



# Wikipedia KaiOS 2.0 Usability Study

December 2020

# ABOUT THE STUDY

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The Wikimedia Foundation was interested in understanding the user experience of the Wikipedia app on KaiOS JioPhone devices.

Hureo team conducted one-on-one, remote usability sessions with 20 users across India in multiple languages to evaluate the understanding and usability of different features within the app and to understand users' motivations and challenges.

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# EXECUTIVE SUMMARY

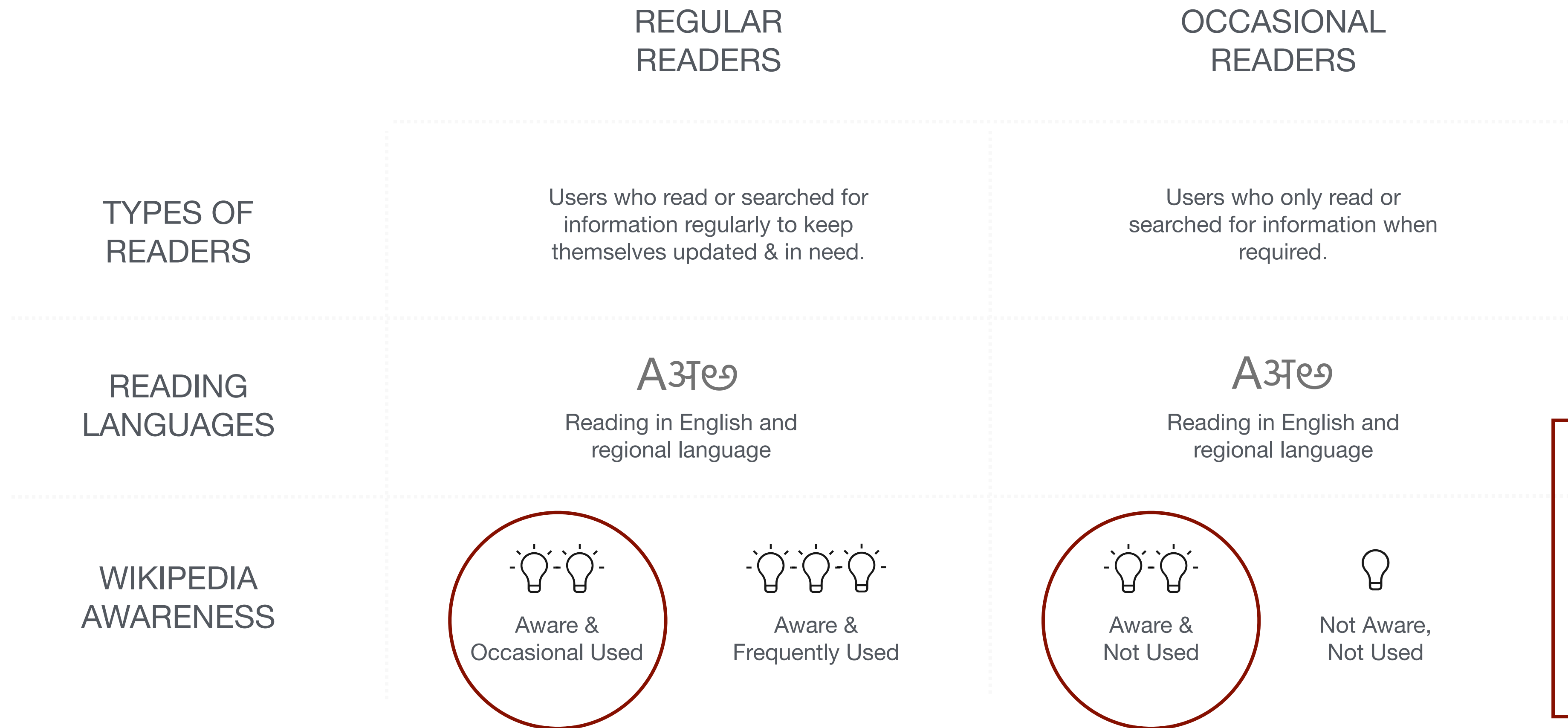
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1. Who were these JioPhone users?
2. What was their language usage on JioPhone?
3. What was the users' search behavior on Wikipedia app?
4. What was the overall onboarding experience?
5. What was the overall understanding of features within the article page?
6. What was the users' overall understanding of app language?
7. Did users understand the difference between app language & article language?
8. How did the users navigate within the app?

# 1. Who were these JioPhone users?

	REGULAR READERS	OCCASIONAL READERS
TYPES OF READERS	Users who read or searched for information regularly to keep themselves updated & in need.	Users who only read or searched for information when required.
READING LANGUAGES	अंग्रेज़ी Reading in English and regional language	अंग्रेज़ी Reading in English and regional language
WIKIPEDIA AWARENESS	 Aware & Occasional Used	 Aware & Not Used
	 Aware & Frequently Used	 Not Aware, Not Used

# 1. Who were these JioPhone users?



Most of the users belonged to the two highlighted categories - these users had heard or seen Wikipedia but had either used it occasionally or had never used it.

## 2. What was their language usage on their JioPhone?



### Phone Language

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English: Most users used their phones in English.

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Regional Languages: Few users used their phones in regional languages.



### Keypad Language

A

English: Most users used keypads in English.

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Regional Languages: Few users used keypads in regional languages.



### Reading Language

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- English: For simpler, easier content
- Regional Languages: For complex, detailed content
- Changing app language: Changed the language for specific apps to read regional content

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Regional Language: Due to limited English proficiency.



### Search Language



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- Voice Search: In both English and regional as regional voice search is easier.
- Text Search: In English or with suffixes like *'in Hindi'* or Hindi query in Roman script for results in regional languages.



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Voice & Text Search: In **regional languages** due to convenience.

# 3. What was the users' search behavior on Wikipedia app?

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Most of the users were replicating their current Google search behaviour - searching for English or regional content by typing or using voice search.

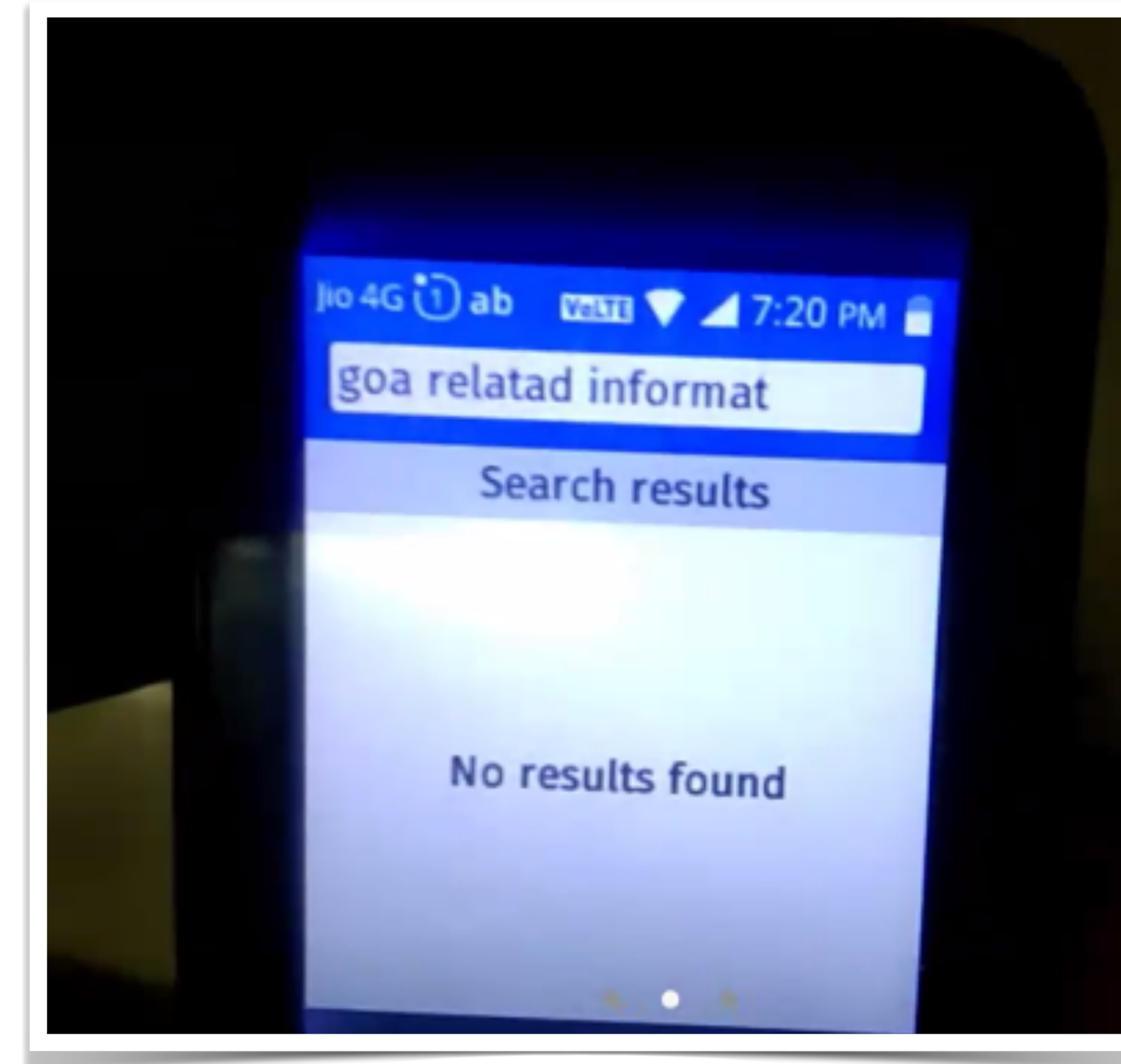


# 3. What was the users' search behavior on Wikipedia app?

## English Language Users

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Users were searching for information by typing as they would do on Google and expected to see similar search results.



Users searching for information by typing in English

# 3. What was the users' search behavior on Wikipedia app?

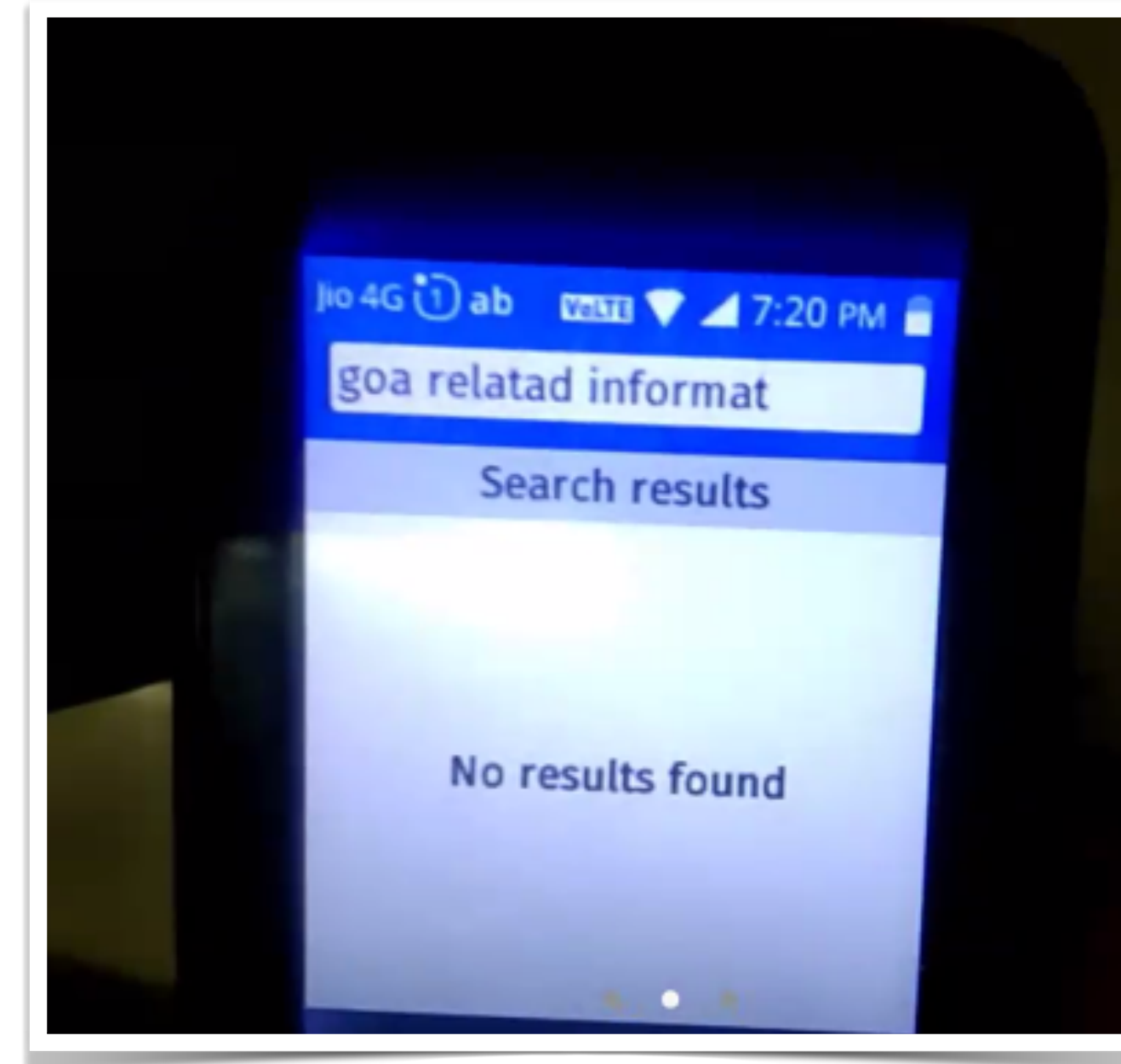
## English Language Users

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Users were searching for information in English by typing as they would do on Google and expected to see similar search results.

### TAKEAWAY:

Users were unable to understand that Wikipedia search is different from Google search.



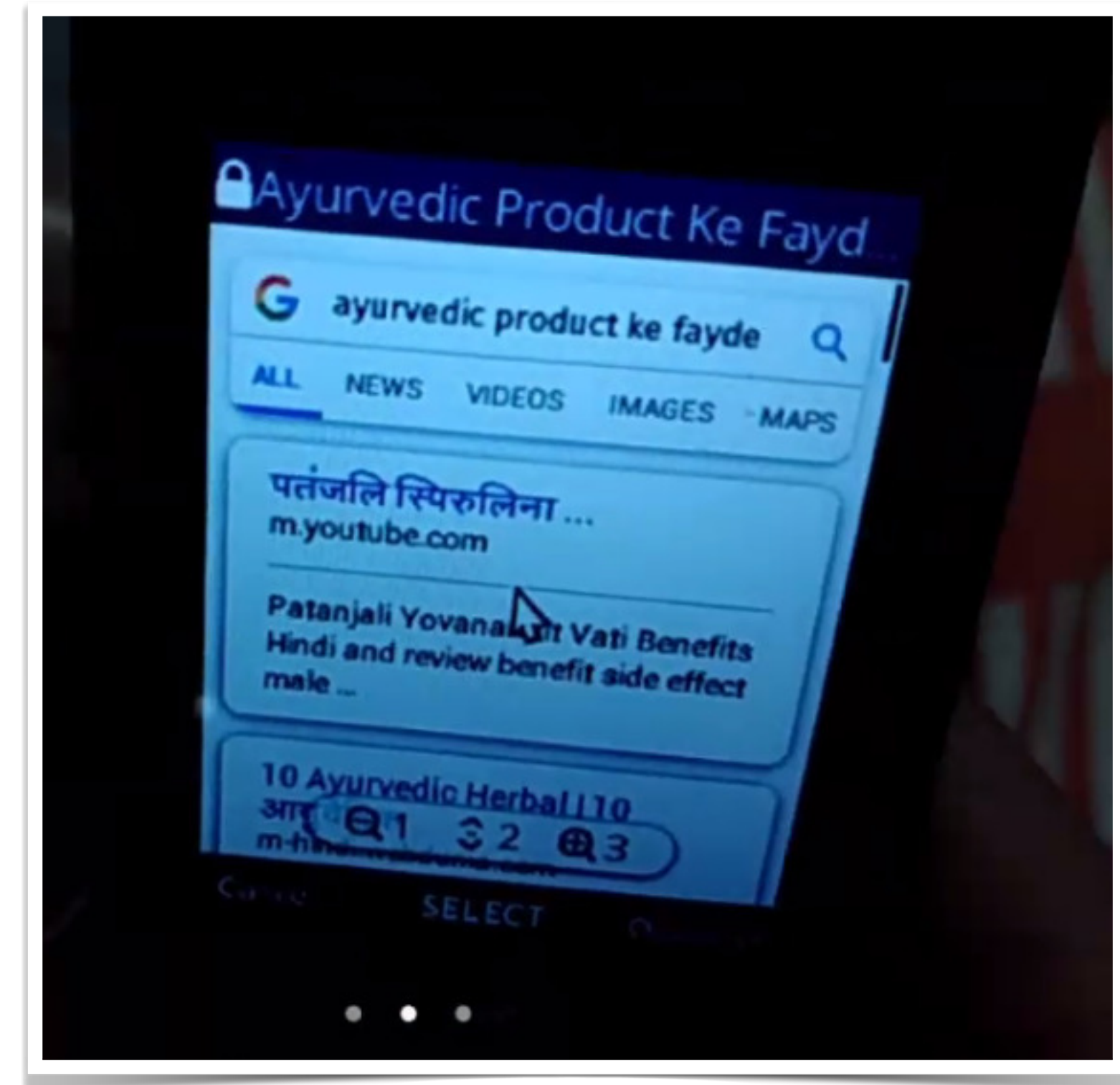
Users searching for information by typing in English

# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

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Users were searching for regional content either by using **text or voice search on Google**. Or they were **changing the app language for certain apps to get regional content**. They replicated the behavior on Wikipedia.



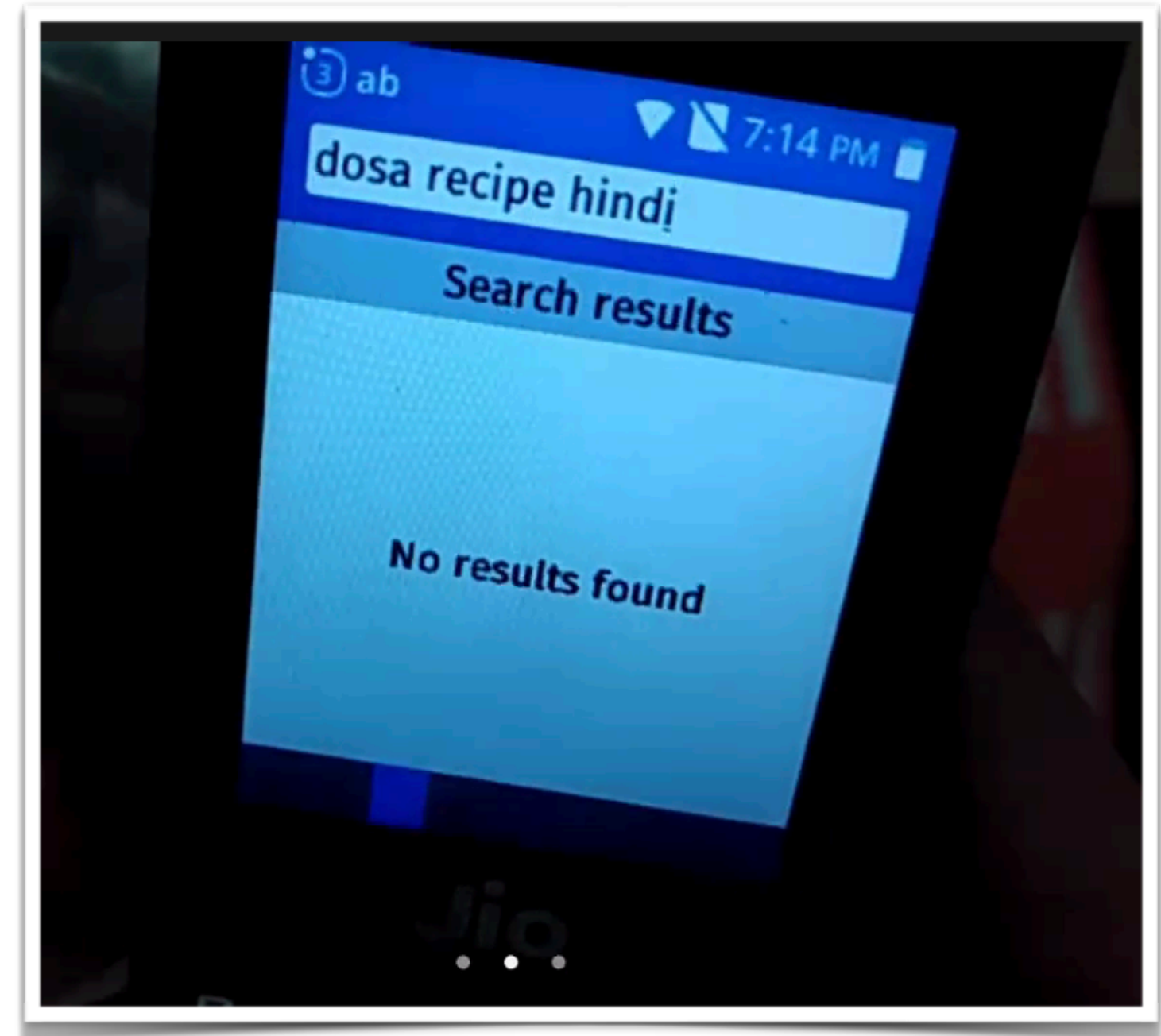
Users searching for regional information by typing in English

# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

### T Text Search

Users searched for information by typing their search query in English but would add “(regional language)” as a suffix to read regional content. For eg: *‘Dosa Recipe Hindi’*.



Users searching for information by adding regional language as suffix

# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

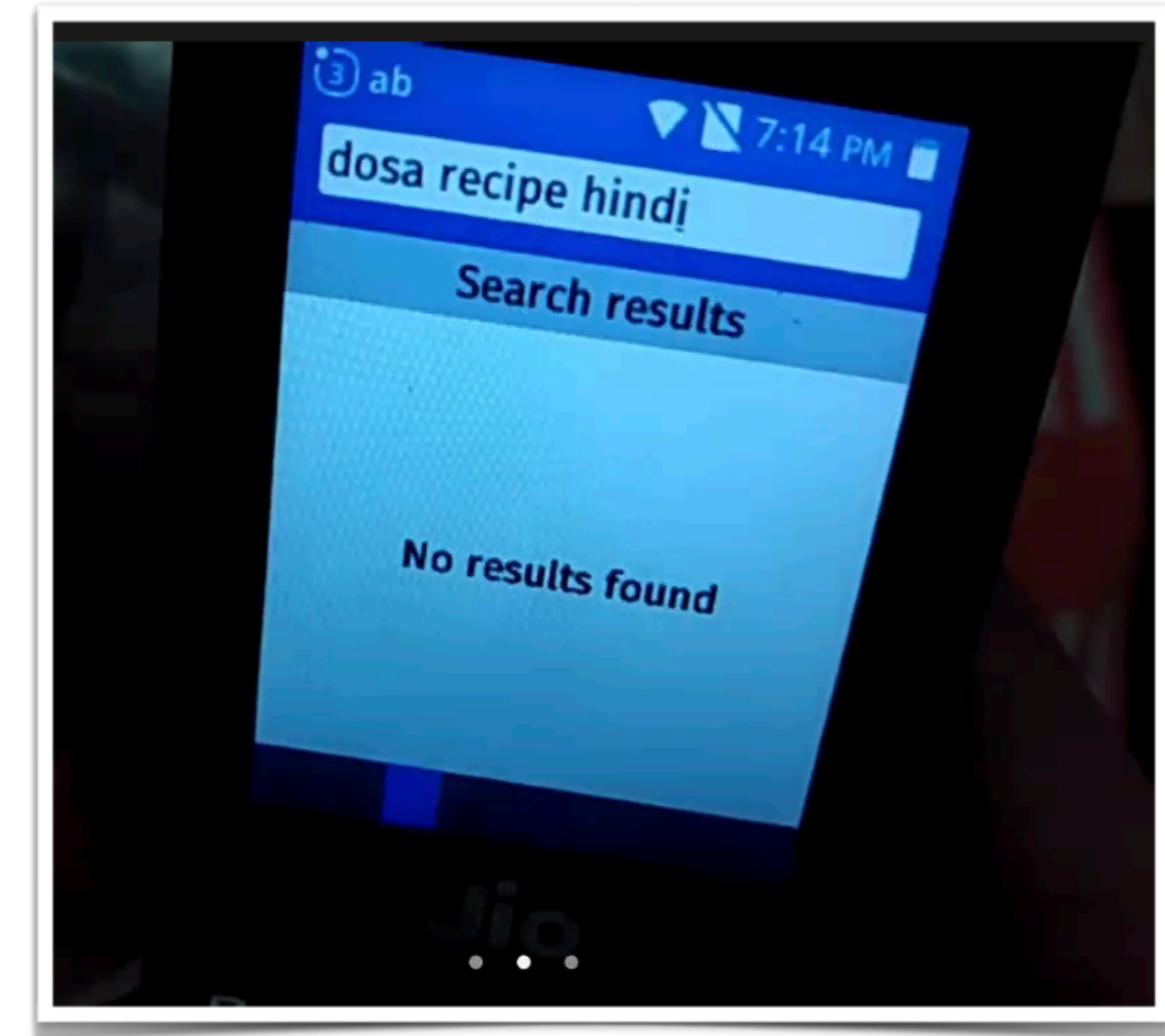
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### TAKEAWAY:

Users were unable to understand that Wikipedia search is different from Google search.



Users searching for information by adding regional language as suffix

# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

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### Voice Search

Users were used to searching for information on Google using voice search which they were unable to find on Wikipedia app.



*I will have to type, there's no mic here! I think I should check in the settings once to see if there's voice search.*

- User 7, Delhi

# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

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### Voice Search

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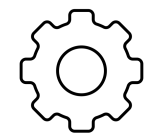
### TAKEAWAY:

Users were looking for a way to search using voice and wanted that capability in Wikipedia.

# 3. What was the users' search behavior on Wikipedia app?

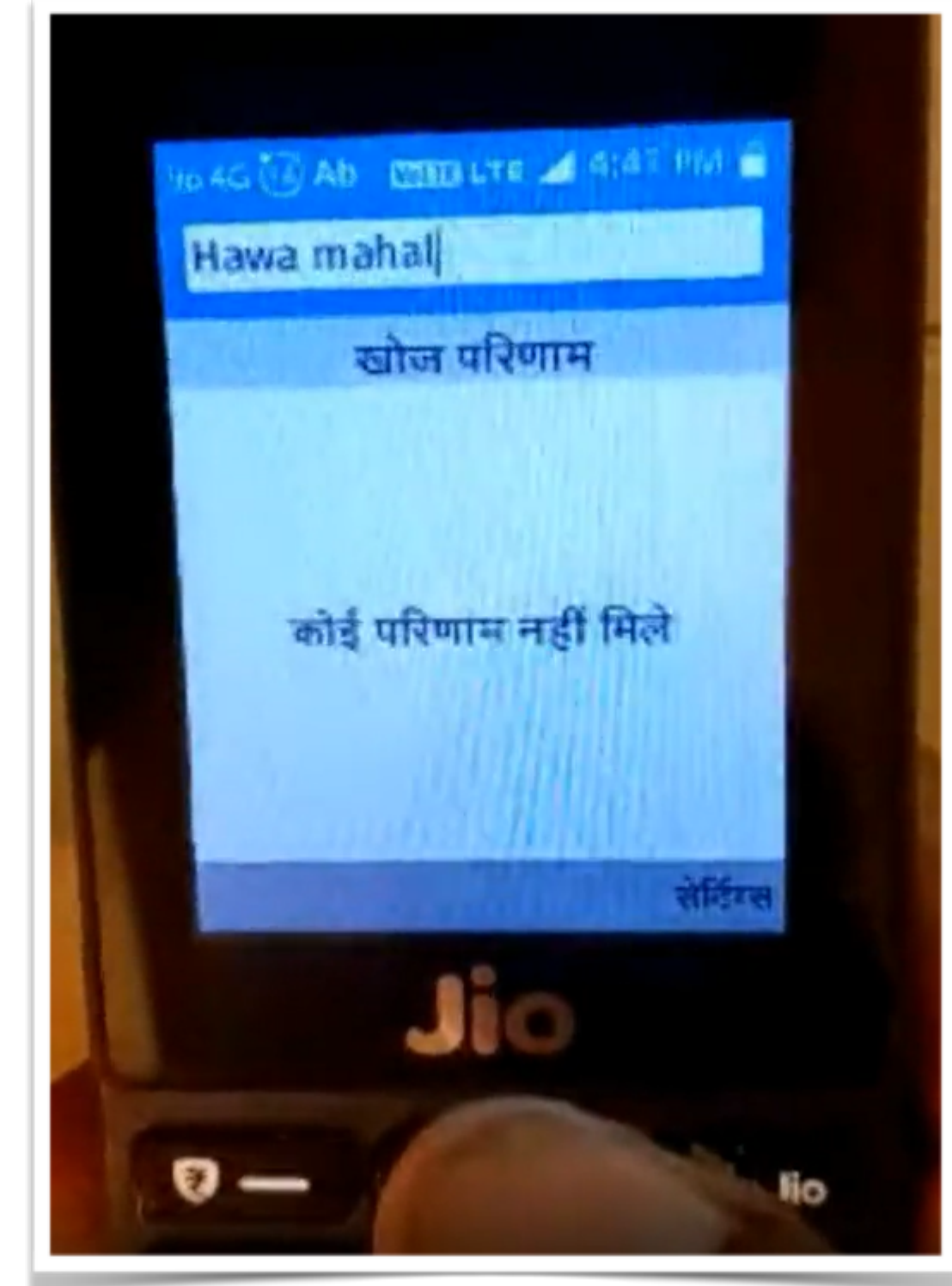
## Regional Language Users

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### Changed Language of Certain Apps To Get Results in Native Languages

- Users searched for regional information by changing the language of certain apps through app settings.
- They similarly changed the Wikipedia app language to regional language to get regional content.
- The users typed their search query in Roman script and expected to see results based on their query. However, they were confused when they didn't get their expected search result.

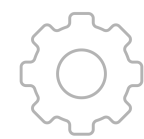


User typing a Hindi query in Roman script



# 3. What was the users' search behavior on Wikipedia app?

## Regional Language Users

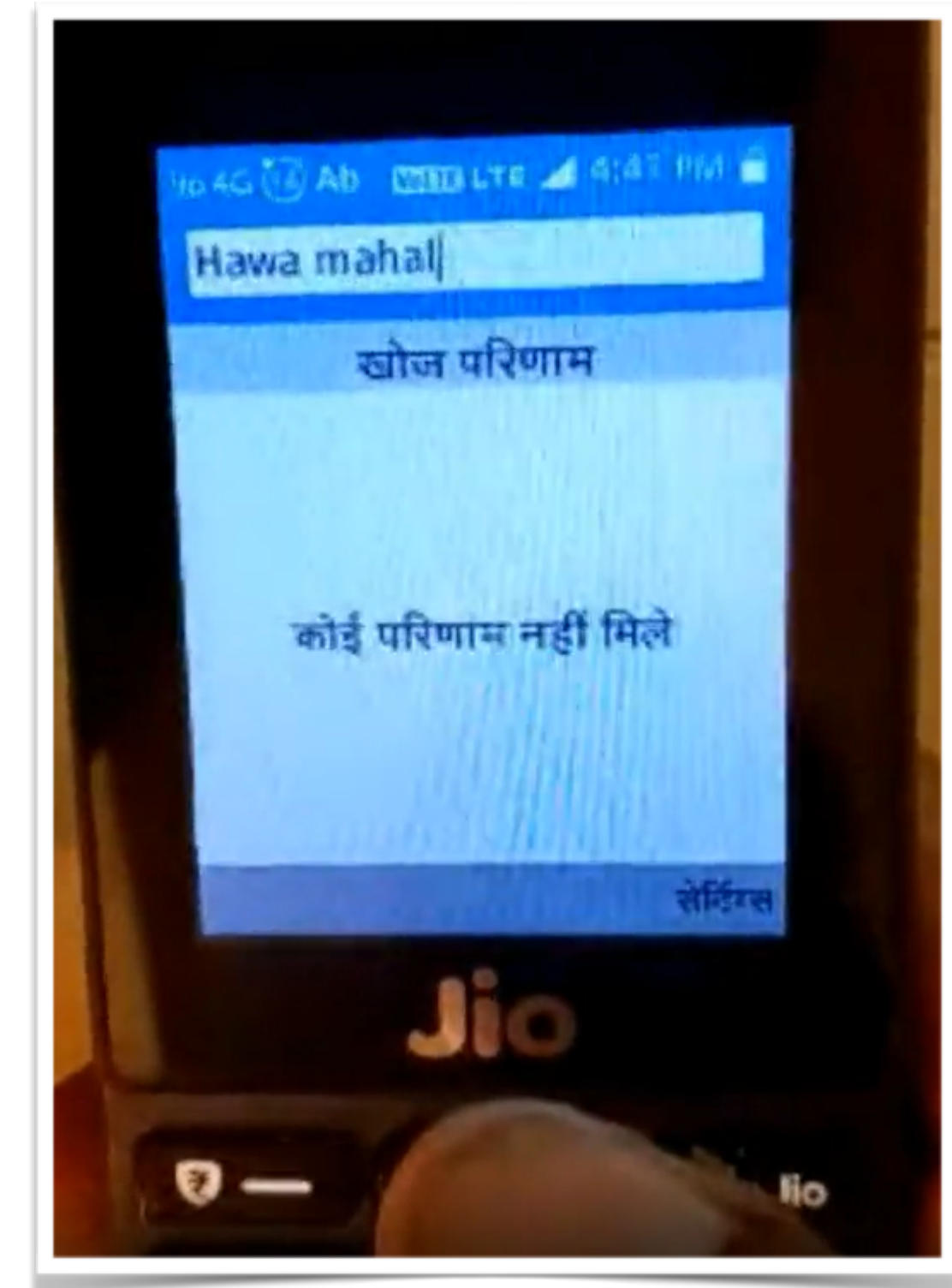


### Changed Language of Certain Apps To Get Results in Native Languages

- Users searched for regional information by changing the language of certain apps through app settings.
- They similarly changed the Wikipedia app language to regional language to get regional content.
- The users typed their regional language search query in Roman script and searched on their query. However, they were unable to get any results.

### TAKEAWAY:

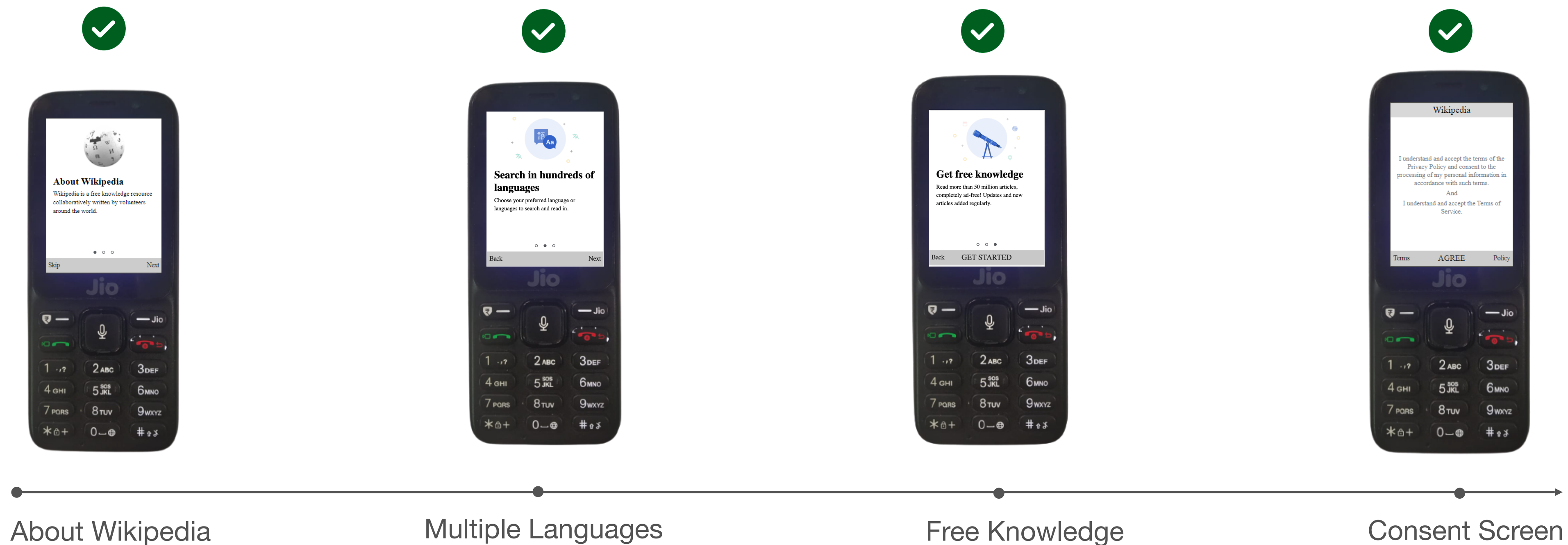
Users were unable to understand that they were searching in regional Wikipedia which is a different Wiki from English.



User typing a Hindi query in Roman script

# 4. What was the overall onboarding experience?

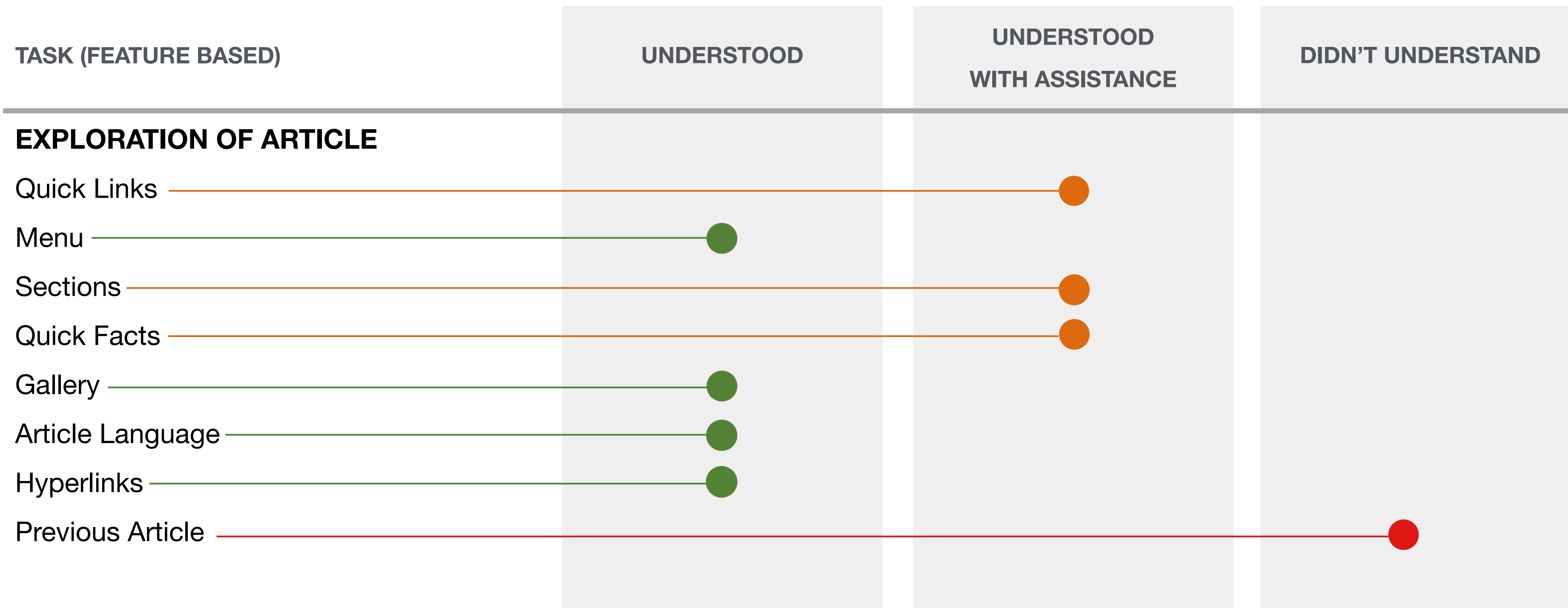
All users were able to complete and understand onboarding tasks without any handholding to proceed to the home screen but most users did not read the description before moving ahead.



\*Images in this section are in English from the app screenshots provided by the team for easy understanding. Sessions were conducted in Hindi, Marathi and Telugu.

# 5. What was the overall understanding of features within the article page?

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## 6. What was the users' overall understanding of app language?

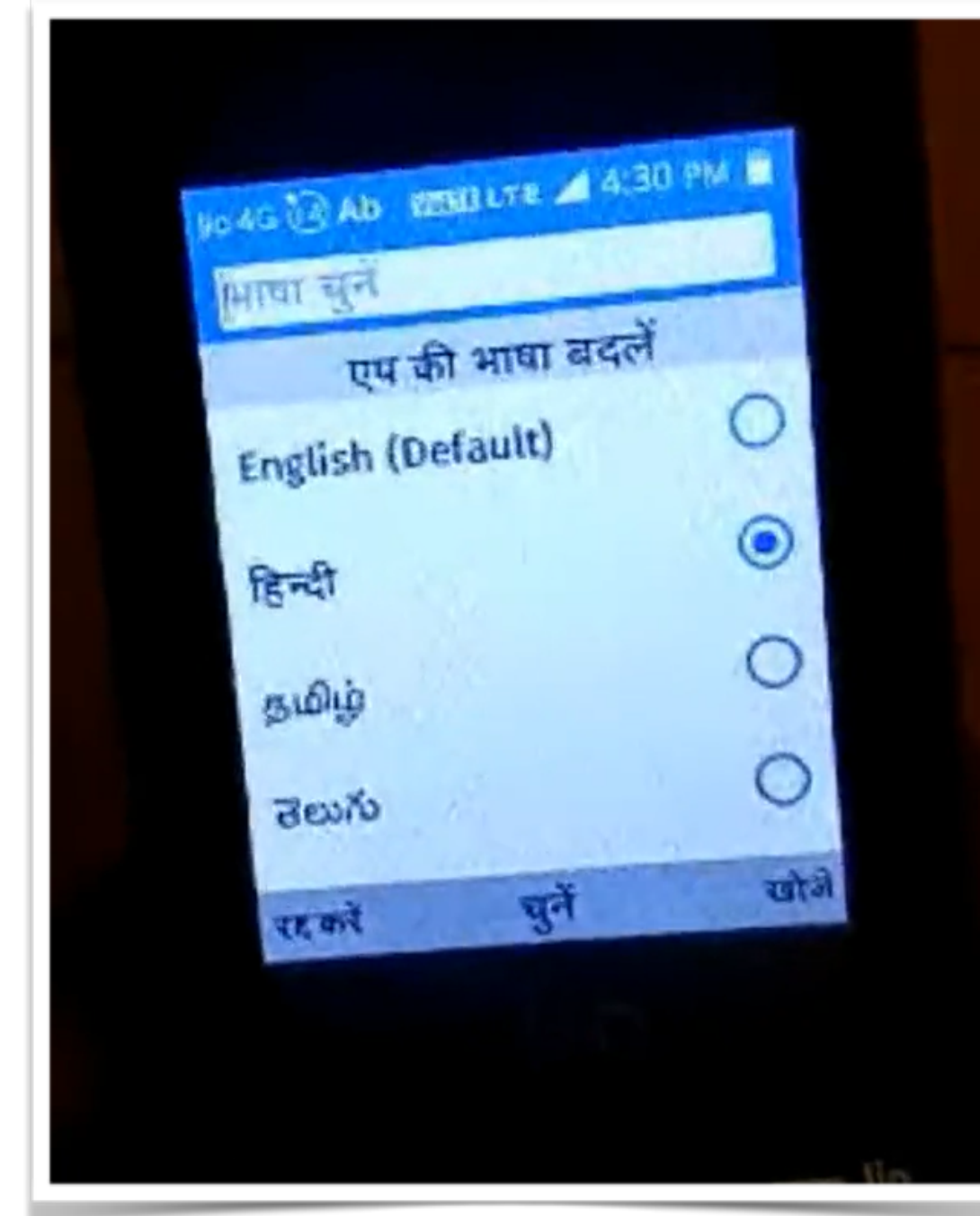
Most of the users understood and liked that they could change the language of the app through settings.

- **Familiarity of the concept:** Users were able to discover the feature on their own as they had seen the option of changing the language within settings of their phone.
- **No change in keyboard:** Users liked the feature as they did not have to use the regional keyboard for typing after changing the app language to their regional language.
- **No change in phone language:** Users understood that only the language of the app would change and the language of their phone would remain the same.



*I can change language before searching only. I will use this feature because I can use it whenever I want to read in Marathi.*

- User 12, Pune



User trying to change the app language

## 7. Did users understand the difference between app language & article language?

Yes, almost all users understood that these were separate from each other - that they could change the language of the app through settings and language of the article either through quick links or menu.



## 8. How did the users navigate within the app?

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Users were mostly navigating using the **back (red)** button of the phone to go back to the previous screens, which also led to accidentally quitting the app sometimes.

Users were mostly accessing features within the article through the article menu option.

## 8. How did the users navigate within the app?

### Usage of Back Button & Close Option

Users were mostly navigating using the back (red) button of the phone to go back to the home screen or the previous article page.

- 1 Usage of Back (red) Button:** Most of the users used the back (red) button to go back to the previous screens as they were used to navigating through other apps similarly.
- 2 Usage of Close Option:** Few users noticed and used the close option in the article page to go back to the previous screens.



# 8. How did the users navigate within the app?

## Usage of Back Button & Close Option

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- 2 Usage of Close Option:** Few users noticed and used the close option in the article page to go back to the previous screens.
- 3 Usage of Back Button & Close Option:** Some users used both red button and the close option to go back to the screens while exploring the article.



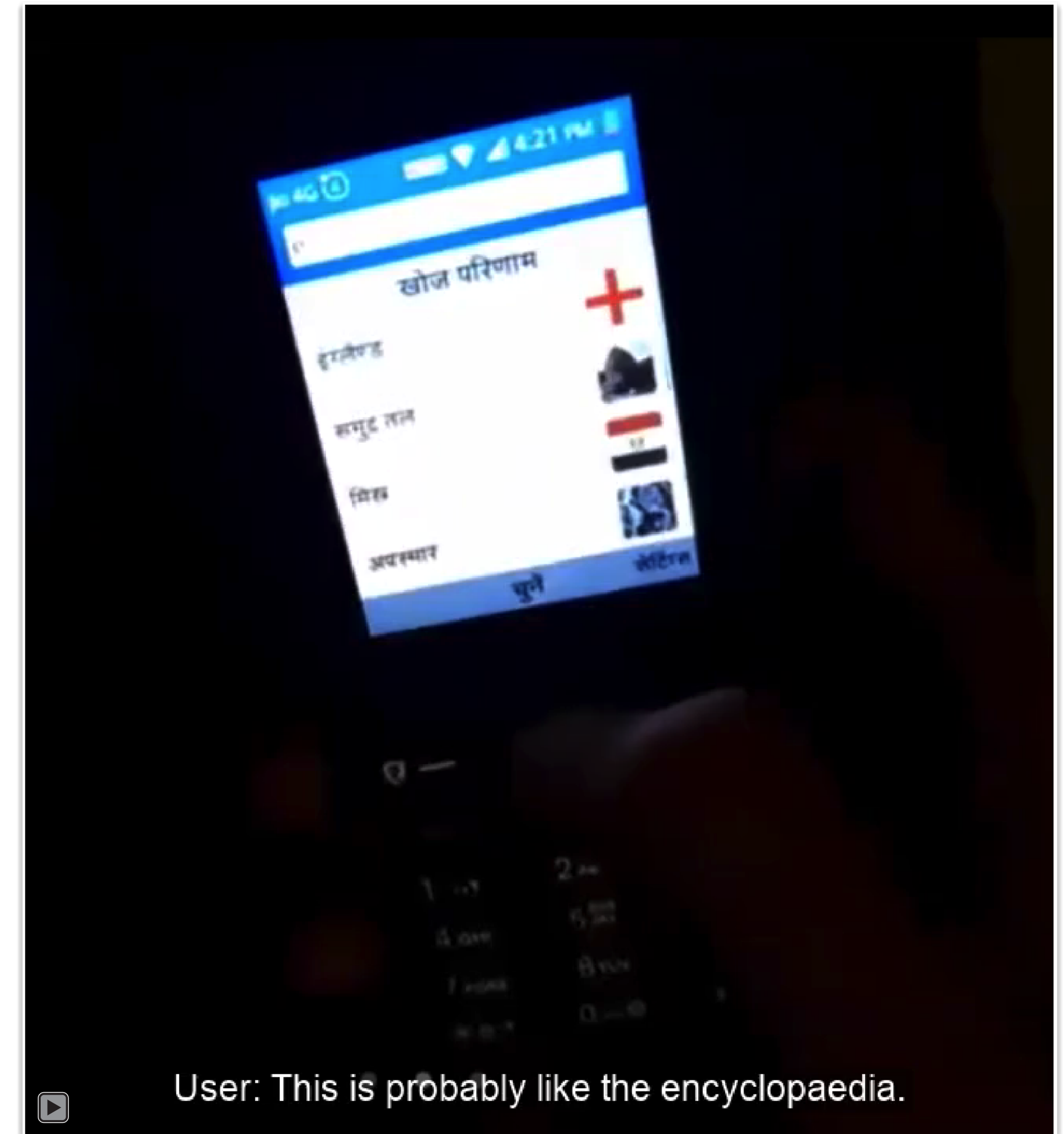


## 8. How did the users navigate within the app?

### Accidentally Quitting the App

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Most users accidentally quit the Wikipedia app several times as they were continuously pressing the back (red) button of the phone to go back to the previous screens.



Click to play video: User accidentally quitting the app in an attempt to go back using the back button.

## 8. How did the users navigate within the app?

### Access of Features within the Article

Users were mostly accessing features within the article through the article menu option.

**1 Article Menu:** Most users accessed features through the article menu as they are used to exploring features through menu for other apps as well.

**2 Quick Links:** Few users accessed features like gallery and article language through quicks links as they were able to recognize those icons.



## 8. How did the users navigate within the app?

### Vertical Scroll Feature

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All users were able to use the vertical scroll feature within the article. However, only few users noticed and liked the feature.



*I really like this feature, as it is very easy to scroll and read the article.*

— User 5, Mumbai

# METHODOLOGY & PARTICIPANTS

Study Goals | Methodology | Participant Profiles

# STUDY GOALS

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- 1** To evaluate users' understanding of onboarding screens and the completion of the onboarding tasks of the Wikipedia app.
- 2** To evaluate users' understanding and usability of different features.
- 3** To test users' understanding of workflows, reading/navigating within the article, searching for content and changing language.
- 4** To understand users' motivations and challenges of using the app.

# METHODOLOGY: REMOTE USER INTERVIEWS

**Number of Participants:** 20

**Method:** Hureo team conducted remote usability sessions with users in which they were assigned various tasks as per the goals of the study to understand their behavior and experience with the Wikipedia KaiOS app.

**Locations:** Delhi, Mumbai, Pune, Hyderabad, Indore and Lucknow.

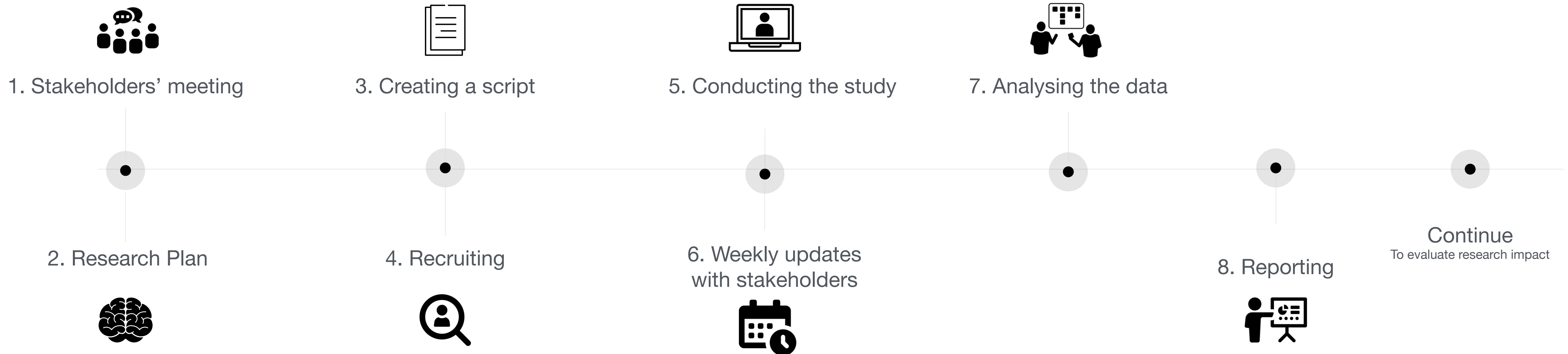
**Languages:** English, Hindi, Marathi, Telugu.



*Click to play video: User exploring an article in the Wikipedia app.*

# RESEARCH PROCESS

Research study at Hureo is a 8 step process.



# PARTICIPANT PROFILES

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## Age & Gender

All participants were within the age group of 20 to 40 years.

Male - 12 users

Female - 8 users



## Languages

Participants were reading in different languages like English, Hindi, Marathi, and Telugu.



## Device Usage

All participants were using JioPhones.

JioPhone 1 - 19 users

JioPhone 2 - 1 user.



## Education

Participants came from varying educational backgrounds including college graduates, undergraduate students and high school graduates.



## Profession

Participants were from different professions including small business owners, workers, homemakers, and students.



# FINDINGS

**1** ABOUT JioPhone USERS

**2** USABILITY STUDY FINDINGS

# FINDINGS

**1** ABOUT JioPhone USERS

**2** USABILITY STUDY FINDINGS

# PART ONE

# ABOUT JioPhone USERS

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1. MOBILE & INTERNET USAGE

2. ONLINE READING BEHAVIOR

# PART ONE

# ABOUT JioPhone USERS

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## 1. MOBILE & INTERNET USAGE

1. What devices did the users use?
2. What was the users' JioPhone usage?
3. In what language did the users use **their** JioPhone?
4. How did the users access internet on **their** JioPhone?
5. What was the users' app usage?

## 2. ONLINE READING BEHAVIOR

# 1. What devices did the users use?

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All users were using **JioPhones** and had access to smartphones either through their family members or friends.

19 users owned JioPhone 1

1 user had JioPhone 2



JioPhone 1



JioPhone 2

## 2. What was the users' JioPhone usage?

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Users used their JioPhones for multiple purposes apart from calling like searching, reading news, accessing social media, watching videos and listening to music.



### Communication

All users used their phones for calling purposes.



### Reading News

Most users read news updates by searching for news channels like 'Aaj Tak' or newspapers like 'Dainik Bhaskar'.



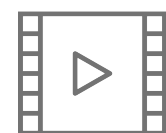
### Accessing Social Media

Most users used social media apps for personal communication.



### Searching for Information

Almost all users searched for topics relevant to their work, education, lifestyle, celebrities etc.



### Watching Videos

Most users watched movies, TV shows & web series through various apps.



### Listening to Music

Some users listened to music on their JioPhone.

## 3. In what language did the users use their JioPhone?

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Most users used their phones in English and few used it in regional languages. The keypad was used in the same language as the phone.



### Phone Language

Most users used their phones in English and few of them changed language settings of apps like JioNews & browser to regional languages if needed.

Few users used their phones in regional languages because of their limited proficiency in English.



### Keypad Language

Most users, who had English as their phone language, also used their keypad in English while the users who used phones in Hindi, operated their keypads in Hindi.

Most users used their keypads in English as it was easier than using keypads in regional languages.

## 4. How did the users access internet on their JioPhone?

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Users accessed the internet on their JioPhone mainly through cellular data. Some users also used Wi-Fi and personal hotspots from family members.

### Mobile Internet

All users accessed internet via mobile data. They chose specific data plans depending on their needs and budget.

### Wi-Fi

Some users also used Wi-Fi and personal hotspots from family members.



## 4. How did users access internet on their JioPhone?



All users accessed the internet via mobile data. They chose specific data plans depending on their needs and budget.

### Mobile Internet

- **Prepaid plans**

All users used prepaid plans. Most users subscribed to data plans ranging from Rs. 75 to Rs.199 that offered them with 1-1.5 GB data per day.

- **Change in data plans**

- There was no major change in the usage of internet or the cost of data plans due to the pandemic.
- Sometimes, users purchased additional internet packs regardless of the pandemic, while a few purchased add-on packs due to extra consumption of data in the increased leisure time during the lockdown.

## 4. How did users access internet on their JioPhone?



Some users also used Wi-Fi and personal hotspots from family members.

Wi-Fi

- **Wi-Fi**  
Some users had access to Wi-Fi at their home or work places.
- **Personal Hotspots**  
Few users accessed internet by borrowing hotspots from their family members when they faced network problems or when their own data was over.

## 5. What was the users' app usage?

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Users used different apps for various activities like searching, accessing social media and for entertainment.



### Searching

All users used browser or Google Assistant to search for required information.



### Reading News

Most users read news updates by searching for news through browser and JioNews.



### Accessing Social Media

Most users used social media apps like WhatsApp and Facebook for personal communication.



### Listening to Music

Some users used apps like YouTube and JioSaavn to listen to music.



### Watching Videos

- Most users used pre-installed apps like YouTube, JioTV, JioCinema.
- Few users also used downloaded apps like Zee5 and Voot to watch movies, web series and TV shows.

# PART ONE

# ABOUT JioPhone USERS

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1. MOBILE & INTERNET USAGE

2. ONLINE READING BEHAVIOR

# PART ONE

# ABOUT JioPhone USERS

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## 1. MOBILE & INTERNET USAGE

## 2. ONLINE READING BEHAVIOR

1. What content did users read online?
2. In what languages did the users read the online content?
3. How did the users search for content online?
4. What sites were the users reading **from**?
5. Were the users aware of Wikipedia?
6. What was the users' perception about Wikipedia?

# 1. What content did users read online?

The content users read online was based on the type of information they searched for and their topics of interest.



## News

Almost all the users read news online in English and in their regional languages through popular newspapers like Dainik Bhaskar (Hindi), 'Sakal' (Marathi).



## Cricket

Some users read about cricket and the Indian Premier League (IPL), and checked for updates of cricket scores on sites like 'Cricbuzz'.



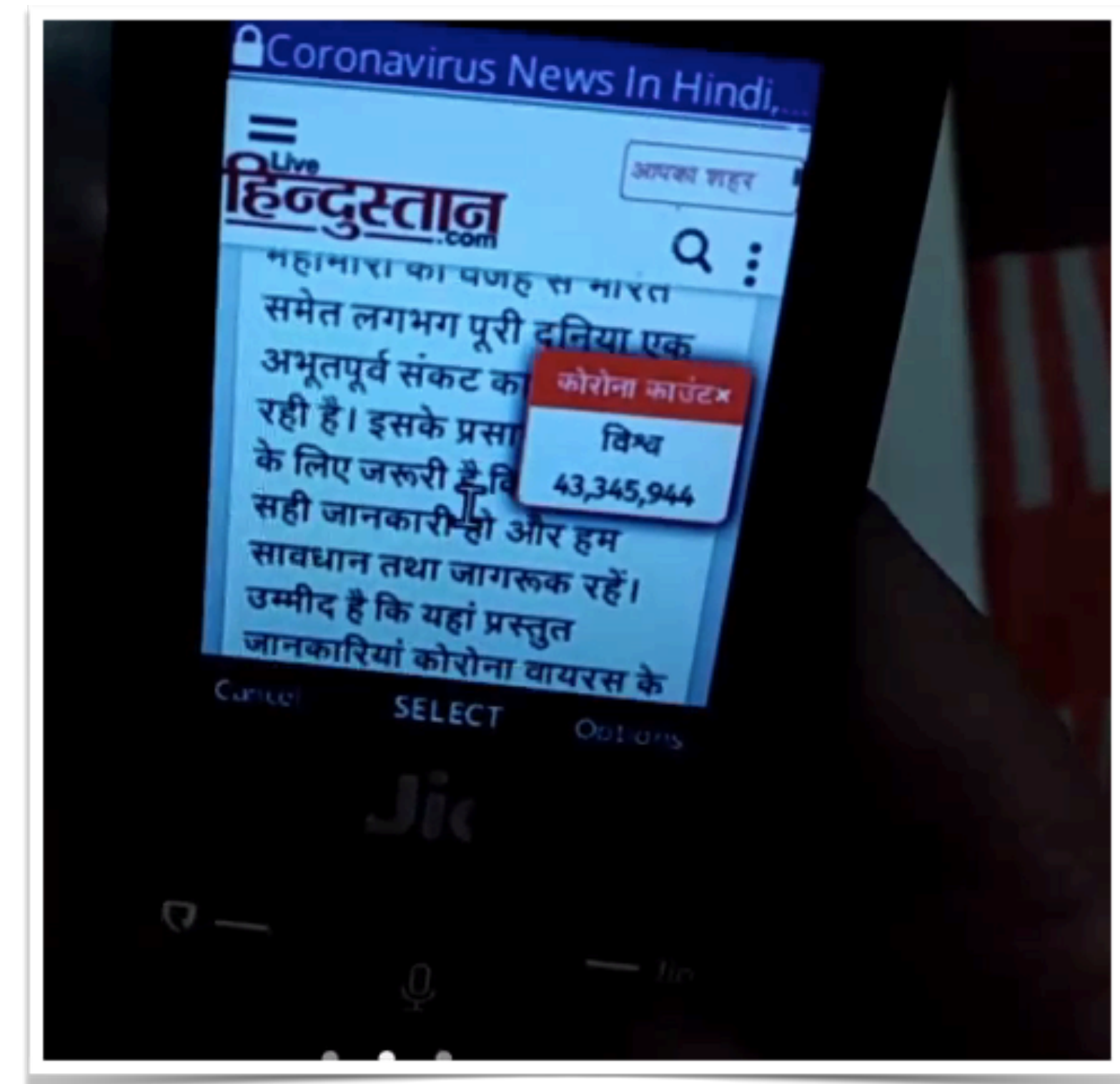
## Celebrities

Some users read about celebrities online such as 'Salman Khan' (a famous Bollywood actor).



## Meanings of English Words

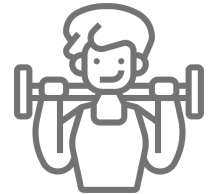
Some users often searched for meanings of English words that they found unfamiliar.



User reading news in Hindi

# 1. What content did users read online?

The content users read online was based on the type of information they searched for and their topics of interest.



## Lifestyle

Few users read content related to lifestyle and fitness like information on exercising and weight loss.



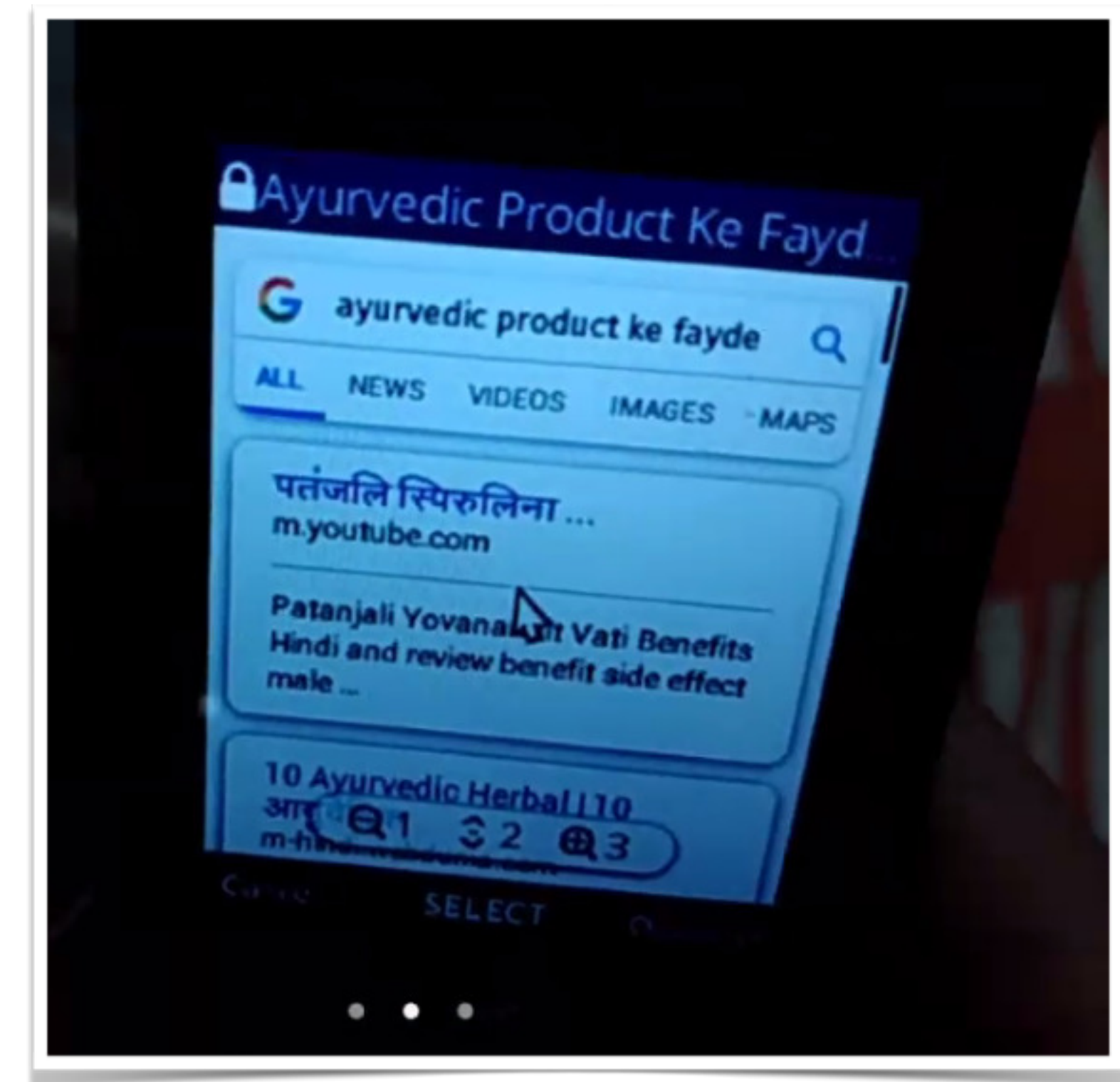
## Products

Few users read about the benefits and constituents of products like shampoos, creams and medicines that they wanted to buy.



## Miscellaneous

Few users also read about other topics that interest them like places of pilgrimage, educational topics and information related to finding jobs.



User searching for benefits of products in Hindi

## 2. In what languages did the users read online content?

Users read content in both English and in their regional languages with a preference for the regional languages.

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### More Regional & Less English

Most users read in their regional languages like Hindi, Marathi and Telugu and in English with a preference for the regional languages.

Most users read in regional languages due to limited English proficiency.

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### Both Regional & English

Few users read in both English and in their respective regional languages, without having a preference.

For easier content, users read in English while for more complex content, they chose regional languages for better understanding.



### 3. How did users search for content online?

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Users searched for information through a combination of text and voice search, with varied levels of preference.



Mostly Voice Search



Mostly Text Search



Text & Voice Search

## 3. How did users search for content online?

### Mostly voice search

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Some users preferred to search using voice as it was convenient for them.

They used voice search through Google Assistant and YouTube.

#### Why voice search?

- **Voice search is easier**  
Few users found voice search more convenient compared to text search, especially when the search query is longer or involves words that are difficult to spell.
- **Damaged phone buttons**  
Few users preferred voice search because the buttons of their JioPhones had been damaged due to prolonged use which made typing difficult.



[Click to play video: User searching for news using Google Assistant](#)

## 3. How did users search for content online?

### Mostly voice search

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What languages were they using?

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- Most of the users used voice search in regional languages because it was easier than doing text search in the same.
- They used nearly complete sentences for voice search.

## 3. How did users search for content online?

### Mostly text search

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Some users preferred to search for information only through text search.

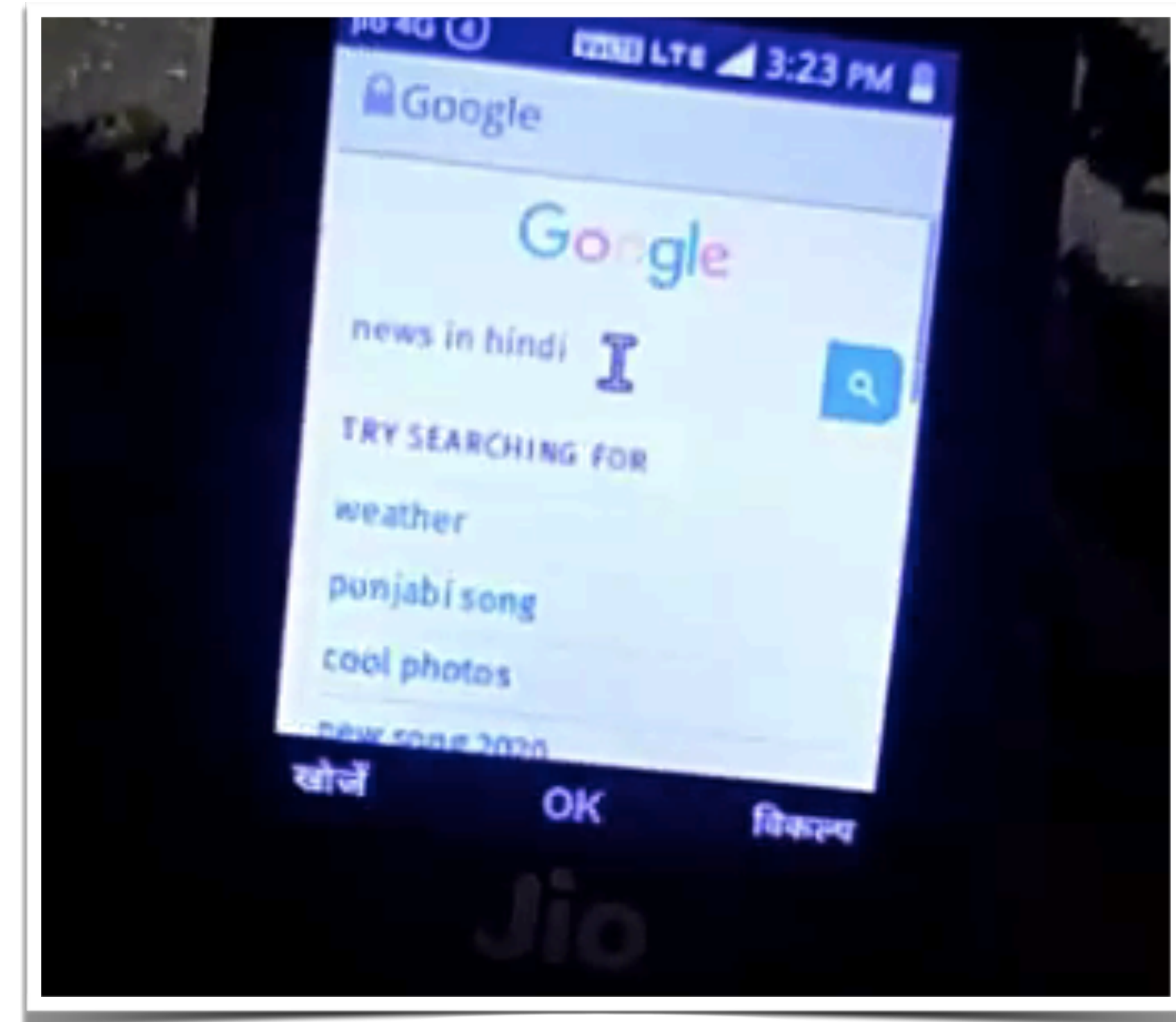
Few users used both text and voice search, but preferred text search over voice.

#### Why text search?

- **Existing habit of text search**

Few users didn't need to use voice search as they were comfortable with their existing habit of using text search or because they were not aware of how to use it.
- **Inaccurate voice recognition**

Few users had faced difficulty in searching through voice as their voice commands were not being recognized correctly.



User using text search on Google, adding 'in Hindi' at the end of the search query.

## 3. How did users search for content online?

### Mostly text search

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What languages were they using?

# Aa

- Most users were typing in English as it was more comfortable than using the keypad in their regional languages.
- To get the search results in their respective languages, they added 'in Hindi' at the end of their search query.

## 3. How did users search for content online?

### Voice & text search

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Few users used both text as well as voice search equally. Their search mode depended upon their situation and nature of the search query.

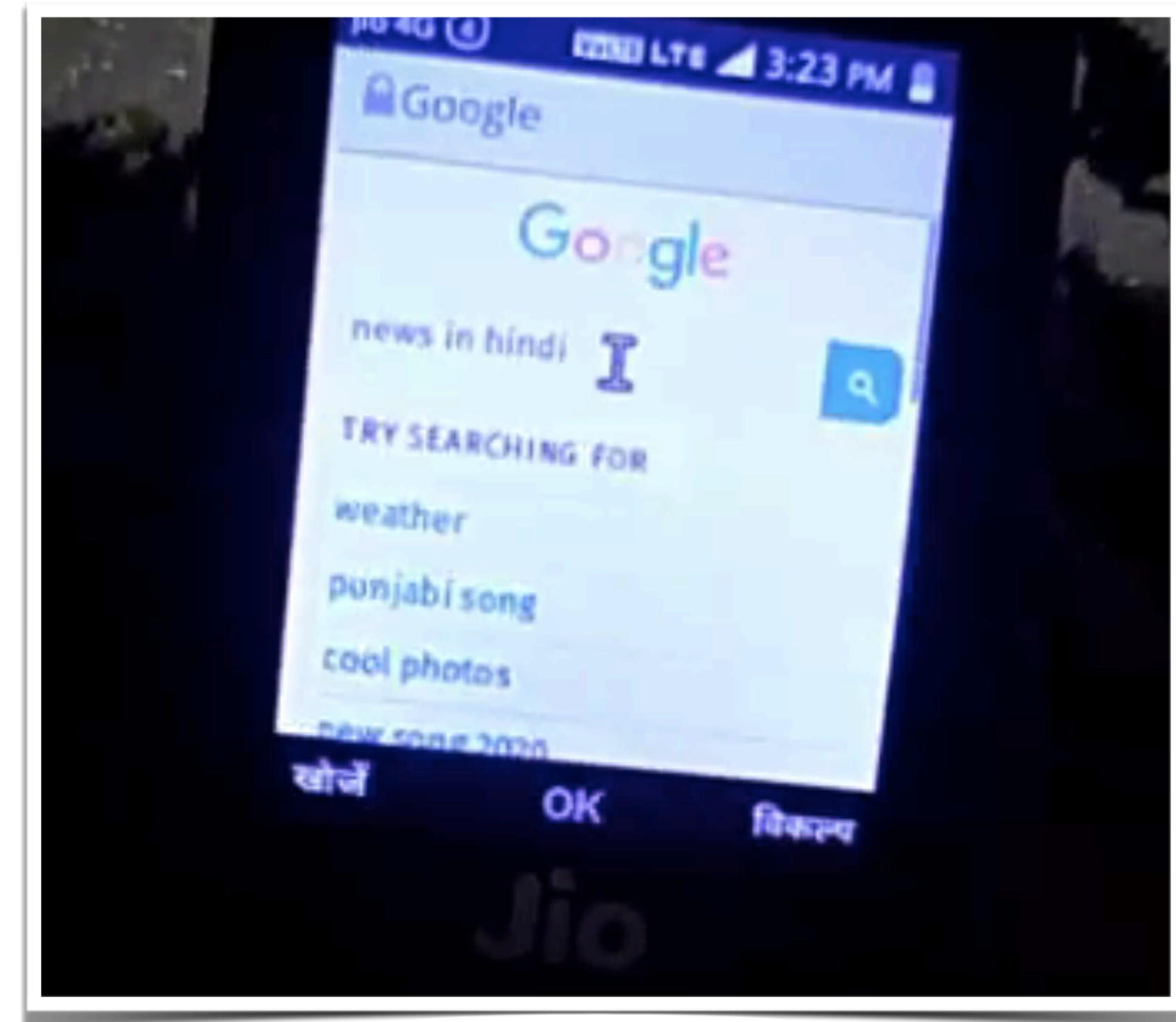
#### Why both voice & text search?

- **Based on the environment**

Few users decided whether or not to use voice search as per their surroundings. If their environment was noisy, they used text search. They also used text search when surrounded by other people, where privacy was a concern in case of voice search.

- **Based on the search query**

Few users used voice search if the search query was too long or involved spellings that were difficult for the user.



User using text search on Google, adding 'in Hindi' at the end of the search query.

## 3. How did users search for content online?

### Voice & text search

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What languages were they using?

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- Some users searched in English for text as well as for voice search.
- To get the search results in regional languages, they added 'in Hindi' at the end of the search query for text & voice search.

## 4. What sites were users reading from?

Users used numerous sites to read regional & English content in the form of news, articles etc. from various sites such as 'Dainik Bhaskar', 'sakal.com' and Wikipedia.

Some users didn't refer to any particular site.



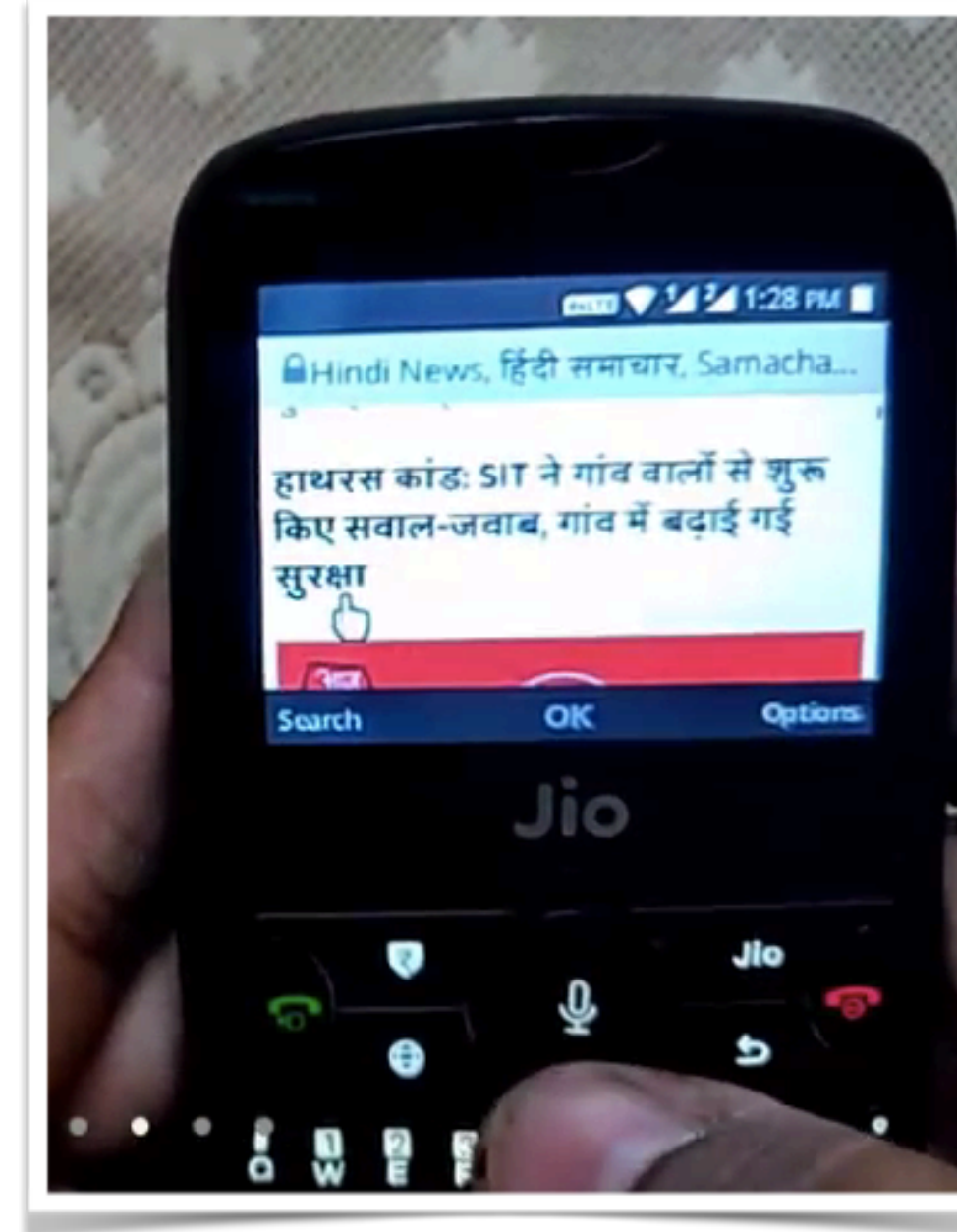
### News

Some users read news online through various sources that provide news content in regional languages such as JioNews, 'Navbharat Times' in Hindi, 'Sakal.com' in Marathi, and 'Eenadu' in Telugu.

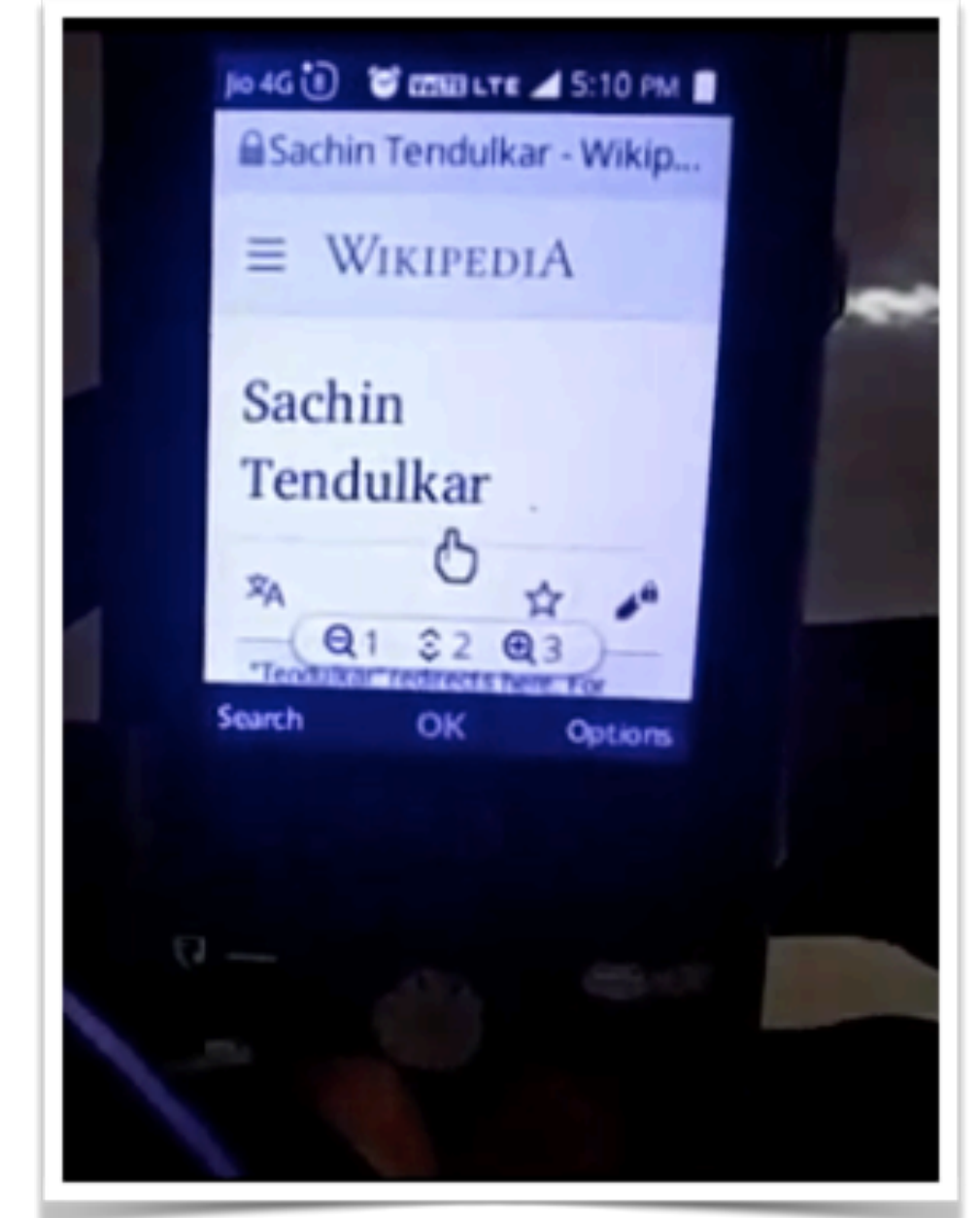


### General knowledge

Few users occasionally read Wikipedia as it appeared as one of the topmost search results.



User reading news in Hindi.



User reading an article from Wikipedia in browser.



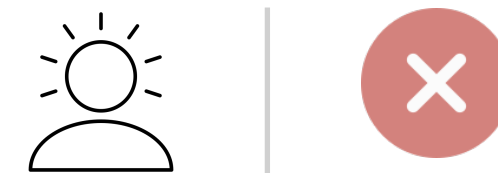
## 5. Were users aware of Wikipedia?

Most users were aware of Wikipedia but used it occasionally.  
Few users were not aware of Wikipedia.



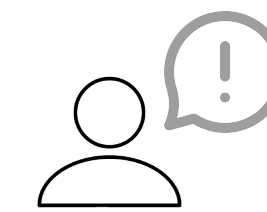
### Aware & have used

- Some users had heard of Wikipedia and had used it a few times.
- They came across Wikipedia while searching on Google as Wikipedia appeared in the topmost search results.



### Aware & haven't used

- Some users had heard of Wikipedia but had never used it.
- They were aware of Wikipedia as it appeared in topmost search results as well as through news, friends and children.



### Not aware

- Few users were not aware of Wikipedia.

## 6. What was users' perception about Wikipedia?

Users considered Wikipedia to be a site that gives detailed information about a topic. They related it to encyclopaedia and Google.



### Encyclopaedia

Few users believed Wikipedia to be like a dictionary or encyclopaedia, to get in-depth information about a topic, especially about famous people.



*Wikipedia is a collection of information about people and topics and it is tied to Google so you can get it when you search through Google.*

— User 7, Delhi



### Channel of Google

Few users considered Wikipedia to be a channel of Google as it frequently appeared in topmost search results.

# FINDINGS

**1** ABOUT JioPhone USERS

**2** USABILITY STUDY FINDINGS

# PART TWO

# USABILITY STUDY FINDINGS

---

1. ONBOARDING
2. CONSENT SCREEN
3. HOME SCREEN
4. EXPLORATION OF ARTICLE PAGE
5. OVERALL FEEDBACK ON THE APP

# PART TWO

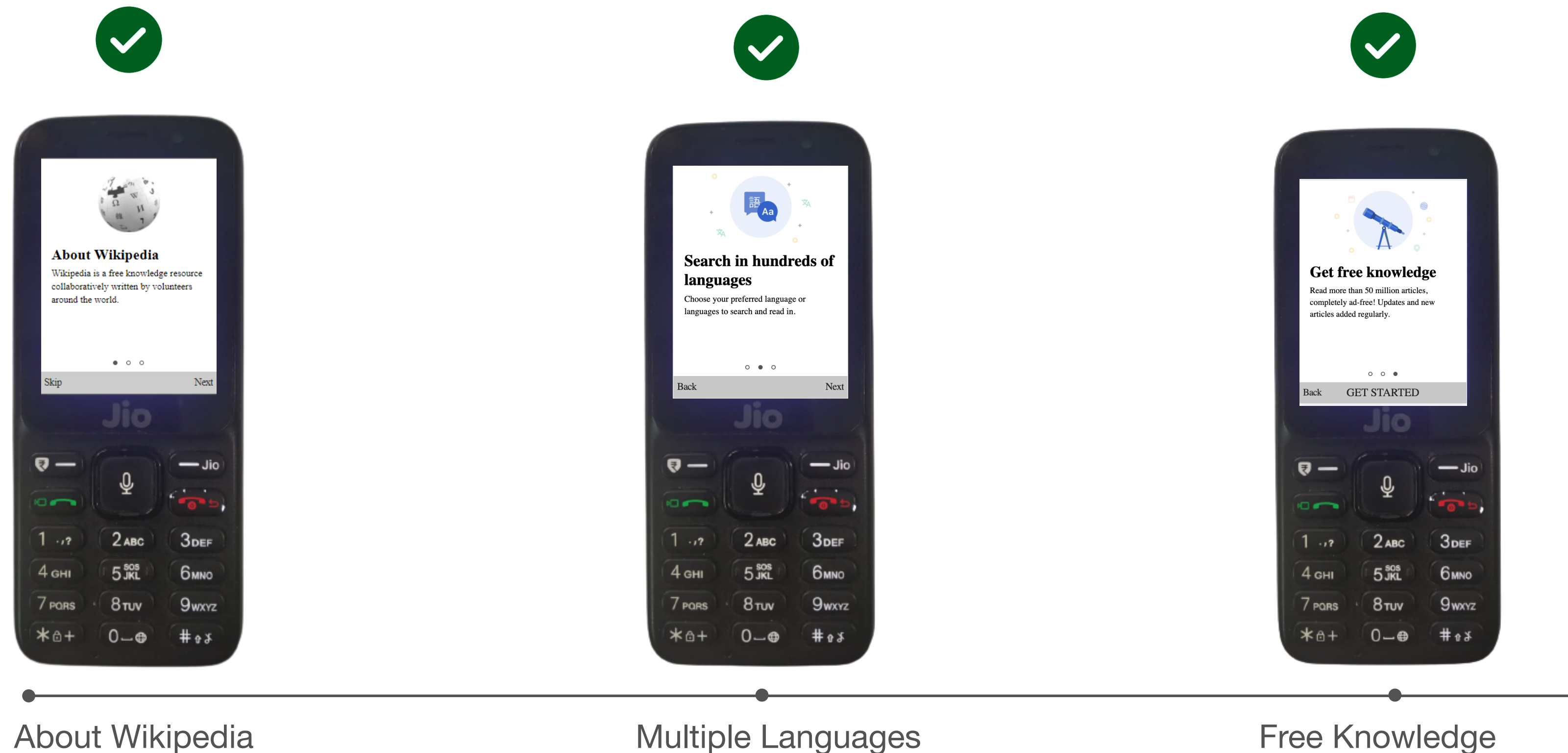
# USABILITY STUDY FINDINGS

---

1. ONBOARDING
2. CONSENT SCREEN
3. HOME SCREEN
4. EXPLORATION OF ARTICLE PAGE
5. OVERALL FEEDBACK ON THE APP

# What was the users' overall behavior on Onboarding Screens?

Almost all users (19/20) clicked on the “Next” button to proceed ahead so that they could start using the app. One user clicked on “Skip” to proceed.



## ONBOARDING: WORKED



### Completed the task to move forward

Almost all users (19/20) were able to understand and complete the onboarding tasks to proceed forward by clicking on the 'Next' button. One user clicked on 'skip'.

Most users (16/20) did not read the description as they were not used to reading it on other apps as well.

### Understood the description of onboarding screens

Most users (14/20) had seen similar onboarding screens while downloading other apps as well and understood screens would include information about the app.

### Read the description of onboarding screens

Few users (4/20) who read the description given on onboarding screens before proceeding and understood that the screens included description about what all is there in the app.

# PART TWO

# USABILITY STUDY FINDINGS

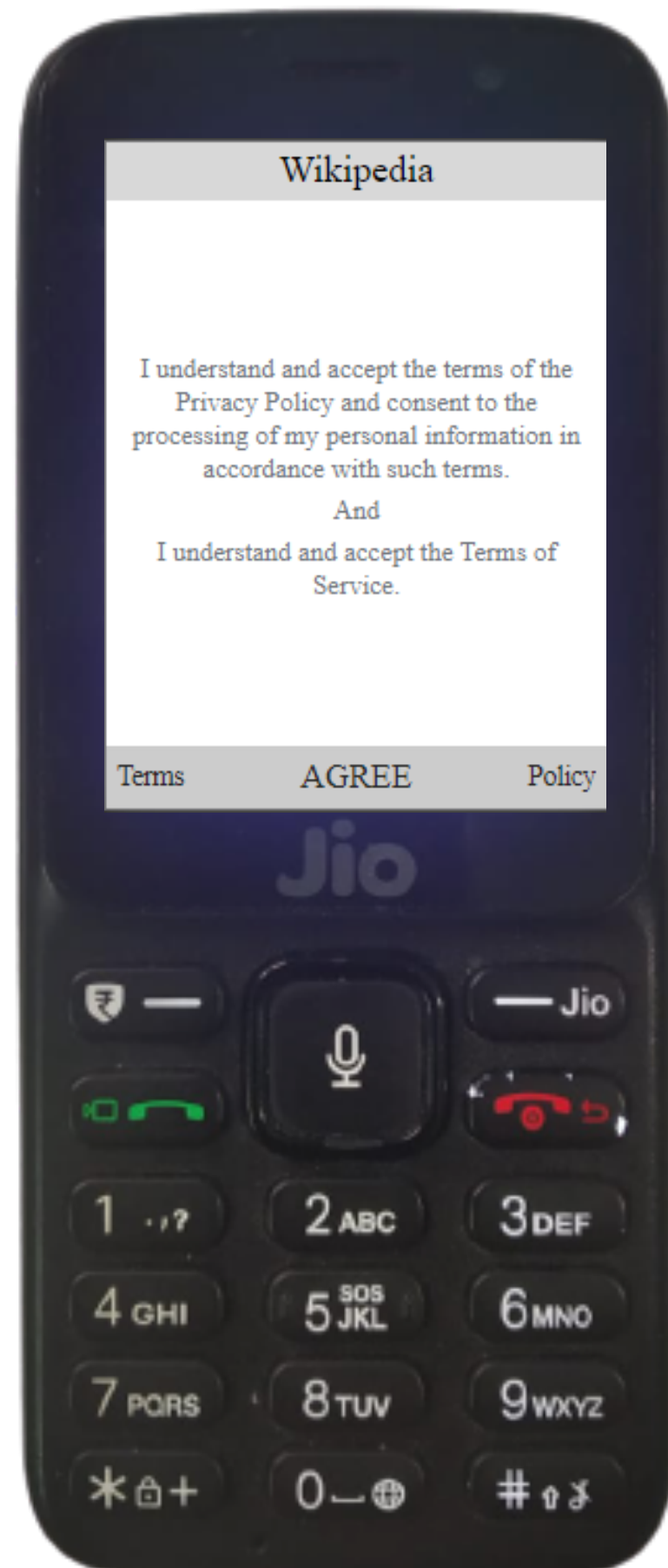
---

1. ONBOARDING
2. CONSENT SCREEN
3. HOME SCREEN
4. EXPLORATION OF ARTICLE PAGE
5. OVERALL FEEDBACK ON THE APP



*I don't have any problems with clicking on agree, incase of any unknown app, I would have read the T&C. I have heard about Wikipedia so it is fine.*

— User 15, Delhi



## CONSENT SCREEN: WORKED

### Completed the task to move forward

All users (20/20) understood and completed the task to proceed forward by clicking on 'Agree'.

### Able to understand that the screen includes T&C

Most of the users (14/20) understood that the screen included the terms and conditions of using the app as they had seen similar consent screens on other apps as well.

### Comfortable giving access

All users (20/20) were comfortable or ignored the consent screen as they were used to giving permissions to apps and did not see Wikipedia as a threat.

# PART TWO

# USABILITY STUDY FINDINGS

---

## 1. ONBOARDING

## 2. CONSENT SCREEN

## 3. HOME SCREEN

1. Search Wikipedia

2. App Language

3. Send Feedback

4. **Text Size**

## 4. EXPLORATION OF ARTICLE PAGE

## 5. OVERALL FEEDBACK ON THE APP

# How did the users' proceed from the home screen?



Most users (13/20) selected the search Wikipedia feature to proceed.

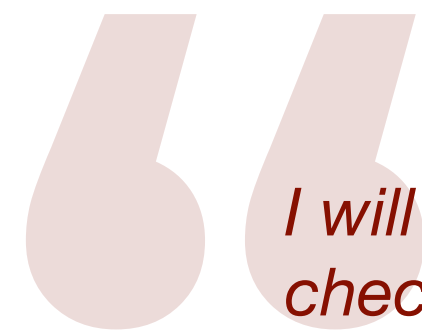
Some users (7/20) selected settings to see if there was an option of changing the language.

## Search Wikipedia

Most users opted to search for information after they landed on the home screen and expected to see search results related to their search query.

## Settings

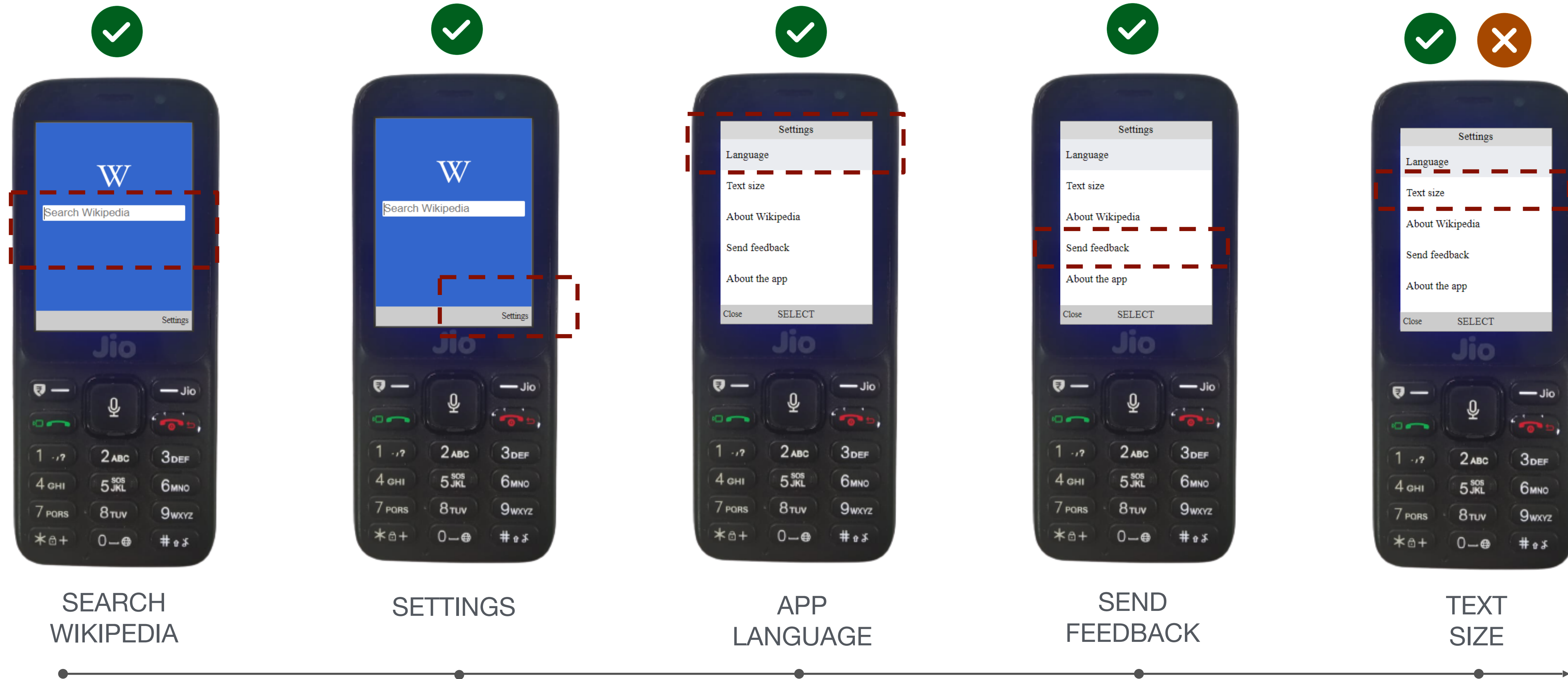
- Few users directly went to settings to check if there was any option of voice search or an option to change the language to their regional language.
- Few users went to settings as they felt it was the only clickable option on the home screen.



*I will have to type, there's no mic here! I think I should check in the settings once to see if there's voice search.*

— User 7, Delhi

# What was the users' overall usage of features on the home screen?



✓ Worked • ✗ Struggled • ✓✗ Mixed



*When you type 'Vi', a lot of search results appear on their own.*

— User 5, Mumbai



*User searching for famous celebrity in India*

## SEARCH WIKIPEDIA: WORKED

### **Able to search for information on Wikipedia**

All users (20/20) understood that they could search for information. They searched various topics related to places, famous personalities, etc.

### **Liked that the entire keyword needs not to be typed**

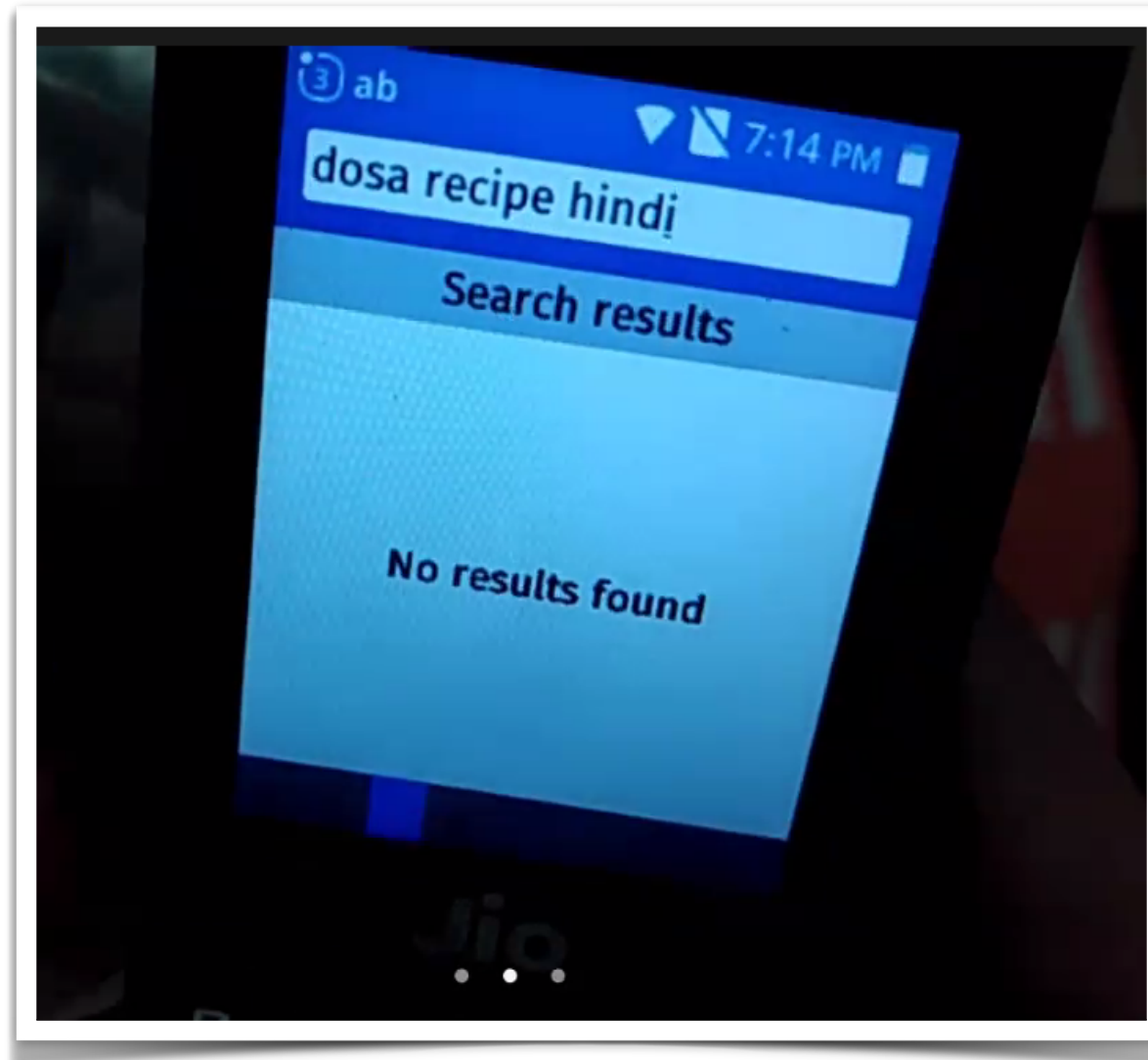
Some users (6/20) liked that they did not have to type the entire search query to search for information. They liked that just by typing a few letters they were getting different search results.

### **Understood Wikipedia is an online encyclopaedia**

After exploring the app, a few users (2/20) understood that Wikipedia is an online encyclopaedia and not a search engine like Google.

*When I search for 'Dosa recipe in hindi' using voice search I get the results, here maybe the information is available in English only and not Hindi.*

— User 10, Delhi



User unable to get search results for the search query.

## SEARCH WIKIPEDIA: STRUGGLED

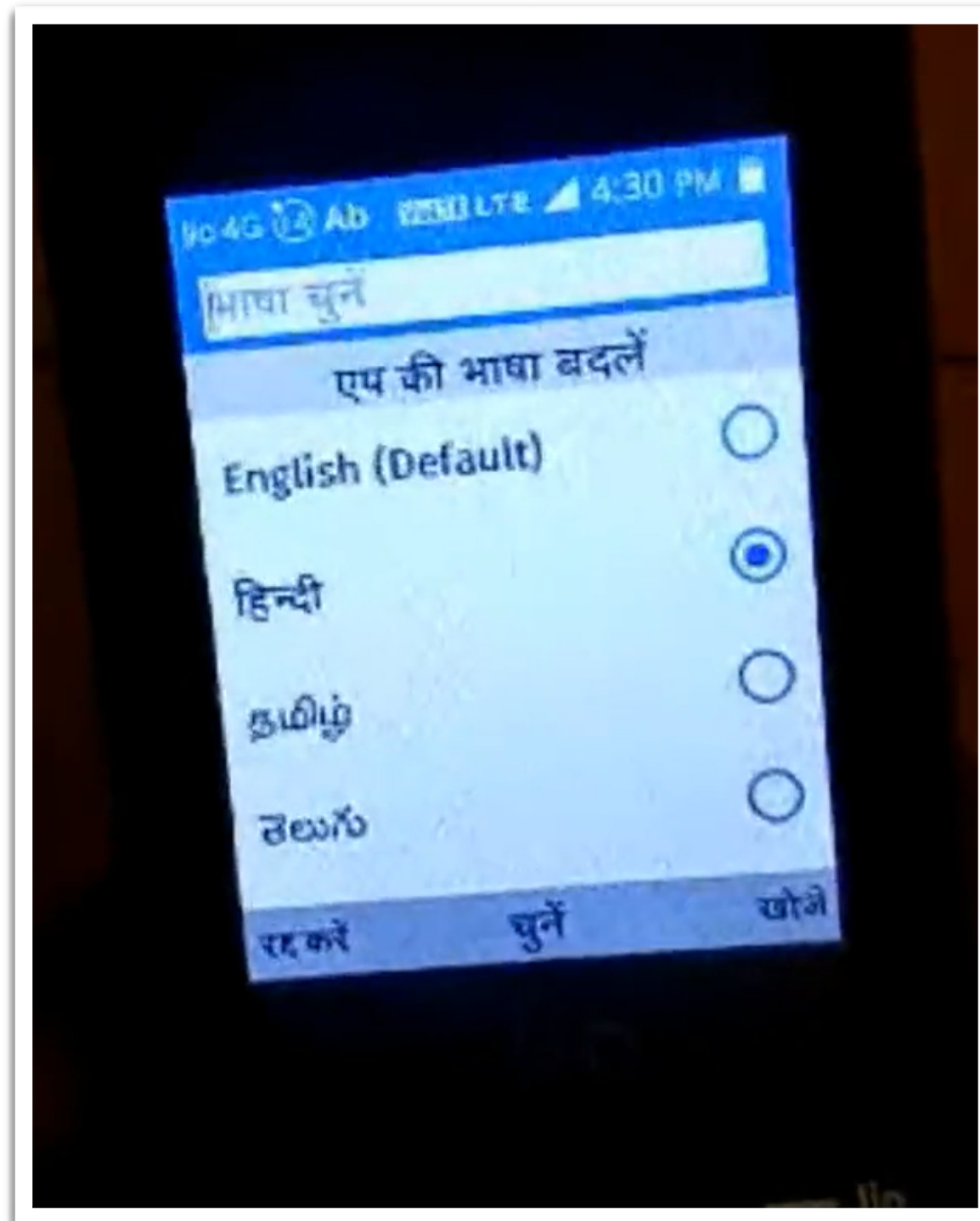
### Confused on not getting any search results

Most users (13/20) were unable to understand why they were not getting any search results:

- **Compared to Google search:** Users compared Wikipedia search to Google search and were confused as to why they were not getting any search results after typing their query.
- **No content available in regional language:** Users who were searching for regional information mostly using voice search or had changed the app language through settings were confused about why they were not getting any search results.

*I can change before searching only. I will use this feature because I can use it whenever I want to read in Marathi.*

— User12, Mumbai



User changing the app language from English to Hindi

## APP LANGUAGE: WORKED

### Easy to locate

Most users (16/20) were able to discover the feature on their own as they had seen the option of changing the language within the settings of their phone or on apps they used and related the same here.

### Understood the concept of app language

Most users (15/20) understood that by changing the app language through settings only the language of the Wikipedia app would change, and the language of their phone would remain the same.

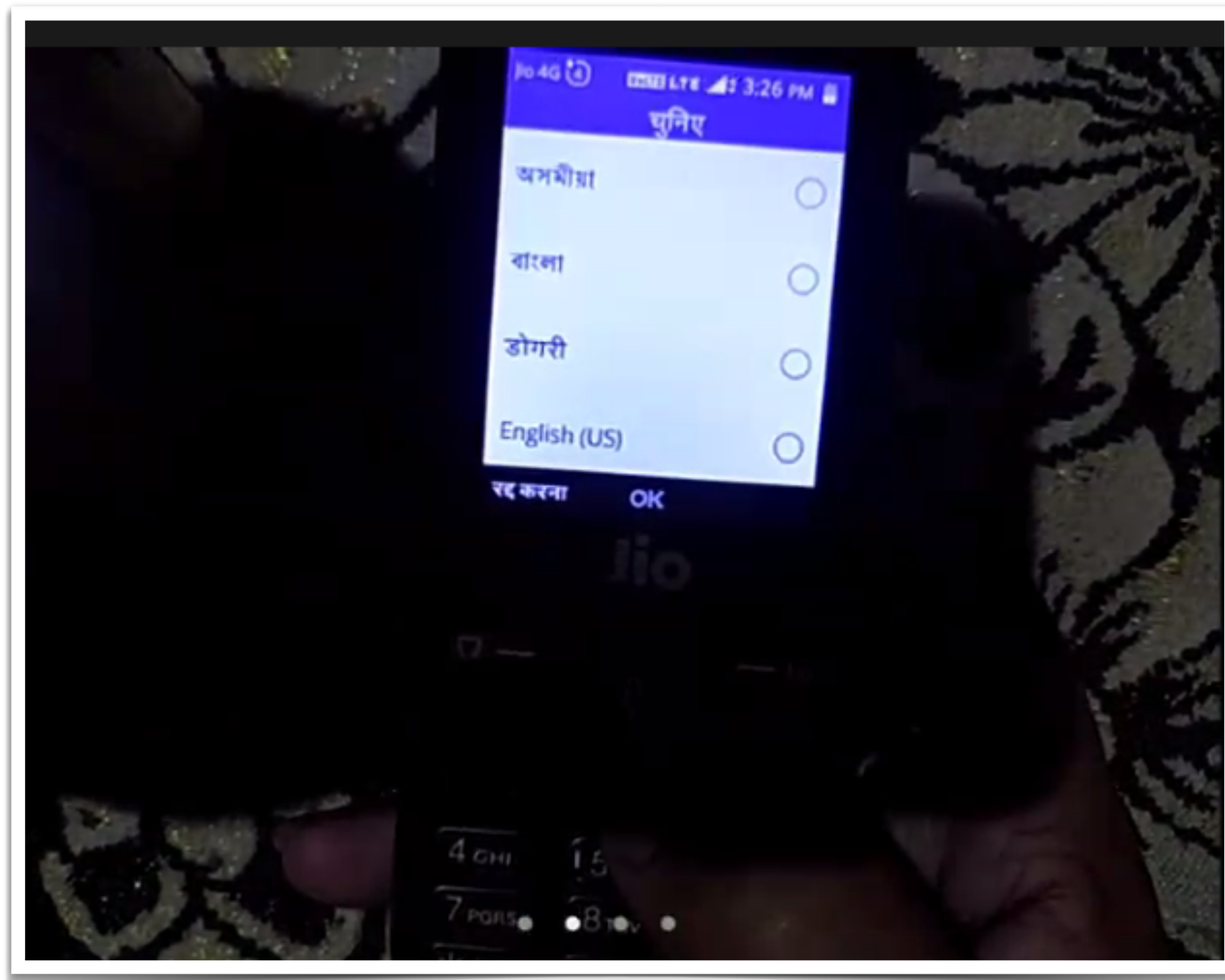
### Able to change the app language

Most users (15/20) were able to change the language of the app from English to their regional language or vice versa.

### No change in keyboard

Most users (10/20) liked the feature as they did not have to use the regional language keypad to search for information.

## APP LANGUAGE: STRUGGLED



User changing the app language from English to Hindi

### Unable to understand the concept

Few users (5/20) did not understand that the language of the app could also be changed. They believed that the language option here is the same as the article language option given in the menu or shortcut links.

### Unable to discover the feature

Few users (4/20) were unable to discover the feature initially and were probed by the researcher to know their understanding.

### Unaware that keyboard language would not change

Few users (4/20) were not comfortable initially about changing the app language to their regional language as they believed that they would have to use the regional language keypad for typing.



## SEND FEEDBACK: WORKED

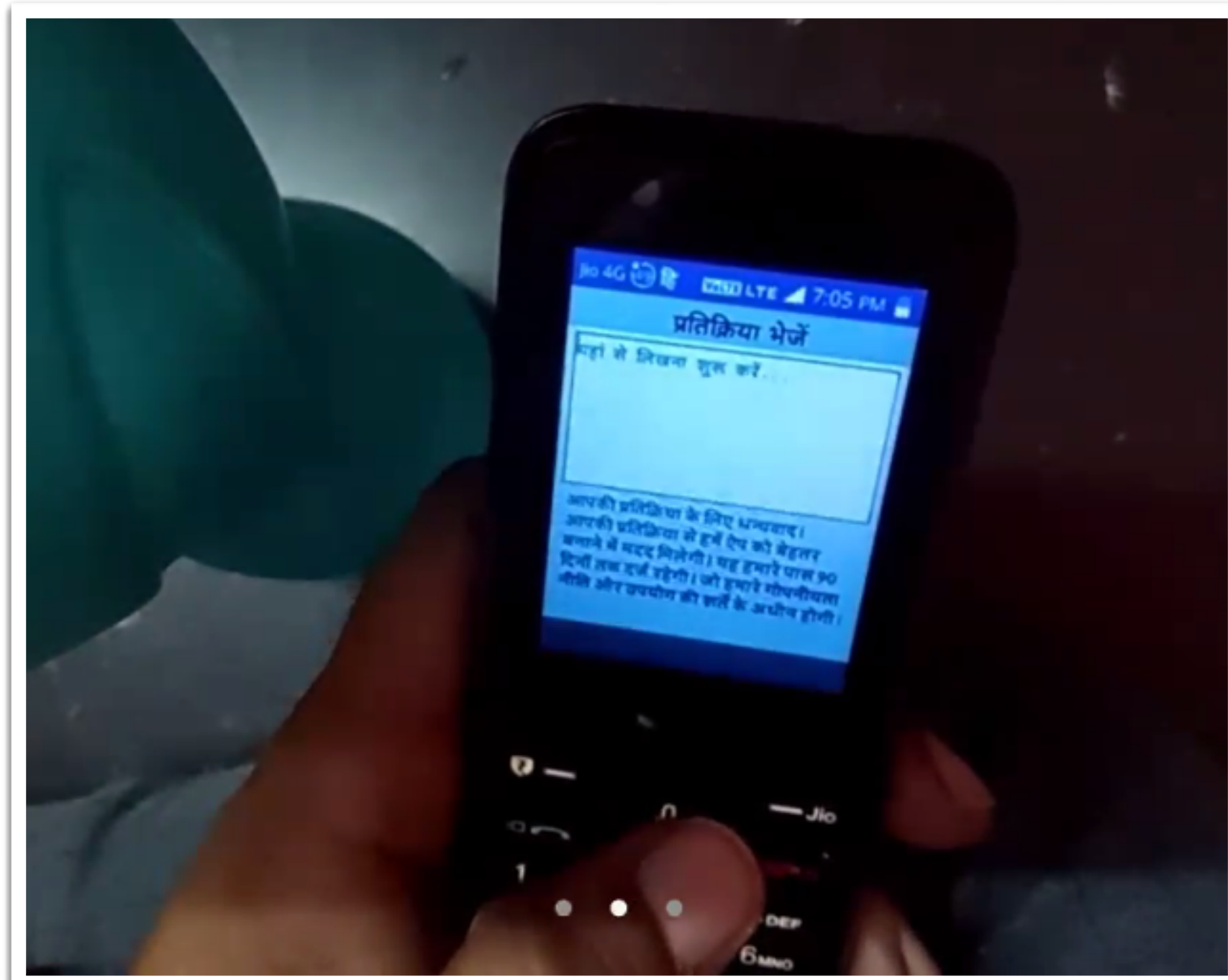
### Understood the concept of send feedback

Most users who explored the feature (14/15) understood the concept and liked that there was an option to give feedback in settings.

## SEND FEEDBACK: STRUGGLED

### Struggled to discover send feedback

Some users who explored the feature (6/15) struggled to discover the feature initially as they were searching for the feedback option through the menu or shortcut links instead of settings.



User exploring the send feedback feature

## TEXT SIZE: WORKED

### Able to discover the feature

Most users who explored the feature (15/18) were able to discover the feature on their own either through menu or settings.

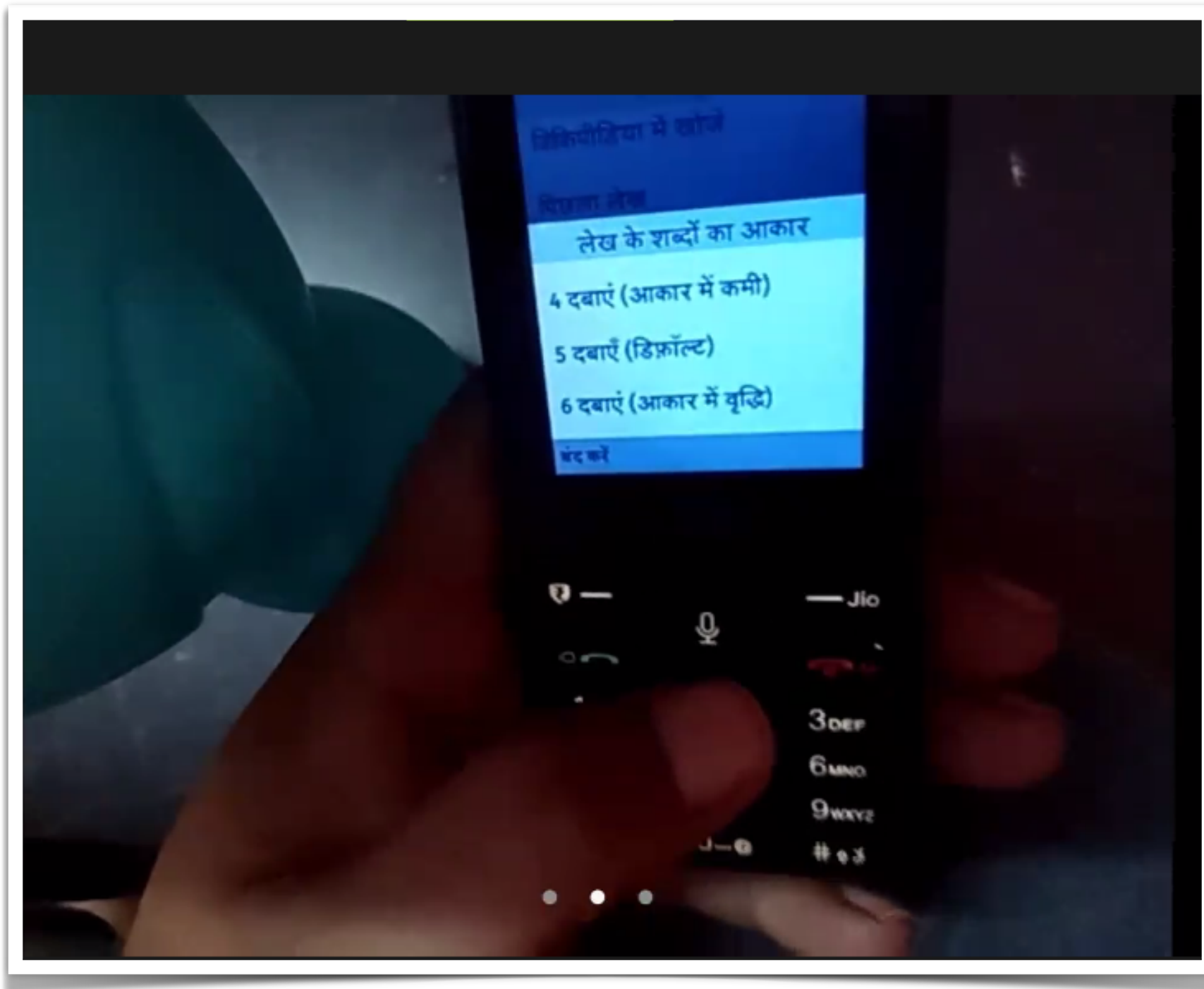
### Able to understand the feature

All users who explored the feature (18/18) understood that they could either increase or decrease the text size. They read and understood the instructions that were given.

Some users (8/18) were able to change the text size of the article.

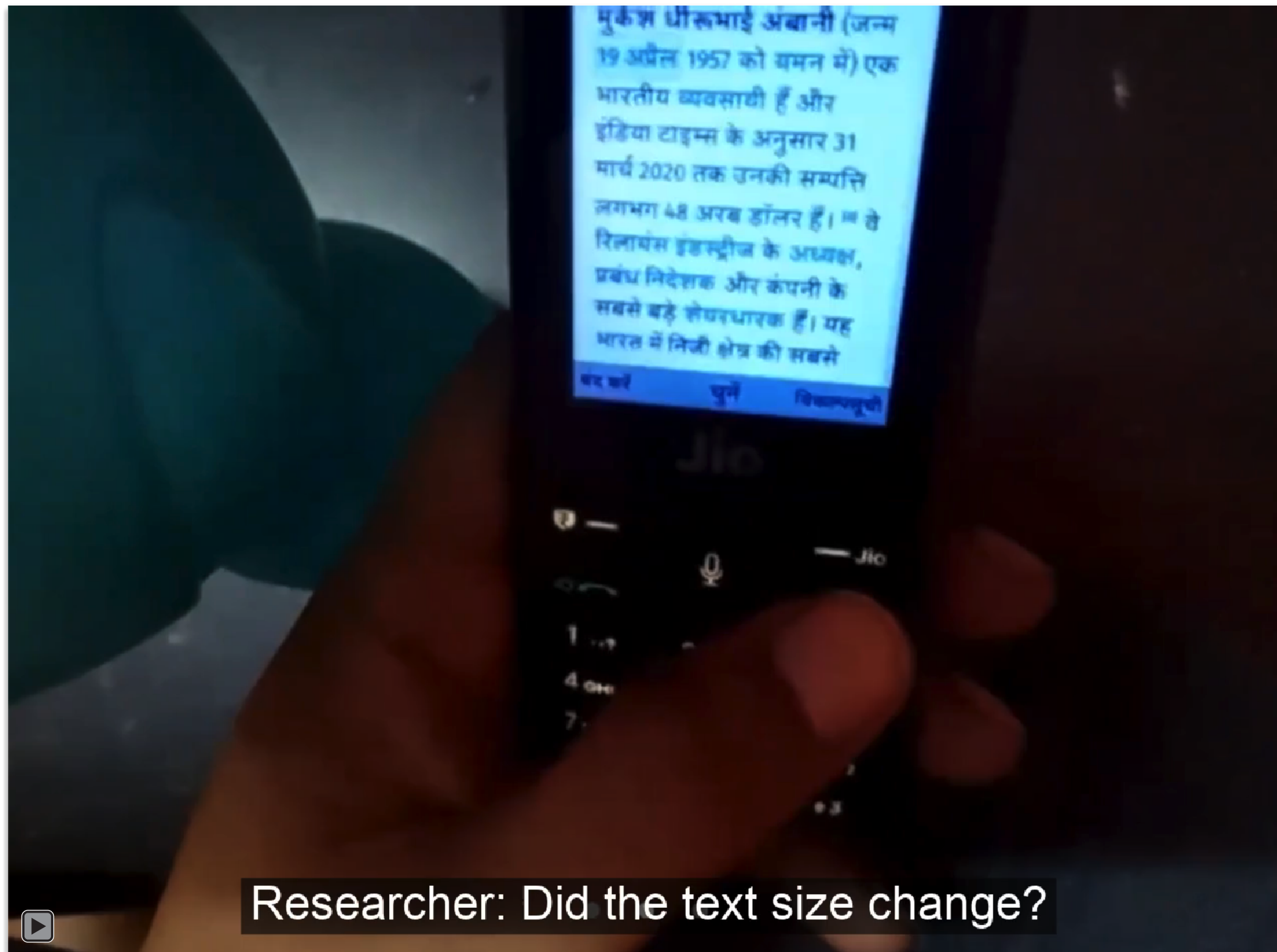
### Most preferred option

Most users who explored the feature (11/18) preferred to explore the feature through article menu rather than settings.



User reading the instructions to change the text size

## TEXT SIZE: STRUGGLED



Click to play video: User struggling to use the text size feature

### Struggled to use the feature

Most users who explored the feature (10/18) didn't understand that the page only has instructions and that they have to press those keys on the article page.

They were either pressing the keys on the page that included instructions or were scrolling up and down to select an option for text size.

### Unable to discover the feature

Few users who explored the feature (3/18) were unable to discover the feature within the app. After exploring the app, the users felt that there is no option of either increasing or decreasing the text size.

# PART TWO

# USABILITY STUDY FINDINGS

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## 1. ONBOARDING SCREENS

## 2. CONSENT SCREEN

## 3. HOME SCREEN

## 4. EXPLORATION OF ARTICLE PAGE

### 1. Quick Links

### 2. Menu

### 3. Sections

### 4. Quick Facts

### 5. Gallery

### 6. Article Language

### 7. Hyperlinks

### 8. Previous Article

## 5. OVERALL FEEDBACK ON THE APP

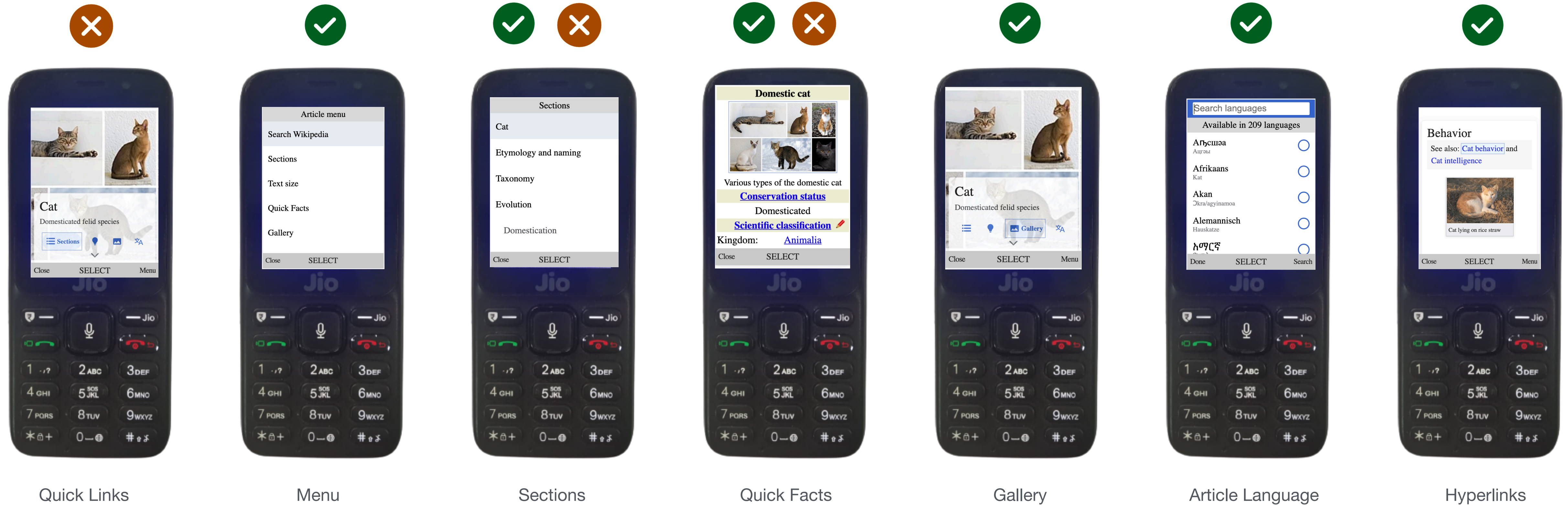
# What was the users' behavior after they land on the article page?

---



Most users (17/20) didn't notice the quick/ shortcut links after they arrived on the article page. They immediately started reading the article by pressing the down arrow button.

# What was the users' overall usage of features on the article page?



✓ Worked • ✗ Struggled • ✓✗ Mixed

# What was the users' overall usage of features on the article page?





## QUICK LINKS: WORKED

### Noticed the quick links feature

Few users (3/20) noticed quick links and explored the language or sections feature when they arrived at the article page.

### Understood the icons for gallery and language

Some users (7/20) were able to identify icons used for gallery and language feature in quick links.





## QUICK LINKS: STRUGGLED

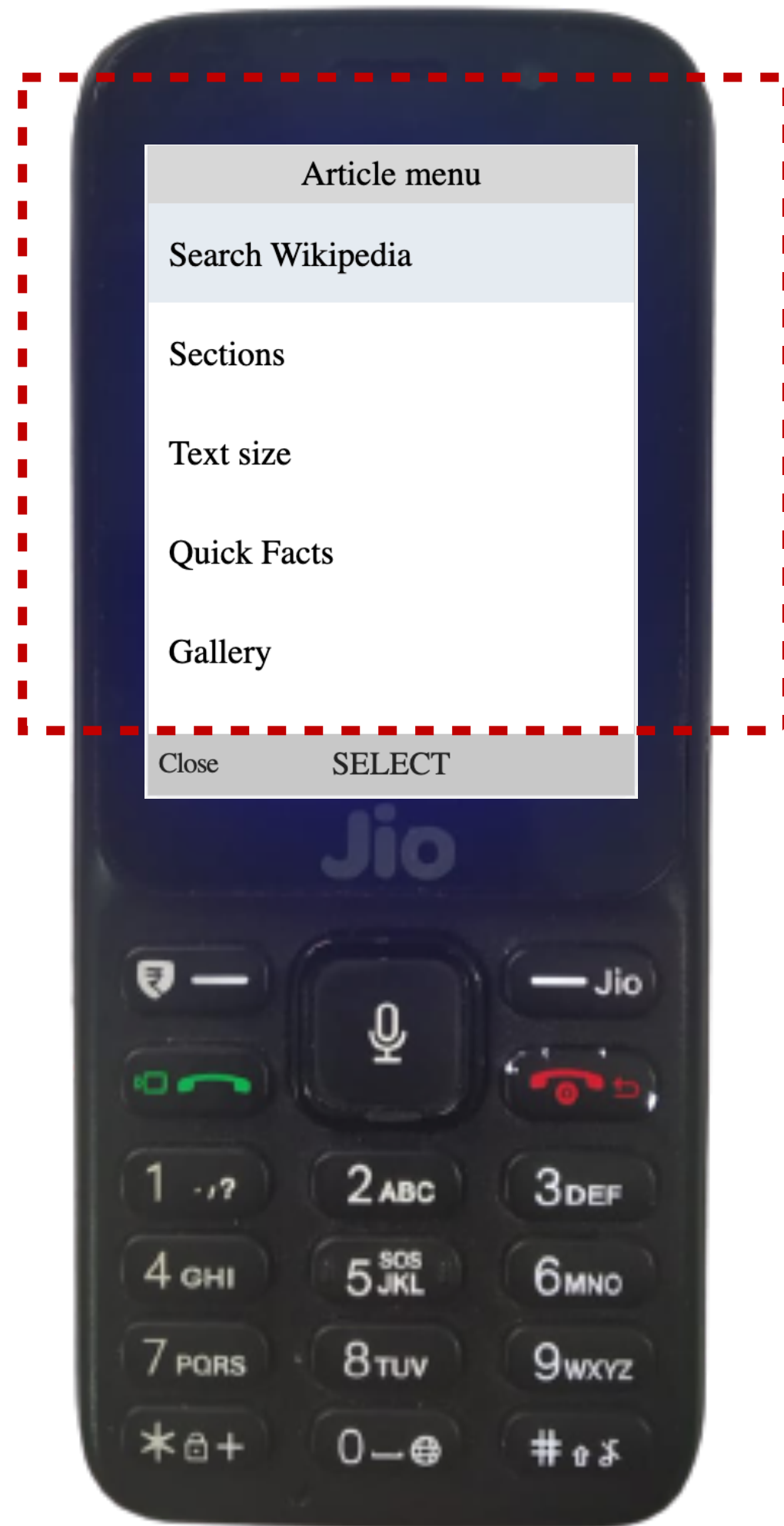
### Did not notice quick links on the article page

Most users (17/20) didn't notice quick links when they arrived at the article page.

Users ignored the feature and proceeded to read the article by clicking on the down arrow button.

### Misunderstood the icon of quick facts

Most users who explored the feature through quick links (4/8) misunderstood the icon used for quick facts and considered it to be the icon of a map / location.



## ARTICLE MENU: WORKED

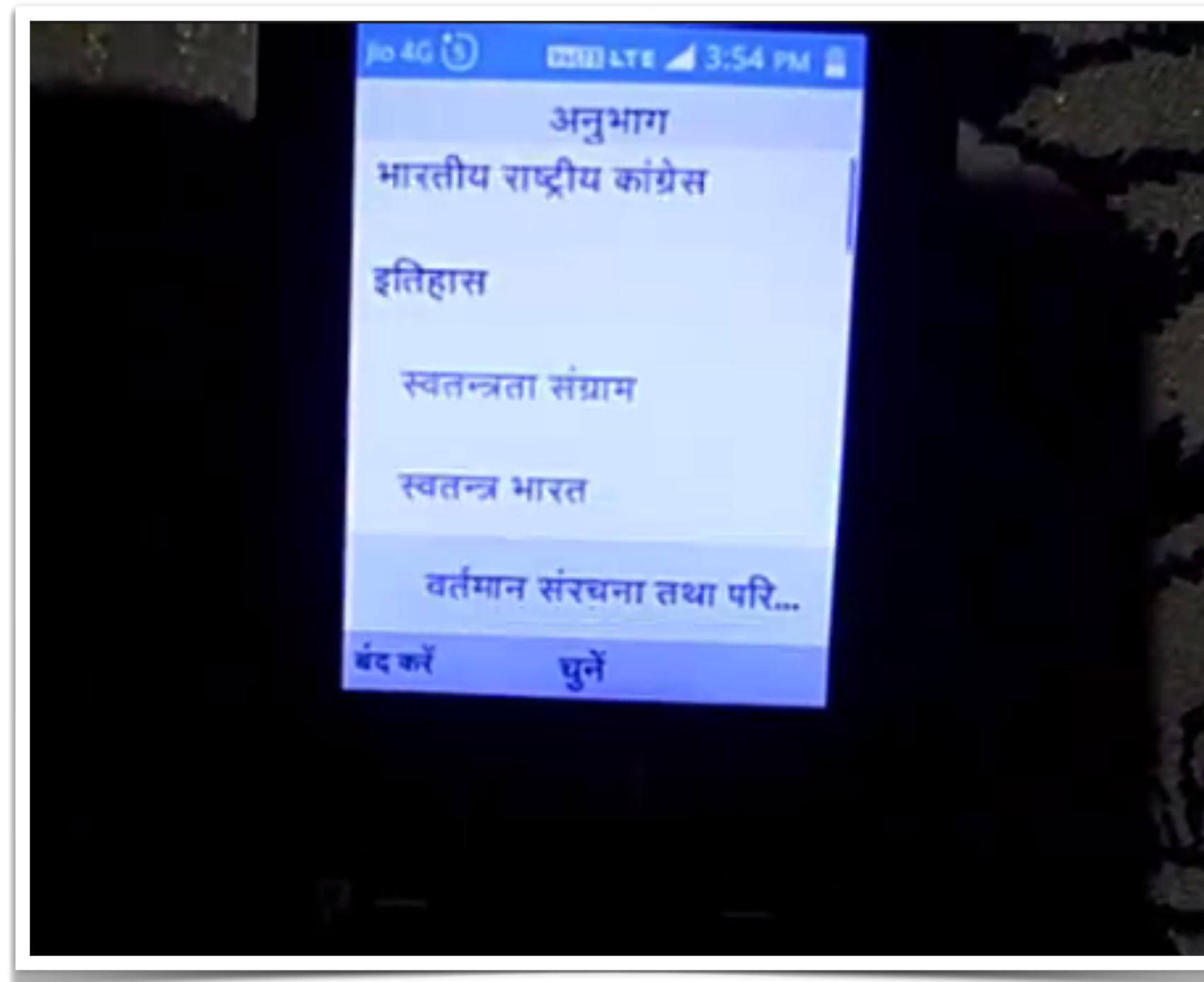
### Explored the features through article menu

Most users (13/20) explored the features such as text size and article language through article menu as they were used to exploring features in menu for other apps as well.



*This is part of the same article. This is like a shortcut, so from here I can read any topic related to the article.*

— User 6, Delhi



User exploring sections within an article

## SECTIONS: WORKED

### Able to understand sections feature

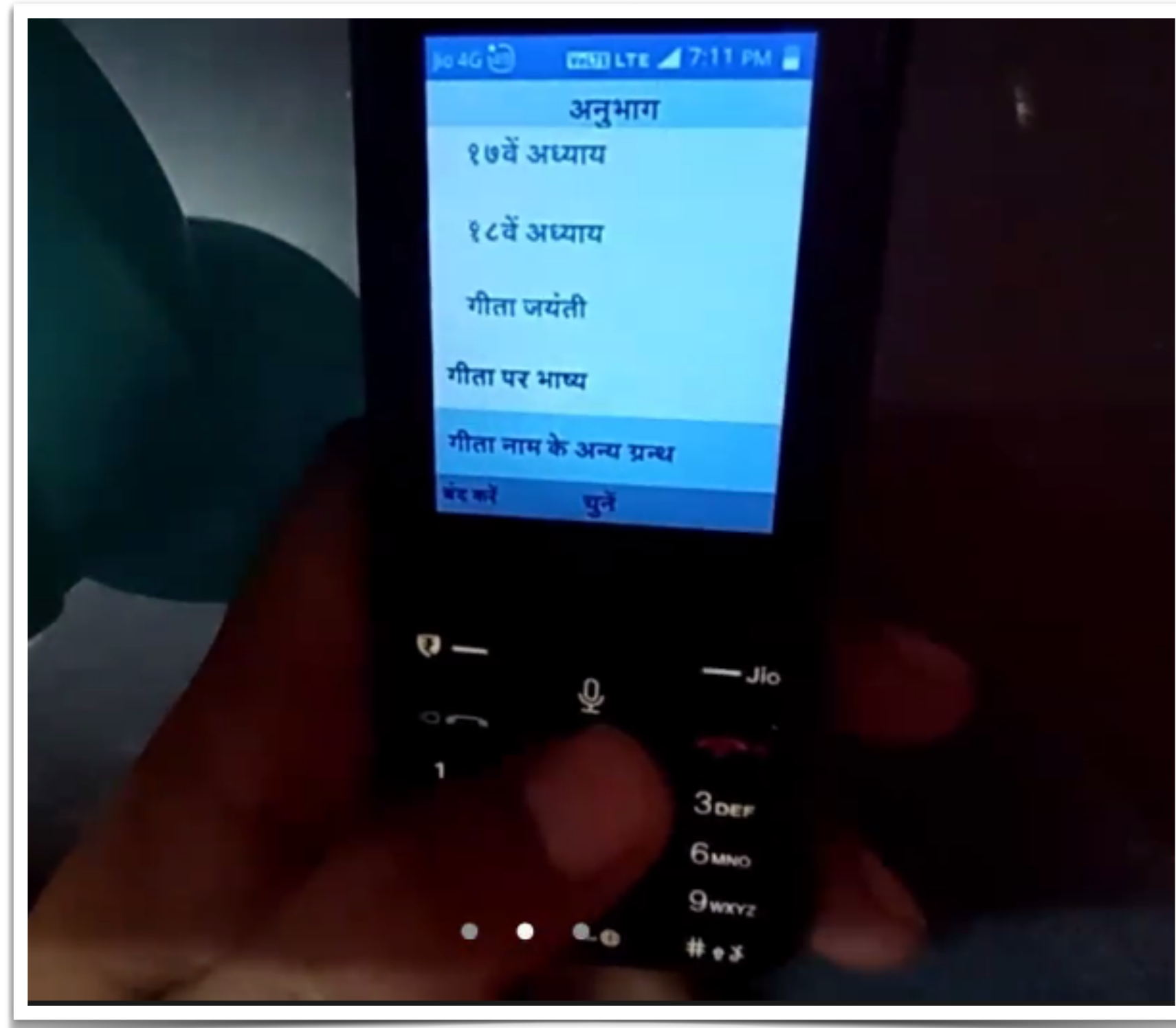
Most of the users (15/20) understood the concept and liked the feature.

- **Able to understand that it is same article:** Most of the users were able to understand that they were exploring the topics/ subtopics of the same article that they were reading, and it was a part of the article itself.
- **Able to understand that it includes topics within the article:** Most of the users understood that they could go to a particular section in the same article by clicking on the section links.
- **Related to Index:** Users had seen the list of topics being listed at other places like books etc. and related sections to Index, Menu or Table of Contents.

### Able to discover sections feature

Some users (9/20) were able to discover the feature on their own while exploring the article. They discovered the feature either through quick links or through the menu.

## SECTIONS: STRUGGLED



User exploring sections within an article

### Unable to discover sections

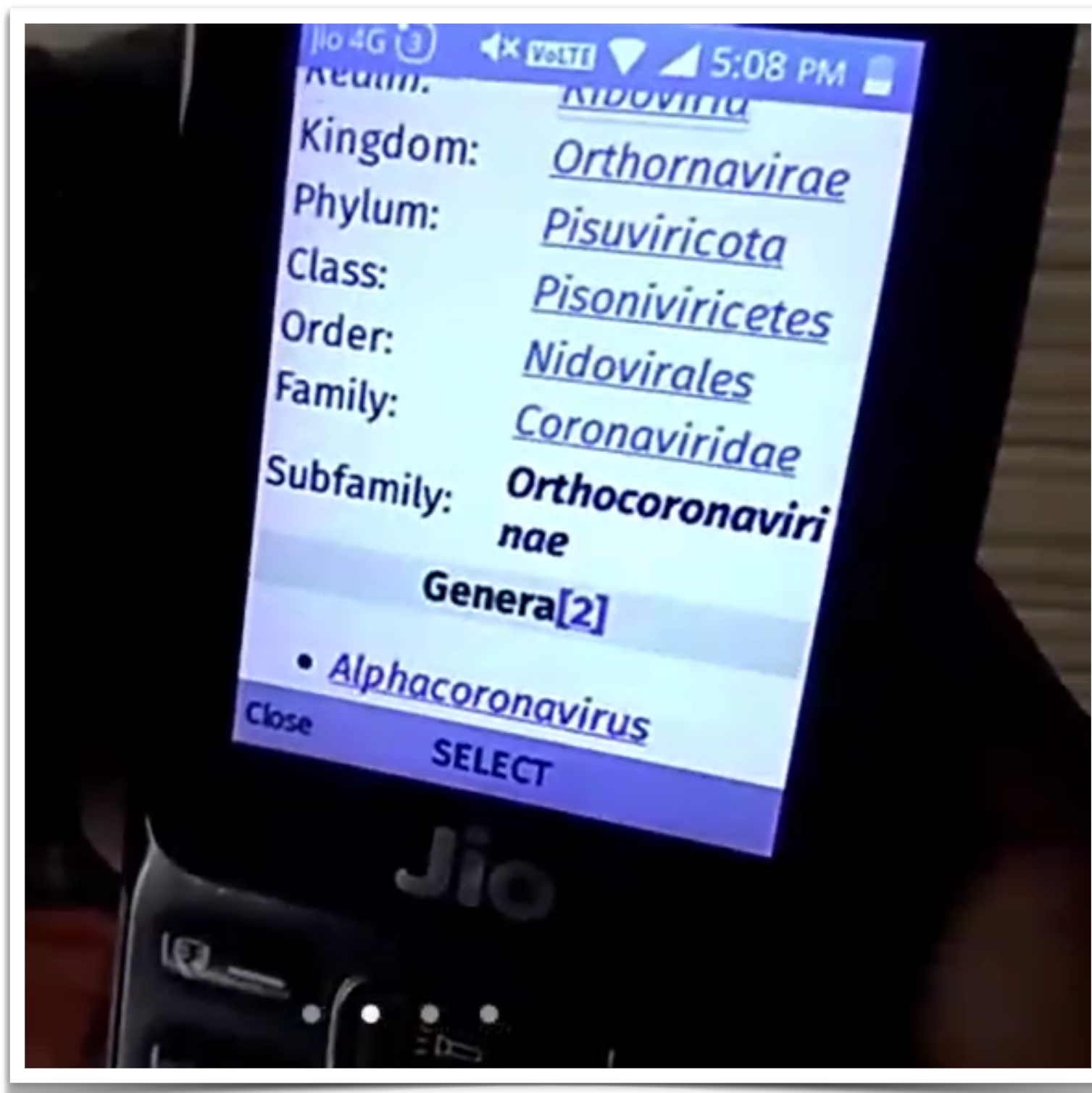
Some users (11/20) did not notice the feature on their own and were directed by the researcher to the sections feature.

### Unable to understand sections

Few users (5/20) did not understand the concept. They felt that they were reading entirely a new article, or the sections as users' search history.

*Mahatvpuran Tathya (Quick Facts) means important information. Therefore, here I can see all important information related to the article.*

— User 13, Delhi



User exploring quick facts within an article

## QUICK FACTS: WORKED

### Able to understand quick facts

Most users understood (12/20) that they could see the important information within this feature.

### Able to discover quick facts

Some users (11/20) were able to discover the feature on their own while exploring the article. Users discovered the feature either through quick links or through the menu.

### Understood the terminology

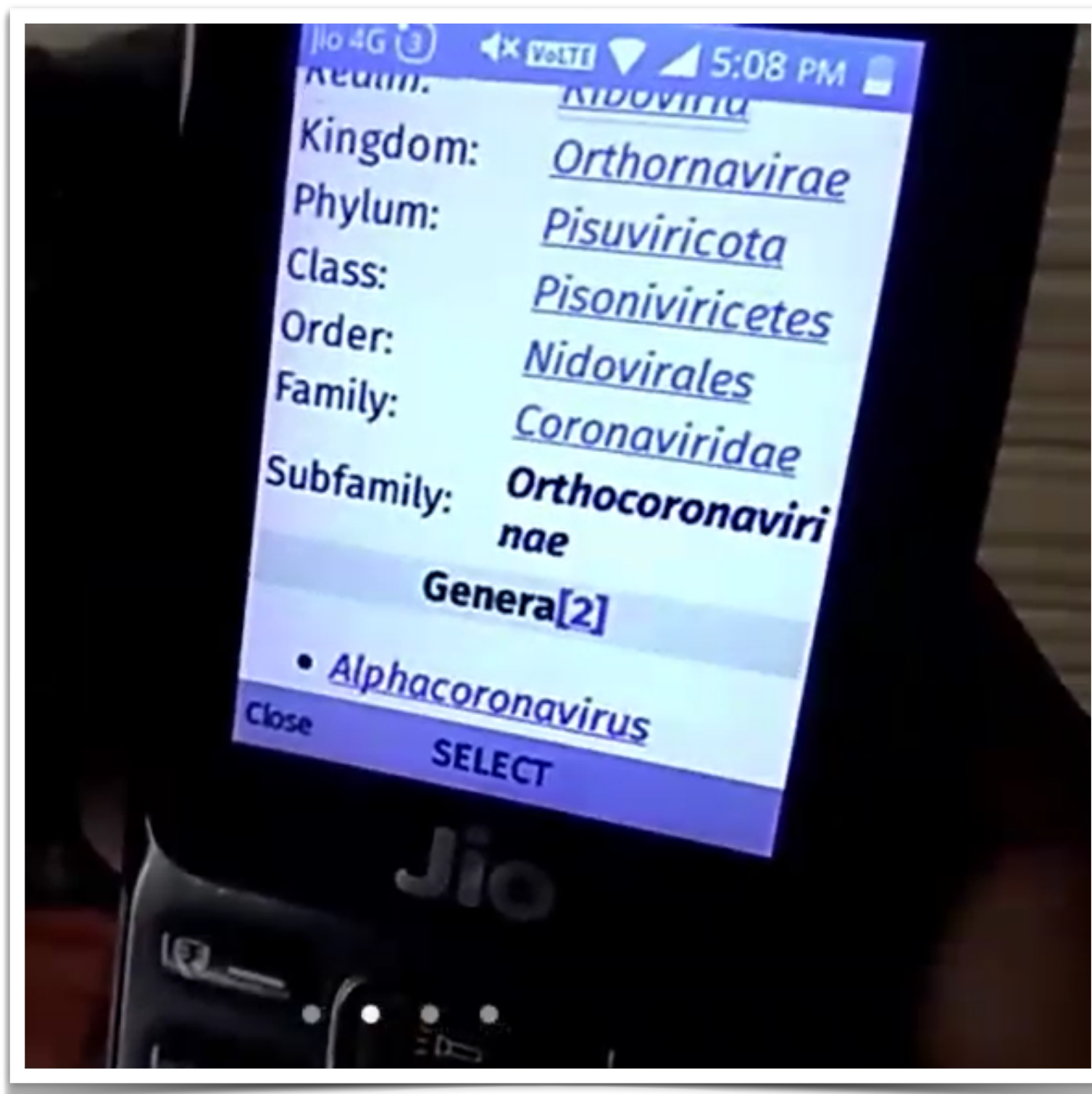
Some users (7/20) understood the terminology and expected to see the main points of the article at a glance.

### Able to understand quick facts icon

Few users (2/20) were able to understand the icon used for quick facts as they were familiar with the icon image.

*I expected to see a map here, as the icon used for it was of a location.*

— User 11, Mumbai



User exploring quick facts within an article

## QUICK FACTS: STRUGGLED

### Unable to discover quick facts

Some users (9/20) were unable to discover the feature on their own and were directed by the researcher to Quick Facts.

### Did not understand the concept

Some users (8/20) did not understand the concept of quick facts for various reasons:

- **Misunderstood the icon:** Users misunderstood the icon and related it to the icon of a map.
- **Latest & detailed information:** Users felt that it would include detailed and latest information point wise related to the article.
- **Photos related to article:** Users felt that it would include photos related to the article.

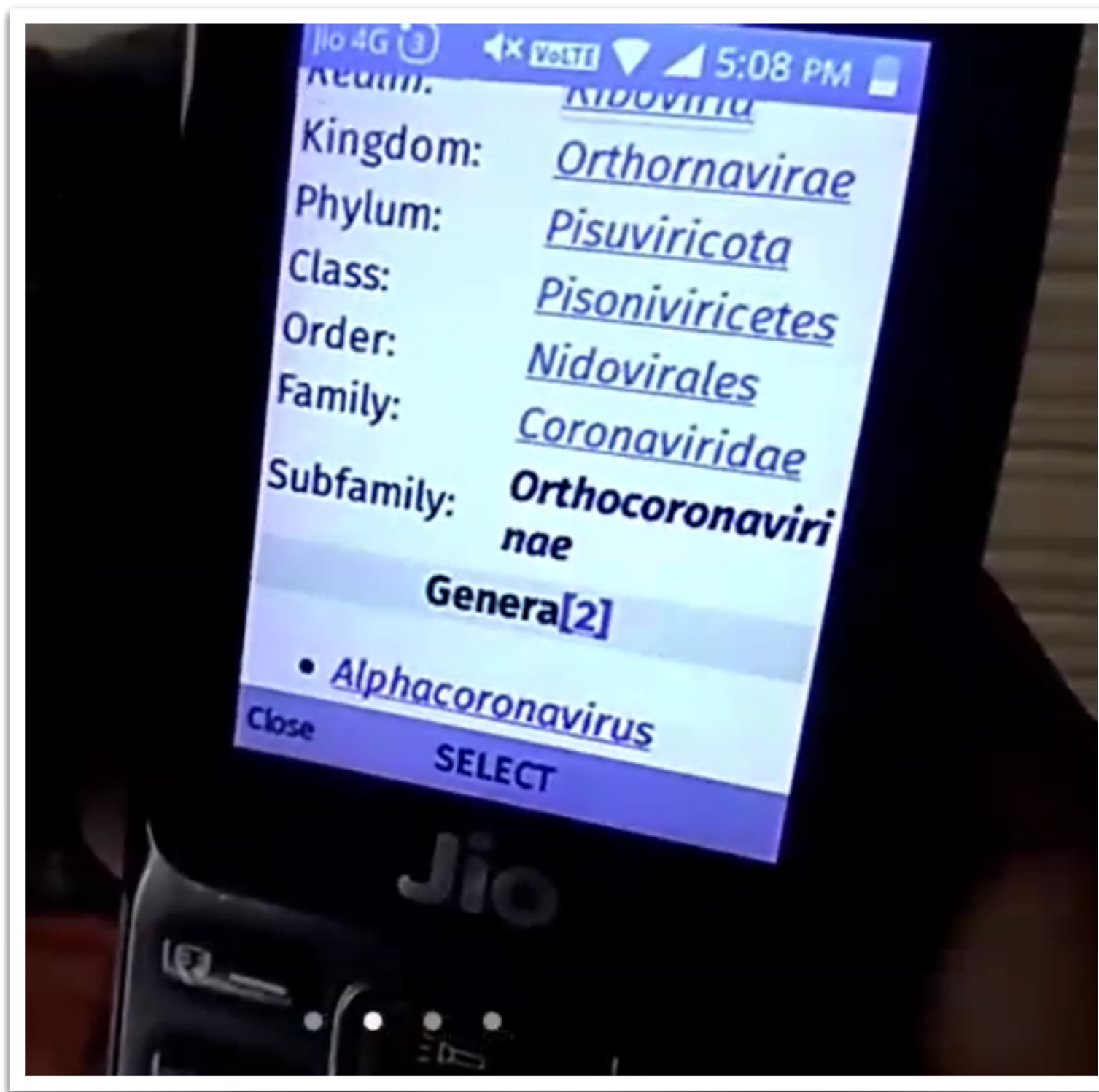
## QUICK FACTS: WISHLIST

### New and latest information

Few users (4/20) wished to see new and latest information about the topic they searched for.

### Vertical page bar scrolling

Few users (1/20) wanted to be able to scroll through quick facts so that they could easily navigate within the page.



User exploring quick facts within an article

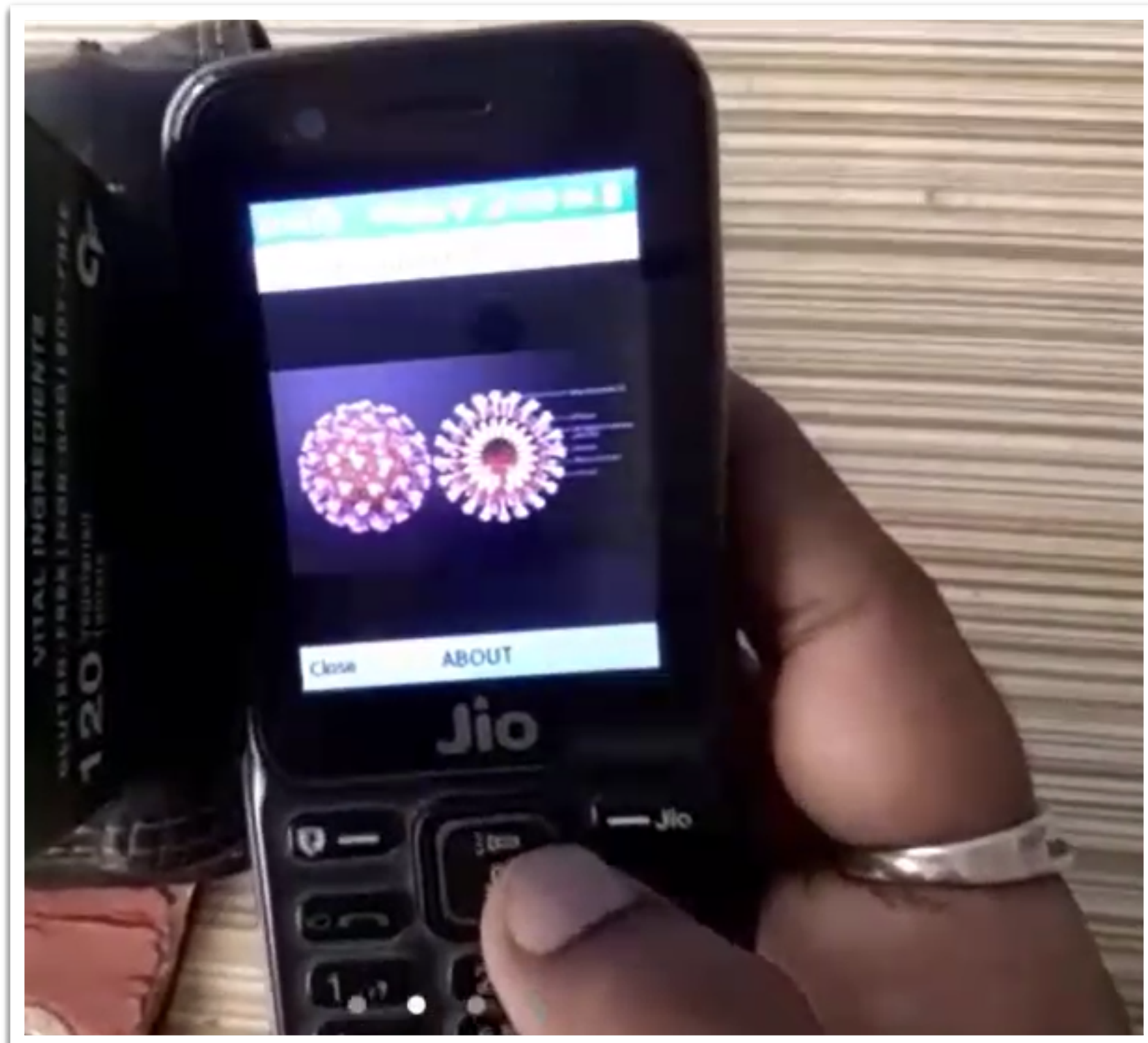


*I was hoping to see latest information on covid here.  
Like active cases, total cases etc. That should be here.*

— User 5, Mumbai

*Yes, I was expecting to see all these pictures only related to Goa.*

— User 16, Mumbai



User exploring images of Coronavirus in the gallery feature

## GALLERY: WORKED

### Able to understand the gallery feature

All users who explored the feature (19/19) were able to understand that the gallery had photos related to the article.

### Able to discover gallery feature

Almost all users who explored the feature (18/19) were able to discover the gallery on their own while exploring the article.

- **Able to identify the icon:** Users discovered the gallery feature through quick links as they were able to recognise the icon used for the feature.
- **Some discovered through Menu:** Users discovered the gallery feature through the menu option as they were within the article and only the menu feature was visible in the article page.

### Able to see multiple photos

Most users (11/15) were able to see multiple images within the gallery as they were able to understand that they had to click the left/ right button of their phone to see more photos.



## GALLERY: STRUGGLED

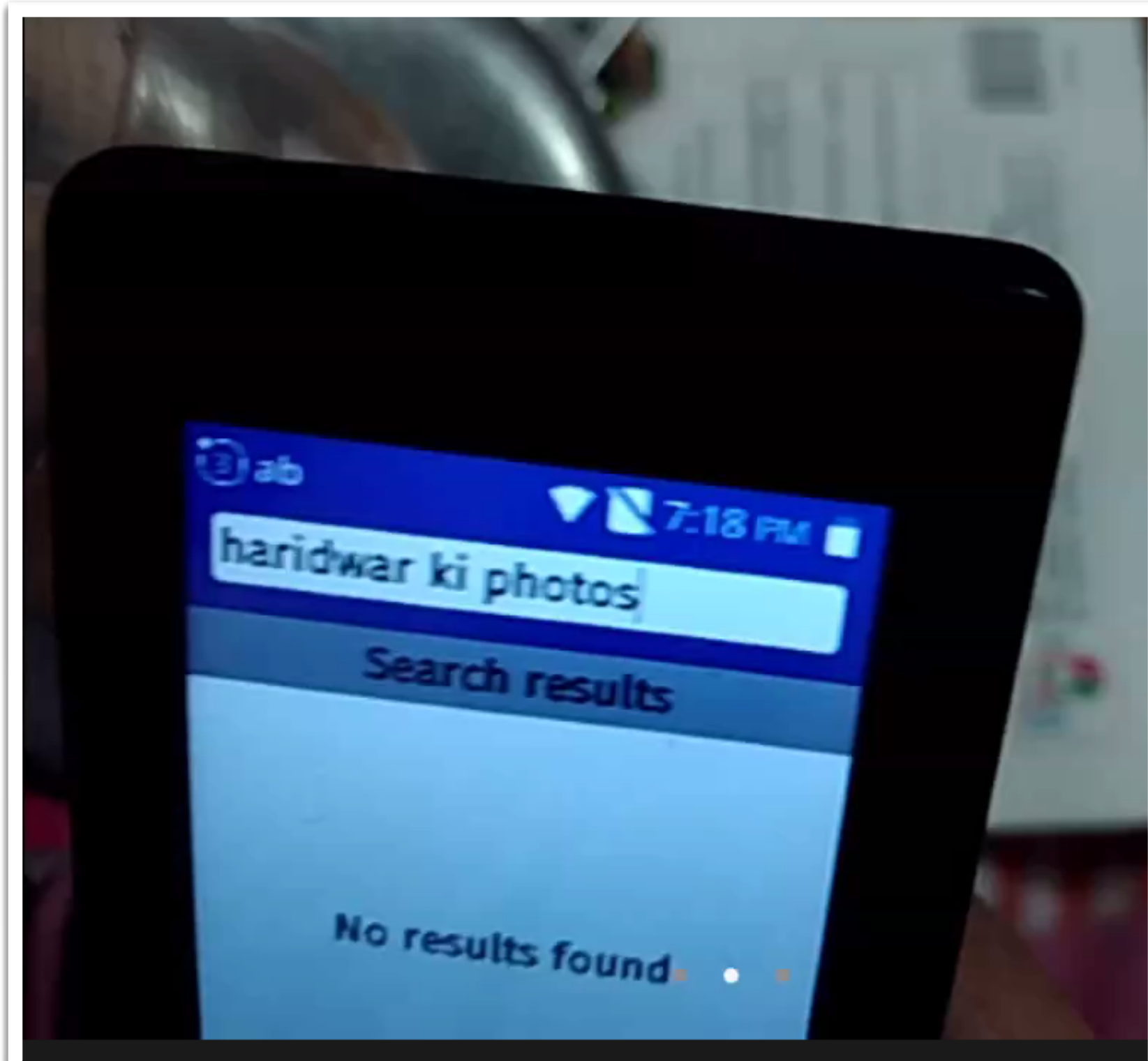
### Unable to discover gallery

Few users who explored the feature (1/19) were unable to discover the gallery feature on their own and were directed by the researcher.

They were searching for photos related to the article on search Wikipedia and expected to see photos as they would see via the search bar.

### Unable to see multiple photos

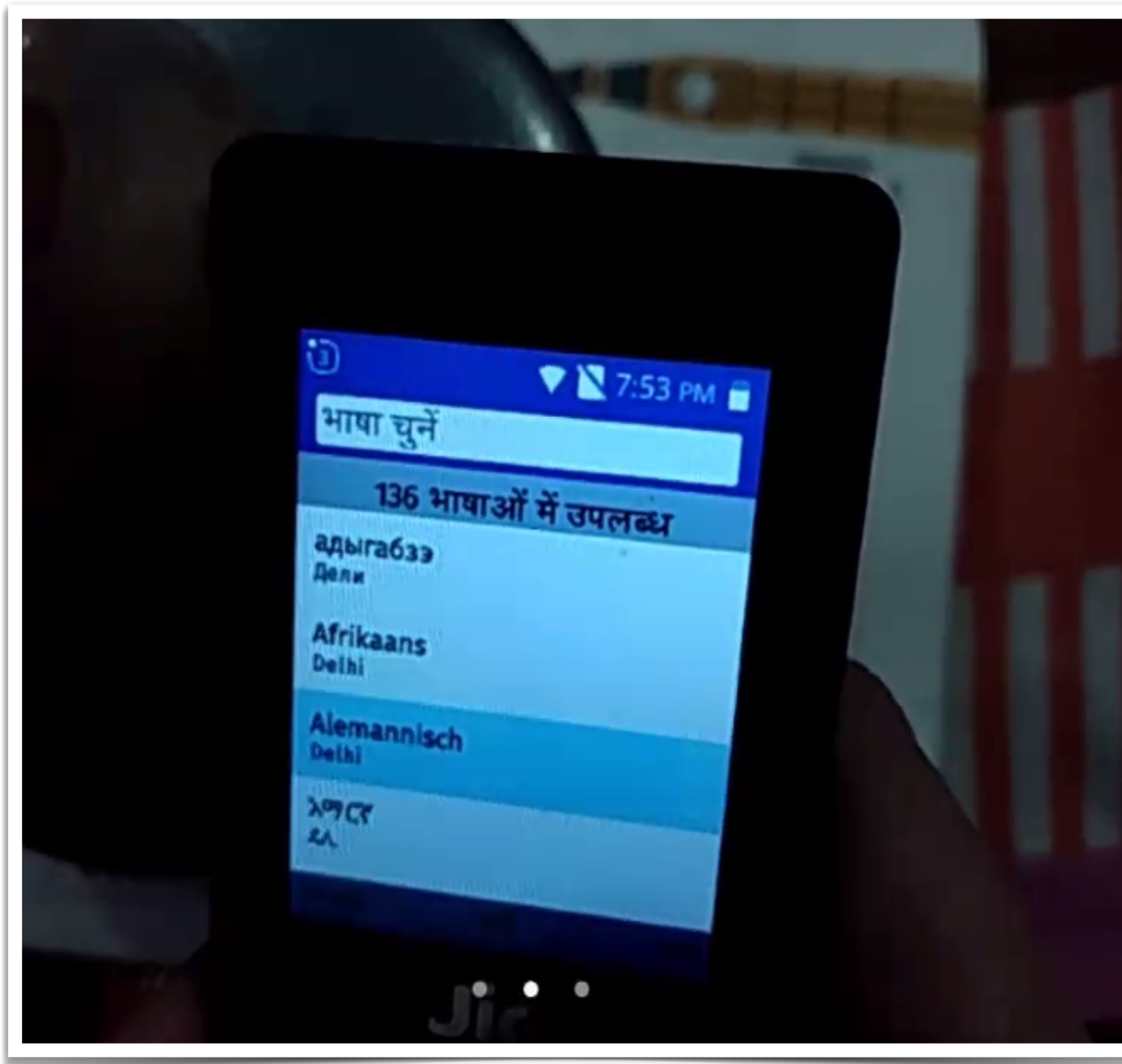
Few users (4/15) were unable to understand that they could see multiple photos within the gallery as they continued scrolling up/ down instead of left/ right to see more images.



*User trying to find the images of the article in search Wikipedia*

*No, it is not translated. It has changed a bit. The English article had information on distance, but the Hindi article doesn't.*

— User 1, Delhi



User searching for hindi language from the options given.

## ARTICLE LANGUAGE: WORKED

### Able to discover article language

Almost all users (19/20) were able to discover the article language feature on their own while exploring the article.

- **Most discovered through Menu:** Users discovered article language through menu option.
- **Few discovered through Quick links:** Users discovered article language through quick links feature.

### Able to understand article language

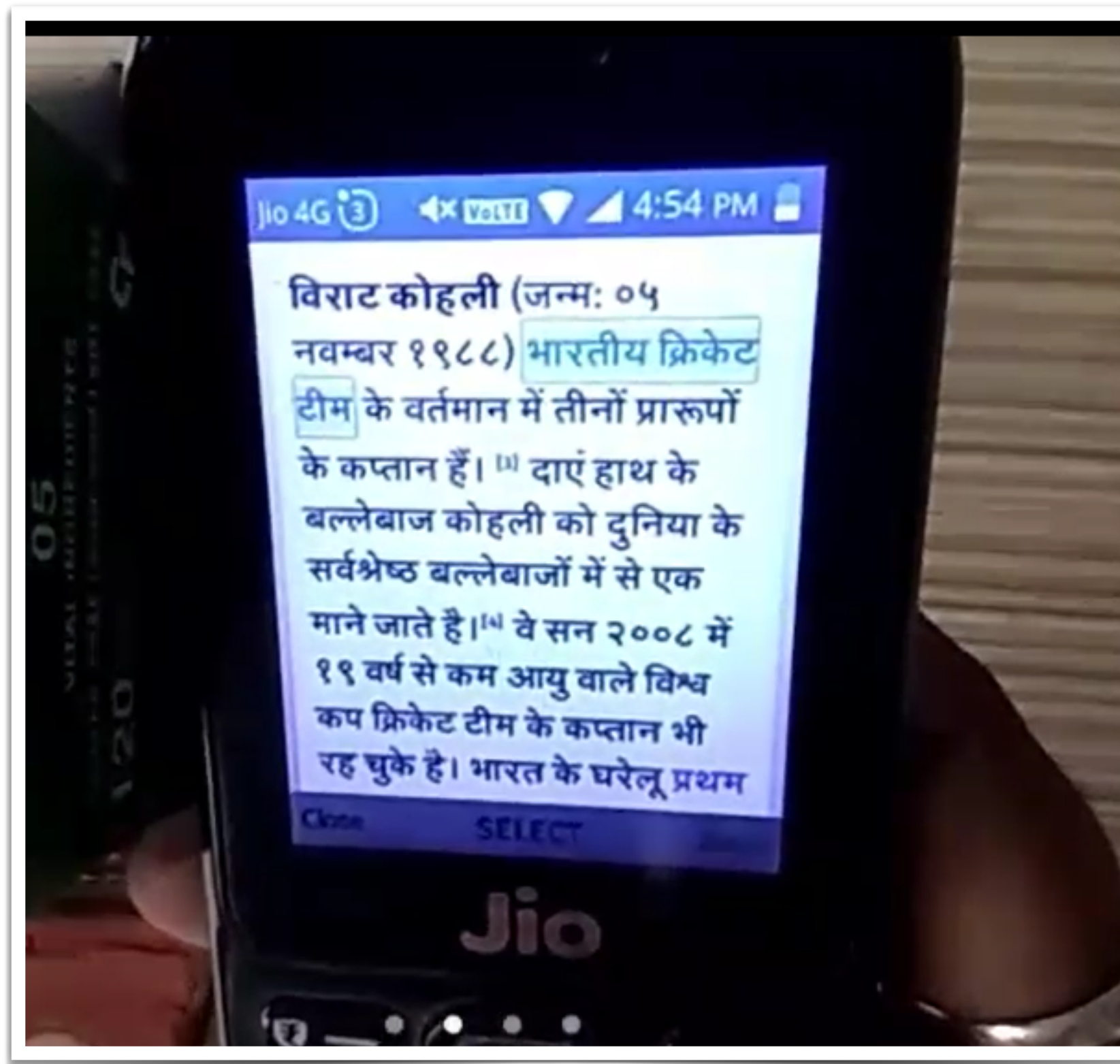
Almost all users (19/20) understood the feature. They were able to use and change the language of the article on their own.

### Able to understand that articles are written

Few users (2/12) were able to understand that the articles are written and not translated, as they found content different from the same article in different languages.

*This is same article only. It is just translated to Marathi, so that people can read in Marathi*

— User 12, Mumbai



User reading a Hindi article

## ARTICLE LANGUAGE: STRUGGLED

### Unable to understand that articles were translated

Most users (10/12) were unable to understand that the articles were not same. They believed that the article was translated as they found the topics and content to be similar.

### Unable to discover article language

Few users (1/20) were unable to discover the article language on their own and were directed by the researcher to explore the feature.

### Unable to understand article language

Few users (1/20) were unable to understand that the language can be changed within the article. They went to app settings to change the language.

## HYPERLINKS: WORKED

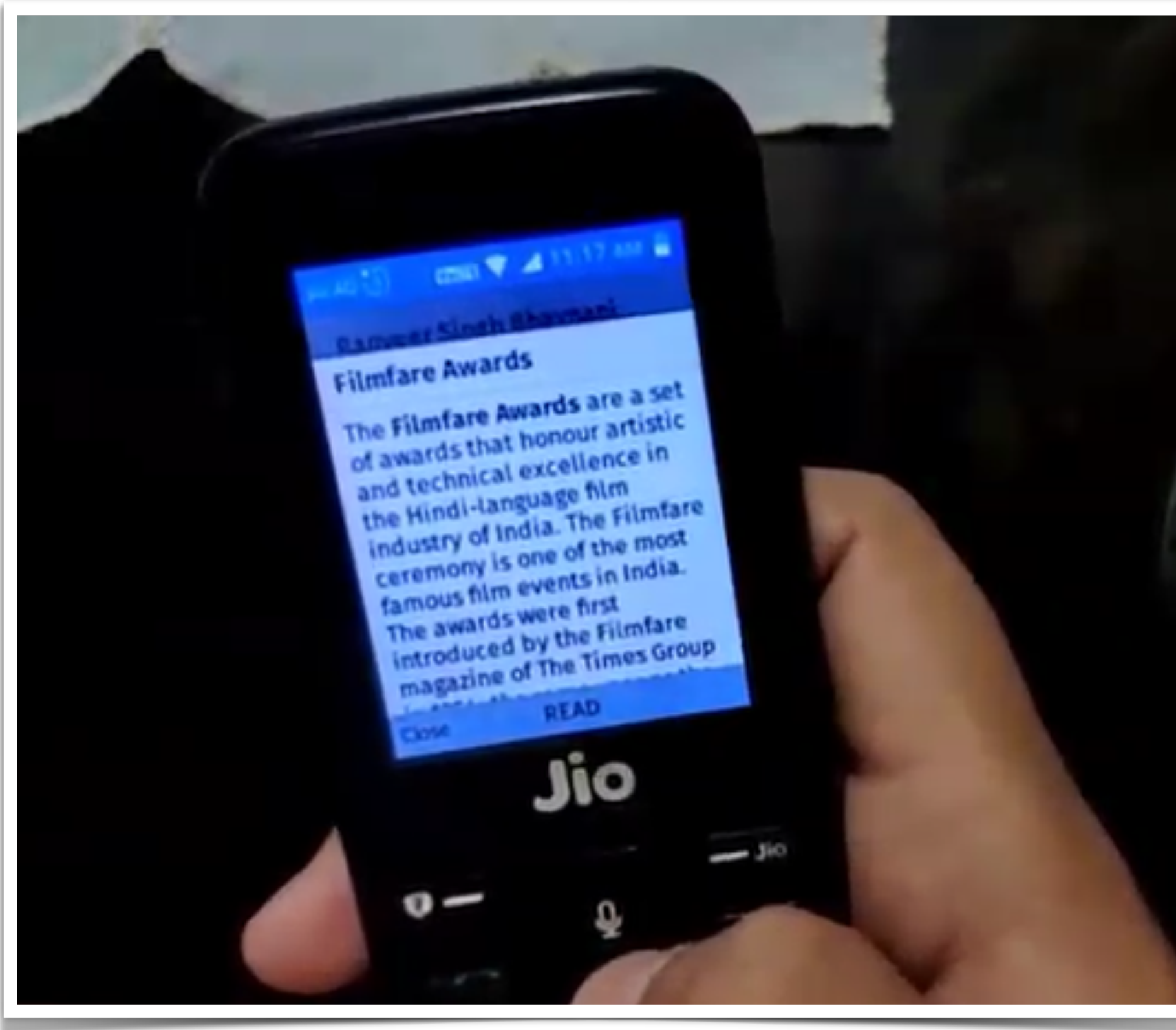
### Able to understand hyperlinks

Most users (15/18) understood that they could click on the blue words (hyperlinks) and read more information on other topics within the article.

## HYPERLINKS: STRUGGLED

### Unable to understand hyperlinks

Few users (3/18) did not understand that the blue words were clickable. They felt it was blue because those were important points in the article.



User exploring an article through hyperlink within the article

## PREVIOUS ARTICLE: WORKED

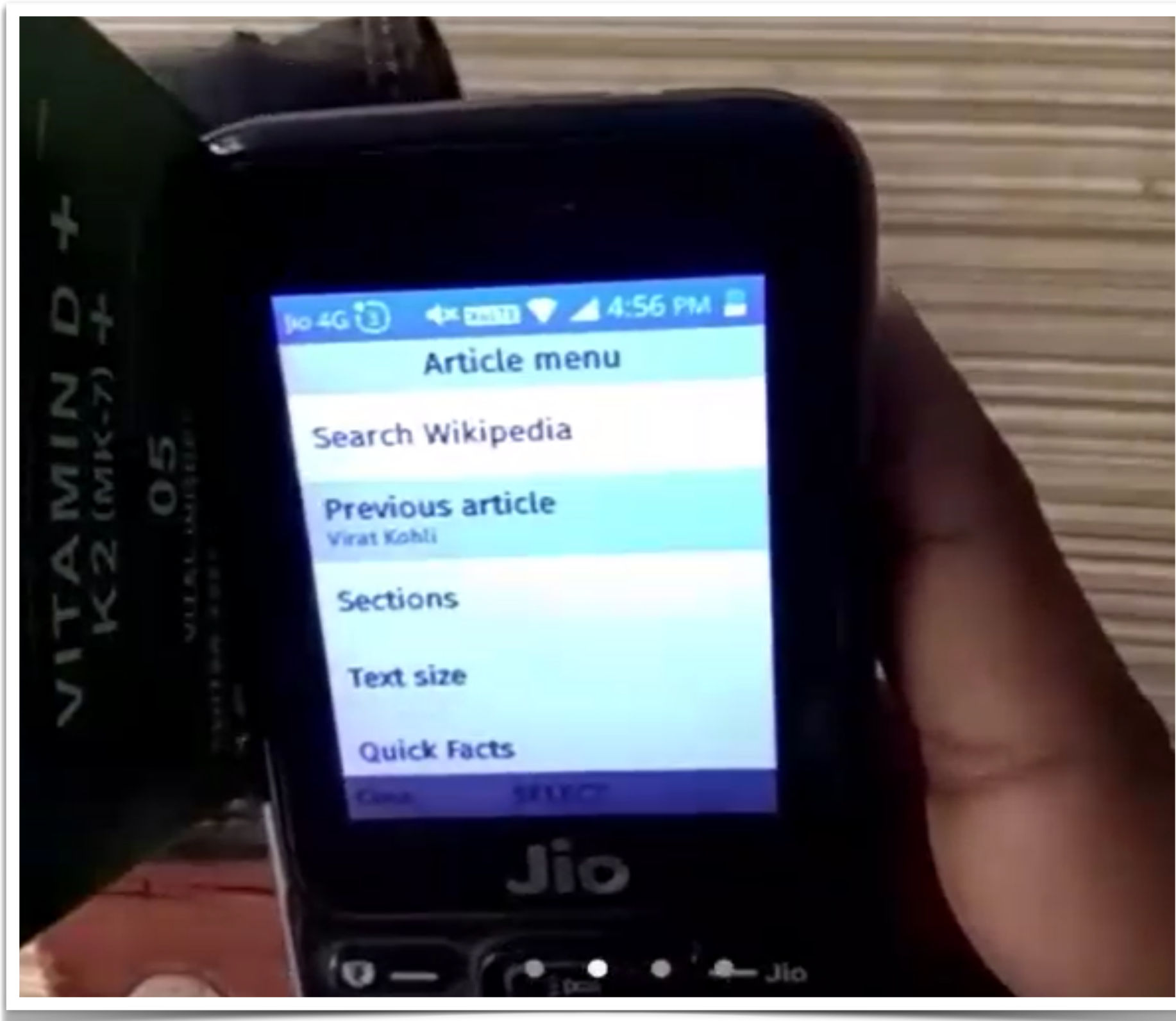
### Able to discover previous article

Few users (2/10) were able to discover the feature and used it to go back to the previous article.

## PREVIOUS ARTICLE: STRUGGLED

### Unable to discover previous article

Most users (8/10) were unable to discover the feature as they used the back (red) button or close option to go back to the previous article.



User using the previous article feature

# PART TWO

# USABILITY STUDY FINDINGS

## 1. ONBOARDING SCREENS

## 2. CONSENT SCREEN

## 3. HOME SCREEN

## 4. EXPLORATION OF THE ARTICLE PAGE

## 5. OVERALL FEEDBACK ON THE APP

1. What did users like?

2. What **did** users struggled with?

3. What **was** users' wishlist?

4. **Will** users recommend this app to friends and family?

5. **When will users use the Wikipedia app?**

6. How often will users use the Wikipedia app?

7. How did users rate the Wikipedia app?

# What did users like?

---



**1**

## **CONTENT IN REGIONAL LANGUAGES**

Users liked that the articles in the app were available in multiple languages.

**2**

## **CHANGING APP AND ARTICLE LANGUAGE**

Users liked that they could easily change the language of the app or the article language.

**3**

## **SUB TOPICS IN THE ARTICLE**

Users liked that the articles were divided into sections and they could directly read the desired subtopic instead of the entire article.

**4**

## **INCLUDES IMAGES**

Users liked that they could see relevant images within the article through the gallery feature.

# What did users like?

---



**5**

## **INCLUDES LINKS TO OTHER TOPICS**

Users liked that the article included links of different topics and they could read those by clicking on the links.

**6**

## **INCLUDES QUICK AND IMPORTANT INFORMATION**

Users liked that that they could quickly see important facts about the article they ere exploring.



# What did users struggled with?

---



1

## UNABLE TO USE TEXT SIZE FEATURE

Users didn't understand that the page only has instructions and that they have to press the keys on the article page to use the feature.

2

## UNAVAILABILITY OF ARTICLES AFTER CHANGING APP LANGUAGE

Users were confused when certain articles were unavailable when they changed the app language to their regional language

3

## UNABLE TO UNDERSTAND QUICK FACTS ICON

Users were unable to understand the icon used for quick facts and considered it to be a map's icon.

4

## UNFAMILIAR WORDS IN REGIONAL LANGUAGE

Users were uncomfortable with the Marathi words in the app as the words were not a part of their everyday vocabulary. They preferred to use the app in English despite having limited English proficiency.

# What was users' wishlist?

---

1

## VOICE SEARCH

Users wished to have voice search as it was easier than typing on a feature phone and they were familiar with voice search through Google Assistant.

2

## MORE IMAGES

Users wanted to see more images related to the article as they could only see one image in gallery.

3

## APP TUTORIAL

Users wished to see a guide similar to the onboarding screens to give a quick introduction of the app features to the users before they could start using the app.

# Will users recommend this app to friends & family?

---

Almost all users wanted to recommend the app to friends and family.

## Why would they recommend the app?

Users wanted to recommend the app as they found it easy to use, it was available in multiple languages and provided detailed information about a topic.

## How they would recommend the app?

Users wanted to recommend the app through word of mouth or over phone calls to family and friends whenever they decided to meet or talk to them.

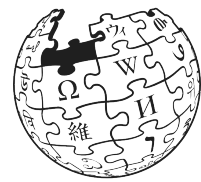


*I will tell my friends and family when I meet them, so that I can show the app and tell that if you want detailed information, you can use this app.*

— User 1, Delhi

# When will users use the Wikipedia app?

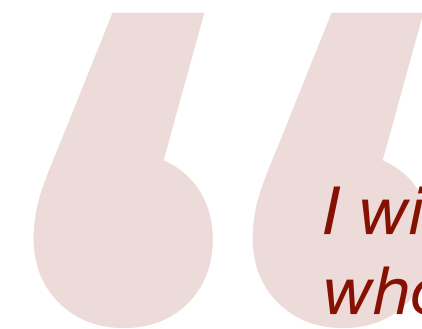
Users wanted to use Wikipedia to get detailed information about a specific topic.



- Users wanted to use Wikipedia to get information about a specific topic, especially about lives of celebrities and historic events.
- They wanted to use Wikipedia to get in-depth information and liked that it contained no ads, as opposed to the browser.



- Some users still preferred to use Google for searching general information, maps and reading news.
- These users found Google more convenient as per their existing search habits.



*I will mostly use Google, but If there's a topic whose information is not given properly, and I need detailed information then I will find it on Wikipedia.*

— User 2, Delhi

# How often will users use the Wikipedia app?

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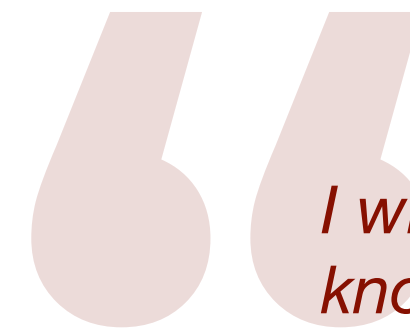
Some users expected to use the app once or twice a week while few users were not sure of their frequency of usage as it depended upon their need.

## Expected to use frequently

Some users expected to use the app 1-2 times a week, as they would use Wikipedia only if they wanted to know about a specific topic or needed information in detail.

## Uncertain about the usage frequency

Few users were not sure of how often they would use the app as for them the usage depended upon their situation and need - they could use it 3-4 times a day if needed or 1-2 times a month.



*I will use this only once or twice a week if I want to know about some place or famous person. Otherwise, I will continue to use Google Assistant to search.*

— User 8, Hindi

# How did users rate the Wikipedia app?

**4.2** ★★☆☆☆



The average rating given by users is 4.2 out of 5. Users liked the app and the features in it.

Few users gave a lower rating as they were unable to find certain article topics and due to the absence of voice search.

# APPENDIX



About the Users | References | Acknowledgements

# ABOUT THE USERS

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	Age	Gender	Location	Language
User one	37	Male	Delhi	Hindi
User two	27	Female	Delhi	Hindi
User three	23	Male	Delhi	Hindi
User four	38	Male	Mumbai	Hindi
User five	21	Male	Mumbai	Hindi
User six	30	Male	Delhi	Hindi
User seven	35	Male	Delhi	Hindi
User eight	22	Male	Mumbai	Hindi
User nine	30	Female	Pune	Marathi
User ten	22	Male	Delhi	Hindi
User eleven	38	Female	Mumbai	Hindi
User twelve	23	Male	Mumbai	Marathi
User thirteen	38	Female	Delhi	Hindi
User fourteen	21	Female	Pune	Marathi
User fifteen	22	Male	Pune	Hindi
User sixteen	21	Male	Mumbai	Marathi
User seventeen	29	Female	Hyderabad	Telugu
User eighteen	30	Female	Hyderabad	Telugu
User nineteen	24	Female	Indore	Hindi
User twenty	32	Male	Lucknow	Hindi



# REFERENCES

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Session Recordings are available [here](#).

These links will be active for download till 7th January 2021.

# ACKNOWLEDGEMENTS

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Daisy Chen, Senior UX Researcher

Angie Muigai, Senior Product Manager

Sudhanshu Gautam, Senior UX Designer

Runa Bhattacharjee, Director Engineering, Language and New Readers

Ana Chang, Design Research Manager, Product Design

# ABOUT HUREO

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Hureo is a user experience research firm based out of India. Hureo works with a wide range of organizations across the world to enable them to create and improve their products and services. Hureo uses various UX research methodologies to provide their clients with user insights that help identify user needs, challenges and opportunities. They have worked in various companies from startups to MNCs in both India and abroad giving them a range of knowledge and experience.

Our team comes from diverse backgrounds such as HCI, Design Thinking, Cognitive Sciences and Advertising & Media.

The team that worked on this project consisted of:

Anjeli Singh, Founder and UX Researcher

Jahnvi Mirashi, UX Researcher

Arunima Ved, UX Researcher

Anish Abraham, UX Researcher

Gauri Nayak, UX Research Intern

To know more about Hureo:

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🐦 Twitter: [WeAreHureo](https://twitter.com/WeAreHureo)

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# THANK YOU

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USER RESEARCH COMPANY