

# International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: [www.ijarcsms.com](http://www.ijarcsms.com)

## Changing Paradigm for Watching TV Programs: Analyzing Viewers of Nagpur City

**Dr. Ruhi Bakhare**

Assistant Professor,

Dr. Ambedkar Institute of Management Studies and Research,  
Deekshabhoomi, Nagpur-10, India

**Abstract:** In this study the researcher conducted a survey in Nagpur city to understand how the changing digital landscape is affecting how, where and why we watch video programming. The researcher also tried to examine consumption preferences for video programming, including the devices most commonly used to view video at home and out of home.

The researcher conducted this survey in selected localities of West Nagpur city which includes 24 areas. Total 100 respondents were randomly selected and were interviewed. The findings and conclusions drawn were restricted to Nagpur city and may be generalized wherever the similar conditions are observed. This study based on primary data collected through questionnaire.

**Key words:** Technology, Media and changing digital landscape

### I. INTRODUCTION

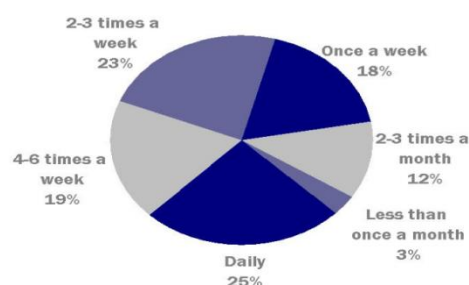
The massive Indian market is changing fast. Internet access is mainstreaming among professionals and the use of mobile is intensifying. The pace of change continues to be rapid with digital channels constantly growing in volume and strength. More people spend more time online in India every year, and the digital tools and sites they use play an ever-growing role in their lives. Smart marketers keep on top of the scale of change and ensure their marketing strategies and touchpoints mirror where the consumer is spending their time. This note gives a sense of the scale of change we've seen so far and implies the scale of what is coming.

For people with access, it's a major part of their daily or weekly schedule. The internet is a gateway to world knowledge as well as a massive platform for national media and documentation. Once people start using the internet their behaviour changes permanently and already in India over two thirds of people with access use it several times a week or more. Work audiences account for significant amounts of the online total population. Access from internet cafes remains extremely high, averaging 30% on working days.

(Source: [www.digitalstrategyconsulting.com](http://www.digitalstrategyconsulting.com))

#### Frequency of internet use: India

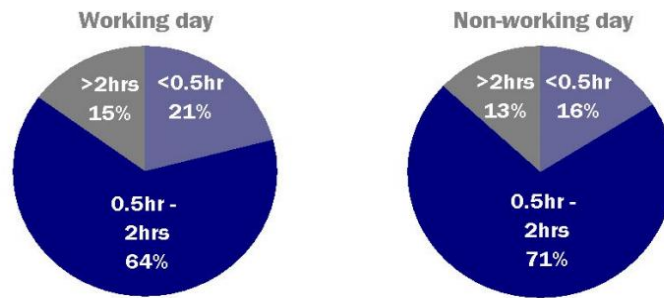
Percentage of active internet users who use the internet...



[www.DigitalStrategyConsulting.com](http://www.DigitalStrategyConsulting.com)

## Internet behaviour: India

### Breakdown of amount of time spent online



www.DigitalStrategyConsulting.com

We are breathing in a world of 24/7 connectivity. We access content on our own terms, and we like it that way. In the city during the survey conducted on digital attitudes and behaviors, 11 out of 100 respondents say they enjoy the freedom of being connected anywhere, anytime (refer Table:1.1) . While this flexibility can be a benefit to us, it represents a huge challenge for brands and content providers vying for our attention.

Technology is dramatically transforming the way in which we interact with the world, including how we live, work and communicates. From keeping tabs on friends via social media, to skipping lines at the store by shopping online, technology continues to reshape our everyday habits. In fact, 19 out of 100 respondents think face-to-face interactions are being replaced with electronic ones (refer Table:1.1). And the digital landscape is only getting more crowded, as a new wave of digital devices, such as wearable and connected car technologies, gain traction.

When it was talked about the screen size 20 out of 100 respondents said that they preferred bigger screen.(refer Table:1.1)

Table:1.1

| Digital attitudes and behaviors  | Respondents |
|--|-------------|
| Enjoy freedom of being connected anywhere, anytime                             | 11          |
| Face-to-face interactions are being replaced with electronics ones             | 19          |
| Bigger is better when it comes to screen size                                  | 20          |
| Prefer to watch video programming live, at its regularly scheduled time        | 16          |
| Prefer to watch video programming content more if it has a social media tie in | 12          |
| Mobile phones are the most commonly used cited go-to device on the go viewing  | 9           |
| Growing white-space digital opportunities                                      | 13          |
| Total  | 100         |

The media industry, too, is experiencing a revolution, thanks to the explosion of digital devices and access points, including TVs, connected TV’s, smartphones, PC’s, tablets and gaming consoles. The traditional boundaries between devices and formats have distorted, and content once confined to a single device can now be delivered across multiple platforms. And it’s not just devices and platforms competing for our time and attention—fragmentation is occurring within mediums, too. Like out of the total 100 respondents 12 respondents said that they prefer to watch video programming content more if it has a social media tie in and also out of 100 respondents 9 respondents said that they preferred mobile phones are the most commonly used cited go-to device on the go viewing.

**II. RESEARCH METHODOLOGY**

The researcher conducted a survey in Nagpur city to understand how the changing digital landscape is affecting how, where and why we watch video programming. The researcher also tried to examine consumption preferences for video programming, including the devices most commonly used to view video at home and out of home. The researcher conducted this survey in selected localities of West Nagpur city which includes following 24 areas:

1. Abhayankar Nagar
2. Ambazari
3. Bajaj Nagar
4. Bharat Nagar
5. Civil Lines
6. Congress nagar
7. Dhantoli
8. Dharampeth
9. Gandhi Nagar
10. Giripeth
11. Gokulpeth
12. Gopal Nagar
13. Hingna T-point
14. Laxmi Nagar
15. Phutala
16. Rahate Colony
17. Ram nagar
18. Ramdaspath
19. Ravi Nagar
20. Shankar Nagar
21. Shivaji Nagar
22. SitaBuldi
23. Subash Nagar
24. Wadi

Total 100 respondents were randomly selected and were interviewed. Information was collected through questionnaire (Annaxure-I).

Following null hypothesis were formed:

H01: Freedom of being connected anywhere, anytime is not associated with age.

H02: There is no association between age and habit of internet usage.

H03: There is no association between self-reported device preferences and activities in home or out of home.

H04: There is no association between age and usage of electronic device.

These hypotheses were tested by using “Chi Square Test” of association. This test is used to discover if there is an association between two categorical variables and “Multiple Regression” Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables.

#### Test of hypothesis:

H01: Freedom of being connected anywhere, anytime is not associated with age.

|       |  | digital attitudes and behaviors                    |  |   |   |  |   |   |        | Total  |
|-------|--|--|--|---|---|--|---|---|--------|--------|
|       |  | Enjoy freedom of being connected anywhere, anytime | Face-to-face interactions are being replaced with electronics ones | Bigger is better when it comes to screen size | Prefer to watch video programming live, at its regularly scheduled time | Prefer to watch video programming content more if it has a social media tie in | Mobile phones are the most commonly used cited go-to device on the go viewing | Growing white-space digital opportunities |        |        |
| Age   | 15-20 years                              | Count  | 11   | 8   | 0   | 0  | 0   | 0   | 0      | 19     |
|       |  | % within Age                                       | 57.9%  | 42.1%   | 0.0%  | 0.0%   | 0.0%  | 0.0%                                      | 0.0%   | 100.0% |
|       |  | % within digital attitudes and behaviors           | 100.0%   | 42.1%   | 0.0%  | 0.0%   | 0.0%  | 0.0%                                      | 0.0%   | 19.0%  |
|       |  | % of Total   | 11.0%  | 8.0%  | 0.0%  | 0.0%   | 0.0%  | 0.0%                                      | 0.0%   | 19.0%  |
|       | 21-34 years                              | Count  | 0  | 11  | 20  | 2  | 0   | 0   | 8      | 41     |
|       |  | % within Age                                       | 0.0%   | 26.8%   | 48.8%   | 4.9%   | 0.0%  | 0.0%                                      | 19.5%  | 100.0% |
|       |  | % within digital attitudes and behaviors           | 0.0%   | 57.9%   | 100.0%  | 12.5%  | 0.0%  | 0.0%                                      | 61.5%  | 41.0%  |
|       |  | % of Total   | 0.0%   | 11.0%   | 20.0%   | 2.0%   | 0.0%  | 0.0%                                      | 8.0%   | 41.0%  |
|       | 35-49 years                              | Count  | 0  | 0   | 0   | 14   | 1   | 0   | 0      | 15     |
|       |  | % within Age                                       | 0.0%   | 0.0%  | 0.0%  | 93.3%  | 6.7%  | 0.0%                                      | 0.0%   | 100.0% |
|       |  | % within digital attitudes and behaviors           | 0.0%   | 0.0%  | 0.0%  | 87.5%  | 8.3%  | 0.0%                                      | 0.0%   | 15.0%  |
|       |  | % of Total   | 0.0%   | 0.0%  | 0.0%  | 14.0%  | 1.0%  | 0.0%                                      | 0.0%   | 15.0%  |
|       | 50-64 years                              | Count  | 0  | 0   | 0   | 0  | 11  | 2   | 0      | 13     |
|       |  | % within Age                                       | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 84.6%   | 15.4%                                     | 0.0%   | 100.0% |
|       |  | % within digital attitudes and behaviors           | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 91.7%   | 22.2%                                     | 0.0%   | 13.0%  |
|       |  | % of Total   | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 11.0%   | 2.0%                                      | 0.0%   | 13.0%  |
|       | 65 years and above                       | Count  | 0  | 0   | 0   | 0  | 0   | 7   | 5      | 12     |
|       |  | % within Age                                       | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 0.0%  | 58.3%                                     | 41.7%  | 100.0% |
|       |  | % within digital attitudes and behaviors           | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 0.0%  | 77.8%                                     | 38.5%  | 12.0%  |
|       |  | % of Total   | 0.0%   | 0.0%  | 0.0%  | 0.0%   | 0.0%  | 7.0%                                      | 5.0%   | 12.0%  |
| Total | Count                                    | 11   | 19   | 20  | 16  | 12   | 9   | 13  | 100    |        |
|       | % within Age                             | 11.0%  | 19.0%  | 20.0%   | 16.0%   | 12.0%  | 9.0%  | 13.0%                                     | 100.0% |        |
|       | % within digital attitudes and behaviors | 100.0%   | 100.0%   | 100.0%  | 100.0%  | 100.0%   | 100.0%  | 100.0%                                    | 100.0% |        |
|       | % of Total                               | 11.0%  | 19.0%  | 20.0%   | 16.0%   | 12.0%  | 9.0%  | 13.0%                                     | 100.0% |        |

From the above table we can say that from the age group of 15-20 years and 21-34 years are the people who enjoy the freedom of being connected anywhere, anytime as compared to the people who are above 34 years and hence our null

hypothesis H01: Freedom of being connected anywhere, anytime is not associated with age is rejected and alternate hypothesis H11: Freedom of being connected anywhere, anytime is not associated with age is accepted from which it is clearly visible that face-to-face interactions are being replaced with electronic ones amongst the young crowd.

|  | Value              | df | Asymp. Sig. (2-sided) |
|--|--------------------|----|-----------------------|
| Pearson Chi-Square   | 0.587 <sup>a</sup> | 24 | .000                  |
| Likelihood Ratio   | 0.402              | 24 | .000                  |
| Linear-by-Linear Association   | 56.170             | 1  | .000                  |
| N of Valid Cases   | 100                |    |                       |
| a. 31 cells (88.6%) have expected count less than 5. The minimum expected count is 1.08. |                    |    |                       |

When reading this table we are interested in the results of the "**Pearson Chi-Square**" row. We can see here that  $\chi(1) = 0.587, p = .000$ . This tells us that there is significant association between Age and Face-to-face interactions are being replaced with electronics ones; that is, the age group of 15-20 years and 21 -34 years are the people who enjoy the freedom of being connected anywhere, anytime as compared to the people who are above 34 years.

|  |            | Value | Approx. Sig. |
|--|------------|-------|--------------|
| Nominal by Nominal   | Phi        | 1.665 | .000         |
|  | Cramer's V | .832  | .000         |
| N of Valid Cases   |            | 100   |              |
| a. Not assuming the null hypothesis.                                 |            |       |              |
| b. Using the asymptotic standard error assuming the null hypothesis. |            |       |              |

Phi and Cramer's V are both tests of the strength of association. We can see that the strength of association between the variables is strong.

H02: There is no association between age and habit of internet usage.

**Table: 1.5 Crosstab**

|       |  | Keep up with shows for joining conversation on social media          |        |            |           |        | Total  |        |
|-------|--|--|--------|------------|-----------|--------|--------|--------|
|       |  | All most always  | Often  | Frequently | Sometimes | Never  |        |        |
| Age   | 15-20 years  | Count  | 19     | 0          | 0         | 0      | 0      | 19     |
|       |  | % within Age   | 100.0% | 0.0%       | 0.0%      | 0.0%   | 0.0%   | 100.0% |
|       |  | % within keep up with shows for joining conversation on social media | 51.4%  | 0.0%       | 0.0%      | 0.0%   | 0.0%   | 19.0%  |
|       |  | % of Total   | 19.0%  | 0.0%       | 0.0%      | 0.0%   | 0.0%   | 19.0%  |
|       | 21-34 years  | Count  | 14     | 16         | 11        | 0      | 0      | 41     |
|       |  | % within Age   | 34.1%  | 39.0%      | 26.8%     | 0.0%   | 0.0%   | 100.0% |
|       |  | % within keep up with shows for joining conversation on social media | 37.8%  | 100.0%     | 73.3%     | 0.0%   | 0.0%   | 41.0%  |
|       |  | % of Total   | 14.0%  | 16.0%      | 11.0%     | 0.0%   | 0.0%   | 41.0%  |
|       | 35-49 years  | Count  | 0      | 0          | 4         | 11     | 0      | 15     |
|       |  | % within Age   | 0.0%   | 0.0%       | 26.7%     | 73.3%  | 0.0%   | 100.0% |
|       |  | % within keep up with shows for joining conversation on social media | 0.0%   | 0.0%       | 26.7%     | 73.3%  | 0.0%   | 15.0%  |
|       |  | % of Total   | 0.0%   | 0.0%       | 4.0%      | 11.0%  | 0.0%   | 15.0%  |
|       | 50-64 years  | Count  | 0      | 0          | 0         | 4      | 9      | 13     |
|       |  | % within Age   | 0.0%   | 0.0%       | 0.0%      | 30.8%  | 69.2%  | 100.0% |
|       |  | % within keep up with shows for joining conversation on social media | 0.0%   | 0.0%       | 0.0%      | 26.7%  | 52.9%  | 13.0%  |
|       |  | % of Total   | 0.0%   | 0.0%       | 0.0%      | 4.0%   | 9.0%   | 13.0%  |
|       | 65 years and above   | Count  | 4      | 0          | 0         | 0      | 8      | 12     |
|       |  | % within Age   | 33.3%  | 0.0%       | 0.0%      | 0.0%   | 66.7%  | 100.0% |
|       |  | % within keep up with shows for joining conversation on social media | 10.8%  | 0.0%       | 0.0%      | 0.0%   | 47.1%  | 12.0%  |
|       |  | % of Total   | 4.0%   | 0.0%       | 0.0%      | 0.0%   | 8.0%   | 12.0%  |
| Total | Count  | 37   | 16     | 15         | 15        | 17     | 100    |        |
|       | % within Age   | 37.0%  | 16.0%  | 15.0%      | 15.0%     | 17.0%  | 100.0% |        |
|       | % within keep up with shows for joining conversation on social media | 100.0%   | 100.0% | 100.0%     | 100.0%    | 100.0% | 100.0% |        |
|       | % of Total   | 37.0%  | 16.0%  | 15.0%      | 15.0%     | 17.0%  | 100.0% |        |

From the above table we can say that from the age group of 15-20 years and 21 -34 years are the people who enjoy being connected through internet i.e. they are the people who are having the habit of using internet on a regular basis as compared to the people who are above 34 years and hence our null hypothesis H02: There is no association between age and habit of internet usage is rejected and alternate hypothesis H12:: There is an association between age and habit of internet usage is accepted.

**Table: 1.6 Chi-Square Tests**

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 0.693 <sup>a</sup> | 16 | .000                  |
| Likelihood Ratio             | 0.526              | 16 | .000                  |
| Linear-by-Linear Association | 53.154             | 1  | .000                  |
| N of Valid Cases             | 100                |    |                       |

a. 18 cells (72.0%) have expected count less than 5. The minimum expected count is 1.80.

When reading this table we are interested in the results of the "Pearson Chi-Square" row. We can see here that  $\chi(1) = 0.693, p = .000$ . This tells us that there is significant association between age and habit of internet usage; that is, from the age group of 15-20 years and 21 -34 years are the people who enjoy being connected through internet i.e. they are the people who are having the habit of using internet on a regular basis as compared to the people who are above 34 years.

| Table; 1.7 Symmetric Measures  |            |       |              |
|--|------------|-------|--------------|
|  |            | Value | Approx. Sig. |
| Nominal by Nominal   | Phi        | .647  | .000         |
|  | Cramer's V | .640  | .000         |
| N of Valid Cases   |            | 100   |              |
| a. Not assuming the null hypothesis.                                 |            |       |              |
| b. Using the asymptotic standard error assuming the null hypothesis. |            |       |              |

Phi and Cramer's V are both tests of the strength of association. We can see that the strength of association between the variables is strong.

H03: There is no association between self-reported device preferences and activities in home or out of home.

**Self-reported device preference for watching videos \* device preferred to watch videos at home**

| Table: 1.8 Crosstab                                 |                 |  |          |              |        |       |
|---|-----------------|--|----------|--------------|--------|-------|
| Count   |                 |  |          |              |        |       |
|   |                 | Device preferred to watch videos at home |          |              |        | Total |
|   |                 | Television                               | Computer | Mobile phone | Tablet |       |
| Self-reported device preference for watching videos | News shows      | 7  | 10       | 0            | 0      | 17    |
|   | Comedy shows    | 10                                       | 4        | 0            | 0      | 14    |
|   | Sports events   | 0  | 12       | 4            | 0      | 16    |
|   | Cooking shows   | 0  | 0        | 8            | 5      | 13    |
|   | Reality shows   | 0  | 8        | 0            | 6      | 14    |
|   | Children's show | 14                                       | 2        | 0            | 0      | 16    |
|   | Daily soaps     | 3  | 7        | 0            | 0      | 10    |
| Total   |                 | 34                                       | 43       | 12           | 11     | 100   |

From the above table we can say that most preferred device to watch videos at home is computer and people prefer to watch news, sports and children's show.

| Table: 1.9 Chi-Square Tests  |                   |    |                       |
|--|-------------------|----|-----------------------|
|  | Value             | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square   | 0.56 <sup>a</sup> | 18 | .000                  |
| Likelihood Ratio   | .887              | 18 | .000                  |
| Linear-by-Linear Association   | .407              | 1  | .524                  |
| N of Valid Cases   | 100               |    |                       |
| a. 19 cells (67.9%) have expected count less than 5. The minimum expected count is 1.10. |                   |    |                       |

When reading this table we are interested in the results of the "Pearson Chi-Square" row. We can see here that  $\chi(1) = 0.56, p = .000$ . This tells us that there is significant association between self-reported device preferences and while doing activities at home. From this we can say that our null hypothesis H03: There is no association between self-reported device

preferences and activities in home or out of home is rejected and alternate hypothesis H13: There is an association between self-reported device preferences and activities in home or out of home is accepted.

|  |            | Value | Approx. Sig. |
|--|------------|-------|--------------|
| Nominal by Nominal   | Phi        | .871  | .000         |
|  | Cramer's V | .628  | .000         |
| N of Valid Cases   |            | 100   |              |
| a. Not assuming the null hypothesis.                                 |            |       |              |
| b. Using the asymptotic standard error assuming the null hypothesis. |            |       |              |

Phi and Cramer's V are both tests of the strength of association. We can see that the strength of association between the variables is strong.

**Self-reported device preference for watching videos \* device preferred to watch videos at out of home**

|   |                 | Count   |          |              |        |    | Total |
|---|-----------------|---|----------|--------------|--------|----|-------|
|   |                 | Device preferred to watch videos at out of home |          |              |        |    |       |
|   |                 | Television                                      | Computer | Mobile phone | Tablet | 5  |       |
| Self-reported device preference for watching videos | News shows      | 11  | 6        | 0            | 0      | 0  | 17    |
|   | Comedy shows    | 0   | 5        | 9            | 0      | 0  | 14    |
|   | Sports events   | 0   | 0        | 3            | 13     | 0  | 16    |
|   | Cooking shows   | 0   | 0        | 0            | 0      | 13 | 13    |
|   | Reality shows   | 11  | 0        | 0            | 0      | 3  | 14    |
|   | Children's show | 0   | 11       | 5            | 0      | 0  | 16    |
|   | Daily soaps     | 0   | 0        | 7            | 3      | 0  | 10    |
| Total   |                 | 22  | 22       | 24           | 16     | 16 | 100   |

From the above table we can say that most preferred device to watch videos at out of home is computer and people prefer to watch news, sports and children's show.

|   | Value             | df | Asymp. Sig. (2-sided) |
|---|-------------------|----|-----------------------|
| Pearson Chi-Square  | .743 <sup>a</sup> | 24 | .000                  |
| Likelihood Ratio  | .624              | 24 | .000                  |
| Linear-by-Linear Association  | 3.213             | 1  | .073                  |
| N of Valid Cases  | 100               |    |                       |
| a. 35 cells (100.0%) have expected count less than 5. The minimum expected count is 1.60. |                   |    |                       |

When reading this table we are interested in the results of the "Pearson Chi-Square" row. We can see here that  $\chi(1) = 0.74, p = .000$ . This tells us that there is significant association between self-reported device preferences and activities while doing activities out of home.



| Table: 1.13 Symmetric Measures                                       |            |       |              |
|--|------------|-------|--------------|
|  |            | Value | Approx. Sig. |
| Nominal by Nominal   | Phi        | .530  | .000         |
|  | Cramer's V | .765  | .000         |
| N of Valid Cases   |            | 100   |              |
| a. Not assuming the null hypothesis.                                 |            |       |              |
| b. Using the asymptotic standard error assuming the null hypothesis. |            |       |              |

Phi and Cramer's V are both tests of the strength of association. We can see that the strength of association between the variables is strong.

H04: There is no association between age and usage of electronic device.

| Table: 1.14 Age * preferredpurposetouseelectronicdevice Crosstabulation |                    |                                       |                  |               |            |                  |           |             |                          |                                 |                                |       |
|---|--------------------|---------------------------------------|------------------|---------------|------------|------------------|-----------|-------------|--------------------------|---------------------------------|--------------------------------|-------|
| Count   |                    | Preferredpurposetouseelectronicdevice |                  |               |            |                  |           |             |                          |                                 |                                | Total |
|   |                    | Share medical information             | Get an education | Buy groceries | Find a job | Conduct research | Pay bills | Find a date | Conduct banking business | Watch video programming content | Take and share pictures/videos |       |
| Age   | 15-20 years        | 10                                    | 9                | 0             | 0          | 0                | 0         | 0           | 0                        | 0                               | 0                              | 19    |
|   | 21-34 years        | 0                                     | 2                | 7             | 9          | 7                | 0         | 0           | 2                        | 6                               | 8                              | 41    |
|   | 35-49 years        | 0                                     | 0                | 0             | 0          | 5                | 10        | 0           | 0                        | 0                               | 0                              | 15    |
|   | 50-64 years        | 0                                     | 0                | 0             | 0          | 0                | 6         | 7           | 0                        | 0                               | 0                              | 13    |
|   | 65 years and above | 0                                     | 0                | 0             | 0          | 0                | 0         | 4           | 8                        | 0                               | 0                              | 12    |
| Total   |                    | 10                                    | 11               | 7             | 9          | 12               | 16        | 11          | 10                       | 6                               | 8                              | 100   |

From the above table we can say that according to changing age the preference for using electronic devices also changes.

| Table: 1.15 Chi-Square Tests  |                   |    |                       |
|---|-------------------|----|-----------------------|
|   | Value             | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square  | .964 <sup>a</sup> | 36 | .000                  |
| Likelihood Ratio  | .734              | 36 | .000                  |
| Linear-by-Linear Association  | 31.256            | 1  | .000                  |
| N of Valid Cases  | 100               |    |                       |
| a. 49 cells (98.0%) have expected count less than 5. The minimum expected count is .72. |                   |    |                       |

When reading this table we are interested in the results of the "Pearson Chi-Square" row. We can see here that  $\chi(1) = 0.96, p = .000$ . This tells us that there is significant association between age and usage of electronic device. Hence we can say that our null hypothesis H04: There is no association between age and usage of electronic device is rejected and alternate hypothesis H14: There is an association between age and usage of electronic device is accepted.

|  |            | Value | Approx. Sig. |
|--|------------|-------|--------------|
| Nominal by Nominal   | Phi        | .578  | .000         |
|  | Cramer's V | .789  | .000         |
| N of Valid Cases   |            | 100   |              |
| a. Not assuming the null hypothesis.                                 |            |       |              |
| b. Using the asymptotic standard error assuming the null hypothesis. |            |       |              |

Phi and Cramer's V are both tests of the strength of association. We can see that the strength of association between the variables is strong.

### III. CONCLUSION

#### *Reasons behind the success of SECOND-SCREEN option;*

- » **Be Social:** The study shows that social media can increase program awareness, make the experience more enjoyable for audiences and keep viewers involved. The desire to be part of the collective conversation can be a powerful motivator to stay connected through internet. Second-screen strategies should include an interactive component that allows users to interact and at the same time watching the desired channels/programs simultaneously.
- » **Be (Inter)active:** Keep content fresh to maximize time spent with the content and drive repeat visits on site. Also, include interactive experiences to make users feel involved and deepen their connectivity with the program.
- » **Be Available:** Innovators cannot focus on a single screen. Rather, they must ensure content is accessible wherever users are and that the user experience is enjoyable across all devices.
- » While computer remains the primary device for video consumption in the home as well as out of the home, mobile phones are the most commonly cited go-to device for on-the-go viewing. But the full story is actually more complex.
- » Device viewing is largely situational; it depends on where we are, whom we're with and what we're doing. Even at home, the traditional computer may not automatically be the go-to device. For example, among respondents who watch video programming when they're home alone, the largest percentage say they watch video programming on the computers, but tablet/mobile is also close second.
- » Apart from this from the hypothesis the following conclusions can also be drawn:
  - Freedom of being connected anywhere, anytime is not associated with age is accepted from which it is clearly visible that face-to-face interactions are being replaced with electronic ones amongst the young crowd.
  - There is association between age and habit of internet usage.
  - There is an association between self-reported device preferences and activities in home or out of home.
  - There is an association between age and usage of electronic device.

### References

1. R. Agrawal, J. Kiernan, R. Srikant, and Y. Xu, "Order preserving encryption for numeric data," in Proc. ACM SIGMOD Int. Conf. Manage. Data, 2004
2. A. Boldyreva, N. Chenette, Y. Lee, and A. O'Neill, "Order-preserving symmetric encryption," in Proc. 31st Annu. Int. Conf. dv.Cryptology, 2009
3. A. Boldyreva, N. Chenette, and A. O'Neill, "Order-preserving encryption revisited: Improved security analysis and alternative solutions," in Proc. 31st Annu. Conf. Adv. Cryptology, 2011.
4. B. Hore, S. Mehrotra, and G. Tsudik, "A privacy-preserving index for range queries," in Proc. 30th Int. Conf. Very Large Data Bases, 2004
5. L. Xiao and I. Yen, "A note for the ideal order-preserving encryption object and generalized order-preserving encryption," IACR ePrint Archive, pp. 535–552, 2012.

6. Business Research Methodology, by JK Sachdeva, Himalaya Publishing Pvt.Ltd.
7. Business Research Methods, by Satyaprasad, Sachdeva, Himalaya Publishing Pvt.Ltd.
8. Research Methodology for Researchers in Commerce and Management, by Jayalaxmi, Himalaya Publishing Pvt.Ltd.
9. Kothari (2008), Business research methods, Vikas publication
10. Zikmund (2005), Research methods ,PHI
11. R Nandagopal, K Arjun Rajan, N Vivek, Research Methods in Business, 1st Ed, Excel Books, 2007
12. Naval Bajpai, Business Research Methods, st Ed., Pearson publications, 2011
13. "7-Eleven's new web-enabled kiosks," *NewsBytes News Network*, 7 June 2001, p.5.
14. Anderson, E. T., Simester, D. I., 1998, "The role of sales signs," *Marketing Science*, No.2, 1998, p.139-155.
15. Anderson, E. W., Fornell, Rust, R. T., 1997, "Customer satisfaction, productivity and profitability," *Marketing Science*, No.2, p.129-145.
16. "Annual expenditures on a child by husband-wife families in the U.S. 2000," *World Almanac & Book of Facts*, 2002, p.69.
17. Aaker, D.A., 1995, *Building strong brands*, New York, U.S.A.: Free Press.
18. Aaker, D.A., 1997, "Should you take your brand to where the action is?" *Harvard Business Review*, 1 September 1997, p.135-143.
19. Babin, B., Darden, W.R., 1996, "Good and bad shopping vibes," *Journal of Business Research*, March 1996, p.210-260.
20. Bagozzi, R.P., Gopinath, M., Nyer, P.U., 1999, "The role of emotion in marketing," *Journal of the Academy of Marketing Science*, Spring 1999, p.184-207.
21. Bainbridge, R.E., 2000, "Analyzing the market for convenience stores: The changing conveniences to reindustry," *Appraisal Journal*, October 2000, Vol.68, Issue 4, p.427.
22. Baker, J., Cameron, M., 1996, "The effect of the service environment on affect and consumer perception of waiting time: An integrative view and research propositions," *Journal of the Academy of Marketing Science*, Fall 1996, p.338-349.

### Questionnaire

**1. Name**

**2. Age**

- 15-20 years
- 21-34 years
- 35-49 years
- 50- 64 years
- 65+ years

**3. Gender:**

- Male
- Female

**4. What type of digital attitudes and behaviors you show generally:**

- Enjoy freedom of being connected anywhere, anytime
- Face-to-face interactions are being replaced with electronics ones
- Bigger is better when it comes to screen size
- Prefer to watch video programming live, at its regularly scheduled time
- Prefer to watch video programming content more if it has a social media tie in
- Mobile phones are the most commonly used cited go-to device on the go viewing
- Growing white-space digital opportunities include industries such as health care, education, grocery retailing and finance

**5. Do you browse the internet while watching video program?**

- All most always
- Often
- Frequently
- Sometimes
- Never

**6. Do you always keep up with shows so that joining the conversation on social media is possible:**

- All most always
- Often
- Frequently
- Sometimes

Never

**7. Do you watch live video programming content more if it has a social media tie up?**

- All most always
- Often
- Frequently
- Sometimes
- Never

**8. What are your self-reported device preferences for watching videos?**

- News shows
- Comedy shows
- Sports events
- Cooking shows
- Reality shows
- Children’s show
- Daily soaps

**9. When do you use self-reported devices for watching videos?**

- Spending time with family
- While eating
- Sitting alone in my home
- Passing the time
- While cooking
- While exercising
- Spending time with friends
- Others

**10. Please tick the most preferred option which tells about the use of device to watch video programming in selected location.**

|              | Location |             |
|--------------|----------|-------------|
|              | In-home  | Out-of-home |
| Devices      |          |             |
| Television   |          |             |
| Computer     |          |             |
| Mobile phone |          |             |
| Tablet       |          |             |

**11. Out of the following options for which purpose the electronic device is preferred to use by you:**

- Share medical information
- Get an education
- Buy groceries
- Find a job
- Conduct research
- Pay bills
- Find a date
- Conduct banking business
- Watch video programming content
- Take and share pictures/videos