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# Promotional Tools of Air Purifier that Reduce Indoor Air Pollution in Bengaluru City: A Brief Study

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## 1. Introduction

Air purifiers are devices that aim to clean indoor air by filtering out particulate matter like dust and pollen, gaseous pollutants like hydrocarbons, and unpleasant odours. According to manufacturers, in most devices, air passes through three layers of filters — a "pre-filter" that captures the bigger particulates, a carbon-activated middle filter for gaseous pollutants, and the innermost "High Efficiency Particulate Arrestance", or HEPA, filter whose intricate honeycomb structure captures finer particulates. Manufacturers usually promise additional benefits through the use of other technologies. Some use photocatalytic oxidation or light-based triggers, some use electric processes which emit negative ions to attract positively charged particulates.Some devices use UV ray technology and ozone for filtration. Prices depend on the technology, type of filter used, and the volume of air the machine can clean.

Most air purifiers have monitors that show levels of particulate matter coming down indoors by 50% to 90%. While international studies have shown PM levels fall with particular machines, there is virtually no peer-reviewed study in India or elsewhere to conclusively establish that air purifiers have tangible health benefits.

"We know that reduced concentrations of pollutants are good for health and we know that good air purifiers reduce concentrations of pollutants, but we don't directly know that air purifiers improve health. The exception to this is in the case of specific diseases (allergies, asthma) for which there is direct evidence," he said by email.Most international studies have documented a perception of improvement in air quality, rather than actual health benefits — which, according to scientists, may, however, be treated as indication of actual improvements in health.

#### 2. Literature Review

Indoor air quality is an important health matter because people spend most of their time inside, especially during the cold season. Thus the quality of the indoor air has an essential influence on a person's health. (Haahtela, Hannuksela, Mäkelä & Terho 2007, 372).

A good indoor air environment increases the productivity and efficiency of the work place, by making people feel more comfortable and healthy when performing their tasks. If the indoor air environment is poor for some reason, apart from the decrease in performance and productivity, sickness can result, thus increasing absenteeism that then negatively affects the company's efficiency and profit. (**Baslot 2011**).

The most common reason for problems occurring in the indoor air environment involves an inadequate, poorly functioning or poorly maintained ventilation system. In large buildings it is also sometimes the case that the

temperature is too high and the air too dry. Stuffy air in the work place refers to inefficient ventilation systems that can cause headache and fatigue. Allergens, microbes and other impurities in the air can cause respiratory diseases and skin symptoms such as flu, asthma, chronic rhinitis and bronchitis, pneumonia and lung cancer. (Haahtela et al 2007, 372).

According to **Armstrong G.(2002)** firms use various elements to achieve their promotional objectives. Promotion consists of two components; personal selling and non-personal selling. Personal selling is a promotional presentation made on a person-to-person basis with a potential buyer. Non-personal selling consists of advertising, sales promotion, and public relations. The promotional strategies are a combination of personal selling and non-personal selling. Marketers attempt to develop a promotional mix that effectively and efficiently communicates their message to target customers.

**Netemeyer, R.G. and Boles, J.S. (2002)** argued when you want to buy something you usually go to a concerned shop and purchase it from there. But, sometimes you find people bring certain goods or products and make them available to you at your place. For example, you find persons selling vegetables or rice by carrying the same in a cart and moving from door to door to sell. You must have noticed the persons selling carpets, electronic items, etc. in a similar fashion. While travelling in buses or local trains you must also have seen people selling pens, toys, books, combs, etc. inside the bus or train. In cities also persons move from door to door to sell different products like water purifiers, air purifiers, detergents, mosquito repellents, etc.

Personal Selling is a highly distinctive form of promotion. It is basically a two way communication involving not only individual but social behaviour also. It aims at bringing the right products to the right customers. It takes several forms including calls by company's sales representative, assistance by a sales clerk, an informal invitation from one company executive to another. It is employed for the purpose of creating product awareness, stimulating interest, developing brand preference, negotiating price etc. **Szymanski (2006)** 

Sales promotion is an initiative undertaken by organizations to promote increase in sales, usage or trial of a product or services (i.e. initiations that are not covered by other elements of the marketing communication/promotional mix). Sales promotion is an important component of an organizations overall marketing strategy along with advertising, public relations, and personal selling. Sale promotion acts as a competitive weapon by providing an extra incentive for the target audience to purchase or support one brand over another. It is particularly effective in spurring product trial and unplanned purchases (Aderemi, 2003).

Most marketers believe that a given product or service has an established perceived price or value, and they use sales promotion to change this price value relationship by increasing the value and/or lowering the price compared with other components of the marketing mix (advertising, publicity, personal selling). In determining the relative importance to place sales promotion in the overall marketing mix, an organization should consider its marketing budget, the stage of the product in the life cycle, the nature of competition in the market, the target of the promotion, and the nature of the product. For example, sales promotion is particularly attractive alternative when the budget is limited (Kelvin, 2012).

# 3. Research Methodology

Research methodology process includes a number of activities to be performed. These are arranged in proper sequence of timing for conducting research. One activity after another is performed to complete the research work. Research methodology includes following steps:

# 3.1. Type of Research

The topic for the research study is sales promotion strategy and the nature of the topic is theoretical and descriptive. So the conduct the research study the type of research suitable is descriptive research only. The data are collected from sales records, dealers, customers and salesmen of the companies performing in Air Purifier sector. The descriptive research has met the requirement of research study.

## 3.2 Sources of Data

For the study purpose both primary and secondary data are used. The primary data collected from sales men of the companies, customers and dealers dealing in the products of the company. The secondary data collected from records of the company, retailers and dealers. The data of past sales also have been collected. The primary and secondary data have been collected to cover every aspect of the study. The primary data are related to behaviour and response of employees, dealers and customers. The secondary data shows the sales of the company product wise. Considering merits and demerits of both sources of date, these have been used in combination to meet the requirements of the research work.

# **3.3. Instruments for data collection**

(a) For collection of data the instruments have been used are; Questionnaire, Telephone, mobile phone and facsimile Mail, Interview etc. These have been used for collection of data from respondents. The data have been collected from respondents from different places. So according to suitability of instruments for data collection, these data have been used.

#### 3.4 Research Methods

For collection of primary data for this research work survey and observation methods have been used. Experimental method is not found suitable for this study because the topic is a theoretical topic and there is no need to have experiments.

## 3. 5. Sampling

Sampling is the process in which a representative part of a population for the purpose of determining parameters or characteristics of the whole population is selected. This is called a sample. It is easier to contact a smaller part of the population for data collection. It can be done within a limited time, efforts and with minimum cost. For selection of a sample special care should be taken that the sample is proper representative of the whole population. Every segment of the population should be included but the number should not be very large which may become difficult to manage within time and cost limits. For this research study purpose out of different sampling methods the stratified random sampling has been selected. The universe includes salesmen, wholesalers, retailers and customers of selected companies located in different parts of Bengaluru region. Out of Bengaluru region main areas like Central Bangaluru (Basavanagudi, Rajaji Nagar, Chikpet, Vittal Mallya Road, Commercial Street, R.T. Nagar, Adugodi, Shivajinagar, Chickpet) East Bangaluru (Brigade Road, Whitefield, Indira Nagar, Vimanapura, Mahadevapura, Kadugodi, Dooravani Nagar) North Bangaluru(Banaswadi, Hebbal, Frazer Town, Devanahalli, Yeshwanthpur, Mathikere, Ganga Nagar, Sanjay Nagar, Jalahalli, Hennur and Yelahanka) South Bagaluru(Mahatma Gandhi Road, Electronics City, Koramangala, Bannerghatta Road, Hosur Road, Banashankari, BTM Layout, Ulsoor, Kumaraswamy Layout and Jaya Nagar) have been selected. The salesmen are selected from branches of companies and further on the basis of availability during visits. Cities are divided into areas and from each area the dealers, retailers and customers have been selected from urban and rural areas of these areas. They have been selected randomly. So stratified random sampling has been used for the study. Keeping in view the proper representation of every segment of population and manageable size of the sample, the sample size selected is 539.

#### **3.6. Time Duration**

The permitted time by the university for completion of research study for Ph. D degree is Three years. Continuous efforts have been put to work on this research. It has been completed and submitted within the permitted time period.

#### 3.7. Statistical Tools for Data Analysis

For data analysis the statistical tools have been used are pie-chart, tables, percentage, and chi-square test.

#### 4. Objectives

- To understand the indoor dust pollution and its types in Bangalore City
- To Study the customer response regarding the promotions of Air purifier in Bangalore City.
- How the potential customers perceive the product?

- Study and Analysis of promotional tools of air Purifier
- Specifically where and how should the product be promoted?
- What route of concept to be followed for effective promotion. Ex. Health route or education route or fear route or emotional route etc....
- To find out whether the current promotional strategies are effective in creating awareness among people.
- To find out what type of promotional tools are effective for customers with respect to air purifier products.
- To suggest a right way of promotion for the companies based on people's awareness about the brand of Air Purifier.

# 5. Analysis and Interpretation

	A (N=173)		B (N=70)		C (n=40)		D (N=44)		E (N=212)	
	(N= Yes	173) No	(N= Yes	70) No	(n= Yes	40) No	(N= Yes	:44) No	(N= Yes	212) No
Do you think discount offer made by the company is beneficial for you?	147	26	54	16	31	9	33	11	196	16
Do you think promotion through social networking websites will be helpful for Air Purifier?	161	12	49	21	29	11	36	8	187	25
If Air Purifier is to be endorsed by celebrity will it affect your purchasing decision?	112	61	38	32	21	19	24	20	120	92
Will you purchase Air Purifier if company provides financial facility/installment facility?	156	17	54	16	34	6	37	7	201	11
Are you aware of the different types of indoor air pollution?	162	11	59	11	36	4	38	6	204	8
Are you aware of the disease caused by the indoor dust pollution?	160	13	64	6	33	7	40	4	210	12
Are aware of dust mites and the air dust particles?	160	13	59	11	36	4	38	6	204	8
Have you ever been told by a doctor (or other health professional) that you had asthma?	158	15	57	13	32	8	31	13	201	11
Do you or anyone in your household smoke?	123	50	35	35	22	18	12	28	101	111

A - Bengaluru – Central ; B - Bengaluru – North ; C - Bengaluru – West ;D - Bengaluru – East ; E - Bengaluru-South

# 6. Findings

1. Advertisement and sales promotions methods attract more customers and personal selling is the least method that attracts customers.

2. One third of customers said price off, and nearly one fourth of respondents said discount and premium are the methods used for promotion.

4. Price off or discount method is the most effective method, premium and extra quantity methods are second and third respectively to motivate customers to buy products

5. One third of respondents said sometimes, nearly one fourth said often and always respectively gets information regarding sales promotions methods.

6. More than one third respondents opined sometimes, one fourth said often and nearlyone fifth said always, the shoppers provide information regarding sales promotions benefits.

7. Respondents more than one third opted sometimes willingly, nearly one fourth only on request and one fifth opted always willingly, the shoppers give benefits of the scheme.

8. As per opinion of respondents the company interested to offer sales promotions benefits are ranked as Philips, Euroka Forbes, LG and Last one is Kent.

9. The respondents opined that the timing for bringing sales promotions scheme are off season, during falls in sales volume and during peak season.

10. More than one third of the respondents said the objective of sales promotions schemes are to increase sales, push up sales in off season, increase sales of products out of demand and neutralize completion effect.

11. Two fifth of the respondents said sometimes, one fourth said often and one fifth said always they get benefits of sales promotion schemes.

## 7. Conclusions and Suggestions

1. Branded products are purchased frequently so special care should be taken for these products to increase sales and get business.

2. Different promotions methods are useful for improvement of sales. A promotion mix should be selected very carefully to achieve the objective.

3. Price off, discount and premium are important tools of sales promotion. Proper care should be taken for these tools in planning and implementation.

4. Information regarding sales promotion methods not readily available to all customers. More efforts needed to communicate to all concerned parties very often to increase more awareness regarding sale promotion methods.

5. Shoppers lack in communication and providing benefit to the customers regarding sales promotion schemes. They should be motivated and good relations should be maintained. They should be provided with proper dealers promotional scheme benefits.

6. Sales promotion schemes are mainly brought in off season, during falls in sales volume and peak of the season. In future, for launching of schemes the timing is to be followed for better result.

7. Benefit of sales promotion schemes are not reaching to all customers always. A widegap is there. Sales manager of the company should implement the scheme strongly and review of the scheme is to be carried out periodically.

#### Reference

- 1. Balakrishnan K, Ghosh S, Ganguli B, Sambandam S, Bruce N, Barnes DF, et al. State and national household concentrations of PM2.5 from solid cookfuel use: results from measurements and modeling in India for estimation of the global burden of disease. Environ Health. 2013;12(1):77.
- McCracken JP, Schwartz J, Diaz A, Bruce N, Smith KR. Longitudinal relationship between personal CO and personal PM2.5 among women cooking with woodfired cookstoves in Guatemala. PLoS One. 2013;8(2):1–4.
- 3. Rylance J, Fullerton DG, Semple S, Ayres JG. The global burden of air pollution on mortality: the need to include exposure to household biomass fuel-derived particulates. Environ Health Perspect. 2010;118:A424.

- Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet. 2012;380(9859):2224-60.
- Smith KR, McCracken JP, Weber MW, Hubbard A, Jenny A, Thompson LM, et al. Effect of reduction in household air pollution on childhood pneumonia in Guatemala (RESPIRE): a randomised controlled trial. Lancet. 2011;378(9084):1717-26.
- 6. Thompson LM, Bruce N, Eskenazi B, Diaz A, Pope D, Smith KR. Impact of reduced maternal exposures to wood smoke from an introduced chimney stove on newborn birth weight in rural Guatemala. Environ Health Perspect. 2011;119(10):1489-94.
- 7. National Institute for Health and Clinical Excellence. Methods for the development of NICE public health guidance. Thirdth ed. London: National Institute for Health and Clinical Excellence; 2012.
- 8. Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JPA, et al.
- 9. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. BMJ. 2009;339:b2700.
- 10. Clark ML, Reynolds SJ, Burch JB, Conway S, Bachand AM, Peel JL. Indoor air pollution, cookstove quality, and housing characteristics in two Honduran communities. Environ Res. 2010;110(1):12-8.
- 11. Clark ML, Bachand AM, Heiderscheidt JM, Yoder SA, Luna B, Volckens J, et al. Impact of a cleanerburning cookstove intervention on blood pressure in Nicaraguan women. Indoor Air. 2013;23(2):105-14.
- 12. Commodore AA, Zhang JJ, Chang Y, Hartinger SM, Lanata CF, Mäusezahl D, et al. Concentrations of urinary 8-hydroxy-2' -deoxyguanosine and 8-isoprostane in women exposed to wood smoke in a cook stove intervention study in San Marcos. Peru Environ Int. 2013;2013(60):112-22.
- 13. Li Z, Sjödin A, Romanoff LC, Horton K, Fitzgerald CL, Eppler A, et al. Evaluation of exposure reduction to indoor air pollution in stove intervention projects in Peru by urinary biomonitoring of polycyclic aromatic hydrocarbon metabolites. Environ Int. 2011;37(7):1157-63.
- 14. Nurmatov UB, Tagieva N, Semple S, Devereux G, Sheikh A. Volatile organic compounds and risk of asthma and allergy: a systematic review and meta-analysis of observational and interventional studies. Prim Care Respir J. 2013;22(1):S9-PS15.
- 15. Thomson HJ, Thomas S. The effect direction plot: visual display of non-standardised effects across multiple outcome domains. Res Synth Methods. 2013;4(1):95-101.
- 16. Largo, F. L. (1998). Cox Direct 20th Annual Survey of Promotional Activities. Survey Journal, 50, 65-70.
- 17. Narasimhan, C. (1990). Managerial Perspectives on Consumer promotions. Journal of marketing research, 54, 54-424.
- Narasimhan, C., Neslin, S. A., & Sen, S. K. (1996). Promotional elasticities and category characteristics. Journal of Marketing Research, 35, 17-30.
- 19. Neff, J. (1995). Diaper Battle Puts EDLP on Injured List. Advertising Age, 14, 35-36.
- 20. Nielsen, N. H. (1992). Category management. Marketing Research Journal, 4, 112-121.