RESEARCH ARTICLE

AN EMPIRICAL STUDY OF SOCIAL MEDIA MARKETING FOR CREATING ELECTRICITY CONSERVATION AWARENESS CAMPAIGNS, IN THE NAVI MUMBAI REGION

Seema Rajesh Laddha* and Purshottam Narayanrao Patil

1,2Assistant Professor, Marketing Management Dept.,
NCRD’s Sterling Institute of Management Studies, Navi Mumbai, Maharashtra, INDIA.
*Corresponding Author : simranladdha@yahoo.co.in

ABSTRACT

In India the demand of electricity is always outstripping the supply. This severe gap in electricity supply has lead to the failure of electricity supply companies to match the demand, across India. The outcome of this phenomenon is load shedding and subsequent debacle of diminutive productivity for industry and distressed life for the community. Maharashtra is one of the leading states in the country in terms of industrialization and infrastructure. Conversely, this state also has the awful reputation of ranking in the higher order in the list of high electricity deficit states. Electricity generation and electricity adequacy, both are at a substandard level in the state. There are no indications, whatsoever, of reaching a precise solution in this regard. Consequently, there is widespread public outcry, observed frequently over this issue. Deep demand-supply fissure and increased load shedding affect the socioeconomic development of the state, adversely. Supply side management has the foremost obstacle of lack of the state’s policy decision making and execution of new power generation projects, for several reasons. This cannot be immediately focused upon. Thereby, the only alternative remains considering the demand side management. In this regard, energy conservation is the key for the solution. This is not possible without public involvement. Through their previous research, these authors have observed, that the current awareness campaigns of the state owned electricity supplier MSEB, are ineffective in creating requisite public awareness.

In India, social media played major role in the success of various campaigns. One third of India’s online consumers are aware of brands that have an online presence. Interestingly, social media has now become part of everyday life for a majority of citizens, both in the urban and rural area. According to a study on social media usage by the Nielsen Company, conducted in collaboration with Absolute Data, nearly 30 million Indians who are online consumers are members of social networking sites and about two-thirds of them spend time on these social networking sites, like Facebook and Twitter, daily. Nowadays, Facebook and Twitter are widely preferred choice of many businesses for promotion of their product.

This study has highlighted the aspect that Facebook and Twitter are prospective dependable instruments for MSEB, in their pursuit to create public awareness on efficient use of electricity.

Keywords : MSEB, Social Media, Social Networking Sites, Electricity, Conservation Campaigns, Navi Mumbai, Facebook, Twitter.

1. INTRODUCTION

Power requirement for India is mounting, considering the superior economic growth. Availability of electricity is scarce, due to delay in startup of power generation projects. Moreover, power plants require extensive time for stabilization, according to CEA reports.

As fuel shortage and environmental issues hit the power sector, the nation faces severe electricity shortage of over 10 percent this fiscal vis-a-vis the deficit of 8.5 per cent seen in 2010-11. "The anticipated energy and peaking shortage in the country would be 10.3 per cent and 12.9 per cent, respectively (in 2011-12)," the Central Electricity Authority has said. According to the projections, there would be an electricity supply shortfall of 96,367 million units in 2011-12. During this fiscal, the requirement is expected to be higher at 933,741 million units as against an estimated availability of 8,373,74 million units. To fulfill the deficit in supply, power sector resorts to the alternative of load shedding which adversely affects industrial productivity and agitates the life of people, consequently leading to national loss and public outcry. Conversely, if we are able to use electricity, efficiently and economically, by creating awareness so as to encourage people on energy conservation, the crisis would decipher significantly.

Awareness campaigns run by power generating companies including MSEB, have been futile for long. According to recent research, approximately 70 percent of populations of age group between 15 to 60 are spending considerable time with social media. In our research we emphasize the precise use of social media for executing the various electricity awareness and conservation campaigns.
LITERATURE REVIEW

Reasons for increasing use of electricity: The Indian economy has seen a rapid growth, consequently intensifying the demand for power from all segments. While the rapid industrialization and express economic activity demands a large share of the electricity, the agriculture and domestic sector have not been left behind. In fact the trend analysis depicts that there is almost a similar percentage growth in the demand for electricity in India from both the domestic as well as the industrial sectors.

Industrial demand for electricity in India: Industrialization always has a high demand for power. It is the largest consumer of power in India, as the nation emerges as an IT/BPO hub and a lot of process automations are taking place. As the economy in India is in a growth phase, there has been supplementary pressure from the industrial segment for more power.

Agricultural demand for electricity in India: Despite rapid industrialization, agriculture still forms a major contributor to the Indian economy. With the economy progressing and a lot of mechanization being done in agricultural practices, the demand for electricity among this segment has also increased. With farmers slowly moving out of traditional practices to increase productivity as well as efficiency of farming operations, the share of mechanical and electrical operations in agriculture has doubled from 1970 to 2003. A comparative study on different segments reflects that the demand by the agricultural segment is almost as much as that by the industrial segment.

Domestic demand for electricity in India: The emergent Indian economy has stimulated an upbeat change in the lifestyle of the citizens. People today have more disposable income; consequently need, convenience and time saving have gained importance as never before. Purchase figures of time saving appliances have elevated. Air conditioners, washing machines, micro-waves, refrigerators, artificial heating devices, food processors which once constituted the luxury items list have now reached common households. The Indian consumer market is still to catch onto the trend of energy saving appliances. All of this adds on to the demand for power, manifold.

The increase in consumer spending power has lead to a retail boom. There is a speedy proliferation of malls, supermarkets, and multiplexes etc which draw tremendous electricity. New age stores and innovative entertainment gadgets put a soaring demand on the scarcely available power supply.

The domestic demand has increased due to urbanization, thereby huge influx of people migrating into cities and satellite towns. The increase in demand is stretched further by the trend of nuclear families resulting in more number of power consuming domestic units.

Demand – Supply gap: For the past two decades, India had to face increasing deficit in power supply, both for meeting its normal energy requirements as well as its peak load demand. The problem is acute during peak hours and summer season, and necessitates planned load shedding by many utilities to maintain the grid in a healthy state. The average all-India shortages in 2009-10 were at 10 per cent in terms of normal energy requirement and about 13 per cent in terms of peak load.

Table 1: Electricity Demand and Supply

<table>
<thead>
<tr>
<th>FY</th>
<th>Demand (MU)</th>
<th>Availability (MU)</th>
<th>Shortage (MU)</th>
<th>%</th>
<th>Demand (MW)</th>
<th>Met (MW)</th>
<th>Shortage (MW)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>545,983</td>
<td>497,890</td>
<td>48,093</td>
<td>8.8</td>
<td>81,149</td>
<td>71,547</td>
<td>9,945</td>
<td>12.2</td>
</tr>
<tr>
<td>2003-04</td>
<td>559,264</td>
<td>519,398</td>
<td>39,866</td>
<td>7.1</td>
<td>84,574</td>
<td>75,066</td>
<td>9,508</td>
<td>11.2</td>
</tr>
<tr>
<td>2004-05</td>
<td>591,373</td>
<td>548,115</td>
<td>43,258</td>
<td>7.3</td>
<td>87,906</td>
<td>77,652</td>
<td>10,254</td>
<td>11.7</td>
</tr>
<tr>
<td>2005-06</td>
<td>631,024</td>
<td>578,511</td>
<td>52,513</td>
<td>8.3</td>
<td>93,214</td>
<td>81,792</td>
<td>11,422</td>
<td>12.3</td>
</tr>
<tr>
<td>2006-07</td>
<td>693,057</td>
<td>624,716</td>
<td>68,341</td>
<td>9.9</td>
<td>100,715</td>
<td>86,818</td>
<td>13,897</td>
<td>13.8</td>
</tr>
<tr>
<td>2007-08</td>
<td>737,052</td>
<td>664,660</td>
<td>72,392</td>
<td>9.8</td>
<td>108,866</td>
<td>90,793</td>
<td>18,073</td>
<td>16.6</td>
</tr>
<tr>
<td>2008-09</td>
<td>777,039</td>
<td>691,038</td>
<td>86,001</td>
<td>11.1</td>
<td>109,809</td>
<td>96,785</td>
<td>13,024</td>
<td>11.9</td>
</tr>
<tr>
<td>2009-10</td>
<td>830,594</td>
<td>746,644</td>
<td>83,950</td>
<td>10.1</td>
<td>118,472</td>
<td>102,725</td>
<td>15,747</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Source: Central Electricity Authority

With the shortage at both the normal and the peak levels, Indian power industry does not exhibit much cyclicity.

Increase use of Social Media by the business: Social media constituting the social networking sites (SNS) as Facebook, Twitter, Youtube, etc is widely accepted & utilized by people. This social connectivity has steadily revolutionized masses & several public uprisings world-over due to the SNS. The Twitter uprising in Iran, the anti-corruption campaign lead by veteran Anna Hazare in India, the Egypt demonstrations are evident as consequences of the social media impact. Now a day, social media is most popular media of advertisement and building brand image. The following two graphs show the different uses of SNS by the corporate:
Table 2: Increasing use of Social Media Networking, Worldwide

<table>
<thead>
<tr>
<th>Online Marketing Tactics Currently Used by US Small Businesses, 2009-2011</th>
<th>Fall 2009</th>
<th>Spring 2009</th>
<th>Fall 2009</th>
<th>Spring 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>A company website</td>
<td>55%</td>
<td>54%</td>
<td>49%</td>
<td>65%</td>
</tr>
<tr>
<td>Search engine optimization</td>
<td>34%</td>
<td>23%</td>
<td>20%</td>
<td>36%</td>
</tr>
<tr>
<td>Mass email</td>
<td>18%</td>
<td>22%</td>
<td>13%</td>
<td>24%</td>
</tr>
<tr>
<td>Online social networking (MySpace, Facebook, etc.)</td>
<td>11%</td>
<td>13%</td>
<td>15%</td>
<td>35%</td>
</tr>
<tr>
<td>Pay-per-click advertising (Google AdWords, etc.)</td>
<td>11%</td>
<td>11%</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>Banner ads/pop-up ads</td>
<td>8%</td>
<td>8%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Blog</td>
<td>5%</td>
<td>7%</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>Podcasts</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>


Fig. 1: Different Use of Social Media Networking In India

Implication of use social media in electricity conservation campaign: According to a recently released Pike Research consumer survey it is estimated that “57 million customers worldwide will use social media to engage utilities in 2011 and that number is expected to rise to 624 million customers by the end of 2017”. The Social Media in the Utility Industry Consumer Survey by Pike Research found four key social media benefits for utilities:

1) Informing customers about changes to pricing and billing
2) Educating customers and keeping them informed about new products and services
3) Addressing questions and allowing for a “virtual” conversation with customers
4) Reaching certain demographic groups

By conducting a web-based survey of 1,051 consumers in the fall of 2011, using a nationally representative and demographically balanced sample, Pike Research defined the current use of social media, utility social media interactions and opportunities for future utility interaction through social media.

Addressing Questions and Allowing for a “Virtual Conversation” with Customers: Establishing the utility company voice as an energy efficiency expert and addressing customer concerns promptly improve service provider credibility and ability to address customer concerns. Increasing utility communication through social media with ratepayers to address concerns, help them save money and promote energy saving programs builds a relationship and allows for increased dialogue between ratepayers and their utility.

“Survey respondents were polled on how often they interact with their utility using social networking and media services. As Chart above shows, nearly 60% of respondents interact with their utility “very often” or “regularly.” This evidence by Pike research is an encouraging sign, indicating that consumers who pursue a social media relationship with their utility are likely to engage with the utility on a frequent basis.”

Developing a virtual conversation with ratepayers allows utilities to continue the energy efficiency conversation beyond monthly bill inserts commercials or other forms of promotion. Social media provides an outlet for utilities to build a relevant and meaningful connection with the communities they serve, through the online communities they regularly engage in.

Expanding the Energy Efficiency Conversation through Social Media: Pike Research forecasts, “Approximately 57 million customers worldwide will use social media to engage utilities in 2011, a number that will rise to 624 million customers by the end of 2017. Utility spending on social media, meanwhile, will increase from $195 million in 2011 to $317 million in 2017”.

Utilities have a unique opportunity to combine call center and community outreach with effective social media. This strategic approach allows utilities to address customer concerns and questions in real-time, provides a new level of customer service. Social media use is here to stay; it’s time to expand utility social media presence and the energy
efficiency conversation.

3. RATIONALE BEHIND THE TOPIC
The growth of user responding to social networking sites shows a significant change in their social and personal behavior. SNS have become an essential medium of communication and entertainment among the young adults. There is no possibility that the popularity of SNS will reduce in near future. As every aspect or resource in this world can be used for a dire purpose so can it be used for good one? Social media popularity and usage has grown at never before pace. India is one of the fastest growing emerging economies in the world. However in its pursuit towards growth and development, there are a few impediments, which should be given adequate consideration in the national interest, on time. Power sector proves to be the engine for national growth, beyond doubt. The shortage in electricity supply against the towering demand is a major challenge in this India growth story.

Although there have been procedures and steps taken up by the Government to increase the power generation, this gap of demand vis-à-vis supply in the electricity arena abruptly increases due to the severe rise on the demand side. In the present circumstances, considering the high demand-supply gap, increasing the supply side would take extensive time. Managing the demand side amicably by creating awareness among the consumer about energy conservation practices would be more worthwhile. In this regard power suppliers like MSEB, should utilize the forums of social media to educate consumers with best practices during usage of electricity. Instead of resorting to conventional communication systems as print and electronic media to launch various information campaigns, contemporary consumer forums as social media would be more meaningful.

4. PURPOSE OF RESEARCH
1. To analyze the effective communication strategy through social networking sites.
2. To study the effectiveness of communication through social networking sites by consumers and service providers.
3. To find the impact of interaction through these communication among Indian users (with reference to Face book, Twitter and Orkut).
4. To understand whether the use of social media for the communication will help to solve the problem of energy shortage by influencing consumer through social media.

5. RESEARCH METHODOLOGY
Research methodology is the process of solving the problem systematically by research. The objective of the study is to solve the problem by using available data

Research Design : Exploratory Qualitative Research
Sample Technique : Simple random technique.
The researchers have taken 100 samples randomly from the total population.
Data Collection : Primary sources of data collected through questionnaire secondary source are magazines, journals and websites.
Instrument Design : Personal interview is the method of contact used with the respondents. Personal interviewing method is used because sample size is relatively small and interviewer can ask more questions.
Structure of the Instrument : For collecting primary data, method used is questionnaire. It is the most popular method used when the population and sample size are large. A questionnaire includes a number of questions, printed in proper sequence, for presenting to respondents for their answers. Each question is contributing to research objectives. Questionnaire was designed with most of closed ended questions and only few open ended question. It was designed to cater to all areas and aspects of the study.

6. DATA ANALYSIS AND INTERPRETATION

Users of SNS :
Chart 2: Number of profiles on social networking sites.

From the above chart it is clear that all of the respondents had profiles with Facebook (100%), 88 respondents with Orkut, 62 with Twitter, & 37 respondents had profiles with other social networking sites as Linkedin, Myspace, etc. Some of the respondents are using two or more SNS sites.

Communication through Social Networking Sites
Chart 3: Ads Communicated In These Social Networking Sites
From this chart it is evident that 45 for Facebook, 28 for Orkut, 12 for Twitter & 15 for others, respectively, was the count for the respondents that found that advertisements were well communicated through the respective social networking sites.

**Communication creates trust on ads :**

**Chart 4 : Social Media Ads Helpful In Creating Trust**

From the survey data, it is understood that 38% of user agreed and satisfied with ads appearing in social networking sites, whereas 11% of the user disagreed and unsatisfied with certain communication of information. Only 51% of the respondents found it neutral. The web has proved a catalyst in bringing the changes forward and amplifying their scale in creating trustworthiness (Table 6).

**Accessibility of ads**

**Chart 5 : Ads accessible through SNS**

According to the respondents, 67% of user agreed that the communication strategy used in campaign of electricity conservation creates impact effectively and also which could helps them to recall the same often and interactively. 24% of users said that it partially creates impact and traffic of communication. The remaining respondents almost 9%, says that it does not create much impact but still effective for other communication purpose like sharing information.
7. FINDINGS
1. The finding of the study states that the audiences respond more to interactive marketing than the traditional ads followed in internet advertising.
2. Almost everyone is communicated through social networking sites.
3. Nearly 70% of the audiences were impacted through ads on social networking sites and half of them access these ads.
4. Social networking sites will become the primary arena for highly targeted marketing and advertising. Social networking sites present an unmatched opportunity to use for creating awareness among the consumers.
5. Users expect communication through SNS than the traditional way of marketing.

8. CONCLUSION
Communication about the product or service provides a major contribution to brand competition in the market. It not only provides information about a product or service but also promotes creative innovation. Besides advertising, it also facilitates consumer satisfaction. The concealed fact is that no brand can progress without effective communication strategy to attract their customers or users. Brands, whether new or established, nowadays lay their base on social network communication to get recognized in the target market.

Social networking sites users of Face book, Twitter and Orkut have become a personal, product and corporate branding hub in India nowadays in digital era. Every brand that exists on social networking sites has the same core features and benefits, such as the ability to create a page, share resources, add multimedia and much more. Social networking sites are filled with potential users who are mainly young adults. They spend more time on these networking sites due to heavy commercial contents, entertainment and social gathering. Product or service communicators throng their ads in these areas with more interactive and with fascinating factors so that their brand identity is developed among the right choice of focused audience. Advertisers and brands uses social networking sites as the major resource for their promotion and developing brand identity among the focused market.

9. SUGGESTIONS
Communication should be more preferred than advertising: people do not prefer buying products through social networking sites. So, if the brand is communicated well and remembered by the audience, then it is a greatest success to the company for their promotion through social media.

Promotional way of advertising is best: the usual banner ads and pop-up ads make the users to ignore them. So advertising must be interactive, promotional and with innovative form to hold the audience. It should target the individuals than the masses. If an ad is hosted for a group then that would be no advantage in delivering specified information. Adding more multimedia elements

10. REFERENCES
[26] (2007). REPORT ON 17 TH ELECTRIC POWER SURVEY


