RESEARCH PROJECT DETTOL HAND WASH

Palak Nagdev
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PREFACE

Project and research work is something every economics student should carry out seriously at any organization irrespective of the topic. This is a part of an economic study and carrying out such a project work is required by the examination and evaluation department for the partial fulfillment of the subject.

This project is a research on the demand, supply, elasticities and economic factors of the product-Dettol hand wash. In this report, I have analyzed the impact of covid-19 and increase in awareness on the demand of hand washes. Different elasticities of dettol hand wash along with its preferred attributes have been discussed in this report.

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INTRODUCTION

Dettol is a brand of cleaning supplies and disinfectant and antiseptic, introduced in 1932^[1] and the manufacturer owned by the British company Reckitt.

Dettol Hand wash is an agent applied to the hands for the purpose of removing disease-causing organisms. Hand hygiene is one of the most important measures to prevent the spread of infectious diseases.

Dettol introduced the Liquid Hand Wash in 1994. It was known that many consumers use Dettol Soap for cleaning hands. Dettol Liquid Soap gave the consumers a soap in a more modern and convenient format for hand wash. In hand washing, the need for germ protection is top most on the consumer's mind. Due to its early and continued efforts in building the segment and given the strength of the parent brand Dettol, this segment was historically dominated by Dettol Liquid Hand wash.

Although incidence of hand washing in a day is quite high, penetration of liquid handwash is still low in India, bar soaps being typically used for washing hands. The key reasons for low penetration of the category are 'expensive/low value for money'. Amongst users, the motivators are 'protection from germs' followed by 'convenience of use'.

In building the segment, Dettol has played the role of the market leader and the innovator. In 2005, it was the first player to launch the Pouch refill pack. As the market evolved and the Pouch refill segment grew, all the other competitors entered the pouch refill segment in 2007. Similarly, the latest product innovation offering from Dettol has been the launch of the small pump pack, at a lower pick up price, in the first quarter of 2007.

The management wanted the product's name to reflect its medical history and rigour. RB had been testing Dettol for years, in hospitals and maternity homes, and zeroed in on the term PCMX due to the uniqueness of the compound.

As per consumer research, the number 1 category driver for hand washing has been 'need for protection from germs'. Additionally, consumers look for product attributes like nice fragrance and softness. Another characteristic of the hand wash market is its disproportional dependence on the Modern distribution channel, ie. Self-service stores. Close to 25% of the category business comes from this channel. The self-selecting environment of the target consumer has multiple implications for the brand. Variants become a key driver for widening the consumer choice set in such a shopping pattern. Dettol Liquid Hand wash currently has three variants, namely, Original, Skincare and Sensitive

PURPOSE OF STUDY

- ✓ It helps to determine what factors are affecting the customers buying hand wash.
- ✓ This study helps us to understand what are the needs and behavior of their customers,
- ✓ It Helps to analyze the product better and provide a broader view of its pricing, availability and utility.
- ✓ It helps us to understand the market conditions, demand and supply, economic indicators, government policies and tax subsidiaries around the product.
- ✓ It helps us to analyze the price and income elasticity of the product.
- ✓ Helps us to understand the extent of Dettol's brand value.
- ✓ Helps us to correlate the prices with substitutes and study the relationship between substitutes.

ASSUMPTIONS

- √ There is no change in the tastes and preferences of the respondents
- ✓ Size and composition of the population stays constant throughout the study
- ✓ All respondents are randomly selected and rational
- ✓ No expectations of a price change of the product in the future
- √ No change in income of respondents

RESEARCH METHODOLOGY

The methodology used to analyze the project is mainly based on the survey method and this survey was conducted for knowing about Awareness, Preference, and Satisfaction of Dettol Soap through Questionnaires and it also includes direct contact with consumers. For survey sample size was taken from different locations in Mumbai

The total size of the sample is 50.

Research design:

A research design is purely and simply the work or plan for a study that guides the collection and analysis of the data.

Research Instrument:

Contacting the customer personally and studying their response. The questionnaire fills up, related to usages of particular branded soap.

Research Type:

Objective

Research Approach:

Survey method

Sampling:

Sampling studies are becoming more and more popular in all types of mass studies.

The result of sampling has attained a sufficiently high standard accuracy.

Sample Unit

Individuals in different occupations of the different groups were taken into account because all they come under the segment of potential customers.

Sample Size:

A sample size of respondents of different classes falling under this different segment of existing customers under usage of branded Soap to obtain results of the study.

Sampling techniques:

Convenience Sampling.

Sample Design:

Random sampling

Size of sample:

50

Data Collection Method:

This survey is done through the primary data collection method.

SOURCES OF DATA COLLECTION

The data are collected from primary and secondary sources.

PRIMARY SOURCES

Gather information through Questionnaires.

SECONDARY SOURCES

1.Internet Sites

2. Taken data from various articles, reports and other prominent sources

DATA COLLECTION INSTRUMENT

The questionnaire method has been adapted.

DATA ANALYSIS TECHNIQUE

The data analysis instruments used for conducting the research are statistical too

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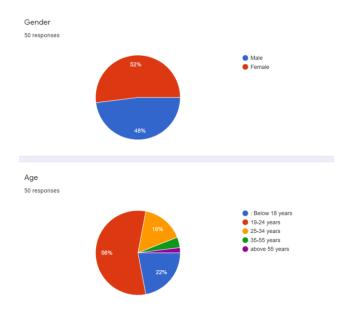
Pivot tables

Bar chart

Pie chart

Linear graphs

BACKGROUND OVERVIEW OF THE RESPONDANTS



PRODUCT ANALYSIS

Features

- DAILY PROTECTION: Dettol Original Germ Protection Handwash Liquid Soap provides protection from a range of germs
- MOISTURIZES: TTC & Triclosan free formula with added Glycerin to moisturize skin
- HEALTHY SKIN: Contains more than 85% naturally derived ingredients and plant derived cleansers
- SOFTLY FRAGRANT: Classic Dettol pine fragrance to keep your hands fresh all day long
- DERMATOLOGICALLY TESTED: Deeply cleanses and protects your skin from 100 illness-causing germs

SWOT ANALYSIS

Strengths

- One of the oldest germ killers in the market Dettol is practically the oldest germ killer in the market, and has been used since 1936.
- Wide applications of Dettol handwash Dettol is used from households to hospitals.
- A household name Because of its product quality and simple use, Dettol has become a household name.
- Timely expansion Dettol made a smart move when it expanded its brand name to other dayto-day products which are also consumed in high volumes – such as soaps, liquids, hand was, body wash and others
- .Distribution and Reach: In almost every state, Dettol has a large number of dealers, backed by a strong distribution network that ensures that its goods are readily accessible to a large number of consumers in a timely way.
- Cost structure: The low-cost structure of Dettol allows it to manufacture at a low cost and to sell its goods at a low price, making it affordable to its clients.
- Dealer Community: Dettol has a good partnership wit
- Brand equity Dettol had almost a monopoly in the liquid market before Savlon came in, and since that day, these two brands are at loggerheads. But due to its brand equity, Dettol was also able to gain traction in the soap and hand wash segment.
- First mover advantage As it was the first to come in the market, many loyalists still prefer Dettol thinking of this brand to be the original quality Antiseptic.

Weaknesses

- Penetration levels As dettol is practically the market leader, it has become complacent and is not looking at aggressive expansion. The distribution of Dettol can become better with more penetration into rural areas. Even dettol soaps and hand washes are found mainly in metro markets and the distribution needs to be ramped up as per the brand equity of Dettol.
- Competition from other similar products means stagnant market share for dettol.

Opportunities

- Fast Expansion: Dettol has to expand faster and take care of the situation in more territories. If it extends its offering to a non-burning antiseptic it can totally capture the market.
- Tie-ups with schools, hospitals, hotel chains etc
- Better penetration in rural markets and emerging economies
- Dettol baby products Although this is too much to hope for, dettol baby products will create a completely new market for dettol and give the company a new market to play in. The market is competitive, but with good products, dettol can give the assurance to parents of new-born babies that their product is good for the baby's health.
- Other markets filled with competition Where dettol is the market leader in anti septic, it derives the brand equity of antiseptic in other competitive sectors such as soap and hand wash. These products do not have a brand equity of their own, which should be built by dettol. Because if any time its antiseptic market is threatened, it will lose these other markets as well.

THREATS

- Other main players in the antibacterial category can affect market share of Dettol
- Other emerging players and alternatives available
- People opting for ayurvedic & natural treatments can reduce business
- Government Regulations: Government regulations on the Pharmaceutical industry can directly or indirectly affect the sales and manufacturing of Dettol.

PORTER'S 5 FORCES MODEL

Potential entrants

Profitable market yielding high returns will definitely attract new business ventures.

Threat from suppliers

Suppliers of raw materials, Lahore and services such as expertise to the firm can be a source of power over the firm when there are few substitutes

Suppliers jay refuse to work with the first or charge excessively high prices for unique resources.

Threat of substitutes

The existence of products outside of the domain of the common product boundaries increase the tendency of customers to switch to alternatives.

Threat from buyers

The buyer power is high ud the buyer has many alternatives, they can force down the price in some situations.

Threat from competition and rivalry

For most industries the intensity of competitive rivalry is the major determinant of the competitiveness of the industry that can lead to huge advertising expenses. There is also a competence advantage through innovation and powerful marketing strategy.

PLAYERS IN THE MARKET:

Lifebuoy: It became a serious player in the Liquid hand wash market in Q3, 2006. Its share went up from 9.3% to 19.8% for the year 2007. Positioned on a 'protection from germs' platform it carries the tagline of 'have no fear' in the Liquid handwash segment too. Other than Dettol, it is so far the only significant player that invests in the category. With media support and strong promotional support, supporting its relaunch, it has made quick gains in this segment.

Godrej: Godrej Consumer Products is a leading emerging markets company. Its handwashes are affordable compared to other handwashes in the market.

Savlon: It launched its hand wash in March, 2005 on the 'gentle protection' platform. It currently has a lesser share. It is not supported on air. Santoor: As a strong player in the bar soaps market and with a high market-share in the South, Santoor launched the Liquid Hand Wash in January 2007, along with media support. Post that, the brand has been off air. The liquid hand wash category has seen a sharp increase in the competitive environment with new players entering in 2007 and big brands like Lifebuoy getting active. As the liquid hand wash category grows, given the usage of a single product for hand washing and bathing in many homes, more and more bar soap players are launching liquid hand wash. Chandrika & Margo are two such new entrants, but with no strong marketing support, they are yet to make their presence felt.

Himalaya: Himalaya Herbal Healthcare has a very wide range of products, which include "pharmaceuticals, personal care, baby care, well-being, nutrition and animal health products." The HandWash is one of their most popular and well known products.

PRICING

The products are priced competitively but are marked slightly higher than its competitor brands like Savlon. As the products of Dettol are available in several variants according to specific use like home and strictly hospital and clinical use, naturally it deploys product line pricing by setting distinct price levels for the variants. Some variants of Dettol's 60-ml antiseptic liquid are available at less than Rs 100 and 60-ml antiseptic liquid with higher concentration of disinfectant is priced as high as Rs. 3000. Captive pricing is common in the liquid hand wash segment where hand wash is priced low whereas its refill is slightly marked up. Products of Dettol are also bundled up like a value pack of 6 soaps and slight discounts are available on purchase of the bundle. Optional-feature pricing is also common in Dettol products; there is a base price for standard products but its variants which have different scent or certain optional value addition like re-energise version in hand wash segment are marked up over the original version.

MARKET ANALYSIS

According to data from the National Family Health Survey (2015-16).

The survey covered at least 600,000 households across India. Other than interviewing members of the households, the enumerators were tasked with seeing the place where members of the household most often wash their hands.

The enumerators could find a designated place for <u>washing hands</u> in about 97% of households surveyed but not all of them with adequate cleaning facilities. Water was not available in 14% of these households at the place where hands were washed. In urban areas, the share of such households was only 6% compared to 18% in rural areas. To be sure, among the households that had water, about 19% had no cleaning agent such as soap, ash, mud or sand.

Richer households have better cleaning facilities. The difference is quite significant – among the wealthiest 20% households in the country, water was not available at the place of washing hands in only 1% of households, while among the poorest 20% households, water was not available in 32%.

ECONOMIC IMPACT

Lack of investment in handwashing leads to additional healthcare costs, lost or decreased productivity, and loss of life. For example, research has found that a national handwashing behavior change program would provide a 35-fold return on investment in China, and a 92-fold return in India.

Handwashing is one of the most cost-effective investments in public health. Disability-adjusted life years (DALY) helps measure the effectiveness of health interventions by combining information about years of life lost and years lived with a disability. Handwashing with soap has been shown to be the most cost- effective way to avert DALYs associated with diarrheal diseases. The cost of averting one DALY through hygiene promotion including handwashing is US\$3.35.

WHO's Commission on Macroeconomics and Health considered an intervention to be 'very cost effective' when it can avert one DALY for less than the per capita GDP. Handwashing with soap meets this criterion, even in the countries with the lowest per capita GDP.

Handwashing is particularly cost effective when compared to other interventions.

An investment of US\$3.35 in handwashing promotion is estimated to deliver the same amount of health benefits as a US\$11 investment in latrine construction, a US\$200 investment in household water supply, or an investment of many thousands of US dollars in immunizations.

Handwashing is substantially less expensive than other public health interventions. It is noted that national handwashing behavior change programs could significantly reduce infections in both countries, and offer excellent value for money.

The economic benefit from handwashing is not isolated to the prevention of diarrhea and pneumonia, as infections from other sources also pose an economic cost to countries, even in high-income countries. Healthcare-associated infections (HCAI), the majority of which can be prevented by good hand hygiene, are extremely costly to individuals, healthcare systems, and countries. The economic loss attributed to the direct costs associated with HCAIs in Europe is €7 billion per year. In the United States, the annual cost was estimated in 2004 to be US\$6.5 billion.Hand hygiene interventions have been shown to be effective in reducing drug-resistant infections in hospitals. In fact, one model estimated that each increase of 1% in hand hygiene compliance could save nearly \$40,000 in MRSA-related healthcare costs per year.

INDUSTRY DEMAND

- The handwash market in India is pegged at Rs.740 crore, with the category growing at 15%. The market estimate for hand washing soaps stands at Rs.8000 crore.
- ➤ However, the penetration of handwash is very low and restricted to the higher SEC's which is around 20% in urban India. This means only about 2 crore households use a liquid hand wash.
- As the devastating second wave of the COVID-19 pandemic swept across India, leading FMCG companies are witnessing a strong surge in demand for their health and hygiene products, including hand wash
- Since increasing awareness related to the role of hand hygiene in infection control is one of the key factors driving the market.
- Additionally, an increase in the number of influenza-like diseases, such as COVID-19, has been raising the importance of regular hand wash practices among people across the globe. The growing urgency of frequent handwashing behavior has set the tone for the market.
- ➤ Whilst the global trends will drive the market, the efforts from the Indian Government such as Swach Bharat Abhiyaan, Swastha Bharat, etc. will encourage the people to use hand hygiene products.
- The Indian Hand hygiene market is expected to reach INR 2159.5 crore by the year 2025 registering a compounded annual growth rate (CAGR) of more than 9%. The Reckitt Benckiser with its brand name Dettol and the Hindustan Unilever Limited with its brand name Lifebuoy are the two leading players in the hand hygiene market of India.
- Other brands such as Savlon, Medimix, Palmolive, Protekt, Fem, etc are also having a consistent market share in the total hand hygiene market of India.
- > 77 Per Cent People Changed Their Handwashing Habits Due To COVID-19, Finds A Study By WaterAid India

PRICE ELASTICITY OF DEMAND

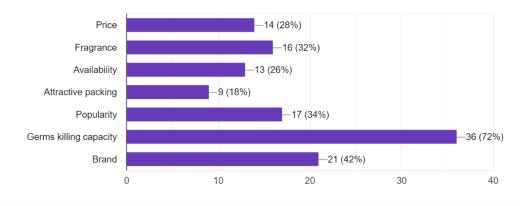
Assumptions

- 1. One person's demand is taken as one unit of commodity
- 2. Ceteris paribus- No relevant economic factors, other than the product's price, are changing.

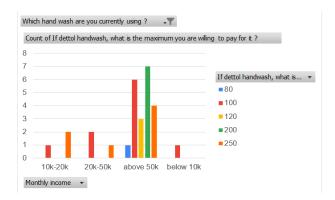


- ➤ When the price increases, people will still purchase roughly the same amount of goods or services as they did before the increase because their needs stay the same. A similar situation shall exist when there is a decrease in price demand will not increase substantially because consumers only have a limited need for the product.
- > The price increased by 25% and demand decreased by hardly 4%, Hence the demand is relatively inelastic.
- ➤ Elasticity= -0.16%
- Another noteworthy factor is the brand power and adherence to consumer's preferences, it was noted in the survey that when it comes to personal hygeine, germ killing capacity was the number one attriubute that consumers were concerned about. Importance was also given to the brand and popularity, and dettol being a major player adhering to both attributes justifies the inelasticity of its demand.

The most preferred attribute in hand wash is ? (you may tick more than one) 50 responses

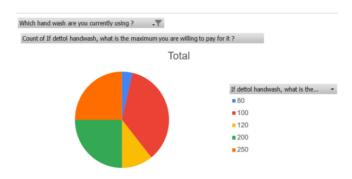


DEMAND OF THE CONSUMERS IN RELATION TO THEIR INCOME



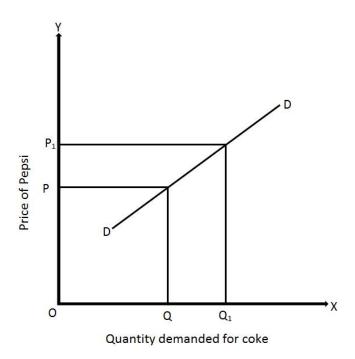
As seen in the above graphs, the demand of the product is not sensitive to the income of the consumers, and 97% of the consumers are willing to pay more than the current price of dettol regardless of their income group.

However it is important to note that the study group is concentrated to higher income groups that proves to be a limitation of the survey due to which there is a bias in studying the income elasticity.



CROSS ELASTICITY OF SUBSTITUTE GOODS.

Since dettol handwash has close substitutes available that have a strong relationship with each other. Hence an increase in the price of one good strongly affects the demand of the other making the cross elasticity curve as shown below:



LIMITATIONS OF THE STUDY

- The survey includes the person's family opinion in case they themselves don't go to buy hand wash on their own for themselves. As a respondent it's important to respond for yourself and not how their parents consider buying it for them.
- > The source of the data for the study was primary data with the help of self-administered questionnaire. Hence the chance of unbiased information is less.
- Most respondents belong to high income group.
- > There can be many interpretations of the data collected. This is empirical study and the research provides the explanation as understood by the researcher only.
- Although all efforts have been taken to make the results of survey as accurate as possible but the survey suffers from the following limitations:
- The time period of study was very less so it was not possible to cover all the areas and go into the depth of the problem and make analysis.
- Some respondents left some of the questions unanswered either due to inability to put a strain on mind or they did not know the answer.
- > Some of the responses might be biased.
- > It is wholly based on primary data.

CONCLUSION

According the to survey, the demand for dettol hand wash is relatively inelastic. Government measures and COVID-19 have both too been a major push in its demand.

Even though dettol hand wash has close substitutes it's most knows and marketed attributes match the concerns of the consumers- germ killing capacity.

Dettol has the largest market share as well as brand value according to both country reports and survey. The government has also promoted personally hygiene production after the pandemic hence giving a support boost to the supply.

Though the study had its limitations, the conclusions drawn are logical and match the practical scenarios, and can be considered partially reliable.

Studying the economic impact of the product is extremely important in studying the demand. The economic impact and scholarly suggestions for the future suggest and forecast an increase in its demand in the coming years.

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Pricing

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