The Methods of Construction are almost as ancient as civilization itself. As the human kind flourished, construction technologies and practices also developed. Coming up with an idea of weaving palm branches or coconut branches to avert rain water leaking is also a major technological breakthrough. Invention of Construction Chemicals in the modern day construction industry has considerably reduced the problem of leakages. Construction Chemicals hold construction materials together by flowing into every nook and crevice, however small, of the construction materials’ surface. Most Construction Chemicals are of a liquid nature or at least tacky. The idea of this study is to know about the construction chemicals industry in Bangalore city and find out the situation of construction chemicals or waterproofing materials in the market. The need for this study would be well defined if we understand the purchase decision pattern when it comes to Construction Chemicals and Water-Proofing products. The buyer of these products usually does not have enough information about the sort of materials and often seeks advices from Applicators, Consultants or Distributors. Thus, the purpose of this study would be to identify influencing individuals who are into the distribution of Construction Chemicals and their role in influencing the buying behaviour of end users to understand ways to modify the marketing techniques and improve sales. Thus, to understand the market of construction chemicals or water proofing products, I chose to seek the insights of Distributors of waterproofing materials, along with the distributors of other construction materials.
1. Introduction:

The change in demand of Construction Chemicals is essentially related to Economic Development. In India, the demand for the Construction Chemicals arises mainly from two segments namely, Consumer & Builder Segment and Industrial segment. While demand for consumer and craftsman segment comes from manufacturing, repairs, maintenance, exterior decoration work, construction materials, water proofing materials etc., the demand for industries comes from constructions such as roads, apartments, airports, industrial water tanks etc.

In the present market scenario, construction chemicals market is more competitive than ever before. New companies are entering into this field every day with attractive new schemes and margins to dealers and retailers, along with competitive pricing strategies to attract end users. This type of competition leads to reduction of sales. It is necessary to study the market condition, positioning of brands according to their prices, promotional activities, dealers network and margin they give to their dealers, so as to alter our own marketing strategies and increase sales.

The influence of channel partners plays an important role in the purchase behavior of the end users since there is lack of awareness on the product like construction chemicals. The basic idea here is that, customers of high feature products such as water-proofing materials usually do not have much technical knowledge. Thus, they seek advices from third parties such as Applicators, Distributors and Consultants before making a purchase. This study seeks to understand the role of Distributors in altering the purchase behavior of end users.

2. Scenario of Indian Construction Chemical Industry:

Today Indian constructional chemical industry is estimated to be valued at INR 7000 Crores-as per Business India, which is projected to grow up to INR 20,000 Crores in the next 15 years. In current scenario, a significant contribution is done by Mumbai region and nearby markets. Demand for chemicals from construction industry has always been there. However, with the fast development in the construction techniques, the demand for advanced construction chemicals has increased as compared to the conventional methods (Tata Strategic Management Group, 2015)

Indian construction chemical market though experiencing significant growth, is still at growing phase when compared to other domestic or regional market. Construction chemicals are used not only to add life to the structures but also play a very important role in reducing the total raw material consumption for construction material manufacturers, thus, acting as cost-effective problem solvers especially in the case of adhesives and related products. (Panchal)
‘Smart City’ projects by the Indian government are driving growth of chemical companies in India. Availability of essential raw materials at low cost is anticipated to increase demand for construction chemicals. Further, repairs and maintenances of longstanding infrastructure is likely to increase demand for paints & coatings, cement and other construction related chemicals. (Chemicals)

The price sensitiveness, Low entry barriers, Low awareness levels, unskilled labors, Lack of stringent regulations are the few challenges faced by the Indian chemical industry (Panchal).

Some of the construction chemical makers in India have come up with the innovative construction chemicals which can save time, labour, Mode of application, easy to apply and use, easy to maintain, resistance to rain, traffic, Fungus and molds. These products developed by considering the customers into account and they are economical and long lasting (M. Gokhale)

(Admin) Some major trends in India construction chemicals market are the increase in investment in R&D, entry of new players, adoption of sustainable products and technological advancements. The Asian region is turning out to be a focus point for most of the major construction chemicals companies for investment in R&D. Rising construction of new buildings and renovation activities across India is expected to boost the overall demand for construction chemicals in the near future.

3. Influence towards buying construction chemicals

According to Kotler et al., influence by others plays a vital role in consumer’s decision processes. Consumers have the habit of consulting each other regarding a new product or brand and seeking their advice. The advices of other people have a strong effect on consumers buying behaviour. However, the degree of such effect depends on the situation or individual. Later adapters tend to be more influenced than early adapters. Influence by others cannot be sharpened by marketers. A buyer can also be influence culturally i.e. value, behaviour and preferences from family or other institution or socially i.e. by a small group like family or membership group. Purchase decision could also be influenced by attitude of others. For example, a consumer wants to buy MacLean, while in the shop he or she comes in contact with a friend who says Colgate makes my teeth brighter and whiter. The consumer can be forced to buy Colgate. (P. Kotler)

(Anjay Kumar Mishra) Consumer personality is influenced by risk aversion factor where the consumer seeks to be certain and sure of what they are purchasing. For this, consumer has influence by others characteristics which are consultant, friends and relatives where consultant is considered as the expert and friends/relatives are the prior users of the specific brand. In this way, consumer’s decision process is motivated and comes to the point of purchase.
The company reputation and reliability factor are perceived to be strongly influencing the buying decisions of the client in construction chemical market. Majority of the buyers give importance to the supplier’s reliability and reputation while buying construction chemicals. Many buyers are keen about the product price, product quality and brand image. With the research it is observed that the Emotional Factor plays a central role in the decision-making process of the construction chemical buyer.

4. Objective for the Research:

To identify the factors which make builders to choose on certain brands of construction chemicals, with the help of Dealers/Distributors. Identify the role of Distributors in the process of marketing of construction chemicals and to study the level of influence Distributors have on the purchase behaviour of end users. Its impact on the purchase behaviour of end users, concerning construction chemicals. To understand the factors that make distributors push certain brand of Construction Chemicals.

5. Scope of Research:

This study was carried out to analyze the buying behavior towards the construction chemicals. This study also to get details on the kinds of schemes available in the market, which attract Distributors and Other intermediaries. This study is focused on studying the buying behavior of Big Building Companies and also small time house or other building owners in the Bengaluru city, Karnataka.

6. Research Approach:

Both qualitative and quantitative analysis was done to get in depth knowledge about the buying behavior towards the construction chemicals. Qualitative analysis helped to know about factors influencing the buying behavior of the customers of construction chemicals through focus group discussion and key informant interview done with Masons, Contractors, Engineers and Architects. Similarly, the study adopted the survey methods by using the quantitative methods of data collection and statistical analysis.

7. Sample Size

The total number of RERA Approved Projects in Bangalore = 384 in 2020

Thus, the sample size is calculated using the formula as below:

\[ n = \frac{N}{1+N*(e^2)} \] (Yamane)

where, \( n \) = Sample size

\( N \) = Population i.e. The total number of RERA Approved Projects

\( e \) = Marginal error

Taking \( e = 0.1 \),
Sample size is calculated using the above formula = 79
79 number of customers taken into consideration for the study.

8. Method of Data Collection:

Key Informant Interview was done with Promoters of the building projects who were involved in the field of building constructions. Questionnaire survey was conducted with 79 sample population of consumers of Construction chemicals. Multiple choice questions and likert five scale point question were prepared for the purpose of this study.

9. Data Analysis and Interpretation:

The collected data were analyzed with qualitative as well as quantitative technique. The data collected were entered, classified, tabulated and interpreted accordingly using simple descriptive statistics. MS- Excel and other computer aided suitable tools are used for the processing, analysis and the presentation of the data collected, and they were logically interpreted with appropriate tables/ charts to find the objectives of the study.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variable / Factors</th>
<th>Choices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Willingness to deal with purchase of construction chemicals</td>
<td>Yes Willing to deal</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No, Wish to outsource my decision / Seek inputs</td>
<td>82%</td>
</tr>
<tr>
<td>2</td>
<td>Are you depending on someone while purchasing chemicals?</td>
<td>Yes Depending on someone</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No, I am independent to make decision</td>
<td>21%</td>
</tr>
<tr>
<td>3</td>
<td>Factors influencing the purchase of Construction Chemicals?</td>
<td>Quality</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brand Image</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presence in the market</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suggestion made by the Engineer / Manson</td>
<td>60%</td>
</tr>
<tr>
<td>4</td>
<td>Will advertisement is an influencing factor while making purchase decision?</td>
<td>Yes, It does</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No, It doesn’t have any impact.</td>
<td>77%</td>
</tr>
<tr>
<td>5</td>
<td>The purchase decision on the construction chemical is very critical for the construction projects.</td>
<td>Yes, the decision plays a major role in the construction project.</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No, It doesn’t make any impact.</td>
<td>68%</td>
</tr>
</tbody>
</table>
10. Analysis of influential factor affect the buying behavior.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Z Value Observed</th>
<th>Z Table Value at 0.05</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho: Mason/Civil Engineers plays a significant role in purchasing decision process</td>
<td>2.85</td>
<td>1.96</td>
<td>Ho is accepted.</td>
</tr>
<tr>
<td>Ho: Construction Consultant plays a significant role in purchasing decision process</td>
<td>3.21</td>
<td>1.96</td>
<td>Ho is accepted</td>
</tr>
<tr>
<td>Ho: Previous experience plays a major role while making purchase decision.</td>
<td>1.98</td>
<td>1.96</td>
<td>Ho is accepted</td>
</tr>
<tr>
<td>Ho: The advertisement and promotion impact significantly on the purchase decision.</td>
<td>0.89</td>
<td>1.96</td>
<td>Ho is accepted</td>
</tr>
</tbody>
</table>

The Hypothesis testing significantly indicates that the Manson, civil engineers and consultants plays a major role in influencing the buying behavior while purchasing the construction chemicals.

11. Findings

• Although the existing players of the construction chemicals innovating their products for ease of usage and making an appealing advertisements; the promoters of the construction projects are depending on the influencers in the value chain.

• Majority of the promoters felt that they are either not interested nor they gave importance while purchasing the construction chemicals. They think, lots of technicality involved with their and they don’t wish to participate in the buying process.

• Major builders get suggestions of the products to be bought from their consultants.

12. Conclusion

Builders or the promoters have influence by the civil engineers and consultants, where the promoter consider the consultants and the civil engineers as the subject matter experts and continue to depend on them to make the purchase decision. Though the companies are trying to innovate the products which make appeal the end purchaser comfortable in purchasing them and to use them without experts; the research found the story otherwise. The purchase of the construction chemicals did got enough importance in the priority list of the
promoter and they felt those decisions are not critical for their projects. The other efforts made by the manufacturers of the construction chemicals are not making any impact on the buying decision of the buyers. (Taylor)

References

Admin. ""Indian construction chemical and waterproofing Market- An."" 14 April 2019.


