

# Impact of Online News Media on Consumption Habits of People

Siddhesh Thadeshwar, Prof. Amol Joglekar

**Abstract - The birth of Internet revolutionized a lot many things. It has changed the way people communicate and it has changed the way people look for information. It has had an impact on various industries. Cassettes & Audio CDs are now replaced by online streaming of music; Video CDs and DVDs still exist, but people prefer to watch movies on the go, at their convenience streaming whenever they want. Newspapers & magazines are losing the reader base to online news media – news websites, audio podcasts and videos. The Internet has changed the habits of people. Convenience and user-friendliness are the biggest contributing factors in this change. But has this changed the habits of news consumption of people? Has the majority moved to consuming news offline? Or does the age of the person make a difference? Habits influence offline news consumption behaviors. They are shaped by what was dominant in the news media landscape in which the person was born. If a person was born in the pre-Internet era when the newspapers were dominant, then chances are high that the person shall remain an offline news consumer even in the era of the Internet. The question of whether online news media will kill offline news media, will be solely dependent on how the habits of people change. The future of the news media industry – offline and online combined – can be molded if desirable news consumption habits can be developed.**

**Index Terms -** News Consumption, Habits, Internet, Online News, Journalism, Media

## I. INTRODUCTION

The Internet opened a lot of opportunities, created a lot of new channels for the distribution of news media. Initially there were a limited number of offline broadcast channels and local publications. The news media industry expected a revolution in the way news was collected, published, distributed and consumed, with the dawn of Internet.

There have been several discussions about the future of journalism – how online media will have an effect on offline media, will offline media will die because of the rise of online media. Much of this discussion has proven to be myth. Online media hasn't killed offline media completely. It seems they both have an enough audience to survive for many more years to come.

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Both of these mediums, online and offline have been competing for and against each other. There are a lot of news media companies that have traditionally been offline for most of their existence, but have also branched to online media, with the emergence of the Internet. Traditional news rooms supply most of the information on dominant news websites (examples: nytimes.com, cnn.com, timesofindia.com) [2][3]. With only limited news content on any given day, the only practical way for established news media companies to do so is to create “shovelware” [4] where the same information is “copy-and-pasted” across different mediums online [3].

It is easy to observe that people of a particular age group choose offline over online media, and people belonging to another age group will choose vice versa. This choice is driven by their habits as has been observed by Lee & Delli Carpini in their research [1].

The question is how has online news media made a difference in the news consumption habits of people. This paper tries to look in depth at what role does habits have to play in consumption of news online and offline.

Association rule mining is the most efficient data mining technique to search hidden or desired patterns which helps to get correlation relationships among various data attributes in large sets of database. A typical example of association rules mining is market basket analysis [10]. An association rule is implication relation in the form  $X \rightarrow Y$  between two sets of items X and Y. Association rules aid to find relationships among different items according to buying behaviour of a customer. These results are computed with the help of probability [11].

## II. LITERATURE REVIEW

Mohamed Haneefa K and Shyma Nellikka [5] surveyed the Indian online English newspapers to see what kind of an online presence they have, what common patterns of contents, coverage and design they have and how do they connect with the readers using the various channels available on the Internet (like Facebook, Twitter, etc).

Andreu Casero [6] proposed a research paper based on news consumption is undergoing great changes due to the advance of digitisation. In this context, ascertaining the changes in readers' consumption habits is essential for measuring the scope and effects of digital convergence and the outlook for the future. This paper aims to analyse this transformation in the specific case of young people's relationship with news reporting. This paper projected that young people's news consumption is oriented towards new

media, especially social networks, whereas newspaper readership among young people is in decline. As a consequence, newspapers are no longer the primary source of information in the digital context, which does not mean that the appetite for news among young people has diminished, quite the contrary, interest in information is strong and news consumption scores highly as a civic value. The conclusions of this research suggest that profound changes are emerging in news consumption patterns and the concept of news among young people.

A study by the World Association of Newspapers [7] reveals that youth view the internet as their first choice for news and information. The fact is online news is abundant and easily available and people go for online news rather than the traditional media [8]. However, research in 2011 [7] found that TV news consumption is higher than online media and that TV is also the most credible media for youth.

Saodah Wok, Ezhar Tamam, Jusang Bolong, Abdul [9] tried to explore the pattern of news media consumption and interpersonal news discussions among youth. The specific objectives of the study are (1) to determine the level of perceived news media credibility, (2) to find out the level of news media consumption, (3) to find out the extent of interpersonal news discussions, (4) to analyze the relationship between perceived media credibility and news media consumption with interpersonal news discussions, and (5) to differentiate the effect of selected demographic characteristics on news media consumption and interpersonal news discussions. The survey research design method was used in the study. Based on the findings of the study, the following conclusions are made. TV is perceived as the most credible mass media, followed by the newspapers and the Internet. This is because of current news on national and public affairs that are disseminated by both media are reliable. Internet credibility according to Malaysian youth perception is still low. There are youth who do watch TV, read newspapers, and surf the Internet. Those who are exposed to the media spent about half of an hour on TV and news per day while Internet per week. They also paid some attention to the media concerned. Their consumption varied and was high for TV, moderate for newspapers, and low for the Internet.

### III. RESEARCH METHODOLOGY

There are two main objectives of this paper. To understand the trend of Offline and Online news media and to understand why a particular medium is preferred, what factors make it user-friendly.

An online survey form was built to collect the data and conduct this research. The questions mentioned in Table no. 1 were asked.

#### A. Method

The data was collected from a survey conducted online and stored in an Excel file for further analysis. Association rules are useful for analyzing and predicting customer behavior. Association rules are used to identify strong rules according to measure of interestingness.

#### B. Apriori Algorithm

STEP 1: Scan the excel file to get the support of S each item {Male, Female, Text, Audio, Video, News Category}. Compare S with minimum support 0.1 and get a support of all items as L1.

STEP 2: Use  $L_1$  join  $L_1$  to generate a combinations of two items from L1. Use Apriori property to prune the unfrequented items from this set. The remaining will form L2.

STEP 3: Repeat the step 2 and form  $L_{k+1}$  set.

STEP 4: If  $L_{k+1}$  set is empty then goto step 5 else goto step 3.

STEP 5: Now we used the current set to generate Association Rules using confidence 0.5.

Table 1: Input Variables

Questions	Options
1. Gender	Male Female
2. Age Group	15 to 18 19 to 22 23 to 29 30 to 45 Above 45
3. Do you read news regularly	Yes No
4. What time of the day do you prefer to read the news?	Morning Afternoon Evening Night Any time of the day
5. How much time do you spend reading news in a day/	Less than 15 minutes At least half an hour Approximately 45 minutes Roughly an hour Two hours More than two hours
6. What medium do you prefer to read news?	Offline Online
7. Preferred medium for news consumption in the following categories	
a) Technology	Text (newspapers, news websites, news apps) Audio (podcasts, radio, etc) Video (TV, YouTube, etc)
b) Sports	
c) Entertainment	
d) Business	
e) Politics	
f) World News	
g) Local City News	
h) Finance & Share Market	
I) Automobile	
8. Would you be interested to try out a news application on you mobile?	Yes No
<b>Questions for Offline as preferred medium</b>	

Questions	Options
9. Select all the applicable sources that you read from: (Multiple Choice)	Newspapers Magazines Others
10. Rate the newspaper on Accuracy of news and information	Rating between 1 and 5, with 1 meaning Very Inaccurate and 5 meaning Highly Accurate.
11. Rate the newspaper on Completeness of information	Rating between 1 and 5, with 1 meaning Never and 5 meaning Everytime.
12. Rate the newspaper on Latest news coverage	Rating between 1 and 5, with 1 meaning Never and 5 meaning Everytime.
13. Do you use a News App?	Yes No

Questions for Online as preferred medium	
9. Select all the applicable sources that you read from: (Multiple Choice)	News websites (Eg. timesofindia.com, ndtv.com, firstpost.com) News Apps on Phone/Tablet (Eg. Official Apps, NewsHunt) Facebook Twitter Blogs Others
10. Rate the news app on Accuracy of news and information	Rating between 1 and 5, with 1 meaning Very Inaccurate and 5 meaning Highly Accurate.
11. Rate the news app on Completeness of information	Rating between 1 and 5, with 1 meaning Never and 5 meaning Everytime.
12. Rate the news app on Latest news coverage	Rating between 1 and 5, with 1 meaning Never and 5 meaning Everytime.
13. Do you use a News App?	Yes No

#### IV. RESULTS AND DISCUSSION

A general statistical research on the data gathered (N=69) revealed the following. Of all the data collected, 63.8% were Male and 36.2% were Female respondents. The age group divide was as follows:

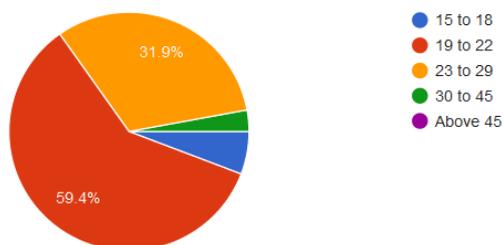


Figure 1: Age Group

59.4% of the respondents said that they read news regularly.

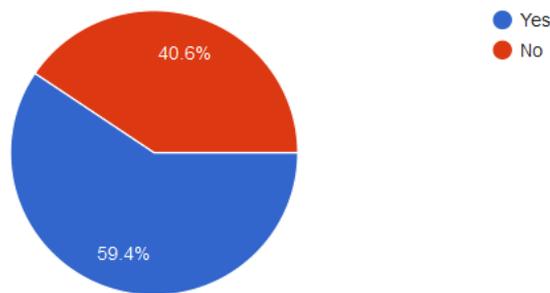


Figure 2: Reading News regularly

56.5% of the people who took part in the survey said that they read news for less than fifteen minutes in a day, whereas 33.3% said they read news for at least half an hour in a day.

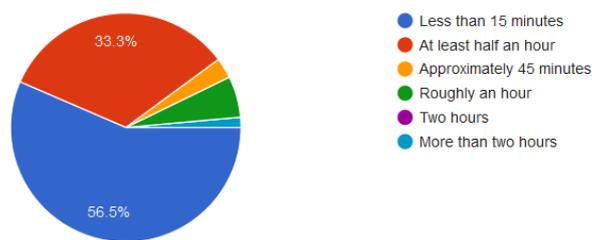


Figure 3: Time spent reading news in a day

A common question was asked to people, if they prefer to consume news online or offline. X% said that they prefer reading online.

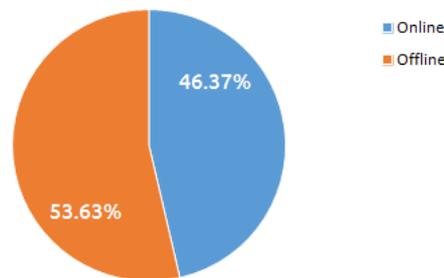


Figure 4: Online vs Offline

These two individual groups were asked separately. Of the people who chose offline, 64.9% said yes that they have used a news app before.

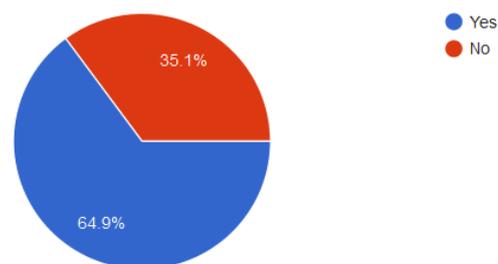


Figure 5: 64.9% of Offline people said they have used a news app on their mobiles/tablets.

Of the people who chose online, 62.5% said yes that they have used a news app or use a news app.

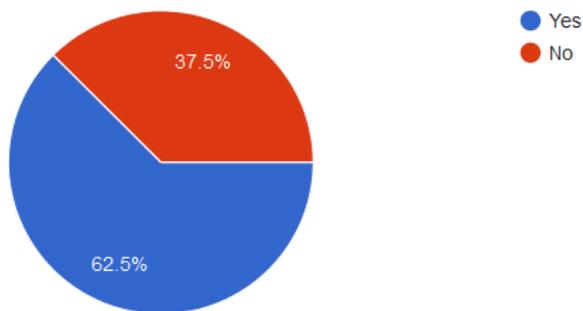


Figure 6: 62.5% of online people said they have used a news app on their mobiles/tablets.

Those that said that they have never used a news application on mobile were asked if they would want to give a try to a news application. 78.3% responded with a Yes.

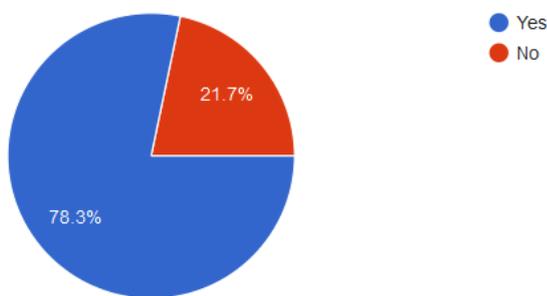
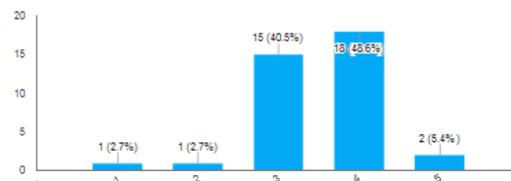


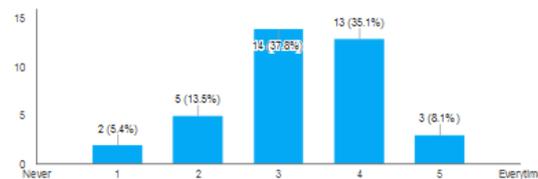
Figure 7: Trying a news app in the future if you haven't used one before

Those people who selected Offline News, a total of 94.5% said that they prefer newspapers because they trust the accuracy of the news and information, whereas from those people who selected Online News a total of 93.1% said that they prefer news apps because they trust the accuracy of the news and information. Those people who selected Offline News, a total of 81% said that they trust the completeness of information, whereas from those people who selected Online News a total of 90.7% said that they trust the completeness of information. Those people who selected Offline News, a total of 78.3% said that they get the complete news coverage from newspapers, whereas from those people who selected Online News a total of 93.8% said that they get the complete news coverage from news apps.

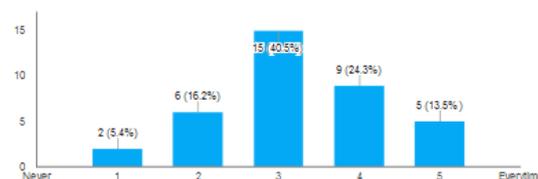
Rate the Newspaper on "Accuracy of news and information" (37 responses)



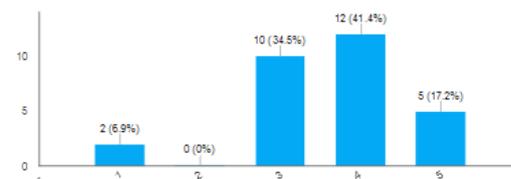
Rate the Newspaper on "Completeness of information" (37 responses)



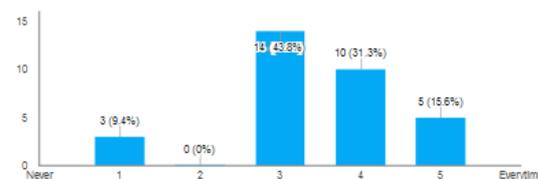
Rate the Newspaper on "Latest news coverage" (37 responses)



Rate the News App on "Accuracy of news and information" (29 responses)



Rate the News App on "Completeness of Information" (32 responses)



Rate the News App on "Latest News Coverage" (32 responses)

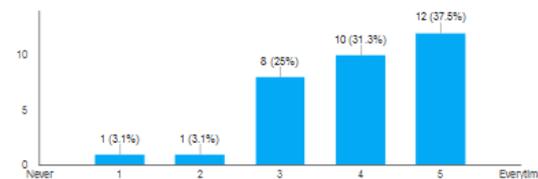


Figure 8: Offline vs Online.

## V. CONCLUSION

The Internet has definitely had an impact on the way people consume news. Their habits have changed gradually with the availability of news "on-the-go" because of the internet. We see currently people preferring to switch to online news, because they trust the online news media as much as the trust offline news media. A major positive factor for this change is the convenience online news media comes with. Also another

thing that can be seen from the results is that the attention span of people is reducing, the amount of time they spend in reading news is decreasing rapidly. Hence online news is preferred because one can also get the news in short online. Online media does impact on people and changes their habits of reading news.

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