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## **A Tale on Consumer Perception Analytics**

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### **Abstract**

*Consumer perception can be recognized through the colour, shape, taste of the product, price, quality, value, and brand awareness in-terms of shopping behaviour and product choice. However, it allows person in selection, organizing and interpretation of information for any product as an inputs. The aim of research is to find consumer awareness level of first-aid kit in Guwahati city; analysis of consumer perception about imiAID pocket size kit, and recognizing the influential element to provide recommendation for the improvement of product. An empirical research was undertaken among 100 respondents including school students; their parents and siblings using structured questionnaires in Guwahati city applying convenience sampling method. The collected data were then coded, calculated and analysed using statistical tools to get the conclusions. Research explored that majority of the respondents recognize first-aid kit as a small pouch, and are informed through campaign organized by the imiAID executives in school. Portability feature of the product influences consumer to choose imiAID pocket size kit. The research highlighted that majority of respondents/ users are ready to recommend imiAID first-aid kit to other consumers and suggested few improvement on the content of kit.*

**Keywords:** Awareness, First-aid kit, Guwahati, imiAID, Price

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### **1. Introduction**

Perception allows an individual's choice, consolidation and understanding of facts to construct an expressive image of the creation (Berelson and Steiner, 1964; Fill, 2002). Awareness depended on physical incitements, on the incitements' association to the adjacent environment, and on circumstances surrounded by each individual (Kotler et al., 2013). If two individuals are exposed to the same stimuli under the same condition, the response of individuals will vary subject to the way of interpretation and perception. Each individual selection, sorting and interpretation of incitements is beached and administered by their requirements, belief and importance, which are distinctive to respective person (Schiffman et al., 2012). Zeithaml (1988) pointed out that perceived value is very subjective and distinct, and varies from one customer to another. Therefore, consumer buying behaviour of a product depends on the perception of that particular product.

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Consumer perceptions of value, superiority, and worth are considered as a dominant elements of spending manners and goods selection (Bishop 1984; Doyle 1984; Schechter 1984; Sawyer and Dickson 1984; Jacoby and Olson 1985). The user makes buying decisions on the basis of their perceptions on various stimuli. Consumer perceptions of price are linked to sales promotion about the product. Sales promotion reduced the amount a consumer has to spend on buying a product. Schiffman and Kanuk (2004) stated that opinion about the inequity of an amount of a specific merchandise rests an influence on the users' judgement to purchase or not to purchase a specific merchandise. Moore et al. (2003) has described that adverse views and optimistic awareness have a vital influence on the judgements around the market. Acuity of worth as a component show a key character in the achievement of an institution (Jiang and Rosenbloom, 2005). Moore et al. (2003) has defined that constructive opinion of users about a specific product is a display of position, superiority and respect; i.e. features other than worth.

Users using a worth/ superiority association are essentially depend on an eminent product label as a display of an excellence without truly depending straight on worth per se (Liechtenstein et al., 1993). Users use worth and product to assess status of the merchandise but do not usually practice these signs once they appraise the merchandise's output (Brucks and Zeithaml, 2000). As soon as, users appraise more tangible elements of the manufactured goods, such as output and resilience, they trust less on the worth and product name as signs of superiority than when they appraise the merchandise's status and representative worth (Brucks and Zeithaml, 2000).

End user's sensitivity of superiority is assessed as a crucial element of merchandise selection (Zeithaml, 1988). Consumer preferences of manufactured goods differ depending on goods fauna, social and economic condition of user (Uusitalo, 2001). Merchandise preference is depended on the maximum value of artefact structures focusing on the dearth of money (Gwin and Gwin, 2003). Some of the important product attributes included cost of product, product variety, value and worth of the product. Users were found to be price cognisant and superiority mindful (Tuli and Mookerjee, 2004).

Excellence is well-defined as an assessment of fineness and dominance of the merchandise (Zeithaml, 1988). The meaning of quality varies from individual to individual. Earlier studies have indicated that, it is difficult to quantify and define quality. However, Anselmsson et al. (2007) in their study divided quality into impartial of superiority and awareness of superiority. Impartial of superiority is an appraisal of the manufactured goods established on somatic features and awareness of superiority deliberates particular representation (Anselmsson et al., 2007). According to Collins-Dodd and Lindley (2003) user assesses the superiority in relationship of the external and the inherent sign. Inherent sign is the awareness of superiority through somatic features of the manufactured goods such as shade, extent, taste or smell and external signs includes characteristics that have some associations with the merchandise, namely suite, worth, publicity and peer stress (Collins-Dodd and Lindley, 2003). However, due to the familiarity of external signs an individual can easily evaluate the products. According to Richardson et al. (1996), superiority awareness governs user proneness to purchase a secluded product.

Consumer perception can be recognized by the shade, figure, and flavour of the merchandise (Grossman and Wisenblit, 1999). Brand awareness is important in the user acuity once their purchasing design is not clear (Aaker, 2002) in low involvement products. Koubaa (2008) have indicated that nation of origin had an impact on product insight. This outcome varies through products and transversely nations of manufacture (Koubaa, 2008). Mode of purchase effects buying pattern and consumer perception (Nandagopal and Chinnaiyan, 2003).

As a result, it can be conclude from past literature that there was no such kind of study available on consumer perception of a first-aid kit in northeast India. It highlights the importance

of a study on this area and would fill a significant gap in literature and at the same time would have high practical utility for Indian manufacturers operating especially in semi-urban & rural market. Henceforth, the research aims to uncover the elements that influences consumer towards a first-aid kit.

## 2. Objectives

The objectives are

- To identify the consumer awareness level of first-aid kit in Guwahati city.
- To analyse consumer perception about imiAID pocket size kit in Guwahati city.
- To explore the elements that influence consumer to choose imiAID pocket size kit in Guwahati city.
- To suggest the suitable approaches for the improvement of imiAID pocket size kit.

## 3. Methodology

A structured questionnaire was prepared comprising mostly close-ended questions and presented to respondents. The survey was conducted in two schools of Guwahati city, Assam namely, Pragjyotish English High School and Narengi High School. Data were collected from school students; their parents, and siblings using the structured questionnaires. In addition, samples were selected through convenience sampling method. A total 150 questionnaires were printed and distributed to respondents. However, questionnaires filled by respondents were 130 in numbers and out of which 100 were completely filled. Moreover, the study have included secondary data from relevant journals to fulfil the objectives.

The analysis is done in a simple manner without using any jargons. Tables have been used to present survey results for easy understanding. Further, to identify the parameters influences consumer to choose an imiAID pocket size kit (IPK) weighted average method is applied (see Table 10).

## 4. Analysis and Findings

A total of 100 school students and their parents/ guardians from two schools (Pragjyotish English High School and Narengi High School) of Guwahati city have been surveyed to know about the imiAID first-aid kit. Table 1 indicates about percentages of respondents' varying gender wise accounts 57% male and 43% female.

### **Consumer Awareness about First-Aid Kit**

59% of the respondent know about pocket size first-aid kit followed by 41% of the respondent are completely unaware about pocket size first-aid kit (see Table 2). 43% of the respondents realize the first-aid box as a small pouch, followed by 21% recognize to be a small container and 36% of the respondents are unable to comprehend the shape of it (see Table 3). 56% of the respondents are uninformed about imiAID First-aid Kit and 44% of the respondent are aware about imiAID First-aid Kit (see Table 4).

The majority (48%) of the respondents is informed through campaign organized in school by the executives of imiAID followed by the websites (20%), newspapers (11%), and television (4%) respectively. Relatives, hospitals and medicine store / pharmacy are also sources of information for 17% of the respondents (see Table 5).

### **Consumer Perception about imiAID Kit**

The calculated value indicates that overall perception about the imiAID pocket size kit is positive

for the consumer (see Table 6, see Table 7, see Table 8, see Table 9). Detail calculated value has been elaborated in the following steps:

- **Step 1:** Identify the scale associated with perception 1 question and assign the weight to each scale (Highly Satisfied=5, Satisfied=4, Average=3, Dissatisfied=2, Highly Dissatisfied=1)
- **Step 2:** Calculate the individual responds or ratings on each scale (ratings for scales are as (Highly Satisfied=9, Satisfied=30, Average=41, Dissatisfied=13, Highly Dissatisfied=7)
- **Step 3:** Calculate the values for each scale using the formula, Value = weight \* ratings
- **Step 4:** Calculate the total values for perception 1 question by adding individual scale values
- **Step 5:** Similarly, repeated the steps 1 to 4 mentioned for perception 2, perception 3, and perception 4 parameters respectively.
- **Step 6:** Calculate the overall total value of all the perception, values by using the following method,

Overall Total Value = values of perception 1+ values of perception 2 + values of perception 3 + values of perception 4

Overall Total Value = 321+327+211+336= 1195

- **Step 7:** Identify the maximum and minimum weight value assigned to scale for all perception questions and make the addition of the numbers.

The maximum value of perception for one respondent = Highest weights of perception1 + Highest weights of perception 2 + Highest weights of perception 3 + Highest weights of perception 4

The maximum value of perception for one respondent = 5 + 5 + 4 +5 = 19

The minimum value of perception for one respondent = lowest weight of perception1 + lowest weight of perception 2 + lowest weight of perception 3 + lowest weight of perception 4

The minimum value of perception for one respondent = 1 + 1 + 1 + 1 = 4

The mid-value of perception range = (maximum value + minimum value) /2 of perception for one respondent

The mid-value of perception range = (19+4) /2 = 11.5

The average value of perception for 100 respondents = Overall total value / 100

The average value of perception for 100 respondents = 1195/100 = 11.95

The above calculation indicates that the average value of perception for 100 respondents is greater than the mid-value of perception range, which is (11.95 > 11.5). On the basis of calculation, it can be conclude that overall perception is positive (11.95 > 11.5) because of the condition applied that Negative Perception = 4 d" 11.5 and Positive Perception = 11.5 d" 19.

#### **Parameters Influences Consumer for the Kit**

The calculated value indicates about the weighted average of the parameters that influences consumer to choose an imiAID pocket size kit (see Table 10). Weighted average of different parameters is calculated after rating the degree of satisfaction as highly dissatisfied (1) to highly Satisfied (5). Detailed calculated value has been elaborated in the following steps (see Table 10):

- **Step 1:** Identify the scale associated with parameters and assign the weight to each scale (Highly Satisfied=5, Satisfied=4, Average=3, Dissatisfied=2, Highly Dissatisfied=1)
- **Step 2:** Calculate the individual responds or ratings on each scale (ratings for scales are as (Highly Satisfied=9, Satisfied=25, Average=32, Dissatisfied=21, Highly Dissatisfied=13)
- **Step 3:** Calculate the weighted average for each parameter using the formula,

Weighted average of price = Ratings \* weight of Highly Satisfied + Ratings \* weight of Satisfied + Ratings \* weight of Average + Ratings \* weight of Dissatisfied + Ratings \* weight of Highly Dissatisfied / (weight of Highly Satisfied + weight of Satisfied + weight of Average + weight of Dissatisfied + weight of Highly Dissatisfied)

$$\text{Weighted average of price} = (9*5) + (25*4) + (32*3) + (21*2) + (13*1) / (5 + 4 + 3 + 2 + 1) = 19.73$$

Similarly, the weighted average of all the parameters are calculated. The values for parameters such as quantity, quality, portability, number of items, packaging and availability are 21.2, 20.8, 23.53, 20.4, 19.93 and 21.4 respectively. Calculated values indicate that portability has the highest and price has the lowest weighted average.

#### Improvement Required in the Kit

46% of the respondents' want that items such as Analgesic sprays, oral rehydration solution (ORS), safety pins, scissors, and eye wash to be included in the kit, whereas 54% of the respondents don't want any other items (see Table 11). Data indicates that the majority of the respondents are ready to recommend imiAID first-aid kit to other persons (see Table 12).

**Table 1: Gender**

Gender	Responses in (%)
Male	57%
Female	43%

Source: Primary data

**Table 2: Knowledge of Pocket First-Aid Kit**

Customers' Opinion	Frequency	Percentage (%)
Yes	59	59%
No	41	41%

Source: Primary data

**Table 3: Perception about Pocket First-Aid Kit**

Customers' Opinion	Frequency	Percentage (%)
Small Pouch	43	43%
Small Container	21	21%
Can't Say	36	36%

Source: Primary data

**Table4: Knowledge about imiAID First-Aid Kit**

Customers' Opinion	Frequency	Percentage (%)
Yes	44	44%
No	56	56%

Source: Primary data

**Table 5: Sources of Awareness about imiAID First-Aid Kit**

Sources	Frequency	Percentage (%)
TV	4	4%
Newspaper	11	11%
School Presentation	48	48%
Websites	20	20%
Others	17	17%

Source: Primary data

**Table 6: Satisfaction with the Design of Kit (Perception1)**

Scale	Weight	Ratings	Total (Weight * Ratings)
Highly Satisfied	5	9	45
Satisfied	4	30	120
Average	3	41	123
Dissatisfied	2	13	26
Highly Dissatisfied	1	7	7
		Total Value	321

Source: Primary data

**Table 7: Kit Justify its Price (Perception2)**

Scale	Weight	Ratings	Total (Weight * Ratings)
Strongly Agree	5	11	55
Agree	4	33	132
Average	3	34	102
Disagree	2	16	32
Strongly Disagree	1	6	6
		Total Value	327

Source: Primary data

**Table 8: Like Most about Kit (Perception3)**

Scale	Weight	Ratings	Total (Weight * Ratings)
Affordability	1	24	24
Portability	2	48	96
Utility	3	21	63
All of the above	4	7	28
		Total Value	211

Source: Primary data

**Table 9: Quantity of Items Included in Kit is Adequate to Handle Injuries (Perception4)**

Scale	Weight	Ratings	Total(Weight * Ratings)
Strongly Agree	5	11	55
Agree	4	39	156
Average	3	33	99
Disagree	2	9	18
Strongly Disagree	1	8	8
		Total Value	336

Source: Primary data

**Table 10: Parameters Influences Consumer to Choose Kit**

Parameters	Highly Satisfied (5)	Satisfied (4)	Average (3)	Dissatisfied (2)	Highly Dissatisfied (1)	Weighted Average
Price	9	25	32	21	13	19.73
Quantity	11	27	36	21	5	21.2
Quality	11	25	36	21	7	20.8
Portability	19	37	27	12	5	23.53
Number of Items	7	29	36	19	9	20.4
Packaging	6	22	46	17	9	19.93
Availability	7	39	29	18	7	21.4

Source: Primary data

**Table 11: Modification Required on Kit**

Customers' Opinion	Frequency	Percentage (%)
Yes	46	46%
No	54	54%

Source: Primary data

**Table 12: Consumer Recommendation of Kit**

Customers' Opinion	Frequency	Percentage (%)
Yes	42	42%
No	23	23%
Don't Know	35	35%

Source: Primary data

## 5. Conclusion and Future Direction of Research

Consumers make buying decisions on the basis of several perceived stimuli. Consumer perception can be predicted by the use of colour, shape, size, features and taste of the product. Research revealed that majority of the respondents know about pocket size first-aid kit and viewed it as a small pouch, small container. In addition, research enunciates that respondents were informed through campaign organized in schools, websites, newspapers, television, relatives, through hospitals and medicine store to create awareness about pocket first-aid kit. Yet, more than half of the respondents were uninformed about imiAID first-aid kit. However, among the consumer overall perception about the imiAID pocket size kit is positive. Research highlighted that portability nature of kit influences consumer for the product. Conversely, research suggested to include first-aid items such as analgesic sprays, ORS, safety pins, scissors, and eye wash on the kit; and majority of respondents are ready to recommend the kit to other consumers. The research have problems of sampling such as limitations in selection of respondents, which may be an area for further improvement. Firstly, population was the school students and sample were drawn from them, which is a concern. Hence, this respondent's behaviour may vary from the users of other geographic regions. Future researchers can concentrate in this area to improve the depth of research. Secondly, some of the respondents did not respond to queries fully and information was withheld. Sometimes the respondents were reluctant to give information about their usage and demographic profile.

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