



Perceptual Mapping of English Dailies Using Multi-dimensional Scaling

Neha Gupta¹, Rohit Bansal^{2*}, Kavita Srivastava³

¹Assistant Professor, K J Somaiya Institute of Management Studies & Research, Mumbai

Email id: nehagupta@somaiya.edu

^{2*}Associate Professor, Rajiv Gandhi Institute of Petroleum Technology, Department of Management Studies
rbansal@rgipt.ac.in

³Associate Professor, Rajiv Gandhi Institute of Petroleum Technology, Department of Management Studies
ksrivastava@rgipt.ac.in

***Corresponding Author:** Rohit Bansal

*Associate Professor, Rajiv Gandhi Institute of Petroleum Technology, Department of Management Studies
rbansal@rgipt.ac.in

Citation: Rohit Bansal, et al (2024), Perceptual Mapping of English Dailies Using Multi-dimensional Scaling, Educational Administration: Theory and Practice, 30(5), 4557-4564
Doi: 10.53555/kuey.v30i5.3668

ARTICLE INFO

ABSTRACT

The present study aims to construct a perceptual map of English dailies using multidimensional scaling method based on consumer perception. In a pretest the six newspaper brand names namely, Times of India, Hindustan Times, The Hindu, The Economic Times, Business Standard and The New Indian Express, were selected based on consumers' familiarity rating on 1 to 7 point scale. To collect consumers' perception data on these newspapers, the direct approach was used where they were asked to judge the similarity/dissimilarity among the six newspapers brand names using their own criteria on a 10 point scale (1=very similar/ 10= very dissimilar). To draw the perceptual map, the multidimensional scaling analysis was computed using SPSS. The stress value (0.73) was used to identify the number of dimensions. The two dimensions namely "news coverage" ranging from general to specific and "entertainment/leisure" aspect ranging from high to low was found appropriate to draw the perceptual map. The Times of India and Hindustan Times were found balanced on both the dimensions. The Hindu was found to have a unique image in consumer's mind and on the two dimensional map. The economic times and business standard were high on business aspect. The managerial implications and limitation of study is discussed.

Keyword: Brand positioning, Compositional approach, Multidimensional scaling, Stress value,

Introduction

A key element of competitive marketing strategy is product/brand positioning. The product/brand positioning has been defined as the act of designing the image of the firm's offering so that target customers understand and appreciate what the product stands for in relation to its competitors (Kotlar, et.al, 2002). The core thought behind brand positioning is that each brand occupies a particular point or space in the individual consumer's mind, a point which is determined by that consumer's perception of the brand in relation to other brands. The spatial distance between the points in that consumer's mind reflects consumer's perception of similarity or dissimilarity between products and brands (Sengupta, 2005). A number of studies have been conducted to draw perceptual maps based on consumer perceptions in FMCG and durable goods categories. However, a few have directed their attention towards service brands and their positioning. Since services are intangible, imperishable and inseparable, their positioning or perceptual mapping is difficult (Bansal et al., 2021; Zahera and Bansal, 2018). The present study measures consumer perception of English dailies which is categorized a mental stimulus or information processing service; directed to consumers' mind, and aims to draw perceptual map of English dailies.

Literature Review

Perceptual mapping is a major analytical tool in marketing research (Green, Carmone, and Smith, 1988; Shocker and Srinivasan, 1979). Perceptual maps help managers to visualize their product(s) in relation to other competitive offerings in the market place. Perceptual mapping as a technique is also helpful to visualize customers' perceptions of products, attributes, brands, promotions or services. Marketing researchers use various methods to create perceptual maps or for brand positioning. These methods have been categorized into de-compositional and compositional approaches (Huber and Holbrook 1979). In de-compositional methods, subjects are present with brands rather than attributes of the product. A perceptual configuration is constructed on the basis of consumers' (dis)similarity judgments among the brands. In compositional methods, subjects rate the brands on a set of *a priori* specified attributes. The number of attributes is reduced to a smaller number of underlying dimensions, which are interpreted on the basis of their relationships with the original attributes (Verma and Bansal, 2021) (Steenkamp et. al., 1994). Compositional methods and factor analysis in particular, have been found to be superior to decompositional methods with respect to the underlying theory, interpretability of the dimensions, ease of use, and predictive validity (Hauser and Koppelman 1979; Simmie 1978). Consequently, compositional methods are used widely in marketing for perceptual mapping purposes (Steenkamp et. al., 1994). However, it has been recognized that compositional methods are critically dependent on the completeness and validity of the *a priori* specified set of attributes which raise some theoretical problems (Hauser and Koppelman 1979; Urban and Hauser 1980). First, compositional methods cannot identify perceptual dimensions that do not have at least one attribute to represent them. The likelihood of omission of a relevant attribute could be greatest when little previous research is available. Second, and most important, presenting all consumers with the same set of *a priori* specified attributes assumes that (1) all attributes used in the study are relevant to all consumers, (2) no other attributes are relevant to certain groups of consumers, and (3) consumers attach the same meaning to an attribute (Steenkamp et. al., 1994). The general validity of these assumptions can be questioned. Because of differences in expertise, involvement, and other factors, consumers vary in the extent to which they have well-developed, rich, and interrelated cognitive structures for a product category (Alba and Hutchinson 1987; Celsi and Olson 1988; Crocker, Fiske, and Taylor 1984; Fiske and Taylor 1991; Sujan 1985). Consumers differ in the number of attributes stored in memory for a product category, the content of these attributes, and their abstractness (Kanwar, Olson, and Sims 1981; Marks and Olson 1981). Thus, some of the *a priori* specified attributes may not be meaningful to a particular consumer, and relevant attributes could be omitted (Vikas and Bansal, 2019; Zahera and Bansal, 2019). Consumers also could attach different meanings to the same attribute and/or describe the same product aspect in a different way (Steenkamp et. al., 1994). In response to these problems, several free-response mapping procedures have been proposed that are more closely tailored to the cognitive structure of a specific individual. Green, Wind, and Jain (1973) have proposed a free-response approach in which consumers provide associations with brands. The associations are coded into categories, using content analysis. The aggregated n (brands) times m (attributes) matrix of raw frequencies (number of subjects associating a certain attribute with a specific brand) was analyzed using multidimensional scaling. A major strength of this approach is that data collection is completely tailored to each individual. The decomposition methods have its own advantages however very few studies have employed decomposition methods such as multidimensional scaling technique for brand positioning (Konuk and Altuna, 2011).

Multidimensional Scaling (MDS)

MDS is a class of procedures for representing perceptions and preference of respondents spatially by means of visual display. Perceived or psychological relationships among stimuli are represented as geometric relationships among points in a multidimensional space. These geometric representations are often called spatial maps. The axes of the spatial map are assumed to denote the psychological bases or underlying dimensions respondents use to form perceptions and preferences for stimuli (Anderson, Hair and Black, 1998).

The present study aims to construct perceptual maps using multidimensional scaling. To achieve this purpose, the present study investigates print media particularly English dailies that have occupied a significant percentage out of the total publishers of newspapers and periodicals.

The Print Media and Newspaper Industry in India

According to KPMG Analysis (2013), the print industry in India grows by 8.5 per cent from INR224 billion in 2012 to INR243 billion in 2013. According to KPMG and FICCI joint report (2014) the growth of the overall print industry is largely driven by Hindi and the vernacular print markets. The Hindi print market grew by 10.5 per cent from INR68 billion in 2012 to INR75 billion in 2013 and vernacular grew by 10 per cent from INR69 billion in 2012 to INR76 billion in 2013 (KPMG analysis, 2013). By 2018, the print industry is estimated to contribute for 26.5% to the Indian Media and Entertainment industry. The print industry continued to derive most (94.4%) of its revenues from the newspaper category (KPMG Analysis 2013) India has more daily newspaper than any other nation and out of world's 100 largest newspapers, 20 are Indian. In the year 2012 – 13, the highest number of newspapers and periodicals (Total: 94067; English: 12,634) were registered as compared to the last one decade which has increased by 99,660 in 2014 (Registrar

of Newspapers for India, 2014). The total circulation of publication has also increased from 40, 50, 37,930 copies per publishing day in 2012-13 to 45, 05, 86,212 copies per publishing day in 2013-14. The circulation revenue has registered a growth of 11.25% over previous year (RNI, 2014). According to PwC global entertainment and media outlook 2011-15, India has the second largest newspaper market after China. The demand of newsprint in India is expected to grow at a rate of 9%. The consumption of Indian newspaper paper is expected to increase by 3.5MPTA in 2017-18 (CRISIL Research, cited in Emami Paper Mill Ltd.).

The growth in Indian newspaper readership figures becomes much more impressive when we take in to account the global trends in the newspaper industry. All developed countries have seen a gradual decline in the newspaper readership figures largely because of phenomenal technological advancement in electronic media. The Internet has been somewhat of a 'final nail in the coffin' for the printed newspaper in the west, as people can access the online newspapers and get real time news as it happens. The same is not true for the Indian market as the electricity and internet infrastructure in the country has not developed enough to support mass use of online newspapers. A large part of the country still doesn't have round the clock electricity supply and load-shedding is common occurrence especially in the rural areas. Hence, people still rely on their dailies for daily doses of information.

English Dailies

National English dailies in print and online forms provide Indian and International news on hourly and daily bases. In India, there are seventeen various forms of English newspapers prevailing, such as *English Daily Newspaper*, *English Newspaper Online*, *Times English Newspaper*, *Indian English Newspaper*, etc. It is observed that there are about twenty English dailies' brands available at the National and State level in different proportions.

According to the Registrar of Newspapers for India (RNI, 2014), English language shares about 13,138 out of 99,660 registered newspapers which are about 13.2 percent. Among dailies also, English dailies claimed second position with a circulation of 3. 31 Crore copies per publishing day.

According to Indian Readership Survey (IRS, 2014), the circulation of only English dailies has been reported as 3.3 Crores out of all English language publication (6.4 crores) in the year 2014. The leading brands of English dailies at the National level are *Times of India*, *Hindustan Times*, *The Hindu*, *The Telegraph*, *Deccan Chronicle*, *The Economic Times*, *Mid-day*, *Mumbai Mirror*, *The Tribune* and *DNA*.

According to Audit Bureau of Circulations (2014), among the top ten dailies, the circulation of *Times of India* is 2.8 Million (both print and digital) and *The Hindustan Times* has a circulation of 1.32 million followed by *The Hindu* which occupied third position with daily circulation of 1.39 million copies. According to IRS (2014) the readership figure of top 10 dailies is given in Table 1.

Table1 The Readership Figure by IRS (2014)

Top 10 English Dailies	Readership (2014)
Times of India	7590
Hindustan Times	4515
The Hindu	1622
Mumbai Mirror	1195
Telegraph	1003
Economic Times	834
Mid Day	573
The Tribune	507
Deccan Herald	442
Deccan Chronicle	361

* Figures are in 000s
(Source: IRS 2014)

The present study has measures consumer perception of six English dailies: *Times of India*, *The Hindustan Times*, *The Hindu*, *The Economic Times*, *The new Indian Express* and *Business Standards*. The detail of above newspapers is given below:

The Times of India (TOI): It is a leading English newspaper in India which is owned and managed by Bennelt, Coleman & Co. Ltd (owned by Shahu Jain Family). The *Bombay Times* and *Journal of Commerce* was the first edition issued by *Times of India* on 3 November 1838. Being the oldest, TOI has a wide presence all over India (IRS, 2012). TOI has widest circulation among all English newspapers also stood first among all with daily readership of 7.590 million (IRS, 2014). It has Pan-India presence in 41 centers with 29 editions. Some of the TOI supplements are *Bombay Times*, *Times Pulses*, *Times Ascent*, *Education Times*, *Times Property*, *What's Hot*, *life*. TOI also has a full-fledged website, mobile application and e-paper version. TOI

occupied first position among multi-edition dailies in 2013-14 with circulation of 4.7 million copies per publishing day.

Recently, TOI has introduced a 3-D advertisement of the TV series Mahabharat in mid-September 2014. The 3-D ads have generated a lot of interest among the readers especially youth, who access multiple sources for news and information.

The Hindustan Times (HT): 'HT' is one of India's most respected and leading English dailies inaugurated by Mahatma Gandhi in the year 1924. It provides the interactive platform to its readers by using innovative colours and templates. Hindustan Times, the market leader of the National Capital Region has in the last decade rapidly expanded its footprint and today reaches readers across the length and breadth of the country. In IRS survey (2014), HT has received second position with 4.515 million daily readerships across the country. The newspaper has editions published from Delhi, Mumbai, Lucknow, Patna, Ranchi and Kolkata and is printed at nine centers including Bhopal, Chandigarh, Delhi, Mumbai, Jaipur, Kolkata, Lucknow, Patna and Ranchi. Its supplements are *Brunch*, *HT City*, *HT Café*, *HT Education*, *HT Estates*, *Shine Jobs* and *HT Live-Bhopal*.

To differentiate themselves from competitors and to grab eyeballs, Hindustan Times' has come up with 'Page One Plus'. This is a vertical perforated page appended on the front page, which gives the readers an option to remove it and read it on the go. It compiles all the important news in concise manner and provides the reader with a quick snapshot of everything that he needs to know about the important stories in the newspaper

The Hindu: The Hindu, the south India-based English daily started in 1878 as a weekly, and then became a daily in 1889. The Hindu's independent editorial stands remarkably among all. Its reliable and balanced presentation of the news won the serious attention and regard of the people. The Hindu is the first Indian newspaper to offer an online edition in 1995. According to IRS survey (2014), it has third position having daily readership of 1.622 million. As of October 2014, it is printed at 17 locations across 8 states Bangalore, Chennai, Hyderabad, Thiruvananthapuram, Vijayawada, Kolkata, Coimbatore, Madurai, Noida, Visakhapatnam, Kochi, Mangalore, Tiruchirapalli, Hubli, Mohali, Allahabad, and Kozhikode. The Hindu had also published a Lucknow edition during the 2013-14. The Hindu has a wide portfolio and its Chennai Edition brings out supplements and features on all days of the week, like on Mondays (*Metro Plus*, *Business Review*, *Education Plus*), on Tuesdays (*Metro Plus*, *Young World*, *Book Review*). The Hindu has supplements for all other remaining days. It also does surveys and publishes some weekly magazines. The Hindu has launched a micro site, www.thehinduhub.com that carries information about the readership numbers and circulation of The Hindu newspaper and its several editions, as well as other publications of the group across different states and cities. This is an attempt to communicate better with media planners, buyers and marketers and provide relevant information on the events executed, various innovations on offer and its future plans for advertisers.

The Economic Times (ET): The Economic Times headquartered in Mumbai is an English-language, Indian daily newspaper published by the Bennett, Coleman & Co. Ltd. first published in 1961. It had already been acknowledged as the second-most widely read English-language business newspaper, after the Wall Street Journal (IRS 2013). The Economic Times has occupied 7th position with 0.8 million daily readership (IRS 2014). ET has separate & dedicated pages covering important sectors of an industry. Its main content is based on the Indian economy, International finance, share prices, prices of commodities as well as other matters related to finance and is printed on attractive salmon pink paper, giving it a unique identity. Some of the well followed supplements are *Brand Equity*, *Corporate Dossier*, *ET Travel*, *Zig-Wheels*, *ET Realty*, *ET Wealth*, and *Investor's Guide*, these all are weekly supplements.

The New Indian Express: The New Indian Express is an Indian English-language broadsheet daily newspaper published by the Express Publications and based in Chennai. It was founded in 1932 as the Indian Express. After the death of Ramnath Goenka, the company got split in to two and became separate entities. The northern version is named as Indian Express and the southern version got the name as The New Indian Express. This newspaper is known for its intrepid and anti-establishment tone. Express Publications (Madurai) Limited publishes the 'The New Indian Express' from 22 centers in Tamil Nadu, Karnataka, Andhra Pradesh, Kerala and Odisha. It has supplements on career and education which appear on a weekly or fortnightly basis. The 24-page education supplement, called Edex, was launched in early 2010. At present, The New Indian Express is the only national daily which publishes news of far-flung Andaman and Nicobar Islands on an everyday basis.

Business Standards (BS): The daily newspaper Business Standard (also available as an e-paper) owned by the Kotak Mahindra Group is the preferred choice of serious business readers. 'BS' has daily readership of around 0.166 million according to IRS (2013) and was ranked third among Business daily. It is published from 12 centers - Mumbai, New Delhi, Kolkata, Bangalore, Chennai, Ahmedabad, Hyderabad, Chandigarh, Lucknow, Pune, Kochi and Bhubaneswar. It also has a Hindi version which is published from eight centers across northern India and its content can be accessed at bshindi.com. BS offers syndicated columns from

Martin Feldstein and Dani Rodrick, and content from Breakingviews.com--with exclusivity in the Indian market. In addition to two newspapers, BS publishes two monthly magazines (Indian Management and Business Standard Motoring), as well as a quarterly (Asian Management Review). The company also has a books division, which publishes books under the BS Books imprint. BSL's website properties include *bshindi.com*, *bsmotoring.com*, and *smartinvestor.in* (dedicated information-cum-trading site for investors).

Methodology

Stimulus Development

To select the English newspapers brand name, a pre-test was conducted with twenty five management students studying in business schools (Mishra et al., 2023b). Respondents were asked to indicate the name of English newspapers which they read daily. Based on their responses (familiarity rating on 7 point scale where 1 indicates not at all familiar and 7 indicates highly familiar), six newspaper brands were selected namely, Times of India (Mean= 7), The Hindustan Times (Mean = 7), The Hindu (Mean = 6.8), The Economic Times (Mean = 7), , The new Indian Express (Mean = 5), and Business Standards ((Mean = 6.7).

Sample and Data collection

A convenience sampling method was used to collect the data from 120 management students studying in different business schools in India. The mean age of participant was 26 years (Mishra et al., 2023a; Prince, Kumar Maurya. Rohit, Bansal. Yasmeen, Ansari. Anand, 2023).

Procedure

Multidimensional scaling was used to draw the perceptual map based on consumer's perception of English dailies. The direct approach was used to collect the perception data. In direct approaches, the respondents are asked to judge the similarity/dissimilarity among the various brands or stimuli using their own criteria. Respondents are required to rate all the possible pairs of brands or stimuli in terms of similarity on a likert scale (Dixit et al., 2022; Maurya et al., 2023).

Subjects were presented all six newspapers brand name in pairs (for example, TOI vs HT, HT vs Hindu etc.). All 15 pairs ($n(n-1)/2$, where n is the number of stimuli; in this case 15 pairs) were given to the subjects to evaluate the similarity/dissimilarity between the pairs on 10 point rating scale, where 1 indicated *very similar* and 10 indicated *very dissimilar*. Following instructions were given to the respondents:

Given below are the sets of English newspapers that you know of/ read. You are requested to evaluate them on whether you think they are similar or different when compared to each other.

Qualitative data was also collected from respondents: they were asked to tell about the image they have in their mind for these news paper brands, and how did they judge the similarity between pairs of brand. This information was helpful for naming the dimensions.

Statistical Analysis

Multidimensional scaling was computed to draw the perceptual map. The data collected from all the respondents were collated in to a 6X6 matrix to represent the aggregate dissimilarities between brands where the rows and columns are mirror images of newspaper brands. The MDS data was analyzed using SPSS software.

Results and Conclusions

The objective in MDS is to obtain a spatial map that best fits the input data in the smallest number of dimensions. To identify the number of dimensions Stress value is used. Stress is a lack of fit-measure which minimizes the sum of squared errors between the actual distances and the distances reproduces on the perceptual map. Higher value of stress indicates poorer fits. Thus to identify the number of dimensions a plot of Stress vs dimensionality was examined. The point at which an elbow or a sharp bend occurs indicates an appropriate number of dimensions. The Stress plot indicated two dimensions were appropriate to construct the perceptual map. The Stress value was .073. The R^2 value was .97. The R square is Goodness of fit which measure the proportion of variance of the optimally scaled data that can be accounted for by the MDS procedure. Value greater than or equal to 60% is considered acceptable. Based on the subjects qualitative responses the two dimensions were labelled as following:

Dimension 1: News Coverage ranging from general to specific

Dimension 2: Entertainment/leisure aspect ranging from high to low

The MDS output produces the coordinates on the identified dimensions. The coordinates are given in Table 2:

Newspaper Name	Dimension1(News Coverage: General to Specific)	Dimension2(Entertainment aspect)
Hindustan Times (HT)	1.54	0.26
Times of India (TOI)	1.21	0.55
The Hindu	0.27	-1.14
Economics Times (ET)	-1.864	0.43
Business Standard	-1.592	0.081
The New Indian Express	0.4395	-.1805

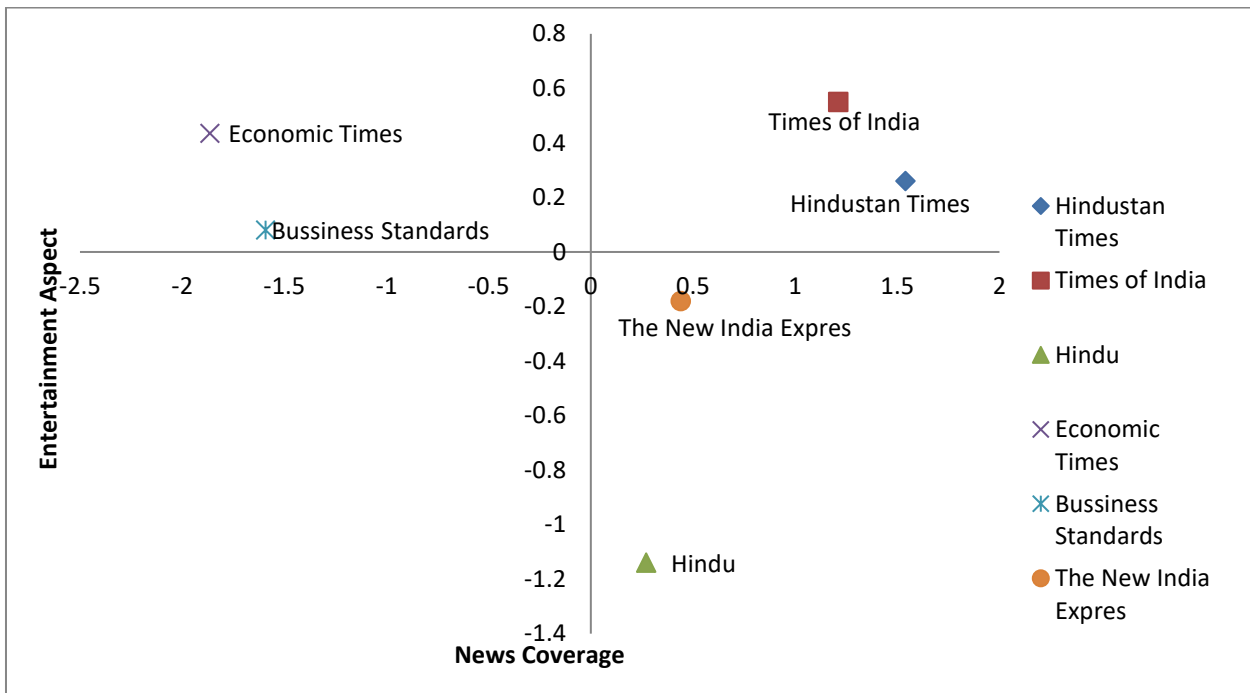


Fig1: Coverage analysis

If we see the output, dimension 1 seems to be based on news coverage ranging from general to specific news coverage (See Fig:1). The Hindustan times and TOI are more oriented towards general news coverage while Economic times and Business Standard are high on specific news coverage like business and finance. The second dimension is labelled as entertainment/leisure aspect where HT and TOI is on higher side (high on entertainment aspect) and The Hindu is on lower side providing no aspect of entertainment/leisure. TOI seems quite balanced on both the dimensions.

It can be seen that HT and TOI provide news almost on all topics whereas ET and BS focus only on economic or business related news. The Hindu is having unique position in perceptual map which indicates that consumers consider The Hindu as a standardised newspaper with “no frills” news. It does not have daily supplements (except on Sundays- *Magazine*) like Hindustan Times and Times of India. The case of The Indian News Express is peculiar because it does not match close to any of the other brands and also not high in any of the dimensions. The perceptual map also indicates that consumers perceived HT and TOI similar (the distance between the two is minimum) suggesting the fierce competition between the two. Hindustan Times and Times of India come with attractive *gossip rich* supplementary pages daily like: HT has *HT City* and Times of India has *Delhi Times* that quite a few people are eager to read. Overall it can be concluded that this perceptual map clearly shows the position of six English newspaper brands in the market and in consumers mind.

Implication

Perceptual mapping technique is widely used in marketing for positioning analysis. To determine the current situation, competition threats, weaknesses and opportunities perceptual mapping is very useful. Regarding the newspaper market, the present study identify the two most important dimensions, the news coverage (general to specific) and entertainment/leisure, effective to attract readers. Any newspaper aims to increase the circulation should primarily work on its content as our results suggest. The consumers read news paper because of their content and coverage.

The new Indian Express lacks in the content and the quality of print as suggested by our qualitative data. It requires more effective supplements like other news papers offer. The Hindu has occupied a unique and

distinctive place in the consumer's mind as compare to other newspapers as it is known for high quality of journalism and presentation. However, the entertainment aspect could be increase in different supplement to attract more readers. Moreover, both TOI and HT can also come up with business and economic supplement to attract readers who are hungry for business news. The new economic or business supplement may be helpful to set differentiation and unique positioning strategies.

References

1. Alba, Joseph and Hutchinson J. Wesley (1987), "Dimensions of Consumer *Expertise*," *Journal of Consumer Research*, 14 (March), 411-54.
2. Bansal, R., Kar, S., Gupta, S., 2021. Efficiency Assessment of Consumer's Electronics Sector: Data Envelopment Analysis. *J. Asia-Pacific Bus.* 22, 279-297. <https://doi.org/10.1080/10599231.2021.1983502>
3. Celsi, R. L. and Olson, Jerry C (1988), "The Role of Involvement in Attention and Comprehension Processes," *Journal of Consumer Research*, 15 (September), 210-24.
4. Crocker, Jennifer, Susan T. Fiske, and Shelley E. Taylor (1984), "Schematic Bases of Belief Change," in *Attitudinal Judgment*, J. Richard Eiser, ed. New York: Springer Verlag, 197-226.
5. Dixit, A., Mani, A., Bansal, R., 2022. An adaptive mutation strategy for differential evolution algorithm based on particle swarm optimization. *Evol. Intell.* 15, 1571-1585. <https://doi.org/10.1007/s12065-021-00568-z>
7. FICCI-KPMG Indian Media and Entertainment Industry Report 2014.
8. Fiske, Susan T. and Shelley E. Taylor (1991), *Social Cognition*, 2nd ed. New York: McGraw-Hill.
9. Green, P. E., Carmone, F. J. and. Smith, S. M (1989), *Multidimensional Scaling: Concepts and Applications*. Boston: Allyn and Bacon.
10. Green P.E. Wind Y., and Jain, A. K. (1973), "Analyzing Free-response Data in Marketing Research," *Journal of Marketing Research*, 10 (February), 45-52
11. Huber, J., and Holbrook, M. B. (1979), "Using Attribute Ratings for Product Positioning: Some Distinctions among Compositional Approaches," *Journal of Marketing Research*, 16, 507-16.
12. Hair, J.F. Jr. , Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis*, (5th Edition). Upper Saddle River, NJ: Prentice Hall.
13. Hauser, J. R. and Koppelman F. S. (1979), "Alternative Perceptual Mapping Techniques: Relative Accuracy and Usefulness," *Journal of Marketing Research*, 16 (November), 495-506.
14. Indian Readership Survey, 2013, 2014
15. Kanwar, R., Olson, J. C and Sims L. S. (1981), "Toward Conceptualizing and Measuring Cognitive Structures," in *Advances in Consumer Research*, Vol. 8, Kent
16. B. Monroe ed. Ann Arbor, MI: Association of Consumer Research, 122-7.
17. Konuk F. A. And Altuna K (2011), "Brand Positioning Through Multidimensional Scaling: A Study In The Turkish Shampoo Market" *International Journal Of Social Sciences And Humanity Studies*, 3, (2) 193-298.
18. Kotler, P., Armstrong, G., Saunders, J., & Wong, V. (2002). *Priciples of Marketing* (3rd European ed.). London: Prentice-Hall.
19. KPMG in India Analysis, Industry Discussions conducted by KPMG in India (2013)
20. Marks, L. J. and Olson, J. C. (1981), "Toward a Cognitive Structure Conceptualization of Product Familiarity," in *Advances in Consumer Research* Volume 08, eds. Kent B. Monroe, Ann Abor, MI : Association for Consumer Research, Pages: 145-150.
21. Maurya, P.K., Bansal, R., Mishra, A.K., 2023. Russia-Ukraine conflict and its impact on global inflation: an event study-based approach. *J. Econ. Stud.* <https://doi.org/10.1108/JES-01-2023-0003>
22. Mishra, A.K., Bansal, R., Maurya, P.K., 2023a. Investing for a better tomorrow: Values-driven antecedents of investment in socially responsible equity funds by Indian retail investors. *J. Clean. Prod.* 420, 138441. <https://doi.org/10.1016/j.jclepro.2023.138441>
23. Mishra, A.K., Bansal, R., Maurya, P.K., Kar, S.K., Bakshi, P.K., 2023b. Predicting the antecedents of consumers' intention toward purchase of mutual funds: A hybrid PLS-SEM-neural network approach. *Int. J. Consum. Stud.* 47, 563-587. <https://doi.org/10.1111/ijcs.12850>
24. Prince, Kumar Maurya. Rohit, Bansal. Yasmeen, Ansari. Anand, K.M., 2023. Behavioural Determinants of Health Insurance Buying Intention of Missing Middle Consumers: A Study During Covid-19 Pandemic. *Eur. Econ. Lett.* <https://doi.org/10.52783/eel.v13i5.874>
25. Registrar of Newspapers for India, 2014
26. Sengupta, S. (2005). *Brand Positioning: Strategies for Competitive Advantage*. Tata McGraw-Hill Education
27. Shocker, A. D. and Srinivasan, V. (1979), "Multi-attribute Approaches for Product Concept Evaluation and Generation: A Critical Review," *Journal of Marketing Research*, 16 (May), 159-80.
28. Sujan, Mita (1985), "Consumer Knowledge: Effects on evaluation Strategies Mediating Consumer Judgments," *Journal of Consumer Research*, 12 (June), 31-46.

29. Verma, R.K., Bansal, R., 2021. Impact of macroeconomic variables on the performance of stock exchange: a systematic review. *Int. J. Emerg. Mark.* 16, 1291–1329. <https://doi.org/10.1108/IJOEM-11-2019-0993>
30. Vikas, V., Bansal, R., 2019. Efficiency evaluation of Indian oil and gas sector: data envelopment analysis. *Int. J. Emerg. Mark.* 14, 362–378. <https://doi.org/10.1108/IJoEM-01-2018-0016>
31. Urban, G. L. and Hauser J. R. (1980), *Design and Marketing of New Products*, Englewood Cliffs, NJ: Prentice- Hall, Inc
32. Zahera, S.A., Bansal, R., 2019. A study of prominence for disposition effect: a systematic review. *Qual. Res. Financ. Mark.* 11, 2–21. <https://doi.org/10.1108/QRFM-07-2018-0081>
33. Zahera, S.A., Bansal, R., 2018. Do investors exhibit behavioral biases in investment decision making? A systematic review. *Qual. Res. Financ. Mark.* 10, 210–251. <https://doi.org/10.1108/QRFM-04-2017-0028>