

Infographics as Visual Narratives of News: A Thematic Analysis of the English National Dailies of India

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Abstract: Information has become the most important component of human life in the contemporary society as all important life functions depend on the accessibility and possession of information. In this context, the mass media has been serving as the prominent force in the dissemination of information to the public. With the rise of digitalization in the field of journalism, infographics provide enhanced information in the form of visual narration of the news story by using numerical and graphic illustration of data. The present paper analyses the diverse types of infographics adopted by the top three highest readership national dailies of India – *The Times of India*, *Hindustan Times* and *The Hindu* on the basis of its subject theme. A thematic content analysis of the newspapers for three years – 2017, 2018 and 2019 is conducted in order to explore the usage of the infographic contents adopted by the English dailies. The study observed that over the time period of three years, *The Times of India* uses maximum number of infographics, followed by *Hindustan Times* and *The Hindu*. Amongst the various types of subject theme-based infographics, business theme-based infographics have the maximum coverage in the English national dailies while politics theme-based infographics have the least coverage. Over the three-year period, an increase in the usage of infographics is observed in all the newspapers.

Keywords: Journalism, digitalization, infographics, media, newspaper, news story, readership.

1. INTRODUCTION:

Human communication is the force that sustains life and rejuvenates its own. At the same time, information, above all is the core of human communication. People communicate to each other for transferring and procuring ‘information’ – the means of survival. Information helps in making people aware of what is happening around, what is likely to happen in future and how people can plan themselves for survival. Today, information has become the basis of all the sectors of life – education, governance, economy, research, health, work force, development and so on. Information has become a valuable asset in the society as it provides awareness, knowledge and power (Isazadeh, 2004). The importance of information cannot be underestimated as the entire social system is dependent on information.

No doubt, we live in an information age where the mass media with its undisputed capacity of reaching out to the public disseminates information in varied forms through diverse media forms. One of the most prominent platforms for disseminating information to the public is the news media. Bombarded with the issues of information overload in the market (owing to acute competition amongst multiple news media) and issues of audience comprehensibility on the other hand, the media is left with no option but to adopt a paradigm shift in the structuring of the news content to gain wider response from the audience. In the wake of the digitalization and the arrival of data journalism, a whole new revolution in the news presentation came to be witnessed.

Experiencing the gradual shift in technological advancement, the news media also adapts structural changes in the presentation of information to the public. With the use of computerized design technology, news media inculcated the concept of infographics for disseminating easily understandable news content. An infographic, which is the abbreviation of the term “information graphic” (p. 12) constitutes a form of visual story telling (Lankow, Crooks & Richie, 2012). Infographics are prepared by using minimal text and information is presented by using visual aids. Visual graphic elements such as “charts, flowcharts, diagrams, maps, mind maps, signs, typographic text are commonly used in designing infographics” (Ghode, 2012, p. 36). In the words of Smiciklas (2012), an infographic “is a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood” (p. 3). According to Roy (2009), infographics are composed of three parts – visuals (colour and graphic elements), content (statistics and facts) and knowledge.

With the growth of technology, the news consumption patterns of newspaper readers have also changed. Electronic media's constant bombardment of 'breaking news', social media's unending content shares and advertiser's ever increasing witty advertisements brought a surge in the newspaper readers to strive for more visual narrations of news in newspapers. "When technology is growing fast and changes media behavior that prefers visual appearance, then journalism culture should change as well" (Sjafiie et al., 2018, p. 374). Newspapers adopting the visualization of textual information through infographics has ultimately become a paradigm shift in the design and development of 'news' in the print industry.

2. RATIONALE AND OBJECTIVES:

The surge in the presentation of news information through infographics has also been greatly felt by the newspaper industry. With the rise of digitalization and data journalism, information contents in the form of data are depicted as visual journalistic narration. In regard to this foundation, newspapers constantly use infographics to provide enhanced information for visually narrating the news story with the help of creative graphic illustrations. In India, newspapers occupy a vital position when it comes to imparting information to the public. While newspaper industry faces a decline worldwide, the Indian newspaper industry is still growing in terms of circulation, readership and sales (Diwanji, 2019). The country is still maintaining a remarkable upsurge in newspaper readership despite facing stiff competition from the digital media.

The present study is conducted taking into consideration the importance and scope of infographics in the Indian newspaper industry. With the main objective of exploring the diverse types of infographics adopted by the three highest readership English national dailies of India – *The Times of India*, *Hindustan Times* and *The Hindu*, the specific objectives framed for the study are:

- To find out the different types of infographics used by the top three highest readership English national dailies of India based on its subject theme.
- To compare the trends of presentation of infographics across the newspapers over time.
- To find out the most popular type of subject theme-based infographics in the top national dailies with high readership.

3. INFOGRAPHICS IN NEWSPAPER – A LITERATURE REVIEW:

The inculcation of Information Communication and Technology (ICT) has totally revolutionized the newspaper industry. The editorial newsroom has been experimenting structural changes in the designing aspects, more so with the success of the adoption of infographics in the newspapers. Infographics, also known as "information visualization (InfoVis) or data visualization" (Stasko, 2010, as cited in Siricharoen, 2013) has become a way of visualizing information through computer assisted graphic data. It is still a debated concept as to when the earliest forms of graphics were used in newspaper. However, historians reported early forms of graphic images found in some of the earliest newspapers of the world such as *The Daily Courant* of London in September, 1702, *The Times* of London in April, 1801 and *The Times* of London again in April, 1875 (Errea, 2017).

There is a gradual transformation in the newspaper design and layout with the emergence of colour newspapers in the mid-1970s and visual graphic tools such as tables, charts, maps, etc., in the early 1980s (Shepard, 1996). *USA Today* since its launch in 1982 started using regular infographics in the form of colour weather maps, tables and symbols to enhance its presentation (Lott, 1994; Tankard, 1989; Siricharoen, 2013). Following the success of *USA Today*, many prominent newspapers such as *The New York Times*, *The Guardian*, *The Times* and the *Miami Herald* successfully started adopting widespread infographics in their newspapers (Okafor, 2019). Gradually, newspaper editors have started realizing the importance of infographics in the newspapers because infographics make the news reports more attractive, can supplement text and help readers comprehend news stories easier (Utt & Pasternack, 2000).

Infographics have already paved its way to the newspaper industry. Kenney and Lacy (1987) observed that 27 per cent of the total space of newspaper front pages was covered by infographics. Apart from colours, maps and charts were the most prominently used infographic elements in newspapers (Siricharoen, 2013; Tankard, 1987; Utt & Pasternack, 1993). Primarily in newspapers, infographics are used to depict weather, maps and site plans for newsworthy events, and graphs for statistical data (Ghode, 2012). Regarding the distribution of infographics in newspapers, Smith and Hajash (1988) and Utt and Pasternack (1993) observed the usage of infographics prominently in newspaper sections such as business/economics, weather and inside news pages. Dur (2012) reported that infographics are prominently used

in newspapers to present visual data in fields such as weather forecast data, statistical data like election or survey results and data about financial or scientific topics. Infographics, more or less are effectively used for news involving numerical data presentations and analysis.

Infographics have become an indispensable element in newspapers as it aims to comprehend news report more clearly and effectively. Utt and Pasternack (1990) observed a dual role of infographics in newspapers - for creative design purpose and for conveying information through data. One of the most important significance of infographics in newspapers is that with limited space and by using minimal texts, infographics provide more detailed information with the graphic aids (Siricharoen, 2013). Apart from complimenting news stories in newspapers, infographics add storytelling value and meaning as well (Hang, 2016). Infographics are found to be very effective in imparting political news such as the ones related to elections (Coleman & Wasike, 2004), business news (Smiciklas, 2012) and brand building (Lankow, Crooks & Richie, 2012). In today’s era of stiff competition among various media outlets and information overload, newspaper infographics clearly serves as an effective source of survival for the newspaper industry in the market.

4. METHODOLOGY:

Keeping into consideration the objectives framed for the study, a content analysis methodology is adopted for the present study. The unit of analysis is a single news report appearing in each newspaper issue.

For knowing diverse trends of infographic presentation in newspapers over time, a longitudinal study of the newspaper contents is adopted. A three-year longitudinal study is conducted for the years 2017 (1st January to 31st December), 2018 (1st January to 31st December) and 2019 (1st January to 31st December). Content analysis of the newspapers from the three years is conducted in order to assess the trends of presentation of infographics over the most recent past three years.

Regarding the sampling technique for conducting the content analysis, a two-stage sampling technique is adopted. In the first stage of sampling, the selection of newspapers is done. In the second stage of sampling, selection of newspaper issues is done. A purposive sampling technique is used wherein the top three highest readership English national dailies of India are selected in order to analyze the diverse types of infographics adopted by the national dailies. According to the Indian Readership Survey, Q3, 2019 report, the top three English national dailies of India are *The Times of India*, *Hindustan Times* and *The Hindu* (“New Milestone,” 2020). The three newspapers with highest readership are selected in order to represent a broader view of the different forms of infographics used for different subject themes in their newspapers.

In the second stage of sampling, a monthly stratified random sampling technique is adopted in the study in order to select the newspaper issues for conducting the content analysis. For the selected time frames, that is, 2017, 2018 and 2019, 12 issues of newspapers (one from each month of the year) for each newspaper are randomly selected. Hence, the total number of newspaper sample issues selected for conducting the content analysis is 108 issues (36 issues for each of the three newspapers).

Regarding the content analysis conducted for the study, in the first stage, content analysis of the 108 newspaper issues is conducted for identifying the total number of infographics used by the newspapers in all the three years. For the second stage, a content analysis of the total number of infographics identified (through the first stage of content analysis) is conducted for the infographics based on its subject theme.

5. RESULTS AND DISCUSSION:

The findings of the study are presented and analysed accordingly taking into consideration the fulfilment of the research objectives framed for the study. For the first stage content analysis of the three newspapers sample, the findings are presented in table no. 1.

Table 1: Infographics used year wise.

Sl. No.	Newspaper	Infographics used			
		2017	2018	2019	Total
1.	The Times of India	132	181	336	649
2.	Hindustan Times	107	200	240	547

3.	The Hindu	92	103	190	385
	Total Infographics	331	484	766	1581

From the data presented in table 1, it is observed that *The Times of India* uses the maximum number of infographics, that is, 649, *Hindustan Times* comes second with 547 and *The Hindu* with the least number of infographics, that is, only 385 all throughout the three years. For all the three newspapers, as the year progresses, a trend in the increase in the usage of infographics is observed.

For the second stage, a content analysis of 1581 infographics (total number of infographics used by the three newspapers for the years 2017, 2018 and 2019) is conducted for the purpose of categorizing the infographics on the basis of its subject theme. It is also taken into consideration that the subject theme categories of infographics identified are mutually exhaustive. Based on the content analysis of the total 1581 infographics, the subject theme categories evolved are:

1. Business
2. Crime
3. Environment
4. Health
5. Politics
6. Science & Technology
7. Sports

A detailed analysis of the usage of the subject theme-based infographics across the three sample newspapers over the period of three years, that is, 2017, 2018 and 2019 is presented in table 2.

Table 2: Theme based infographics across newspapers over time.

Theme	The Times of India			Hindustan Times			The Hindu			Total Infographics
	2017	2018	2019	2017	2018	2019	2017	2018	2019	
Business	30	40	76	21	49	65	18	27	44	370
Crime	18	22	48	17	25	19	10	09	21	189
Environment	19	35	50	12	30	27	16	17	39	245
Health	20	28	52	16	35	40	14	12	26	243
Politics	12	15	25	10	17	18	08	10	13	128
Science & Technology	07	10	26	09	23	31	13	12	18	149
Sports	26	31	59	22	21	40	13	16	29	257
Total Infographics	132	181	336	107	200	240	92	103	190	1581

From the data presented in table 2, for all the three newspapers, that is, *The Times of India*, *Hindustan Times* and *The Hindu*, business theme-based infographics (23%) are the most frequently used infographics in the entire three years while politics theme-based infographics (8%) are the least frequently used. The second slot is occupied by sports infographics (16%) while the third slot by environment infographics (15%). On an average, all through the three years (2017, 2018 and 2019), a trend in the increase in the usage of subject theme-based infographics is observed.

A broader interpretation of the data presented in the findings of the study is done taking into consideration the development of wider scope of inferences for the study. It is observed from the findings that the top three highest readership English national dailies of India exhibit diverse trends in the usage of infographics in their newspapers. On

an average, *The Times of India* uses comparatively higher number of infographics over *Hindustan Times* and *The Hindu*. The findings of the study substantiate another previous finding by Ghode (2012) where *The Times of India* significantly uses higher number of infographics than *The Indian Express*, another English national daily with high readership. A newspaper delivers information on various subject themes. This is reflected through the study's finding where news stories about various subject theme are presented through infographics.

A holistic analysis on the trends of the usage of theme-based infographics reveal the fact that infographics are best suited for issues with more fact-based information such as business, sports, environment and health. These subjects primarily provide information related to hard facts, such as stock exchange value, market rates of valuable commodities, sporting game statistics, winning/losing records, player profile, environmental pollution levels, weather reports, meteorological statistics, health vitals, disease record, mortality rate, nutritional diet values, etc. In such case, infographics provide the easy depiction of the news information thereby grasping the reader's attention. With the help of diverse visual graphic design tools, such infographics depict the narrative style of the writer/designer as well. As human mind perceives visuals more effectively than verbal text, the illustrative visuals in the infographics such as bold typeface, colours, tables, charts, graphs, icons, symbols, maps and logos artistically imbibe an essence of the writer's/designer's storytelling instincts.

An increase in the usage of infographics over the years for all the three newspapers indicates an important inference indicating the significance and scope of infographics in the newspaper industry. This would substantiate Utt and Pasternack's (1990) observation depicting infographics's dual role purpose of exhibiting design and also for delivering information through data. With digital acceleration on one side and on the other hand, coping with information overload, the Indian newspapers effectively use the infographics to handle the two issues at hand. As Jenkins (2006) earlier stated that infographics explain complex information quickly and clearly, the featuring of more infographics in the national dailies over the years gives a clear picture of the growing importance of infographics in the Indian newspaper industry. On a recent note, many leading newspapers of the world are in fact striving to make long complicated stories easily comprehensible and remarkable with the help of effective visualization through infographics (Dur, 2012). If Indian national newspapers follow the world trend in this regard, it is quite a positive initiative.

Correlating with the findings of the study, an important observation can be derived based on the relationship between newspaper readership and usage of infographics. As evident from the study's result, in all the three years, there is a tendency in the increase in the usage of infographics in all the three newspapers. *The Times of India* which has the highest readership among the three newspaper uses the maximum infographics. Similarly, *Hindustan Times* with the second highest readership occupies the second position in terms of usage of infographics while *The Hindu* with the third highest readership occupies the third position. This may no doubt, lead to an interesting inference on the usage of infographics directly influencing the increase in the readership of newspapers. Hence, it is no surprising to find top newspapers adopting the infographics trend. The sole purpose, no doubt, is to attract readers – to increase the publication's readership.

6. CONCLUSION:

Newspapers are the heart of print media. The Indian newspaper industry is one of the few in the world which is expanding in spite of stiff competition from other media forms especially with the digital acceleration at a huge pace. In such a situation, the English national dailies of India infuse the policy of adopting infographics in their newspapers for making news stories more comprehensible and attractive. With a highly appealing and visual description of news information, infographics can effectively display a visual narration of the news story to its readers. As the saying goes 'A picture is worth a thousand words', infographics have the ability to effectively influence the readers with its appealing graphic illustrations.

The present study observed that the usage of infographics over the past three years has increased amongst the top three highest readership English national dailies of India, that is, *The Times of India*, *Hindustan Times* and *The Hindu*. Over the period of three years, *The Times of India* uses maximum number of infographics, followed by *Hindustan Times* and *The Hindu*. The national dailies also use infographics in their newspapers based on specific subject theme. Business theme infographics are the most frequently used infographics in all the newspapers while politics theme infographics are the least used infographics. With the inculcation of aesthetic appeal and easier comprehensibility of news information, infographics have cultivated a paradigm shift in journalism culture. It has indeed become one of the most important and emerging trends of news dissemination in the newspaper industry.

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