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An overview of Marketing of Solar Products

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Abstract:

Solar energy is extensively perceived as a promising technology for electricity generation in remote locations in developing countries. This paper attempts to understand the way solar products are marketed and its influence in the demand of the solar products. Though customers have a vague idea on the availability of solar products yet it has not accelerated the growth of solar industry. An understanding is reached and probable suggestions for marketing strategies are suggested in order to increase the awareness and demand of solar products.

Keywords: solar energy, holistic approach, tariff, technical development, distribution

1. Introduction

Solar energy is one of the sources of energy which is abundantly and freely available energy source for all the nations around the globe. During pre-historic time solar energy was used in the most primitive manner. However, some research and development was carried out in order to exploit solar energy more efficiently but the work remained mainly academic. After the dramatic rise in oil prices in the 1970's several countries began to formulate policies for solar energy. Private Households and small businesses can largely contribute in focused policy initiation. One such initiative can be taken at the micro level where an individual can contribute for a sustainable energy path by consumption of Non-conventional Energy resources like solar energy, the freely available energy source for all the nations across the globe.

In November 2009, Government of India approved JNNSM, whose sole aim is to establish India as a global leader in Solar Energy by creating the policy conditions for its diffusion across the country. IREDA and Ministry of New & Renewable Energy have identified the development of Solar Energy technologies in the country as a NATIONAL MISSION. Such initiation will be a success only if citizen of India takes initiative in such programs. One of the important ways for successful implementation of such initiatives is by creating an environment for *mass consumption*.

Solar Powered Homes are becoming more popular, Solar panels capture the sun's heat and light and converts it into electricity. In few cases, the entire electricity needs of a home can be met by solar energy. Factors such as the location of the home, weather conditions and seasons also needs to be considered.

This paper tries to understand the demand of Solar products in the household market. Before going further we need to understand what marketing is.

2. Understanding What Marketing Is In A Simple Manner

Marketing is about identifying and meeting human and social needs. Marketing is a societal process by which individuals and groups obtain what they need and want through creating offering and freely exchanging products and services of value with others. Marketing is not only a responsibility of a marketing department, there should be a holistic approach to it. In practice, marketing follows a logical process. It consists of analyzing marketing opportunities, selecting target markets, designing marketing strategies, developing marketing programs and managing marketing efforts. Companies must always be moving forward with marketing programs, innovating products and services, staying in touch with customer needs and seeking new advantages rather than relying on past strengths.

Needs, wants and demand: needs are the basic human requirements. These needs becomes wants when they are directed to specific objects that might satisfy the need. Demands are wants for specific products backed by an ability to pay. Understanding customer needs and wants is not a simple task.

The product will be successful if it delivers value and satisfaction to the target buyer. *Value* reflects the sum of the perceived tangible and intangible benefits to customers. It is a combination of quality, service and price, also called a "customer value triad". *Satisfaction* reflects a person's judgments of a product's perceived performance in relation to the expectation. If the performance falls short of expectations, customer is dissatisfied and disappointed. If the expectation exceeds than the customer is delighted.

3. Literature Review

- Carsten Herbes, Iris Ramme [2014]ⁱ The purpose of the study is to analyze how providers' online marketing in one of the most developed markets for green energy can be improved. Providers could improve the effectiveness of their visual messages by using more pictures related to renewable energy. Further, self-expressive benefits of buying green energy could be created by offering merchandise articles symbolizing the contribution a consumer makes by choosing a green tariff.
- Pamela Cargill [2011]ⁱⁱ, a certain amount of pure brand-building marketing is important, the goal of all marketing activities is to generate leads that will result in closed deals. Discontinue any marketing activities that aren't bringing you the right people. Only through market research and planning ahead will you know and save your precious time and money to spend on more effective marketing. Also add to your calendar recurring events, fairs, festivals, and seminars that you have chosen to attend or put on yourself. Have stock ads, e-news blasts, or blog content ready to go with space for you to fill in the special message of the last minute campaign.
- Adam Faiers et al [2006]ⁱⁱⁱ A group of 'early adopters', and a group of assumed 'early majority' adopters of solar power were surveyed and the results show that overall, although the 'early majority' demonstrate a positive perception of the environmental characteristics of solar power, its financial, economic and aesthetic characteristics are limiting adoption. However, if consumers cannot identify the relative advantage of solar power over their current sources of power, which is supplied readily and cheaply through a mains system, it is unlikely that adoption will follow.
- T D. Tsoutsos [2002]^{iv} the degree of development of market does not depend on climate conditions or on different technological developments. The recent growth in the European solar market stems from growing environmental consciousness. People are prepared to pay the price of a solar water heater if the systems are comfortable and technically on high standards.
- Raja Peter et al [2001]^v Stimulating the market is an important challenge for solar-based technologies. Their penetration and contribution will depend on technology development and dissemination. The crucial factors for a broader diffusion of PV systems are: financial incentives, government led initiatives, reduction of investment costs, and increase in reliability, dissemination of information and environmental awareness. A persuaded individual can make an adoption decision that a person with inadequate knowledge cannot.

4. Suggestions

A thorough SWOT analysis by a manufacturer and a marketeers is required in order to identify and analyze an existing barriers to adoption of solar technology can thereby help in accelerating awareness and acceptance of Solar products.

4.1. The Underlying Activities Can Be Conducted Simultaneously

- Motivation of the population: campaigning to raise public awareness, information on the economic benefits, increase of environmental awareness, subsidy programmes as incentives to install a solar plant. This will in parallel create demand of the product.
- Technical development of the product: technology development must reflect increased reliability, adaptation to household technology related to hot water supply and solar cooling. The product is required to be user friendly and can be operated easily.
- Distribution and sales: adopting a creative marketing strategies, building a strong distribution networks, training of personnel involved in distribution and sales. This will enable the availability of the product at the right place and at the right time for the potential customers.
- Analyzing various market segments, such as, rural, urban, semi-urban, educational institution or any service industry.and assigning priorities to those segments.
- Focus on the message, such as, 'warm water' rather than solar system. Customers will be more attracted by the benefit of the product. The message should be appealing and matching the benefit that they are looking for.
- Manufacturing firms must identify its competitive advantage and make it as a strength of a firm and target the customers accordingly. They can even built the marketing strategy just around it.
- Setup a marketing calendar so you can keep ahead of the game. Participant in events, fairs, festivals, and seminars will boost the advertising aspect of the firm and the product.

Apart from above mentioned points the firm or an organization can adopt strategy based on the various internal and external environmental factors influencing its existence in the market such as, customers, government policies, suppliers, employees, etc.

4.2. Suggestions for rural areas

According to a survey Royal Institutions of Chartered Surveyor RICS yet 59% of the rural peoples are unaware of Solar products and those who are aware of solar products only 13% of the them are having solar products. • This low share of the product is due to low distribution and low market communication.

Apart from solar equipment makers, rising diesel cost and awareness for solar power has compelled agri-input manufacturers to include solar in their portfolio. "Solar-based products have a huge market in the remote areas, where they can easily replace costly diesel and kerosene. Apart from irrigation, solar can also help in powering the villages," said Parag Shah, managing partner of Mahindra Partners and head of Mahindra Cleantech division.

The underlying tricks can be conducted:

- Jaipur-based Frontier Markets, or FM, founded by Ajaita Shah suggested that. "Reaching out to rural markets requires a bottom-up approach," she says. "We have to identify what rural people need, the price points they are comfortable with, demonstrate the use of the product we are selling, and show them why it is relevant to their lives."
- Ajaita Shah also suggested that solar products in bulk from different manufacturers and retailers placed them under the brand name 'Saral Jeevan'. Its trump card is the profile of its agents, whom it pays a commission. These are village-level community workers, who are already familiar faces in the region, since they also provide some other service. "People trust these village representatives as they are known to them." They include krishi mitras (farmers' friends) who are employed by the Krishi Vigyan Kendras, an Indian Council of Agricultural Research project, to keep farmers informed about latest agricultural technologies.
- Companies can try to rope in microfinance companies to help with the distribution of solar products in rural India.
- Now Company should also tagged up with each and every Panchayat so, they can directly came into contact with rural peoples. As Rural.Peoples are mostly influence by Panch's so this tagging up can be very much helpful. They can also do some communication through their own Van's mostly in season time because rural peoples are having their most of the income in a particular season.
- Hitesh Doshi CMD, Waaree Group said that state governments should subsidize solar powered equipments rather than giving free electricity to farmers.

5. Conclusion

As the installation fee for solar products are high, customers may be attracted by green tariffs provided by the government or manufacturers. Any marketing activity must end in closed deals, i.e, selling the product. The manufacturers and the marketeers must have their calendar full of events covering promotional activities which could lead to sale of the product. Focusing on the relative advantage of the product can be an icing on the cake. Customer are always ready to pay price for premium product and climatic condition is not a hindrance for the solar product as seen in the increased sales in European countries. If consistent campaigns and promotional activities related to environment are targeted to the citizens of every country then the awareness will lead them to become conscious in choosing Solar products.

Renewable sources of energy are expected to play a crucial part and expanding role in meeting the energy needs of all the developing countries. The market penetration and espousal will depend on its technology development and dissemination which is backed by reliable marketing strategy. The potential for solar-based technology is large and expanding and cosmos in nature. It is attempting to establish itself as an institutional, a distinct market and an industry which is still largely governed by conventional types of energy technology. Stimulating the market is an important challenge for any solar-based technologies. Sustainable development urges that developing countries should not neglect modern high-tech renewable power generating options which provide clean and cost-effective energy solutions to its citizens. The crucial factors for a diffusion of Solar systems are: financial incentives, government led initiatives, reduction of investment costs, and increase in reliability, dissemination of information and environmental awareness, imparting knowledge to the citizens.

6. References

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