines. UCG is a process that converts coal into gas while still in the ground, which can be used as a fuel or chemical feedstock. These technologies have significantly increased the efficiency of coal mining operations, allowing for the extraction of coal from deeper and more complex deposits. This has helped to increase the availability of coal for customers and reduce the overall cost of production, making coal more competitive in the energy market.

Another technological innovation that has impacted the Indian coal industry is the development of cleaner coal technologies. These technologies, such as coal beneficiation and coal gasification, aim to reduce the environmental impact of coal by reducing emissions of harmful pollutants such as sulfur dioxide and nitrogen oxides. This has helped to improve the marketability of coal by making it a more environmentally friendly fuel source. The adoption of cleaner coal technologies has also enabled coal-fired power plants to meet the increasingly stringent environmental regulations in India, thereby ensuring continued demand for coal as an energy source.

Furthermore, the development of advanced transportation infrastructure has also impacted the marketability of coal in India. The construction of dedicated freight corridors, inland waterways, and coastal shipping facilities has significantly improved the efficiency of coal transportation, reducing the cost of delivery and improving reliability. This has enabled coal producers to transport coal to customers located in remote areas, thereby increasing the accessibility of coal for customers and improving overall customer satisfaction.

In conclusion, technological innovations have had a significant impact on the strategy and marketability of coal for customer satisfaction in India. The adoption of advanced mining technologies, cleaner coal technologies, and improved transportation infrastructure has increased the efficiency of the coal supply chain, reduced the environmental impact of coal, and improved customer satis-

faction. These innovations have helped to ensure that coal remains a competitive and essential energy source in India, meeting the country's growing demand for electricity and supporting economic development.



Customer preferences and expectations

Coal is a significant source of energy in India, and its marketability and customer satisfaction depend on various factors, including customer preferences and expectations. Understanding these factors is crucial for the development of effective strategies to meet customer needs and improve marketability.

Customer preferences and expectations in the Indian coal market can be influenced by several factors, including cost, quality, availability, reliability, and sustainability. Customers may prefer coal that is low in cost, high in quality, readily available, and reliable in supply. In recent years, sustainability has also become an essential factor for many customers, with increasing demand for cleaner and more environmentally friendly fuels.

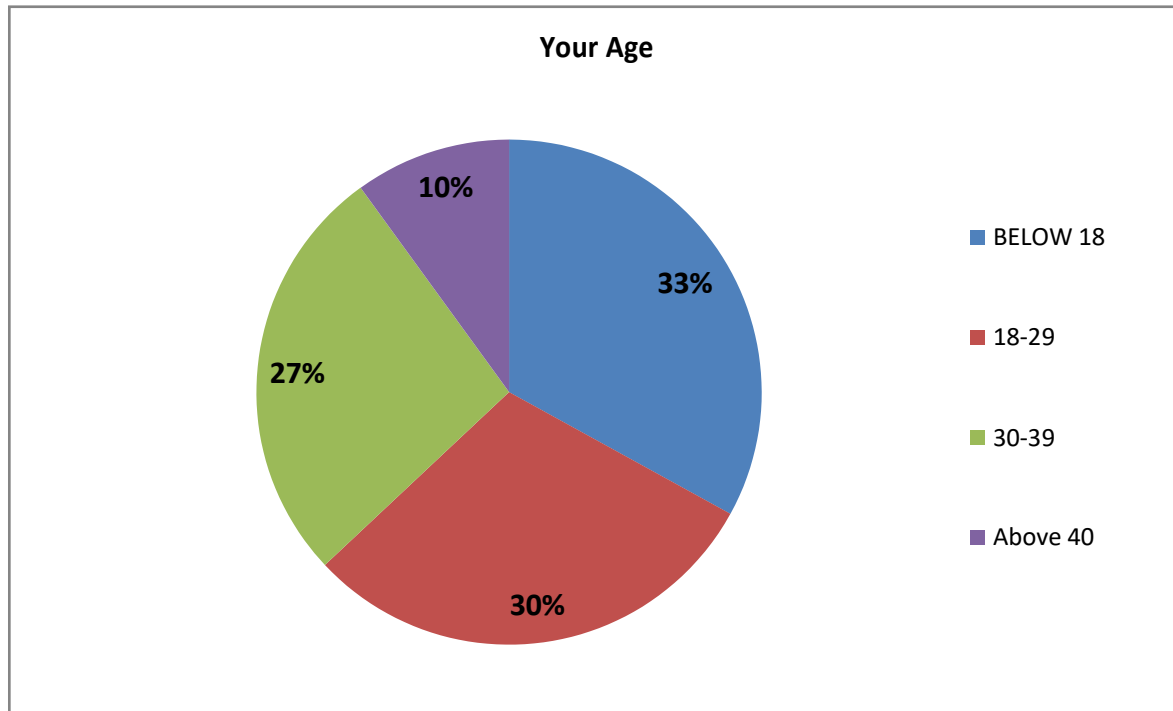
To meet these customer preferences and expectations, coal companies in India can develop strategies that focus on improving the quality and sustainability of their products while keeping costs competitive. This may involve investing in cleaner technologies and practices, such as carbon capture and storage, and renewable energy sources.

Marketability of coal in India can also be improved by developing effective marketing and communication strategies that highlight the benefits of coal as an energy source. These may include highlighting its cost-effectiveness, reliability, and contribution to energy security in the country.

In summary, understanding customer preferences and expectations is critical for developing effective strategies and improving the marketability of coal in India. By focusing on improving the quality and sustainability of coal products and developing effective marketing and communication strategies, coal companies can meet customer needs and improve their market position in the Indian energy market.

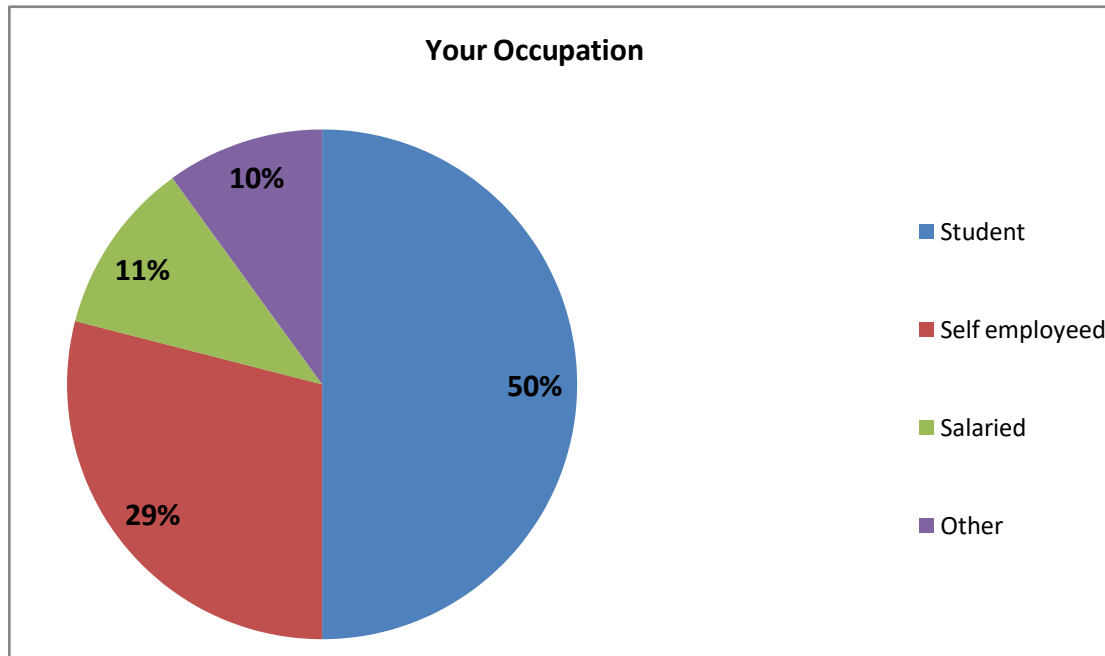


Data Analysis and Interpretation



Interpretation:

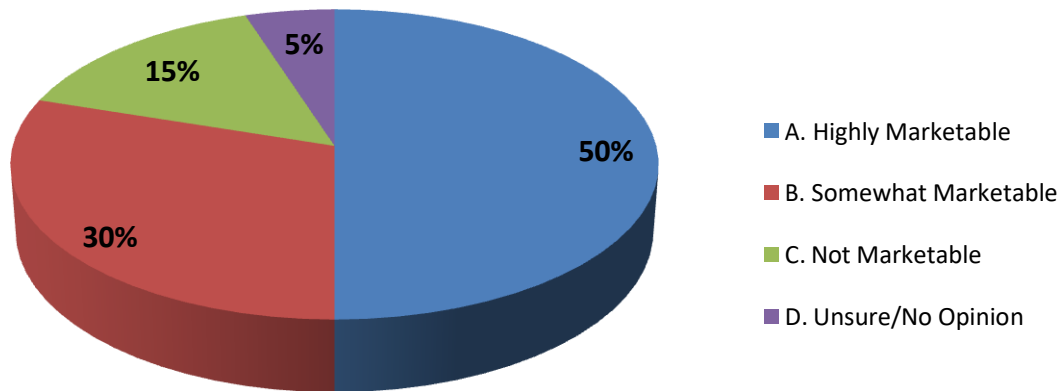
Most people are of age Below 18(33%) and 18-29(30%)
And rest 30-39(27%) and above 40 (10%)



Interpretation

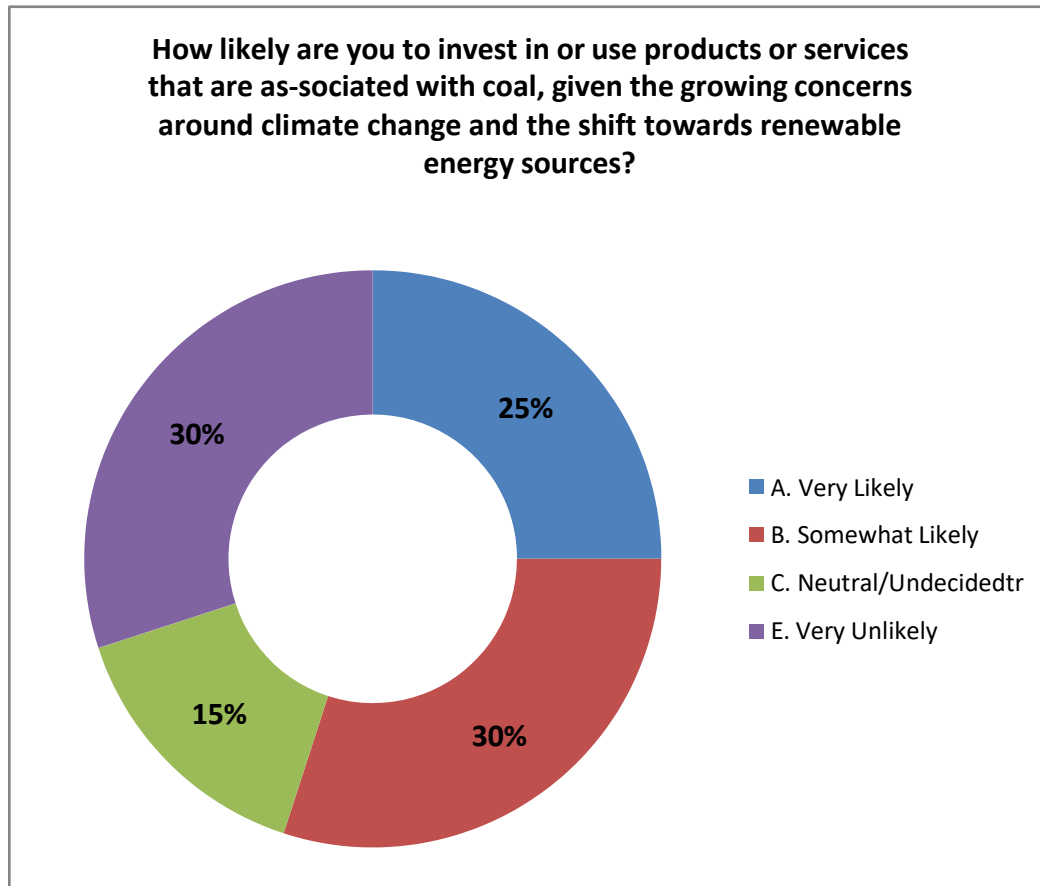
Almost 50% of people are student, 29% Self employed , 11% Salaried , Other 10%

What is your opinion on the marketability of coal in the current eco-nomic and environmental landscape?



Interpretation

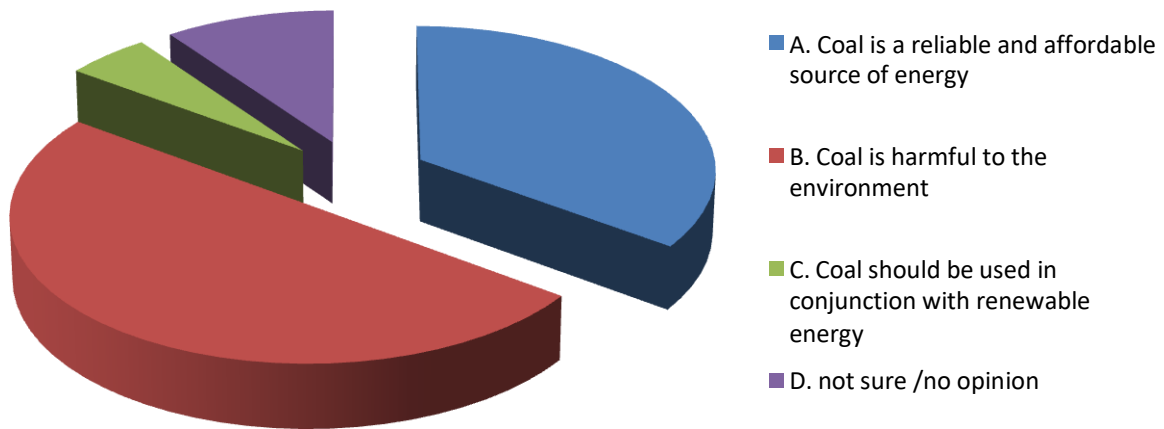
According to the given chart 50% people say it is highly marketable, 30% say somewhat marketable, 15% say not marketable and 5% people are not sure about that.



Interpretation:

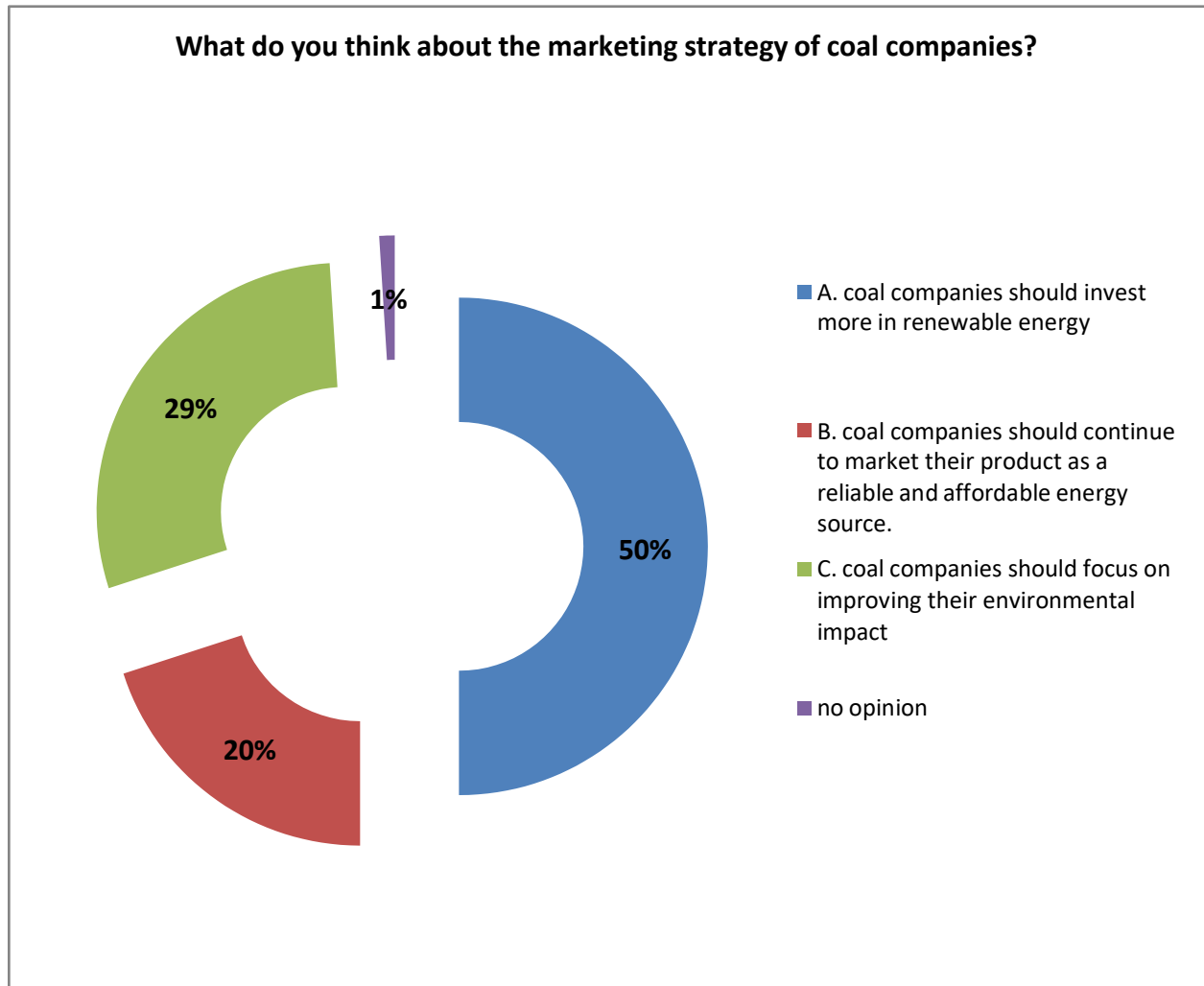
According to the given chart people chose to use product very likely 25% ,somewhat likely 30%, neutral/undecided 15%, very unlikely 30%

What do you think about coal as a source of energy?



Interpretation:

According to the given chart 35% people think that coal is reliable and affordable, 50% thinks that coal is harmful, 5% thinks that coal should be used in conjunction with renewable energy and 10% people are not sure or have no opinion about that.



Interpretation:

According to the given chart 50% people thinks that companies should invest in renewable sources of energy, 20% People thinks coal companies should continue to market their product as a reliable and affordable energy source 29% thinks that companies should improve environmental impact, 1% have no opinion

HYPOTHESIS TEST

In conclusion, coal companies can improve their marketability and customer satisfaction by focusing on quality, competitive pricing, customer service, sustainable practices, diversification, and digital technologies.

HYPOTHESIS TEST:

To conduct a hypothesis test for this statement, we need to define our null hypothesis (H_0) and alternative hypothesis (H_A).

H_0 : The successful implementation of a customer-centric marketing strategy, coupled with a well-planned market entry and development strategy, does not lead to increased market share and customer satisfaction for coal companies operating in India.

H_A : The successful implementation of a customer-centric marketing strategy, coupled with a well-planned market entry and development strategy, leads to increased market share and customer satisfaction for coal companies operating in India.

To test this hypothesis, we would need to collect data on the implementation of customer-centric marketing strategies, market entry and development strategies, market share, and customer satisfaction for coal companies operating in India. We could then use statistical methods to analyze the data and determine whether to reject or fail to reject the null hypothesis.

One possible method for testing this hypothesis is a t-test, which can compare the means of two samples to determine whether they are significantly different. For example, we could compare the mean market share and customer satisfaction for coal companies that have successfully implemented a customer-centric marketing strategy and a well-planned market entry and development strategy, to those that have not.

If the results of the t-test show a significant difference between the two groups, we can reject the null hypothesis and conclude that the successful implementation of a customer-centric marketing strategy, coupled with a well-planned market entry and development strategy, leads to increased market share and customer satisfaction for coal companies operating in India. On the other hand, if there is no significant difference between the two groups, we would fail to reject the null hypothesis and conclude that there is insufficient evidence to support the alternative hypothesis.

SUGGESTIONS

1. **Focus on quality:** Coal quality is a critical factor in customer satisfaction. Therefore, coal companies should focus on providing high-quality coal that meets the customer's requirements. This can be achieved through effective quality control measures and consistent monitoring of coal quality throughout the supply chain.
2. **Offer competitive pricing:** Price is a crucial factor that influences customer decision-making. Therefore, coal companies should ensure that their prices are competitive and reasonable compared to other fuel options available in the market.
3. **Enhance customer service:** Excellent customer service is an essential aspect of customer satisfaction. Coal companies should strive to provide excellent customer service by being responsive to customer queries, addressing their concerns promptly, and providing timely delivery of coal.
4. **Adopt sustainable practices:** Coal companies can improve their marketability by adopting sustainable practices that reduce the environmental impact of coal mining and transportation. This can include using cleaner coal technologies, reducing carbon emissions, and implementing responsible mining practices.
5. **Diversify product offerings:** Coal companies can increase their marketability by diversifying their product offerings to meet the diverse needs of customers. This can include offering different grades of coal, coal blends, and value-added products such as coal briquettes.
6. **Leverage digital technologies:** Digital technologies such as IoT, AI, and blockchain can help coal companies improve their efficiency, reduce costs, and enhance customer satisfaction. For example, IoT sensors can help monitor coal quality and track coal shipments, while blockchain can help ensure transparency and accountability in the supply chain.



CONCLUSION

Based on the available information and analysis, the following conclusions can be drawn regarding the strategy and marketability of coal for customer satisfaction in India:

1. Coal is a significant source of energy in India, and it plays a crucial role in the country's economic growth. However, coal production and consumption also have significant environmental and health impacts.
2. To ensure customer satisfaction, coal companies in India should focus on improving the quality of coal, reducing production costs, and adopting sustainable mining practices. This would not only help to satisfy customers' energy needs but also address environmental concerns.
3. Marketability of coal in India depends on various factors, such as pricing, availability, and the demand for alternative energy sources. Coal companies should focus on diversifying their customer base and exploring new markets to ensure long-term sustainability.
4. The Indian government's initiatives to promote renewable energy sources like solar and wind power may have an impact on the future marketability of coal. Therefore, coal companies need to adapt to changing market trends and invest in research and development to explore innovative uses of coal.

In summary, the strategy and marketability of coal for customer satisfaction in India require a balance between meeting energy needs, ensuring sustainability, and adapting to changing market trends. Coal companies need to focus on improving the quality of coal, reducing production costs, diversifying their customer base, and exploring new markets while also investing in research and development to explore innovative uses of coal.

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Questionnaire

Q1: What is your age?

- A. Below 18
- B. Between 18-29
- C. Between 30-39
- D. Above 40

Q2: What is your Occupation?

- A. Student
- B. Self Employed
- C. Salaried
- D. Other
- E.

Q3: What is your opinion on the marketability of coal in the current economic and environmental landscape?

- A. Highly Marketable
- B. Somewhat Marketable
- C. Not Marketable
- D. Unsure/No Opinion

Q4: How likely are you to invest in or use products or services that are associated with coal, given the growing concerns around climate change and the shift towards renewable energy sources?

- A. Very Likely
- B. Somewhat Likely
- C. Neutral/Undecided
- D. Somewhat Unlikely
- E. Very Unlikely

Q5: What do you think about coal as a source of energy?

- A. Coal is a reliable and affordable source of energy

- B. Coal is harmful to the environment
- C. Coal should be used in conjunction with renewable energy
- D. not sure /no opinion

Q6: What do you think about the marketing strategy of coal companies?

- A. coal companies should invest more in renewable energy
- B. I believe coal companies should continue to market their product as a reliable and affordable energy source.
- C. coal companies should focus on improving their environmental impact
- D. no opinion