MARKETING PERSPECTIVE FOR INFORMATION SERVICES AND PRODUCTS IN INDIAN PETROLEUM INDUSTRY

A.K. SRIVASTAVA
KDMIPE Library
Oil & Natural Gas Commission
Dehradun

Discusses the importance of marketing approach in petroleum industry information services and products. Identifies information user groups, their needs and suggests few services and products along with pricing policies.

INTRODUCTION

Marketing approach to petroleum information services and products is distinct from many other information services and products because of secretive, cost intensive and authoritative nature of information. Marketing of information services of this industry, in principle and practice, needs immense care and judicious approach based on user oriented service.

Information marketing spans entire spectrum of private and public setting where the information service is provided [2]. Sweeping privatisation of global petroleum industry under present politico-economic philosophy has propelled all its constituent segments/units to be economically viable and useful for their existence. Multidimensional role of information in petroleum industry's decision making demands effective marketing approach [1]. Targeted to put knowledge into work, library and information units (L&I) attached with the industry must now transform price free services to price based client oriented economic activity with all its implications. This implies active marketing of information products and services both within the parent organisation and outside which calls for

i) cultural change i.e. internal publicizing the idea of marketing;
ii) information market analysis and research for identifying petroleum information users' needs and wants;
iii) planning the marketing program;
iv) total customer focus on services and product design and development;
v) continuous improvement/modification in existing products and services and starting new ones;
vii) achieving competitive edge over others through world class value added products and services;
vii) integration of market planning with self sustained economic resource generation for the industry.

However, the L&I units dealing with intangible commodity of information available in various technophysical forms are faced with some common business realities such as, infrastructural obsolescence, antagony towards pricing of erstwhile charge free services and products, users' apathy to pay for information for keeping updated, unpredictable customer needs/wants for information required, lack of trained marketing professional and retraining, and acquiring new brand of library professionals to ensure competence with appropriate marketing/selling skills.

This paper discusses how the information service delivery units of petroleum industry may endeavour to initiate implementation of information service marketing process and achieve results targeted to profit generation in the context of LIS promotional paradigm shift.

MARKETING VIS-A-VIS PROMOTION

Information marketing is the management process responsible for identifying the customers, commu-
nivating with customers, satisfying customers to meet the stated objectives and should have suitable policy to retain and expand the market with continuous advantages over the competitors. Promotion of Library and Information Services (LIS) is a complex management process of creating and maintaining awareness [3], provoking a desire for and the practice of satisfying the library readers' wants destined to attract users and increasing the use of services and products. Profit desired out of promotional activities of these services was so long educative only which had neither been put to measurement nor was possible to measure as in cases of other tangible commodities. Cost of these intangible services is paid by the parent organisation from budget overhead. The means that are used to promote library services are

i) personal efforts of librarians and information professionals working in the library and information units: and

ii) through activities performed in various other forms such as, brochures illustrating what the library and information unit can do for the users, direct mailing of new services to specialists, display and exhibition of services and products to draw the attention of the users, interpersonal communication with users about the library activities and so on.

Marketing circumscribes promotion and reveals strong conviction from user for better and high quality service when offered under the marketing setup [4]. It is tinged with business colour involving financial activities and stretches beyond the patronizing organization to invite more users. Successful marketing boosts the profile of the practicing unit in the eyes of management.

PETROLEUM INDUSTRY: INFORMATION USER GROUPS

The users of information market segment in petroleum industry can be grouped under two broad categories—upstream companies workforce and downstream companies workforce which can further be grouped as

i) primary user groups who are already using the information products and services but need regular monitoring of their needs and wants to provide them better services viz, Oil & Natural Gas Commission (ONGC), Indian Oil Corporation (IOC) and various other private owned exploration companies;

ii) potential user groups whose information needs are directly related with the products and services but are neither receiving nor are aware of these services. Examples are mining, refining, marketing, pipeline, transportation, petrochemical groups and institutes for petroleum analysis and product development etc.; and

iii) prospective user groups whose information needs are in some way or other related to information products and services of petroleum based industries but are not aware of it. Examples are geoscience departments in the universities, petroleum engineering departments, societies & associations, geological institutes etc. Such user groups need be explored for extending the information market.

These market segments/user groups are involved in varieties of activities such as,

i) Exploration and production of petroleum and natural gas;

ii) Refining and crude processing;

iii) Natural gas processing, compression and transportation;

iv) Marketing and transportation: import and indigenous marketing of crude oil and petroleum;

v) Pipelines;

vi) Petrochemicals;

vii) Engineering and oil field equipment management;

viii) Alternate energy sources;

ix) Safety and environment management; and

x) Petroleum legislation and policy.

MARKETING PLAN OF INFORMATION PRODUCTS/SERVICES IN PETROLEUM INDUSTRY

Marketing plan involves - product design, costing and pricing, place and mode of delivery, and product promotion. Development of proper market plan requires analysis of information needs and information seeking behaviour and availability of products and services. Precisely, it ensures what is to be done in each area of product life cycle [5].
Information Needs and Information Seeking Behaviour in Petroleum Industry

Information seeking behaviour is in response to variable stimulus—goal directed activities blocked by insufficient knowledge about information problem. Insufficient knowledge stimulates a person to express his information requirement. Information seeking behaviour in petroleum industry varies with the strata of work group.

Top management and corporate petroleum planners concentrate more on personal interaction with experts from giant petroleum companies, handouts, national and international seminars, conferences, discussion with visitors from different companies and consultants/advisors. Primary information sources in various forms and channels of communications form yet another important media of information access, besides the reports compiled and produced by the special group of experts attached locally.

Middle level managers have interaction with both the strata, above and below this group. Part of information is obtained from top strata and a part, from the experimental/field work performed by the bottom strata. Besides, the library and information unit is consulted for various primary and secondary information sources. Bottom line fully depends on the previous works, guidance from seniors and supervisors, varieties of retrieval tools etc.

Information needs of petroleum industry workforce fall in two major categories i.e. Lab/operation data and off lab available publicity data or fact. Laboratory/operations information comprises of basin geoscience; field/structure; well (exploratory, wildcat, dry, producing, and abandoned); geographic information; surveys/seismic prospecting (gravity, magnetic); geochemical prospecting; prospect evaluation; geological laboratory analysis/lithostratigraphy; reservoir and production; drilling equipment/technology and engineering aspects applied to various drilling production operations; petroleum engineering/geology - refining, lube extraction, petrochemicals, natural gas processing etc.

Library/information database comprising of geological/gdophysical/geochemical information, foreign basin information, drilling information, reservoir and production information, management and finance information, safety and environment information, refining, marketing, pipeline, transportation and petrochemicals information are normally used to meet the information requirement.

Information Services and Products

Petroleum industry library and information units provide information service to specialized groups of users. The structuring of these services may be categorised as function based, objective based, personalized client based, and form of material based structures. A set of services and products are devised and existing packages of information are repackaged to suite the specific requirements of existing and prospective users. Examples of some of the services which are/may be generated are

i) Retrospective Search Service (RSS) from inhouse databases, CD-ROM and on-line information systems, for different outside organizations or in-house demands on price basis;

ii) Current Awareness Service (CAS) of the new arrivals of reading materials segmented and packaged specifically for work force of different up stream and down stream sectors of the industry;

iii) Automated Selective Dissemination of Information Service (ASDIS) personalised to meet specific need of the user community by maintaining a user profile and subject profile of all the sectors of the industry and running this profile biomonthly against on-line search. It can provide information from world's leading databases;

iv) Document Delivery Service (DDS/CAPPS) providing photocopies of the contents pages and author abstracts of the selected core titles of reference from the list of acquired journals on petroleum science and applied geosciences. The full papers from core journals selected by libraries may be provided on prices basis. The DDS may include supply of photocopies of research papers and references from CAS, RSS etc. on suitable price basis. Such services do not exist in petroleum industry and abounds strong marketing potential;

v) CD-ROM Based Information Service (CDIS) for providing information service to petroleum
<table>
<thead>
<tr>
<th>Pipeline Segment</th>
<th>Marketing Segment</th>
<th>Refining Segment</th>
<th>Exploration/Exploitation Segment</th>
<th>Natural Gas Segment</th>
<th>Petrochemical Segment</th>
<th>Safety/Environment/Management Segment</th>
<th>Engineering Applications Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Seeking Behaviour</strong></td>
<td><strong>Industry</strong></td>
<td><strong>Workforce</strong></td>
<td><strong>Information Needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal/group interaction</td>
<td></td>
<td></td>
<td>External information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal reports/records</td>
<td></td>
<td></td>
<td>Corporate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting: formal/informal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass media/attached TSG and MSG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitors/experts agency advisors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product catalogue/handouts/bulletins of petroleum related companies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab reports/records/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting/seminars/conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy instructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line searches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information services/products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction manuals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory instructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-house training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor's documentation on tools/equipments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lib./information services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. Information needs and information seeking behaviour in petroleum industry**
industry as a whole by creating a subset of wider database available in CD-ROM. This may be basically a customized service beneficial to other segments of the industry; and

vi) On-line Alert Service (OAS) exploiting the online databases to provide alert service according to the requirements of different segments and directly mailing the information to the users. This service would be a great economizer because the receiving end does not need any infrastructural backup. This may also be priced accordingly.

Information products can be designed from available data and information by a group of specialists such as, geo-scientists, petroleum technologists and information scientists by regularly monitoring the real information needs arising from technical jobs. Periodicity, mode of transmission and type of products are important factors. Product once developed needs constant feedback for modification requiring unpackaging, packaging and repackaging to match the concurrent needs.

Information needs and information seeking behaviour illustrated in the fig. with various interplay of each give rise to specific information products for petroleum industry. Such products may be abstracts/indexes/bibliographies on different aspects of petroleum exploration, production, refining, petrochemicals, transportation, marketing, geo-science, chemical physics, sedimentary basins, petroleum engineering and so on; electronically published inhouse publications with new features like industry focus, news and views, calendars and meetings, product briefs etc.; petroleum information on Afro-Asian regions; cumulative index of inhouse publication.

Pricing is about how to of charging for services [6]. Libraries/Information units must charge in order to offset the cost of acquisition, packaging and dissemination of information, various overhead costs, fixed and variable.

Many Indian institutions and government agencies e.g. Indian National Scientific Documentation Centre, Indian Institute of Science have already started pricing their information products and services. INSDOC generated more than Rupees one crore during the financial year 1993-94 by marketing its information services and products [7]. Institutions in different developed countries have also started charging for services and products. Of course, pricing mechanism varies from institution to institution. Many institutions believe in charging out-of-pocket expenses while many others set their prices with a profit motive. The Petroleum Abstracts Inc., University of Tulsa charges different rates of Petroleum Abstracts from different petroleum companies depending upon the assets of the company. Pricing mechanism for different products/services offered by library group of petroleum industry is similar to special libraries who charge for their products and service in different ways, such as,

i) charging back within the institution account;

ii) charging out to customers who are buying institute’s products and services, free so far, to offset the cost incurred. This refers to ILL of articles, retrospective searches, issues of bulletins;

iii) selling directly to customers. This relates to software packages, information packages on optical discs, micrographic media for the outside customers; and

iv) head counting [8] for library consultation and use by the outside organizations and individuals retired from the services of the industry.

Charging mechanism and formula for information products and services can be decided based on the cost of various resources input in generating the products and services and the profit target fixed up which need not necessarily be adopted on the pattern of other institutions. Initial rates may be loose and tentative subject to revision on actual feedback and demand of the product in the market. The pricing mechanism must also consider the competitive edges and demand of the product or service.

INFORMATION MARKETING IMPLEMENTATION PROCESS

To obtain necessary support for marketing program library/information units of the industry need to sell first to the industry the benefits of information services and products.

Beginning with middle level executives from different segments visiting library, conducting one to one personal informal meeting to present the idea
A.K. SRIVASTAVA

and getting their views are of immense importance in marketing. Discussions with middle level executives percolate up and down to bottom line employees and serve as a spontaneous mechanism for the personnel to accept the marketing concept with less resistance. During these meetings concept of marketing system and pricing mechanism may be talked about. After setting the initial view about resource generation for the industry facing resource crunch, the discussion may be relegated towards pricing from outside sister concerns and then, a cursory touch regarding paying back out of pocket expenses from within the organization can be put forth. Views of the discussion group regarding nature of changes in the present set up in relation to the effectiveness of existing services/products and ways to improve upon can give real picture about their requirement and the way they need it.

Petroleum industry libraries possess strong marketing potential. It has information stock on shelf, convertible to information stock on trade. Motivating and attracting more and more users by transformation of traditional professional activities into economic activity by structuring (packaging, unpackaging and repackaging into customized formats) and delivering the products to customers (erstwhile users) are the essence of marketing. It must ensure sustaining the present client, generate more demand from the existing clients and attract new clients by creating the benefits notion from the services and products.

CONCLUSION

Marketing is a complex process wherein entire organization's involvement is essential for its successful implementation. Customer centered petroleum information services and products need ever increasing attempts for innovative techniques and exploit advantages of information technology for exhaustive and personalized need based approach in designing, developing, delivery mechanism and communication channels. Constant monitoring, and feedback from users could provide the basis for packaging and repackaging the information.

Libraries and information units so far have only been spending but not making any earning for the organization to whom these are attached with. The existing information products and services need to be reformed and repackaged in tune with the need and marketed to sister concerns and also to outside organizations of similar nature in Asian and Afro Asian region. All the promotional activities should be looked into with the profit motive for the organization. Librarians and information workers in petroleum industry have to give a relook to their present day activities and bring in professionalism in their attitude with a blend of marketing approach. Libraries must strive to generate resources for their sustenance and contribute to the organizations treasure through marketing of its services and products.

REFERENCES

2. Op cit.