

PROJECT WORK

(Submitted for the Degree of BSc. General in the University of Calcutta.)

Topic of the project

DIGITAL LITERACY

Submitted by

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Month and Year of Submission

23rd June 2023

ACKNOWLEDGEMENT

I feel great pleasure in expressing my gratitude to my statistics Professor **MR. ANAMITRA MANDAL** for their precious suggestions and guidance for the completion of this project titled “DIGITAL LIREACY”. I am really very thankful to them.

I would like extend my gratitude to the Principal **MR. MANTURAM SAMANTA**.

I would also like to express my gratitude to my Elder Brother & all those who helped me to complete this project.

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DATE: 23rd June 2023

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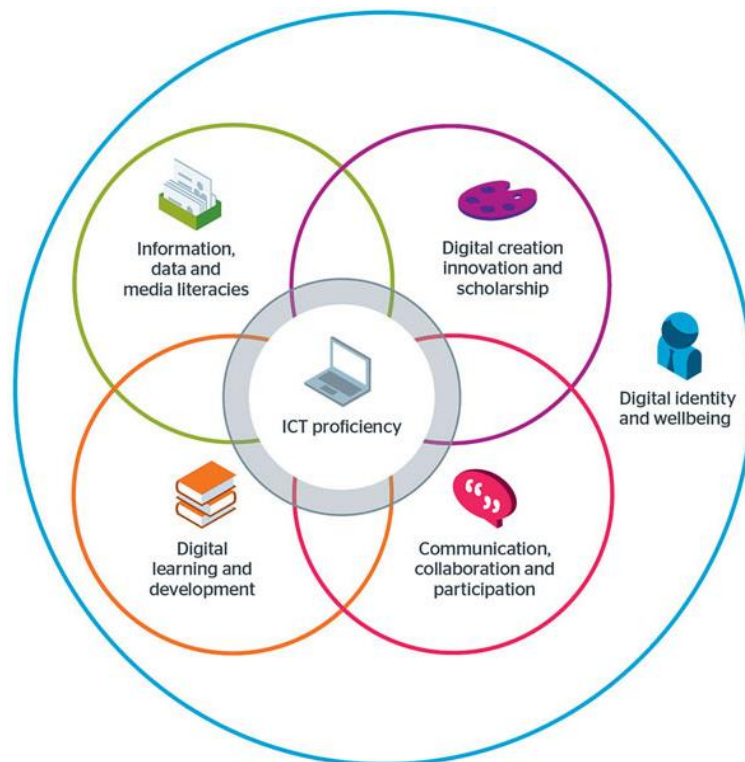
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01.INTRODUCTION

Digital Literacy is the process of teaching and learning about technology and the use of technology.

Digital literacy refers to the skills you need to live, learn and work in a society where access to communication and information is increasingly being accessed through digital technologies such as internet platforms, social media and mobile devices.



DATA COLLECTION

Statistical data are classified as primary and secondary, depending on the source of the data:

- (i) **Primary data:** The statistical data which are gathered directly from the field of investigation for the desired purpose are called primary data. It is obvious that these data are original in nature. A doctor, interested in the weights of his patients, records their weights using a machine. These data are primary to the doctor. This type of data can be used with greater confidence, because the enquirer himself decides upon coverage of the data, the definitions used, the method of collection of the data, etc. and, such, he has a measure of control on the reliability of the data. But collection of such data requires more money, man-power and time.

- (ii) **Secondary data:** The statistical data which have already been collected by some agency and are compiled from that source by the enquirer for his use are called secondary data. In other words, data collected by one when used by another, or collected for one purpose when used for a different one is termed as secondary data. It is evident that secondary data are not original. The census data collected from census reports by a research scholar for his study are secondary data to the scholar. Collection of secondary data is cheaper as it involves less manpower and time. But secondary data usually contain errors due to transcription, rounding, etc. and, hence, are hardly reliable. In making use of such data, the enquirer has to be particularly careful about the coverage of the data, the definitions on which they are based, method of collection of data and their degree of reliability. From the above discussion, it is clear that the same data which are primary for one may be secondary for someone else.

Collection Of Data:

The collection of data is the primary task at the outset of any statistical activity. In this context, most often we come across the terms schedule, questionnaire, etc. Firstly, these commonly used terms are explained here.

- A) **Questionnaire:** The term questionnaire means a list of certain systematically arranged questions pertaining to the subject of enquiry. It is necessary that a questionnaire is designed with due care so that necessary data may be easily collected. A draft questionnaire is

usually formed in the first stage of a survey and tried over a group of people to detect any kind of fault in preparing the questions. The questionnaire is then modified, if necessary, with the help of trial data.

A good questionnaire must possess the following important characteristics:

- (i) Questions should be relevant to the subject and put in simple language.
- (ii) The number of questions must be limited; otherwise, the respondents may be reluctant to fill the questionnaire.
- (iii) Questions should not be dubious in meaning.
- (iv) Multiple choice type questions should mostly be included to facilitate the informants in answering the queries.
- (v) Questions which may hurt the sentiment or ego of the respondents should be avoided.
- (vi) A few questions that enable one to cross examine the consistency of replies to some particular items (like date of birth and age in years) should be included.

B) Schedule: In the schedule one finds a list of items on which information will be collected; exact forms of the questions to be put to the informants are not given and the task questioning and eliciting the desired information is left to the investigator.

C) Pilot survey: For preparing the questionnaire or the schedule, occasionally, it becomes necessary to collect some broad information about the field of enquiry. To meet the purpose, a small-scale survey is conducted prior to the main survey, and this is called a We pilot survey.

We now discuss the different methods adopted for the collection of primary data.

- (1) **Interview method:** In this method, the investigators gather the desired data directly from the field of enquiry. Each investigator, carrying with him some questionnaires/schedules, meets the informants of the area which is allotted to him and tactfully collects the relevant information from them by way of Interrogation. The investigator has the responsibility to convey the purpose of the

enquiry to the respondents and also to record their answers to the different questions.

Advantages:

- (a) It can be used even if the informants are illiterate.
- (b) In this method, trained investigators find the scope of cross-examining the respondents and, as its effect, it is possible to gather accurate and reliable data.
- (c) The chance of non-response is fairly diminished due to the fact that the investigators personally collect the information.

Disadvantages:

- (a) The informants may feel hesitant in furnishing correct answers to certain typical questions (related to income, age, education, etc) before the interviewers.
- (b) It is a time-consuming procedure.
- (c) Some responses may be affected by interviewer-bias.
- (d) This method is highly expensive.

(2) **Mail questionnaire method:** The questionnaire is the main tool used in this approach. A questionnaire, along with a letter informing the objective of the investigation and return postage is sent to each of the informants by post. The individuals are requested to mail the appropriately completed questionnaires within a stipulated period. Specific instructions (if any) are also sent to the informants during this enquiry. In this procedure, the respondents are generally assured that their information would remain secret.

Advantages:

- (a) It is not a costly method.
- (b) It does not require long period for the desired purpose
- (c) The available information is free from interviewer-bias.

In this technique, informants freely furnish genuine answers, especially to confidential questions

Disadvantages

- (a) There is large amount of non-response due to unwillingness or for some kind of fear of a section of informants.

- (b) This method is applicable only for people who have enough education to comprehend the significance of the enquiry.
- (c) It is possible to get back some questionnaires that are not fully filled in.

(3) Direct personal observation method: In this method, the enumerators visit the field of investigation and gather the necessary information by observation (i.e., by seeing, counting or measuring). Here the enumerators are not to depend on others for the information and, as such, the data are likely to be much reliable. Of course, the authenticity of data mainly depends on the honesty, sincerity and capability of keen observation of the enumerators.

Advantages:

- (a) It is possible to collect genuine information.
- (b) The scope of bias due to respondents is completely eliminated.

Disadvantages:

- (a) It is an expensive method.
- (b) The enumerators must be efficient and loyal to their task, otherwise this method may fail to yield correct information.
- (c) This procedure is not appropriate for a large area.

(4) Indirect oral investigation method: The requisite data are collected from some indirect source. Persons possessing correct and elaborate knowledge about the problem at hand are selected and they are interrogated for gathering the desired data. This method is mostly used by the commissions of enquiry and committees appointed by government for collecting primary data. It should be mentioned that the accuracy of data mainly depends on the impartial attitude of the source of information and also on the honesty of the investigators.

Remarks:

Apart from the pre-explained methods, in some situations, locally appointed agents and correspondents collect the necessary information and transmit the same to the appropriate agency. This method is usually applied in those cases where the information is required regularly. In particular, media sectors follow this technique

HOW I COLLECT THE DATA

I collected the data by three methods

1. Questionnaire (Google forms)
2. Interview method
3. Direct personal observation method

Firstly, I Create a Google form with several questions related to digital literacy and send the link of the form to all my friends, collegemate, family members. I requested them to participate in the survey.

I also Interviewed some people, mostly elder ones and recorded their responses.

I also added the responses on behalf of some people whom do I know by their behaviour and knowledge.

I got more approx. 200 responses on Google form and then I analysis the data.

DATA CORRECTION

Scrutiny of data:

Thanks to Google Form to providing simple and efficient way to collect data. Most of the questions were multiple choice and again thanks to Google Form that it provides data validation on each entry you make, so there was no scope of entering any arbitrary value. But there was scope of selecting contradicting response to the questions.

So, I reviewed each row of data and found that some participants' entries were erroneous and contradicting. For example, some participant has selected that "THEY DON'T HAVE SMARTPHONE" but then also selected that "THEY USE DAILY 2GB DATA". I excluded such misleading rows from my data.

CHANGES IN DATA

I reviewed each row of data and found that some participants' entries were erroneous and contradicting. For example, some participant has selected that "THEY DON'T HAVE SMARTPHONE" but then also selected that "THEY USE DAILY 2GB DATA". I excluded such misleading rows from my data.

02.ANALYSIS

Data analysis is the process of inspecting, cleansing, transforming, and modelling data with the goal of discovering useful information, informing conclusions, and supporting decision-making.

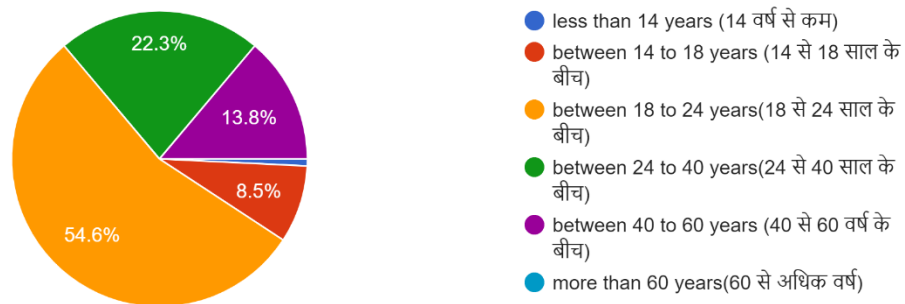
Analysis on participation:

Around 200 individuals participated in the survey. Below are some analyses on participation of individuals.

1.

What's your age group? आपका आयु वर्ग क्या है?

130 responses

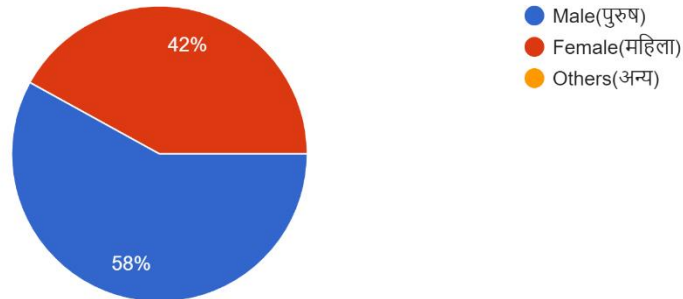


People of all age group participated in the survey but most of the participant were between 18 to 24 years.

2.

What's your gender? आपका लिंग क्या है?

131 responses

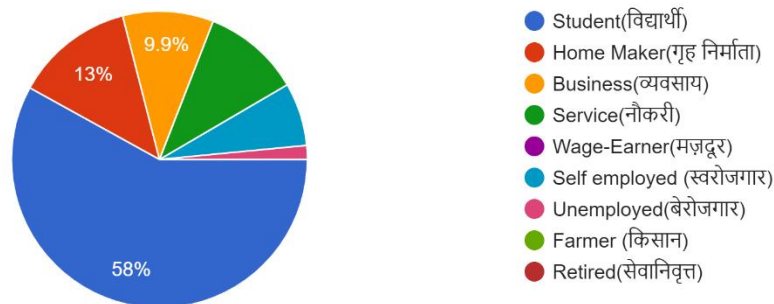


There is no much difference between male and female participant.

3.

What's your occupation Type ? आपका व्यवसाय प्रकार क्या है?

131 responses

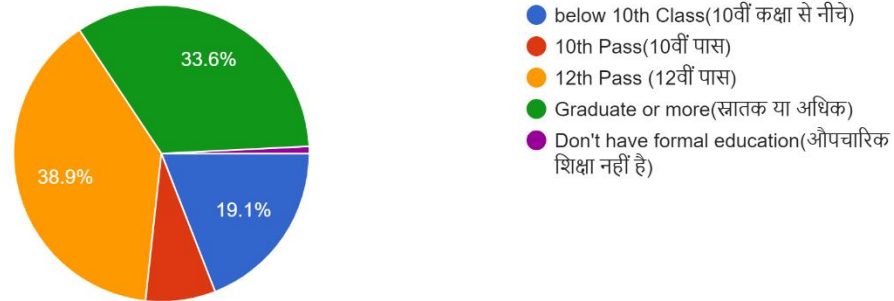


People from several occupation participated in the survey; students tally was highest.

4.

What's your Education Qualification? आपकी शैक्षणिक योग्यता क्या है?

131 responses

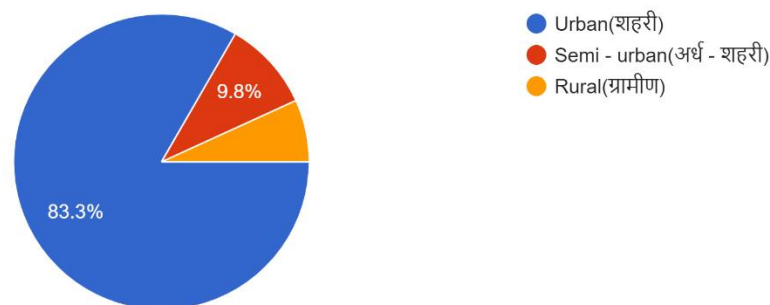


As most of the participant were in 18 to 24 years age group, their educational qualification was mostly Higher Secondary and Graduation. This is also reflecting from above chart.

5.

In Which locality do you live ? आप किस क्षेत्र में रहते हैं?

132 responses



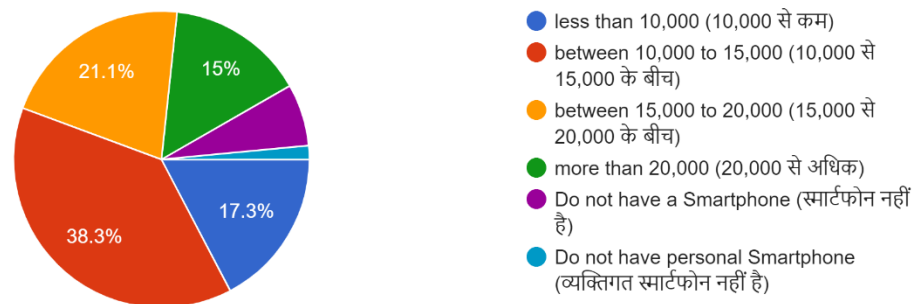
Response from urban area is maximum as I conducted this survey in our locality which is urban and college students, friends most of them belongs to urban locality.

Analysis on availability of digital assets:

1.

What is the price range of your smartphone? आपके स्मार्टफोन की प्राइस रेंज क्या है?

133 responses

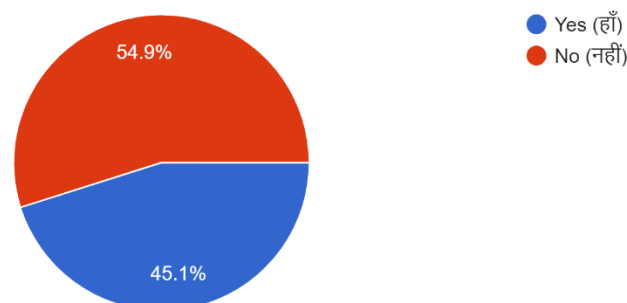


In the above chart, we can see that the most of the people participated have smartphone above 10K INR. The smartphones above 10k are sufficient for handle most of the day-to-day digital task like online study, online payment, availing e-services, online news and info etc. Here we also got around 17% people having **NO** smartphone. Overall, we can conclude that maximum people in our society are having smartphone sufficient for handling day-to-day online activities but still there is good number who don't have a smartphone.

2.

Do you have a computer(Desktop or Laptop) in your home ? क्या आपके घर में कंप्यूटर (डेस्कटॉप या लैपटॉप) है?

133 responses

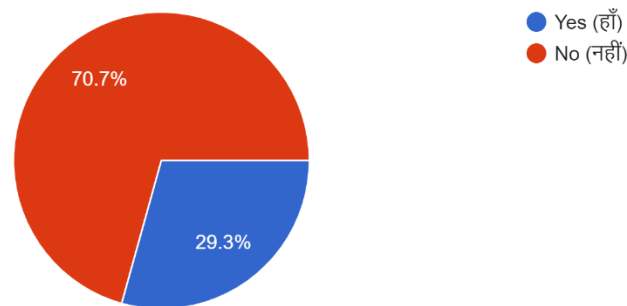


Around half of the participated in the survey have their personal computer. Even though most of the day-to-day e-services and digital products are also available on mobile phones but still there are quite good numbers of e-services

and digital products are there which are either only available to PCs or run efficiently on PCs.

3.

Do you have broadband connection in your home? क्या आपके घर में ब्रॉडबैंड कनेक्शन है?
133 responses

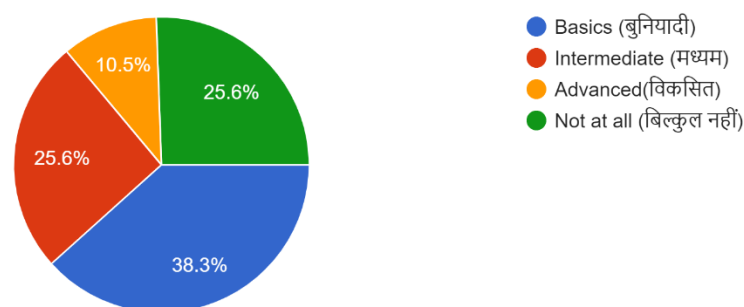


Most of the people don't have broadband connection. Generally, people use mobile data to access internet.

Analyses on Digital Knowledge:

1.

Do you have knowledge on computer? क्या आपको कंप्यूटर का ज्ञान है?
133 responses



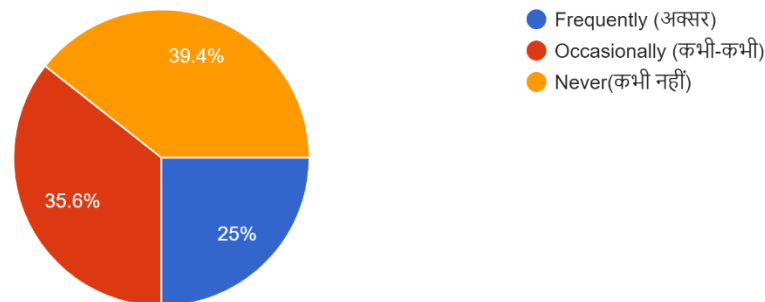
Most of the people have either basic or intermediate knowledge on computer. Knowledge on computer will be helpful to accessing various e-services and digital products. Overall, we conclude that Most of the people in our society have basic to intermediate knowledge on computer and there is a large proportion of people having no knowledge. Govt can opt different policies to increase computer knowledge among people; for instance, mandate the computer education at

lower level of classes and Govt is doing so in the New Education policy. We can aware people about benefit of computer education, so that even elder people attract towards learning computer.

2.

Do you use online government services like UIDAI, AEPS, IRCTC Etc.? क्या आप UIDAI, IRCTC आदि जैसी ऑनलाइन सरकारी सेवाओं का उपयोग करते हैं?

132 responses



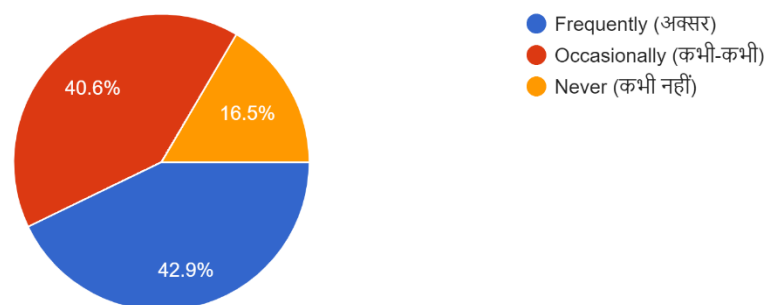
From this survey, it is evident that there is large portion of people who either occasionally uses or not uses Govt e-services like UIDAI, AEPS, IRCTC etc.

So here Govt need to work in terms of making their e-services easy, reliable, and accessible and also make people aware about the benefits of using them.

3.

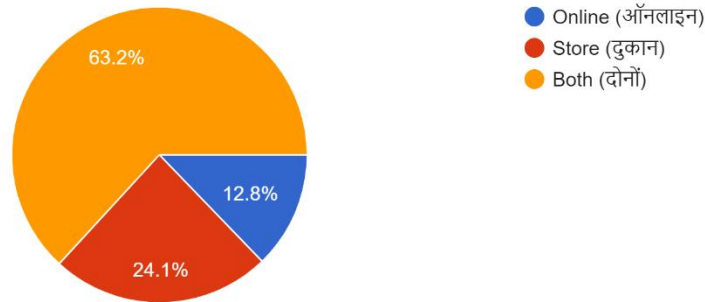
Do you purchase products from online shopping like Flipkart, Amazon, Myntra, meshoo, Etc. ? क्या आप फ्लिपकार्ट, अमेजॉन, मिंत्रा, मेशू आदि जैसे ऑनलाइन शॉपिंग से चीज़ें खरीदते हैं?

133 responses



Preferred mode of shopping for you? आपके लिए खरीदारी का पसंदीदा तरीका?

133 responses

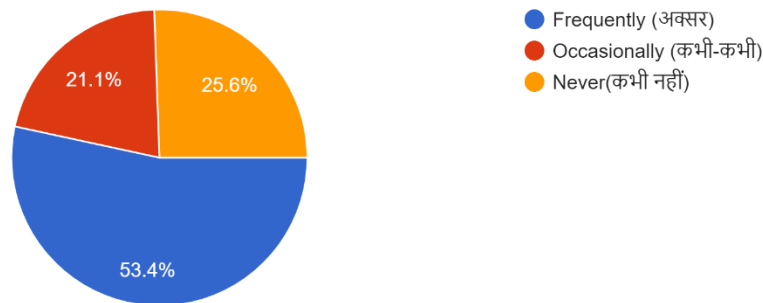


There is a very small portion of people who never uses online shopping, a big chunk either frequently or occasionally uses online shopping sites for their needs. So, we can see that the growing interest of people of our society and this is the good news for e-commerce companies in India.

4.

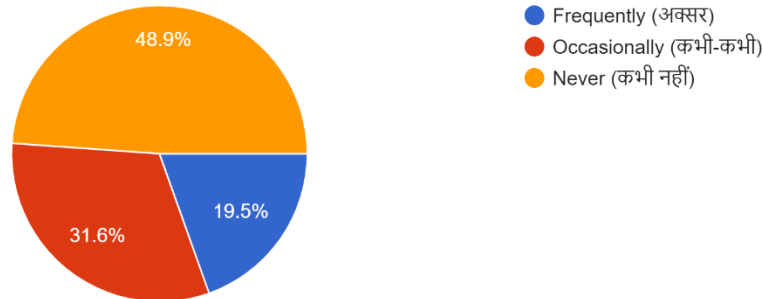
How often do you make online payment by Phone pe, Google pay, UPI etc.? आप प्रायः कितनी बार फोन पे, गूगल पे, यूपीआई आईडी से ऑनलाइन भुगतान करते हैं?

133 responses



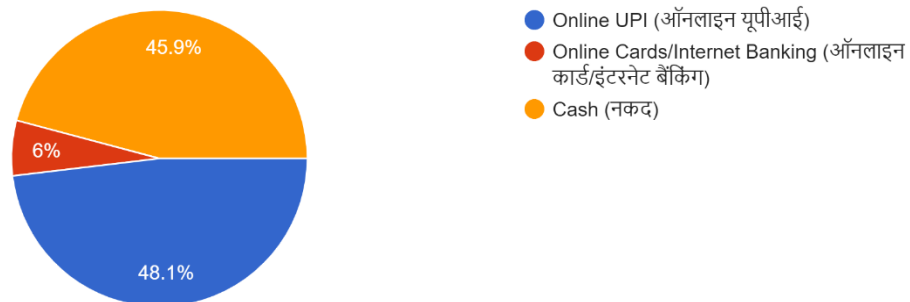
How often do you make online payment by Internet Banking, mobile banking ? आप इंटरनेट बैंकिंग, मोबाइल बैंकिंग द्वारा प्रायः कितनी बार ऑनलाइन भुगतान करते हैं?

133 responses



Preferred mode of payment? भुगतान का पसंदीदा तरीका?

133 responses

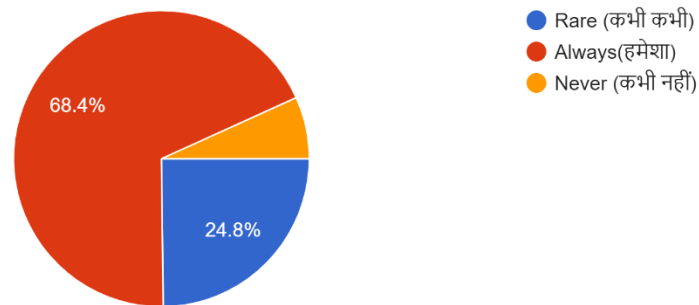


In the above charts we can see that there is rapid growing interest of people in online payments, specially in youths (the people between 18-40 years age group). The preferred mode of payment is UPI. Here one thing to note is that UPI is becoming preferred mode of payment due to simplicity, reliability and accessibility.

5.

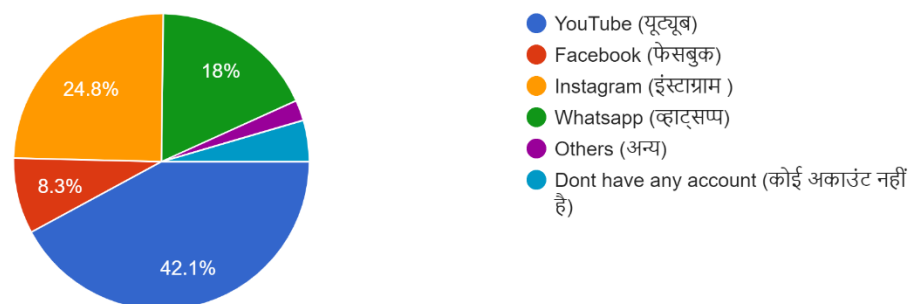
Do you use social media like YouTube, Facebook, Instagram, Snapchat etc.? क्या आप सोशल मीडिया जैसे YouTube, Facebook, Instagram, Snapchat आदि का उपयोग करते हैं?

133 responses



Most used Social media platform by you? आपके द्वारा सर्वाधिक उपयोग किया जाने वाला सोशल मीडिया प्लेटफॉर्म?

133 responses

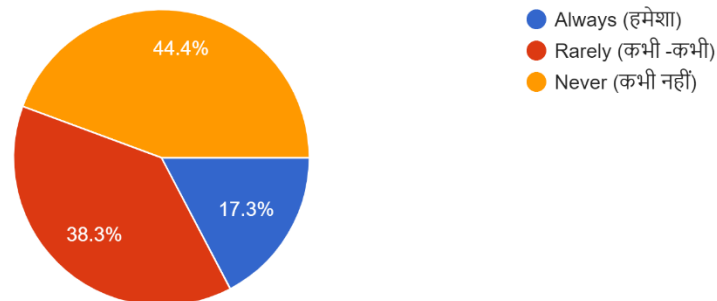


Uses of Social media in our society is never before, this is clearly evident from our survey, around 94% of people participated uses social media. And the most used platform is YouTube.

6.

Do you use OTT platforms like Netflix, Prime Video, Disney-Hotstar etc. for Entertainment? क्या आप एंटरटेनमेंट के लिए नेटफ्लिक्स, प्राइम वीडियो, डिज़्नी-हॉटस्टार आदि जैसे ओटीटी प्लेटफॉर्म का उपयोग करते हैं?

133 responses

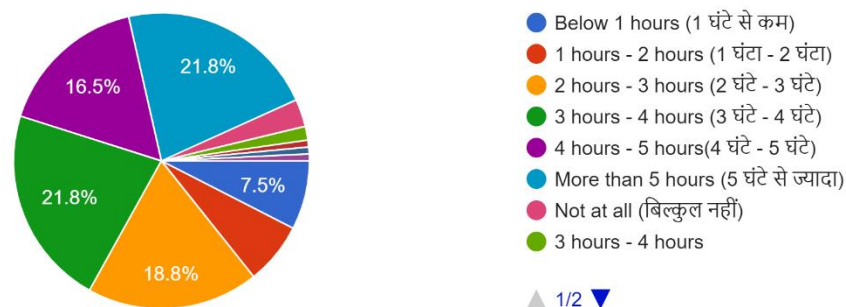


Even though popularity of OTT platform is increasing between people, specially in young generation, there is large percent of people who don't use OTT platforms.

Analysis on time spent on Smartphone:

How much time do you spend with your smartphone? आप अपने स्मार्टफोन के साथ कितना समय बिताते हैं?

133 responses

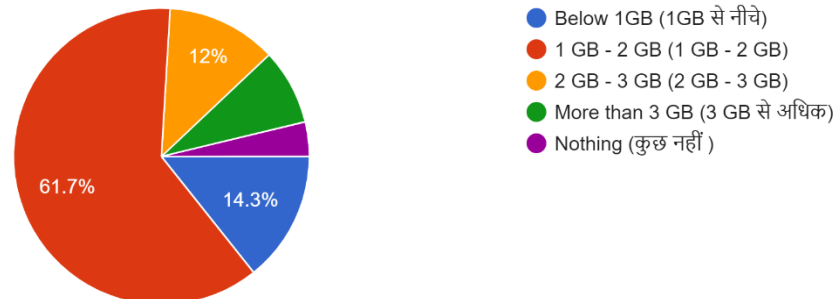


Here we can see how much time the people are spending on their smartphones. Around 40% people are spending more than 4 hours per day on their smartphones.

Analysis on distribution of uses of data:

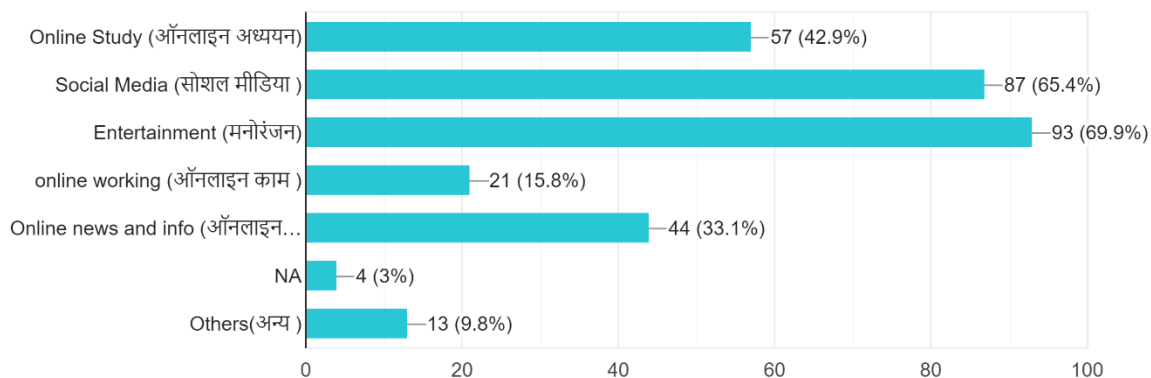
How much internet do you use in a day? आप एक दिन में कितना इंटरनेट उपभोग करते हैं?

133 responses



How do you spend your internet data? (Tick all that apply) आप अपना इंटरनेट डेटा कैसे खर्च करते हैं (1 से अधिक विकल्प)?

133 responses



Majority of people uses between 1-2 GB of data per day basis. Maximum people use their most of the data on Entertainment and Social media. There is also a good percent of people who uses data for online study and for getting online news and info. But the count is low in online working section.

03. INFERENCE

Digital literacy is essentially the ability to understand and make use of digital technologies. In the modern world, this is increasingly important, as the Internet and digital technology is slowly becoming an essential component of many people's lives. As time goes on, more and more people are getting online, and utilizing these technologies in their everyday lives, whether for work, or in the home.

In this survey and analysis I found many facts and figures about digital literacy in our society.

Having digital asset is very important for availing digital services and in learning new digital technologies. In this survey we have seen that the most of the people participated have their own smartphone enough to perform day-to-day tasks but around half of the people don't have their PC. And around 30% people have broadband for their internet connectivity, most people use mobile data for accessing internet.

Most of the people have basic to intermediate knowledge in computer and but numbers are small in terms advance knowledge on computer and digital technologies.

In terms of usability of digital services, it is increasing continuously in our society. We have seen that the people of all group are using Social media, e-commerce platform, UPI etc. We have seen that the easy and reliable digital services (e.g. UPI for Payment) gain much popularity in all section of our society.

Majority of people are spending more than 3 hours time on their smartphone. Around 40% people are spending more than 4 hours per day on their smartphones. Majority of people uses between 1-2 GB of data per day basis. Maximum people use their most of the data on Entertainment and Social media. There is also a good percent of people who uses data for online study and for getting online news and info. But the count is low in online working section

04.CONCLUSION

By conducting this survey on digital literacy and analysing obtained data, we can conclude that status of our society in terms of digital literacy is basic to intermediate. Most of them have smartphones but they don't know much about many digital services and technologies. Simple and reliable services are gaining popularity among people whereas complex e-services are still lagging in numbers in terms of usability. Younger generations are adapting digital services faster.