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Glossary & Design Patterns for Notice and Consent in Indic Languages

Research & Design by *POlallel* 

Supported by





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# 01. Introduction



As of 2022, India hosts over 700 million active internet users (i.e., users who have accessed the internet at least once in the last month)<sup>1</sup>. Of these, 425 million users stem from rural India. This 425 million reflects a growth of 30% in user base, implying a large volume of users are new to the digital space and are only now learning to navigate it.

For new-to-internet users, *privacy is crucial*.

While new-to-internet users are not very digitally aware, they fear sharing sensitive personal data and seek trust and familiarity with digital products. So far, products that have been created for the Indian audience have not been intentionally designed for ease of understanding. The verbose and technically-ridden text used in privacy policies is often incomprehensible to laypeople, nor do they communicate value exchange<sup>2</sup>.

Privacy and security researchers have concluded that privacy notices not only fail to help consumers make informed privacy decisions but are mostly ignored by them<sup>3</sup>.

Additionally, most of these new-to-internet users prefer using apps in Indic languages. 98% of Indian internet users use the internet in an Indian language either exclusively or with English<sup>4</sup>. To cater to this, more brands are localising their apps to be able to meet the needs of local language experience.

<sup>1</sup> https://indbiz.gov.in/india-had-over-700-mn-active-internet-users-by-dec-22-report/

<sup>2</sup> Bedi, A. K., & Kumar, R. (2022, June 15). Making data privacy policies and 'consent' work. The Hindu BusinessLine. Retrieved September 6, 2022, from https://www.thehindubusinessline.com/opinion/ making-data-privacy-policies-and-consent-work/article65530935.ec

<sup>3</sup> https://cis-india.org/internet-governance/blog/design-concerns-in-creating-privacy-notices

<sup>4</sup> https://services.google.com/fh/files/misc/app-website-localization-indian-users.pdf

In instances when Hindi language is used in web and mobile applications, it has been seen that poor translations and lack of strong UX principles not only lead to frustration in users but can also obstruct users from making informed choices on issues of privacy.

Current translations (from English) may help users read, understand and use apps in Hindi language but some words have been replaced by English terms (such as 'scan', 'update', etc.) and people don't understand these words. A similar issue arises with transliteration.

This issue is complicated further when we acknowledge that these translations are not standardised, resulting in varied experiences for users and the need to re-learn tasks on different apps/websites. The challenge is to find the right words that communicate the intent behind the message or call to action and standardise these across the ecosystem.

Even in English, privacy notices have been ineffective due to their complex language and length, their timing, and location. Secondly, and more importantly, these notices assume a certain level of digital literacy on the part of the user, which does not hold for many Indian active internet users. There is not only a need to make privacy and consent notices accessible by design but also to *educate* users on their value.

Indic language user experiences will have to raise the bar on data awareness & privacy. Building data awareness for new-to-internet users needs a more nuanced, experimental, and research-driven approach. Solving Notice and Consent for Hindi, to begin with, is an opportunity for

<sup>5</sup> This project focuses on exploring the above challenges with respect to Hindi and has targeted Hindispeaking audiences for web and mobile applications. Being a first language for over 43% of Indian nationals, the extensive user base of Hindi affords an easier entry into planning and researching. This ensures that common challenges can be met early and better navigated when researching other Indic languages.

<sup>6</sup> https://cis-india.org/internet-governance/blog/design-concerns-in-creating-privacy-notices

finding creative solutions to a complex problem.

The first part of the problem is creating a glossary of terms to be used for explaining notice & consent. But apart from using the right words, the aim is to create design patterns that aid explainability.

Through this research, we aim to -

- progressively educate users about data use and privacy over time.
   Provide information slowly and building trust with users who aren't familiar with digital products;
- communicate value exchange clearly to obtain informed consent. Improve engagement by designing thoughtful user flows that explicitly communicate why personal data is requested;
- use transparency around the purpose of data use to build trust. Make users understand why they are providing consent for something; and
- **reassure users by bringing in familiarity.** While dealing with sensitive information, it is essential to make users feel comfortable by introducing familiar patterns.

# The vision is to create an Indic language resource that's truly usable, starting with the Hindi language.

A platform that designers, product managers, and policy teams can use to create better user experiences in Indic Languages. This document aims to bring together:

- A glossary that helps in providing product teams with a uservalidated set of terms for use in designs for all notice and consent artefacts, such as
  - Cookies
  - Security Tips
  - Notifications for Terms and Conditions
  - Two-Factor Authentication
  - Access permissions
  - Updates/ Changes (in Terms and Conditions/ Privacy Policy)
  - Data collection for Ads
  - Unsubscribe
  - Account deletion
- 2 Design Patterns & Templates that help product and design teams solve for notice and consent in Indic languages by using pre-defined templates and design patterns, essentially saving time/effort in implementing these.
- 3 Observations from the exercise across the industry to foster wider adoption of best practices recommended in the resource. This will help in ensuring Indic language users get consistent terminology across mobile and web apps which will eventually be a catalyst for helping tech companies offer their services in more Indic languages.
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# How to read the insights

The following insights will present user feedback from 40 qualitative user test sessions. Users were exposed to one of the two flows-

#### Prevalent design and terminology

As of today, only a handful of applications have privacy and consent notices created in Hindi. The terminology and design patterns from such apps were taken to serve as the baseline. This would allow insights into current user comprehension and experience.

## Proposed design and terminology

This has been designed by Parallel and tested as an alternative to the current. The design has been created using insights from preliminary research<sup>7</sup> conducted in April 2022 along with certain UI principles. The terminology used in these flows has been influenced by both Hindi and Urdu since the preliminary user study indicated users are more comfortable with an interface that employs everyday, conversational language<sup>8</sup>.

<sup>7</sup> See Annexure for more details on IAMAI Preliminary User Study, April 2022.

<sup>8</sup> The present study does not aim to promote certain dialects over others. The insights in the study are driven from research and recommendations are based on user behaviour.

# Key Learnings



01.

Privacy and consent notices are better understood when these are presented in a simpler, conversational language. Users who were presented with words that are part of their daily conversations are able to develop better understanding of the concept.

02.

Users may understand many of the terms in isolation but when placed in the context of privacy and consent need additional information to make decisions.

03.

When faced with a new conceptual word, users will look at supporting text to make meaning. In flows where users were able to look at complimentary words to understand a concept their learning and retention fared better.

04.

For some terms, simple translations or transliterations cannot resolve issues in comprehension. These terms require higher digital literacy among users. Full comprehension of these terms will have to be developed over time, through education and by communicating value to the users.

# 05.

Users tend to use concepts learnt in other contexts to understand new information. Terms like 'data', which hold dual meanings (both as 'information' as well as 'mobile data') can lead to confusion or misinterpretation. There is a need for use of terminology that is free of previous bias.

06.

Some terminology presented on screen is often ignored by the users or users are unable to pay attention to them. This may be due to lesser visual prominence or banner blindness on the part of the user.

# 03. Deep Dive into Learnings



# update

This refers to the changes in any policy or terms used to inform users about any new information that can affect their use of the app.



# 1. Privacy and consent notices are better understood when these are presented in a simpler, conversational language.

## Two-factor authentication

Translations tested - दो चरणों में ऑथेंटिकेशन vs दो चरणों में पुष्टि



#### **INSIGHTS**

- Users have difficulty pronouncing the term 'ऑथेंटिकेशन'
- Users who have no understanding of the concept will look at the supporting text. If the supporting text is easy to understand they can infer the text is talking about keeping their personal information safe so that it does not get misused.
- More users can build an understanding of the concept when the phrase 'दो चरणों में पुष्टि' is used. Here users understand there are 2 steps for authentication but understanding *how* these two steps build security is usually missing.

"अगर हमें किसी अनजान फ़ोन या कम्प्यूटर पर लॉगिन की कोशिश किए जाने का पता चलता है, तो हम इस नंबर पर आपको OTP भेजेंगे।' मतलब की अगर कोई मेरा वो ID लेकर किसी दूसरे फोन पे चालू करेगा तो हमारे नम्बर पे मेसेज आएगा"

- This concept is commonly associated with 'hacking'.
- Additionally, the term 'पुष्टि' is also used to indicate 'confirm', especially when users need to 'confirm password' or 'confirm phone number'.

<b>OTP डाल कर फ़ोन नंबर की पुष्टि करें</b> ने अभी-अभी 99 पर SMS द्वारा पुष्टि करने वाला OTP भेजा है ।
OTP डालें 
आगे बढ़ें वापिस जाएँ

#### RECOMMENDATION

Use of the term **'दो चरणों में पुष्टि'** along with text that explains how the security is built using these two factors

# Update

Translations tested - अपडेट/ अद्यतन vs बदलाव



#### INSIGHTS

- 'अपडेट' is a difficult word to read and comprehend for most users.
- Users often confuse the concept with app update or re-starting of the app.

• Users can develop a better understanding of the term 'बदलाव'.

RECOMMENDATION

Use of the term '**बदलाव**'

## Review

Translations tested - रिव्यू vs जाँच



#### **INSIGHTS**

- Users have to be guided to the CTA since they have trouble understanding 'रवि्यू'.
- When the term 'जाँच' is shown, the CTA sets clear expectations on what is being done.

RECOMMENDATION Use of the term 'अभी जाँच करें'

# Expect

## Translations tested - अपेक्षा vs उम्मीद



#### **INSIGHTS**

- The term 'अपेक्षा' is not recognised/ understood by users. As a result, they tend to skip over the term without processing the meaning.
- The term 'उम्मीद' is more easily recognisable by the users.

RECOMMENDATION Use of the term 'उम्मीद'

# Collect

# Translations tested - कलेक्ट vs इकट्ठा



### INSIGHTS

- When faced with the word 'कलेक्ट' some users confused this with 'collection' implying categories since the context it is used in may not be easy to understand.
- The term 'इंकट्ठा' is relatable and easy to understand for all users.

RECOMMENDATION Use of the term '**इकट्ठा**'

# **Push Notification**

Translations tested - पुश नोटिफ़िकेशन vs नोटिफ़िकेशन



### INSIGHTS

• Most users have a good understanding of 'नोटिफ़िकेशन' but are unable to relate it to 'पुश नोटिफ़िकेशन'. For them, 'पुश नोटिफ़िकेशन' can signify a new and unknown concept.

RECOMMENDATION Use of the term 'नोटिफ़िकेशन'

# Location

Translations tested - डिवाइस की जगह की vs अपने स्थान की



#### **INSIGHTS**

- Users had mixed responses regarding the phrase 'डिवाइस की जगह की'. Some users struggled with the term 'device'.
- The phrase 'अपने स्थान की' was easily understood and users associated synonyms 'जगह', 'address', and 'location' with this.

RECOMMENDATION Use of the term 'अपने स्थान की'

# **Renew Subscription**

Translations tested - आप जब भी चाहे प्लान रेन्यू कर सकते हैं vs आप जब भी चाहे फिर से सदस्यता ले सकते हैं

Proposed design and terminology
6.6
क्या आप सच में सदस्यता
हटाना चाहते हैं ?
आप जब चाहे फिर से सदस्यता ले सकते हैं । हालाँकि आप
22 अगस्त 2022 तक का फ़ायदा उठा सकते हैं
के सदस्य बने रहें
सदस्यता हटाएँ

#### **INSIGHTS**

- Many users stumbled on the term 'renew' and could not explain what this term meant.
- The phrase 'आप जब भी चाहे फिर से सदस्यता ले सकते हैं was easier for users to understand due to simple nature of the terminology used here.

#### RECOMMENDATION

Use of the term 'आप जब भी चाहे फिर से सदस्यता ले सकते हैं'

# Permanently

Translations tested - स्थायी रूप से vs हमेशा के लिए



#### **INSIGHTS**

- The term 'स्थायी रूप से' evokes mixed responses from users, based on their understanding of the context and prior experiences. Users may completely skip/ read over this term. However, users who have some prior knowledge may relate this to 'permanent'.
- The term 'हमेशा के लिए' was easily understood by all users.

#### RECOMMENDATION

Use of the term 'हमेशा के लिए'

# 2. Context is very important for consent. When everyday terms are placed in the context of privacy and consent users often need additional information to avoid confusion.

# Data Policy / Privacy Policy

Translations tested- प्राइवेसी नीति vs डेटा नीति vs प्राइवेसी पॉलिसी vs निजता नीति vs निजता पॉलिसी

Prevalent design & terminology	Proposed design & terminology
< पॉलिसी अपडेट	🗲 नीति और शर्तों में बदलाव
<ul> <li>आप क्या अपेक्षा कर सकते हैं</li> <li>क्या नहीं बदलेगा</li> <li>स्म अभी भी आपकी जानकारी नहीं बेचते और आगे भी नहीं बेचेंगे।</li> <li>अस्म आपको बताएँगे कि हम अपने सभी प्रोडक्ट्स पर आपकी जानकारी कैसे कलेक्ट, इस्तेमाल और शेयर करते हैं। इस बारे में हम आपको पॉलिसी अपडेट संबंधी नोटिस के ज़रिए या आपके किसी नए फ़ीचर का इस्तेमाल करने से पहले बता सकते हैं।</li> <li>आप अपनी प्राइवेसी को उस तरीक़े से मैनेज कर सकते हैं, जो आपके लिए सही हो।</li> <li>कृपया प्राइवेसी पॉलिसी और सेवा की शर्ती में हुए अपडेट स्वीकार करने पर 26 जुलाई, 2022 से लागू होंगे।</li> </ul>	<ul> <li>आप क्या उम्मीद कर सकते हैं</li> <li>क्या पहले जैसा ही रहेगा</li> <li>झ आपकी निजी जानकारी नहीं बेचते है और न ही बेचते ।</li> <li>की बेचते ।</li> <li>की मांगा की सेशा बताएंगे कि हम आपकी निजी जानकारी किस तरह इकट्ठा, इस्तेमाल व बाँट रहे है । किसी नये फीवर इस्तेमाल करने था नीति में कोई बदलाव होने के पहले हम आपको सूचित करेंगे ।</li> <li>आप अपने मन-मुताबिक कभी भी अपनी प्राइवेसी सेटिंग बदल सकते है ।</li> <li>और जानने के लिए पढ़े</li> <li>प्राइवेसी नीति</li> <li>सेवा की शतें</li> </ul>
	में हुए बदलाव जो 15 <b>अगस्त 2022</b> से लागू होंगे, मैं उनसे सहमत हूँ ।
स्वीकार करें	स्वीकार करें
अभी नहीं	अभी नहीं

## डेटा नीति में अपडेट

हमने हाल ही में अपनी **डेटा नीति** को अपडेट किया है। तितली का उपयोग जारी रखते हुए, आप इन अद्यतनों को स्वीकार करते हैं। अधिक जानकारी के लिए कृपया समीक्षा करें ।

ओके

जानें की क्या बदला है

evalent design & terminology	Proposed design & terminology
<	<
<b>आइए शुरू करें</b> साइन अप करने के लिए अपना ईमेल और पासवर्ड दर्ज करें	<b>आइए शुरू करें</b> अकाउंट खोलने के लिए अपना ईमेल और पासवर्ड डालें
अपना ईमेल दर्ज करें	अपना ईमेल डालॅ
@email.com	@email.com
अपना पासवर्ड दर्ज करें	अपना पासवर्ड डालें
* * * * * * *	*******
जारी रखने का मतलब है कि आप की नियम और शतौँ और <u>निजता पॉलिसी</u> से सहमत हैं ।	मैं की नियम और शतों और निजता नीति से सहमत हूँ ।

#### **INSIGHTS**

- When faced with the hyperlinks to Privacy Policy, most users will proceed without reading. They register that they are agreeing to a policy when they proceed with the app/website, but do not prefer reading the policy itself in detail.
- Users have no understanding of what comprises 'डेटा नीति'. While they have some exposure to the term they cannot explain the concept and what the policy entails. Additionally, the term 'डेटा' is often misunderstood in this context (can be confused with mobile data or activity done on the app).
- Users have difficulty understanding 'प्राइवेसी नीति' and 'प्राइवेसी पॉलिसी' as stand-alone terms. They require context and additional nudge to read the policy.
- Users may have difficulty understanding what exact data is being discussed in the policy and hence need more context building around it. A common association with privacy is "security"/ "गुप्त बातें".
- Users have a hard time pronouncing the term 'निजता' with many misreading it as "नजिता".
- Some users can establish a link between 'निजता नीति/पॉलिसी' and their personal information but have no comprehension of how that information is used and what the policy entails.

#### RECOMMENDATION

Use of the term **'प्राइवेसी नीति'** along with an explanation of what is meant by 'data' of the user. For spaces where the term 'डेटा' has to be used, do not assume users have an understanding of the term in that given context. Explain what 'डेटा' implies in that particular context.

Greater value exchange needs to be built for users to read the policy document.

# **Update in Data Policy**

Translations tested -डेटा नीति में अपडेट vs डेटा नीति में कुछ अहम बदलाव



#### **INSIGHTS**

- Users have a misconception of what 'अपडेट' means and can misinterpret this to mean a change in the user's personal information on the app. However, after reading text that communicates what is changing (and what is not) users can understand better.
- Users can understand 'बदलाव' as a term much more quickly and so this phrase was easier to interpret for users.

#### RECOMMENDATION

Use of the term **'डेटा नीति में कुछ अहम बदलाव'.** Additionally, Include information on who is making the update and for what reason, for users to build full comprehension.

# I agree to \_\*app name\*'s data policy and its changes.

Translations tested -मैं \*app name\* की डेटा नीति और उसमे हुए बदलाव से सहमत हूँ।

#### **INSIGHTS**

 While users understand the terminology, they often misinterpret the intention of the sentence. Users may treat this opt-in as a means to 'Know more' about the data policy and can agree to move forward with the screen without realising they are providing consent.

"जो वहाँ पे लिखा होता है '*मैं \*app name\** की डेटा नीति और उसमे हुए बदलाव से सहमत हूँ।' उसमें टिक करेंगे,स्वीकार करेंगे तब आगे बढ़ेगा"

"अब इसमें क्लिक करने के बाद ही [और] पता चलेगा"

• The comprehension of 'डेटा नीति' needs to be built fully for users to understand what is changing in the policy.

RECOMMENDATION

Explain what 'डेटा' means for the user here.

Provide clear visual cues for users to know where they can learn more about the update.

# **Identity Theft**

Translations tested - पहचान की चोरी vs पहचान की चोरी (placed with simpler terminology)

Prevalent design & terminology	Proposed design & terminology
3	· · · · · · · · · · · · · · · · · · ·
ा साइन अप करें व्या प्रकार गर पक्षत का स्वयंग करे	ा साइन अप करें विव मुख्य पर पल्लर्ड का उसकी करें प्रार्थ केकेल
अपनी ऑनलाइन उपस्थिति सुरक्षित करें	ऑनलाइन दुनिया में सुरक्षित रहें
से अपनी निजी जानकारी हटाएँ	से अपनी निजी जानकारी हटाएँ
हम समझते है की आप कभी कभी <mark>कुछ कॉन्टेंट जो</mark>	ऐसा हो सकता है की आप <mark>अपने बारे में उपस्थित</mark>
<mark>आपके बारे में हैं,</mark> हमारे साइट से हटाना चाह सकते हैं।	<mark>जानकारी</mark> हमारी साइट से हटाना चाहें ।
	हम आपकी सुरक्षा की ज़िम्मेदारी को गंभीरता से
हम अपनी जवाबदेही को गंभीरता से लेते हैं और	लेते हैं । आपकी निजी जानकारी जो पहचान की
ऐसी निजी जानकारी को हटा सकते हैं जिससे	चोरी, <mark>धन-संबंधित</mark> धोखाधड़ी या किसी ख़ास तरह
पहचान की चोरी, <mark>वित्तीय</mark> धोखाधड़ी या किसी ख़ास	का नुक़सान करे, हम उसे हटा देते हैं ।

#### **INSIGHTS**

- This term requires more information for users to be able to understand what information of theirs can be misused. In absence of an adequate explanation, users may skip over the phrase due to a lack of understanding.
- Users emphasise the terms/ text read before a new concept to draw meaning. Terms such as 'आपकी अहम निजी और धन-संबंधित जानकारी,

जैसे कि कोई पासवर्ड या बैंक खाते से जुड़ी जानकारी.. ' are used to build knowledge.

• Users may fail to relate this term to the concept of 'identity theft' but the presence of headings such as "\*app name\* से अपनी निजी जानकारी हटाएँ" helps to comprehend that some data can be removed by the users to avoid mishap.

RECOMMENDATION

This term should be accompanied by an explanation of what information of the user can be misused. Place simpler terminology while explaining to help users understand.

# **Report this ad**

Translations tested - इस विज्ञापन ko report करें vs इस विज्ञापन की शिकायत करें



#### INSIGHTS

- Most users were unsure of the meaning of 'report', either interpreted it as literally 'शिकायत करना' or had an understanding that this would remove the ads.
- Users usually interpret the term 'इस विज्ञापन की शिकायत करें' as action used against 'wrong' advertisements or when users want an ad to stop completely.
- There is no understanding of this being a means to take strict action against an ad and not just to hide it.

#### RECOMMENDATION

Use of the phrase **'इस विज्ञापन की शिकायत करें'** along with an explanation of what this action would lead to and where it should be used.

## Allow access to audio

Translations tested - ऑडियो उपयोग की अनुमति दें (tested with and without context for permission)



#### **INSIGHTS**

- While users understand the terminology, when these permission are communicated without context/intention setting, it leads to confusion for users.
- Users may be unsure if permission is asked to listen to the audio in the app or for recording audio by the user.

#### RECOMMENDATION

When asking for access permissions **provide context on why it is being asked** and how this will be used.

## Allow access to camera

Translations tested - कैमरा उपयोग की अनुमति दें (tested with and without context for permission)

Prevalent design & terminology	Proposed design & terminology
	स्टोरी बनाने के लिए को कुछ अनुमतियाँ चाहिएँ
क्या आप       को कैमरा उपयोग करने         की अनुमति देना चाहते हैं?	कैमरा का उपयोग अपने ख़ास पलों को मं सेव करें और दूसरे के साथ बाँटें
सिर्फ इस्तेमाल करते समय	अॉडियो का उपयोग
सिर्फ़ इस बार अनुमति न दें	圆 फ़ोटो गैलरी का उपयोग
	कैमरा उपयोग की अनुमति दें
	अभी नहीं

#### **INSIGHTS**

• This permission is easily understood by the user, with and without context, as a result of repeated exposure by the user. In this case, providing context will help build trust with the user but is not essential for the comprehension of the text.

#### RECOMMENDATION

When asking for access permissions, **consider providing context on why it is being asked and how this will be used** to build trust with the user.

# Allow access to photo gallery

Translations tested - गैलरी का उपयोग की अनुमति दें (tested with and without context for permission)



#### **INSIGHTS**

 While users understand the terminology, when these permissions are communicated without context/intention setting it leads to confusion for users. One user misunderstood this as the app asking permission to store its media on the user's phone.

#### RECOMMENDATION

When asking for access permissions **provide context on why it is being asked** and how this will be used
# 3. When faced with a new conceptual word, users will look at supporting text to make meaning.

In flows where users were able to look at complimentary words to understand a concept, their learning and retention fared better

# **Encryption**

Translations tested - एन्क्रिप्शन का उपयोग करते हैं vs एन्क्रिप्ट (सुरक्षित) करने का तरीका



### Proposed design and terminology

### INSIGHTS

• This is a new word for most users and in the absence of an explanation, they often do not comprehend the meaning.

"'ट्रांज़िट करते समय हम आपके डेटा को निजी रखने के लिए एन्क्रिप्शन का उपयोग करते हैं।' इसके बारे में कुछ भी समझ नहीं आया।"

 Users who were shown the proposed term, while still unable to pronounce 'encryption' or understand it completely, focused on सुरक्षित to make meaning more readily.

> "एंक्रिप्ट…ब्रैकेट में लिखा है 'सुरक्षित'। एंक्रिप्ट तो नहीं देखा है… मतलब की यह बता रहा है की जो भी जानकारी हम लोग इनको देते हैं वो ये लोग किसी और को नहीं देते "

### RECOMMENDATION

The proposed terminology '**एन्क्रिप्ट (सुरक्षित) करने का तरीका'** fares better here since users can link the term **'सुरक्षित'** with a new concept to make meaning.

# Cyber security

Translations tested - अपनी कम्प्यूटर और इंटर्नेट सुरक्षा बनाए रखे vs साइबर सुरक्षा



### INSIGHTS

• Users have very little understanding of the concept of cyber security. Some users understand that this refers to the security of their details online but are unable to explain how or why this is required. "इसमें यह कह रहा है कि जैसे facebook या फिर whatsapp वगेरह जो होता है तो उसको सुरक्षित रखने के लिए जो हम लोग पासवर्ड या लॉक लगा देते हैं तो उसको सुरक्षित रखेगा वो…"

• Users often had to read through the whole screen to understand the concept and reasons for the suggested security measures.

"यहाँ पे बताया जा रहा है कि उसके पास कोई टूल है, औज़ार है। किसी चीज़ से अपनेइंटर्नेंट को और कम्प्यूटर को किसी दूसरे तक अपनी जानकारी पहुचाने से बचा सकते हैं, सुरक्षित रख सकते हैं। इसके बारे में अभी और जानकारी आगे दे रहा है।"

• Both the current and proposed terms fail to communicate the concept to the users unless combined with an explanation. However, 'इंटर्नेट और कम्प्यूटर पर अपनी निजी जानकारी की सुरक्षा को बढ़ाने के बारे में और जाने' was easier for users to understand since 'cyber' is not a word they understand easily.

RECOMMENDATION Use the term अपनी कम्प्यूटर और इंटर्नेट सुरक्षा बनाए रखें.

# Phishing

Translations tested - फ़शिगि vs फ़शिगि (with simpler supporting text)



### **INSIGHTS**

 This is a new word for users in most cases and so they rely heavily on context to understand the meaning. Challenging words such as "वित्तीय" for financial data or "आपत्तिजनक" hinder comprehension.

> " 'फ़िशिंग से बचने के लिए, कभी आपत्तिजनक लिंक पर क्लिक न करें।' ये नहीं समझ में आया...'फ़िशिंग के शिकार होने से कैसे बचा जा सकता है ?' कोई idea नहीं इसके बारे में।"

• In the design flow where the word was paired with simpler text, users were able to build meaning more easily.

"जैसे आपके पास कोई फ़्रेक ईमेल आता है तो नहीं खोलना है। अगर हम ऐसा करते भी हैं बिना जानकारी के तो हमारा अकाउंट है हमारे जो पर्सनल डेटा होता है कम्प्यूटर के अंदर वो ख़तरे में आ सकता है"

### RECOMMENDATION

Aid learning of this term by using simpler text to explain/ define 'Phishing'. Despite a partial understanding of the concept, most users are still unaware of methods of protecting themselves against phishing. While explaining the concept the text also needs to educate users on methods of protection against phishing.

# Spam

Translations tested - स्पैम vs स्पैम (with simpler supporting text)

< सुरक्षा सलाह	< सुरक्षा सलाह
र सिंह सिंह के साथ के साथ साथ के साथ	अंतलाइन धोखाधड़ी इंमेल या लिंक जिन पर आपको संदेह हो उनकी हमेशा जाँच करें फ़िशिंग का इस्तेमाल, आपको ठग कर आपकी अहम निजी और धन-संबंधित जानकारी, जैसे कि कोई पासवर्ड या बैंक खाते से जुड़ी जानकारी निकलवाने के लिए किया जाता है। फ़िशिंग करने के बहुत सारे तरीके हो सकते हैं, जैसे कि क्यूंमें मुझेल या नकली लॉगिन पेज । इससे बचने के लिए, किसी भी लिंक को न दबाएँ जिसपर आपको शका हो ।
जारी रखें	जारी रखें

### **INSIGHTS**

• This is a new word for users in most cases and they may read over it and look for context to understand the text.

" '...जैसे कि नकली लॉगिन पेज या स्पैम ईमेल । फ़िशिंग से बचने के लिए, कभी आपत्तिजनक लिंक पर क्लिक न करें।' इसमें मतलब आपत्तिजनक मतलब हो गया कोई ऐसी जानकारी जो इसमें समझ में ना आ रहा हो तो इसको क्लिक ना करें। " • Users may not understand the word but will be able to link it to 'fraudulent methods' with the help of supporting text. In flows where comprehension of another topic such as 'फ़शिगि has already been explained earlier, linking the same to स्पैम will aid user comprehension

> "यह मतलब बोल रहा है, जो इस टाइम ऑनलाइन धोकधड़ि हो रही है, कोई भी आपको कॉल करके बोलता है अपना बैंक अकाउंट नम्बर दीजिए...वो हम लोगों को नहीं देना चाहिए, इससे लोग बहुत धोकधड़ि करते हैं। इसलिए हमें कोई भी लिंक को नहीं दबाना चाहिए..."

### RECOMMENDATION

Use simple words to explain the concept and link it to phishing or other terms that may have already been introduced to the user earlier on the screen

# Cyber theft

Translations tested - साइबर ठग vs हैकिंग (अनजान लोगों की ग़ैरक़ानूनी पहुँच)



### **INSIGHTS**

• Some users can build a partial understanding of 'साइबर ठग' by linking this to 'misuse' of information but this term needs more explanation. The term 'cyber' can be misinterpreted since users link this to 'cyber cafes'

> "मतलब ये लोग इस साइबर ठग वगेरह से बचाने के लिए हमारे इसमें एक तरह...जैसे हमारी सुरक्षा जानकारी है ना ये एक जगह पर इकट्ठा करते हैं अपने में। उसे अपने पास सेव रख रहे है जिससे कि कोई परेशानी ना हो।"

"ये बोल रहे हैं…जैसे लोग इंटर्नेंट से पैसे ट्रान्स्फ़र कर लेते हैं, जानकारी निकाल लेते हैं, वो सब ये नहीं कर पाएगा क्योंकि इसकी दो चरण में पुष्टि होगी। "

• However, users can comprehend 'हैकिंग', especially due to the supporting text within brackets.

RECOMMENDATION

Use term 'हैकिंग (अनजान लोगों की ग़ैरक़ानूनी पहुँच)' since users are quickly able to make meaning by reading the partial definition in the brackets

# Confidentiality

Translations tested - गोपनीयता vs गोपनीयता (preceded by simpler supporting text)



### **INSIGHTS**

• When this term was preceded by terms such as 'एक्सेस' (access) and 'एन्क्रिप्शन' (encryption) without explanation it created further cognitive load and impacted how users interpreted 'गोपनीयता'

> " '...मतलब कोई व्यक्ति कड़े नियमों वाले गोपनीय समझौते के तहत काम करता है...' यह नहीं समझ में आया। 'काम करता है' मतलब?"

• When preceded by simpler terms like "देखने की अनुमति" instead of 'एक्सेस', more users were able to interpret the term.

"मतलब कि ये बोल रहा है कि जो भी जानकारी हम लोग इनको देते हैं वो यह लोग किसी और को नहीं देते… जो हमारा काम करता है सिर्फ़ उन्हें ही दिया जाता है।"

• A commonly used interpretation was "जानकारी सुरक्षित रहे".

RECOMMENDATION

Using the term **'गोपनीयता**' (preceded by simpler supporting text) will allow users to build meaning without cognitive load and frustration

# 4. For some terms, simple translations or transliterations cannot resolve issues in comprehension. These terms require higher digital literacy among users.

### Cookies

Translations tested- कुकीज़ vs कुकी

Prevalent design and terminology

### Proposed design and terminology

### यह वेबसाइट कुकीज़ का उपयोग करती है

हम कॉन्टेंट को आपके मन मुताबिक बनाने, विज्ञापनों को आपके मुताबिक ढालने व उनके असर को मापने और आपको सुरक्षित अनुभव देने में मदद के लिए कुकीज़ का इस्तेमाल करते हैं। 'ठीक है' पर क्लिक करके या 'निजता सेटिंग' में एक विकल्प को चालू करके, आप हमारी **कुकी नीति** में बताई गई सेवाओं और मिलती-जुलती टेक्नोलॉजी के इस्तेमाल पर सहमति जताते हैं। विकल्प चुनने के लिए 'सेटिंग' पर जाएँ।

ठीक है

कस्टमाइज़ करें

### आपकी जानकारी हम कुकी में सेव करते हैं

कुकी और मिलती-जुलती तकनीकों की मदद से हम आपको दे सकतें है आपके मन-मुताबिक चीजें , आपके अनुसार विज्ञापन , और एक सुरक्षित और बेहतर अनुभव !

और जानने के लिए कुकी नीति पढ़े

कुकी सेटिंग तय करें

कुकी मना करें

Prevalent design and terminology	Proposed design and terminology
	क्या आपको कुकी पसंद हैं?
साइट पर आने वाले ट्रैफ़िक का विश्लेषण करने के लिए कुकीज़ पेश करता है । हमारी साइट पर आपके उपयोग के बारे में जानकारी उस उद्देश्य के लिए के साथ साझा की जाती है ।	ु इस साइट पर आने वाले लोगों की गतिविधि की परख करता है । इसके लिए हम कुकी का इस्तेमाल करते हैं। आप जिस तरह से हमारी साइट का उपयोग करते हैं, वह जानकारी हम के साथ कुकी के नाम से बाँटते हैं ।
विस्तृत जानकारी देखें	कुकी के बारे में और जानिए
ठीक है	मना करें कुकी स्वीकारें

# **INSIGHTS**

- Users often report not being able to understand text related to cookies and have no understanding of what this term means.
- Due to a lack of understanding, users can build misinterpretations of cookies as a means to provide content or a means to show ads, or think cookies are a kind of malware. These misinterpretations often lead users to reject cookies or dismiss the banner altogether.

"कुकी शायद मैलवेयर टाइप का कुछ होता है। इसमें वाइरस भी हो सकते हैं तो हम हमेशा माना कर देते हैं।"

• When introducing the concept, users need an explanation of what

cookies are as well as what cookies do. Current terminology builds comprehension of the latter to some extent but there is no understanding of the former.

> "... 'आप हमारी कुकी नीति में बताई गई सेवाओं और मिलती-जुलती टेक्नोलॉजी के इस्तेमाल पर सहमति जताते हैं। विकल्प चुनने के लिए 'सेटिंग' पर जाएँ।' इसमें तो मुझे मैडम बोहोत कुछ 90% नहीं समझ में आया।"

• The singular 'कुकी' is easier to pronounce for users.

RECOMMENDATION

Use the term **'कुकी'** along with a clear definition of cookies. However, the definition must explain what cookies are and not just what cookies do.

# **Essential Cookies**

Translations tested - अति आवश्यक vs ज़रूरी कुकी



### INSIGHTS

- Users are unable to comprehend the term 'अति आवश्यक' in this context and often stated they did not understand.
- Most users do not read 'हमेशा ऑन' text placed next to essential cookies.
- While the term 'ज़रूरी कुकी' was also hard to comprehend, more users were able to gather from text that the app cannot function without these cookies. The term ज़रूरी helped build the idea of 'essential'.

### RECOMMENDATION

Use of the term 'ज़रूरी कुकी'. For users to fully understand the different types of cookies, a more comprehensive understanding of cookies themselves is required, which needs to be built through education over time.

# Partners

Translations tested - पार्टनर्स vs भागीदारों



### INSIGHTS

- Users are generally unaware of who partners/ भागीदार are.
- When faced with the term 'partners' users tend to ignore this part of the text or find it challenging to comprehend. For the users who did engage with the term, common misinterpretations were "और लोग" or the literal translation "साथी".
- Users can develop a better understanding of the term 'भागीदार'. In

such cases, some users may relate this term with "companies" or "third party", possibly due to prior exposure.

RECOMMENDATION

Use of term '**भागीदारों'** accompanied by a clear explanation of who these are.

# Data Transfer

# Translations tested - ट्रांज़िट करते समय हम आपके डेटा vs डेटा लेन-देन



### **INSIGHTS**

- The concept of 'data transfer' is new and users need more understanding of why it is done.
- Additionally, users may misinterpret 'data' as mobile' data'.
- Some users found the term 'ट्रांज़िट' hard to pronounce. The phrase 'ट्रांज़िट करते समय हम आपके डेटा' is misunderstood as either

'transaction' or 'exchange of user's info with other users.

### RECOMMENDATION

Use the phrase 'डेटा लेन-देन' along with an explanation of what comprises 'data'. For users to fully understand 'data transfer', a more comprehensive understanding of the concept itself is required, which needs to be built through education over time.

# **Terms and Conditions**

Translations tested - नियम और शर्तों (with and without active opt-in)

<	<
<b>आइए शुरू करें</b> साइन अप करने के लिए अपना ईमेल और पासवर्ड दर्ज करें	<b>आइए शुरू करें</b> अकाउंट खोलने के लिए अपना ईमेल और पासवर्ड डालें
अपना ईमेल दर्ज करें	अपना ईमेल डालें
@email.com	@email.com
अपना पासवर्ड दर्ज करें	अपना पासवर्ड डालें
****	****
जारी रखने का मतलब है कि आप की नियम और शतौँ और निजता पॉलिसी से सहमत हैं ।	
स्वीकार करें और जारी रखें	अकाउंट खोलें

### **INSIGHTS**

• Users have a partial understanding of this concept due to exposure to many apps and websites. They interpret these as terms set by the app but do not have a detailed understanding of what these terms are.

> "...जिस्पे अपना ईमेल वगेरह दर्ज कर रहे हैं तो उनकी कुछ शर्तें भी हैं। वो शर्तें क्या हैं ये तो नहीं पता लेकिन इसमें लिखा गया है की कुछ शर्तें हैं"

• Users view 'Terms and Conditions' and 'Privacy Policy' under one umbrella and often use them interchangeably. The majority of the users tested had never read the policy document.

> "ऐसा तो कुछ नहीं समझ में आ रहा है। क्योंकि उसमें कोई-कोई में लिखा रहता है की जो भी आप इसपे सर्च करेंगे वो सब थर्ड पर्सन के पास नहीं जाएगा, ये दोनो के बीच में रहेगा। आपके अकाउंट और आपके बीच में रहेगा और कोई के पास नहीं जाएगा"

 Despite incomplete/ incorrect understanding of these policies, users understand that acceptance of Terms of Service is mandatory to be able to use the app/ website they are on. Users state they cannot refuse these conditions or they will not be able to access the services required.

### RECOMMENDATION

Use of the phrase 'नियम और शर्तों' needs to build greater value exchange for users to actively read the policy or engage with it. Through education, this also should be demarcated from 'Privacy Policy'.

# Activity-based (ads)

Translations tested - एक्टिविटी आधारित vs गतिविधि पर आधारित

### Prevalent design & terminology

### एक्टिविटी आधारित

या अन्य सेवाओं पर जहां विज्ञापन दिखाए जाते हैं वहां की गई गतिविधियों से एकत्र जानकारी के आधार पर जुगबू द्वारा आपको दिखाए जाने वाले विज्ञापन कस्टमाइज़ किए जा सकते हैं । यह सेटिंग चालू होने पर, आपको कस्टमाइज़ विज्ञापन देने के लिए हम आपको गतिविधि का उपयोग उस सेवा के अतिरिक्त कर सकते हैं जिसमें आपने वही विज्ञापन देखा । उदाहरण के लिए, जुगबू के साथ डेटा शेयर करने वाली वेबसाइट पर किसी फ़िल्म की खोज करने पर आपको अन्य फ़िल्मों के विज्ञापन दिखाए जा सकते हैं ।

### और जानें

### Proposed design & terminology

### गतिविधि पर आधारित

हम विज्ञापनदाताओं और अन्य भागीदारों से आपकी गतिविधि के बारे में डेटा लेते हैं। इस सेटिंग को चालू करने पर, जब आप किसी भागीदार साइट पर हमारे विज्ञापन देखते हैं तो हम यह डेटा इस्तेमाल कर सकते हैं आपको और उचित विज्ञापन दिखाने के लिए।

उदाहरण के लिए, अगर आप कपड़े बेचने वाली किसी साइट पर जाते हैं, तो उसके आधार पर हम आपको शर्ट का विज्ञापन दिखा सकते हैं ।

और जानें

### INSIGHTS

- The term 'एक्टिविटी आधारित' is very new to most users and they either have no understanding or misunderstand what entails 'एक्टिविटी'. Users often misinterpret 'activity-based ads' as an activity done on the app itself.
- Users can build a partial understanding of the concept through the term 'गतिविधि पर आधारित' but need further explanation on what is meant by 'गतिविधि'. Providing examples of how these work was a big help in aiding user comprehension.
- Users often link 'गतिविधि' with app usage but are not clear on what all information serves as 'activity data'.

### RECOMMENDATION

Use of the term '**गतिविधि पर आधारित**' along with an explanation of what comprises '**गतिविधि**'. The use of examples is undeniable in building better comprehension.

For users to fully understand how different ads are shown based on different points of data provided by the user, a more comprehensive understanding of the concept of 'data collection' itself is required, which needs to be built through education over time.

# Interest category (ads)

Translations tested - रूचि कैटेगरी vs विज्ञापन रूचियाँ



### **INSIGHTS**

- The term 'रूचि कैटेगरी' can lend itself to a lot of misinterpretation by users. While some users related this to seeing content (and no ads) basis their interests, some interpreted the terms literally ("रूचि मतलब किसी चीज़ को पसंद करना").
- Most users have a hard time differentiating this category from activity-based ads and often mixed the two/ think of them interchangeably. While most users can establish the link between interest and ads, they required more information on how their interests are recorded and how this differs from other ad categories.
- When faced with the term 'विज्ञापन रुचियाँ' more users can build a partial understanding of what this concept implies. However, they

required more knowledge to differentiate between interest and activity-based ads.

### RECOMMENDATION

Use of the terms **'विज्ञापन रुचियाँ'** along with an explanation of how these interests are recorded. The use of examples is undeniable in building better comprehension.

For users to fully understand how different ads are shown basis different points of data provided by the user, a more comprehensive understanding of the concept of 'data collection' itself is required, which needs to be built through education over time.

# Users tend to use concepts learned in other contexts to understand new information.

# **Analyses traffic**

Translations tested- ट्रैफ़िक का विश्लेषण vs लोगों की गतिविधि की परख

(iii)
5
क्या आपको कुकी पसंद हैं?
इस साइट पर आने वाले लोगों की गतिविधि की
परख करता है । इसके लिए हम कुकी का इस्तेमाल करते हैं। आप जिस तरह से हमारी साइट का उपयोग करते हैं, वह
जानकारी हम जुगनू के साथ कुकी के नाम से बाँटते हैं ।
कुकी के बारे में और जानिए
मना करें कुकी स्वीकारें

### **INSIGHTS**

 Users have difficulty understanding the concept of 'traffic' and are generally unable to draw a link between 'traffic' and 'user activity'. The term 'विश्लेषण' is also hard to understand for most users.

> "यहाँ पर कुछ उपयोगी जानकारी इस साइट पे शेयर किया गया है हम लोगों के लिए । मतलब मेरे साथ वो शेयर करना चाह रहा है, साझा करना चाह रहा है वो जानकारी। "

• Users can relate to the word 'गतिविधि' better but are unaware of what these activities are.

" 'जुगनू इस साइट पे आने वाले लोगों की गतिविधी की परख करता है' जो इस साइट को यूज़ करता है उनकी गतिविधी की परख करता है', मतलब देख-रेख करता है की कैसे लोग हैं क्या कर रहे हैं…"

RECOMMENDATION

Use of the phrase **'लोगों की गतिविधि की परख'** along with an explanation of what these user activities are.

# Performance cookies

Translations tested - प्रदर्शन vs गतिविधि मापने वाली कुकी

revalent design & terminology	Proposed design & terminolog
प्रदर्शन इन टूल की मदद से हम विज़िट और ट्रैफिक स्रोतों की गणना करके अपने ऐप के प्रदर्शन को मापकर उसे बेहतर बना सकते हैं। इनसे हमें पता चलता है कि कौन-से ऐप इंटरफ़ेस सबसे ज्यादा लोकप्रिय है और कौन से सबसे कम लोकप्रिय है। हमें इन फ़ाइलों से यह भी पता चलता है कि विज़िटर ऐप का कैसे इस्तेमाल करते हैं। ये फ़ाइलों जो भी जानकारियाँ जमा करती हैं उ-हें एक साथ इकट्ठा किया जाता है, ताकि वे गुमनाम बनी रहे। अगर आप इन फ़ाइलों को इजाज़त नहीं देते है, तो हम इन फ़ाइलों से यह	गतिविधि मापने वाली कुकी इस साइट को कितने लोग खोलते है, और किस प्रकार की गतिविधि करते है, यह जानकारी हम गुयनाम रूप से मापते हैं। इनसे हमें पता चलता है कि ऐप के कौनसे फ़ीचर कितने लोकप्रिय है ताकि हम अपने आप को बेहतर बना सकें। अगर आप यह अनुमति न दें तो हम यह जानकारी इकट्ठा नहीं करेंगे।
सेव करें	कुकी स्वीकारें

### INSIGHTS

 Users are unable to comprehend the term 'प्रदर्शन' and nearly all users failed to draw a relationship between 'प्रदर्शन' and the concept of custom experience for the user basis their activity on the app. However, from the supporting text, users can understand that they will not be shown content they do not permit.

> "…मतलब ये जो भी चीज़ है हमें पसंद नहीं है वो चीजें वो लोग नहीं दिखाएंगे और जो हम चाहते हैं सिर्फ़ वो ही हमको दिखाया जाएगा "

 The term 'गतिविधि' aids comprehension but users need more information on what these activities are. Users may relate activity to only search activity "जो भी हम सर्च करते हैं". "तो अगर इसको ऑफ़ कर देंगे तो ये जो भी हम सर्च करेंगे वो सब नहीं जानकारी रखेगा अपने पास।"

RECOMMENDATION

Use phrase '**गतिविधि मापने वाली कुकी**' along with some context on what these user activities are.

# **Target Cookies**

# Translations tested - लक्षित करना vs टारगेट विज्ञापन कुकी



### **INSIGHTS**

 Some users misinterpreted the term 'লঞ্জিন কলো' to mean seeing advertisements, based on their interests. Most users confuse this with other types of cookies.

> "इसमें जो कंपनी हैं वो अपने विज्ञापन डालती है ताकि अपन उस चीज़ को देख सकें। वो चीज़ अगर ख़रीदना चाहे और बेचना चाहे जैसा भी हो तो हम उस चीज़ पे जा सकते हैं।"

• While most users still find the concept of target ads confusing, when faced with the term 'टारगेट विज्ञापन कुकी' more users were able to draw a relationship between these ads and personalised content. Some users also confused 'target' with certain goals the app has set. "जो भी ऐप है वो टारगेट कुछ करता है उससे आपको नहीं दिखेगा विज्ञापन। मतलब इस ऐप में टारगेट सेट किया हुआ है मतलब की आपको ये ऐड दिखाना है वो सब। अगर ये सेकंड लास्त वाले ऑप्शन को ऑफ़ कर देंगे तो वो सब नहीं दिखाएगा। "

RECOMMENDATION

Use term **'टारगेट विज्ञापन कुकी**' along with some context on what 'Target' implies.

# Accountability

Translations tested - जवाबदेही vs ज़िम्मेदारी

< सुरक्षा सलाह	< सुरक्षा सलाह
ि सामाना () । साइन अय करें का	ि माउन अप करें संहत अप करें मंच
पुछल् गर पायार्थ का उपयोग करें पायार्थ केवेलर	upper et canada an andre ad
अपनी ऑनलाइन उपस्थिति सुरक्षित करें	ऑनलाइन दुनिया में सुरक्षित रहें
से अपनी निजी जानकारी हटाएँ	से अपनी निजी जानकारी हटाएँ
हम समझते है की आप कभी कभी कुछ कॉन्टेंट जो आपके बारे में हैं, हमारे साइट से हटाना चाह सकते हैं ।	ऐसा हो सकता है की आप अपने बारे में उपस्थित जानकारी हमारी साइट से हटाना चाहें ।
	हम आपकी सुरक्षा की ज़िम्मेदारी को गंभीरता से
हम अपनी <u>जवाबदेही</u> को गंभीरता से लेते हैं और ऐसी निजी जानकारी को हटा सकते हैं जिससे पहचान की चोरी, वित्तीय धोखाधड़ी या किसी ख़ास तरह की नुक़सान होने का खतरा हो ।	लेते हैं । आपकी निजी जानकारी जो पहचान की चोरी, धन-संबंधित धोखाधड़ी या किसी ख़ास तर का नुक़सान करे, हम उसे हटा देते हैं ।
जारी रखें	जारी रखें

## **INSIGHTS**

• 'जवाबदेही' is not an easily understood term. As a result, users may skip reading this out altogether.

" 'हम अपनी जवाबदेही को गंभीरता से लेते हैं और ऐसी निजी जानकारी को हटा सकते हैं जिससे पहचान की चोरी, वित्तीय धोखाधड़ी या किसी ख़ास तरह की नुक़सान होने का खतरा हो।' यह भी समझ नहीं आया।" • Users can clearly understand the term ज़िम्मेदारी, however, it is essential to clarify *who* is responsible. In absence of the right context, users can misunderstand this as the app claiming no responsibility to protect the user's data.

"ये बता रहे हैं की जैसे वेब्सायट पे हमारी जानकारी जैसे हम लोग डाल देते हैं... ईमेल ID और फोन नम्बर हर चीज़ डाल के रखते हैं... फ़ोटोज़ भी लोग डाल के रखते हैं गूगल पे तो ऐसे नहीं डालना चाहिए। मतलब की हम उसकी ज़िम्मेदारी नहीं लेते। इससे नुक़सान हो सकता है।"

RECOMMENDATION

Use of the term 'ज़िम्मेदारी' but with a better explanation of the area of responsibility.

# Data breach

Translations tested - जानकारी का दुरुपयोग vs डेटा का ग़लत इस्तेमाल



### INSIGHTS

• Users may be confused with the phrase 'डेटा का ग़लत इस्तेमाल' since they do not fully understand 'data' as the user's information. Users can still use context to build meaning that one should not click on links from unknown sources as it can lead to misuse of information.

> "मतलब ये ऐसे बता रहा है की आपका जो ईमेल है वो किसी वजह से कुछ ग़लत हो गया है उसमें। तो हम आपको कुछ सलाह देंगे वो पढ़िएगा।"

• Users can relate to 'जानकारी' more effectively and most connected it to their email ID and passwords.

"मतलब की हमारा जो अकाउंट है...किसी साइट या ऐप्लिकेशन पर हमारी जो जानकारी है उसका दुरुपयोग किया जा सकता है। कोई दूसर उसको यूज़ कर सकता है... और जिसकी वजह से हमारा पैस्वर्ड ख़तरे में है हमारा जो ये ईमेल है उसका पैस्वर्ड शायद ख़तरे में है।"

RECOMMENDATION

Use of term 'जानकारी का दुरुपयोग'.
# 6. Some terminology presented on screen is often ignored by the users or users are unable to pay attention to them

This may be due to lesser visual prominence or banner blindness on the part of the user.

#### **Remind me later**

Translation tested- बाद में याद दिलाएँ



#### **INSIGHTS**

• Users consistently fail to notice this as an option and skip reading this out altogether. This term requires stronger visual elements to draw attention to itself. RECOMMENDATION

Text '**बाद में याद दिलाएँ'** should have the same visual prominence as स्वीकार करें' so that users understand both options as equally viable.

#### Always on

Translations tested - हमेशा ऑन



#### **INSIGHTS**

• Users tend to read over this term/ ignore it.

#### RECOMMENDATION

The phrase should have a stronger visual hierarchy through fontweight or the use of iconography.

#### **Reject Cookies**

Translations tested - कुकी मना करें



#### **INSIGHTS**

• Users tend to read over this term/ ignore it.

RECOMMENDATION

Provide equal visual hierarchy to both the CTAs so that users understand both options as equally viable.

#### Don't give permission

Translations tested - अनुमति न दें



#### **INSIGHTS**

• Users tend to read over this term/ ignore it.

#### RECOMMENDATION

Provide equal visual hierarchy to both the CTAs so that users understand both options as equally viable.

#### Ad settings

Translations tested - विज्ञापन और डेटा

6	्∞ अकाउंट	
Ç	🗘 नोटिफ़िकेशन	
X	र्षे विज्ञापन और डेटा	
G	🛈 सुरक्षा और लॉग इन	
9	2) सहायता केंद्र	
E	🔓 लॉग आउट	

#### INSIGHTS

 Users, when urged to find a way to manage ad settings can select 'विज्ञापन और डेटा' as the right tab through the process of elimination of all other tabs. However, there is no display of understanding of what 'विज्ञापन और डेटा' means or what users expect to see when they click on the same.

#### RECOMMENDATION

For users to fully understand this term, a more comprehensive understanding of the concept of 'data collection' and its relation to advertisements itself is required, which needs to be built through education over time.

## 04.

## **Insights from Experts**



During this research, language, and privacy experts were consulted to strengthen the areas of inquiry. These experts have had extensive experience building products and services in Hindi language, through language or policy lens. Feedback from these experts on the proposed research, and their own experiences with localising applications, shaped both the recruitment for this study as well as the terms that were tested.

Among those consulted were -



#### Vivekananda Pani

Co-founder, Reverie Language Technologies. Pioneer of several free tools including the first free text transliteration from English to Indian and other global languages.



#### Sriram Hebbar

CEO Greynium Information Technologies Pvt. Ltd. Former CEO Oneindia.com, ex- Times Internet . Helping startups adapt to Indian Language Ecosystem.



#### **Prabhash Jha** Editor at HT Digital, 14+ years of experience in providing editorial leadership in digital journalism.



#### Swati Dogra

Director - Product at MakeMyTrip. Led localisation of app in Hindi.



#### **Berges Malu**

Public Policy, Music Partnerships, and Communications, ShareChat) and Tamoghna Goswami (Tech Policy and Law, ShareChat).



#### Rajesh Kalra

Executive Chairman at Asianet News Media & Entertainment Pvt Ltd, ex-Chief Editor of The Times Group Digital

Recommendations from these experts are divided into five key themes-

#### **USE OF LANGUAGE**

- Use less complex words and focus on simpler terminology.
- Focus on building terminology that has conversational tones as these are accepted by the users. Additionally, avoid the debate of 'pure forms' vs. 'बोल-चाल की भाषा'. As long as there is logic to the use of certain words, boundaries should not be created.
- While creating simpler terms it is essential to make sure a term does not lose its legal context. Investigate if the simplified terms are holding up in court. Additionally, the drafting of terms and conditions needs to be consistent with the way they are read and dealt with in court.
- Other forms of media affect language uptake and words people understand in formal Hindi. Similarly, the context of usage may affect direct translations. For example, 'khaata' might induce a feeling that it is a financial account; however 'account' may be safer to use [when talking about account creation in non-fintech apps].
- Simplifying technical language in indic is a challenge (For example,

there is no alternative word for 'cookie'). Additionally, legal language can't be replaced by colloquial words. It might serve better to standardise certain words across all languages (e.g. account, delete).

#### **USE OF SCRIPT**

- Transliteration is useful but can have issues as there is no standard spelling for these transliterated words. Retain transliterations where required but standardise spellings for these terms
- Avoid a mixed script (such as the use of 'SMS') as it creates a readability problem or uses mixed scripts with restraint. Acronyms like OTP, etc. are now part of user memory, however, mixed scripts obstruct the readability and warrant caution

#### PUNCTUATION

 The use of punctuation in language has been convoluted. The period ... instead of the purnaviram ' |' creates only confusion and makes it harder to read and process data. There is a need to standardise the use of purnaviram.

#### **UI AND DESIGN**

• When drafting privacy and consent notices, a legally-bound draft is an ideal result but a summary of bullet points in simple language is easily consumed by the user.

- While giving access permissions the education of pros and cons and where the access should be provided is important. Provide context for access permissions. Utility for permissions should be explained to users eg. geolocation is easier to explain but the rest are not.
- People prefer writing in Roman rather than Devanagari and as such this needs to be remembered while creating flows.
- Voice is important over type. Build for voice as users who do not know how to read and write English or struggle with Hindi keyboard and prefer using voice assistance.
- While using images or iconography to build comprehension, remember that different icons can mean different things in different spaces (for example, what does a 'heart' convey in e-commerce websites vs. messaging).

#### **RECRUITMENT AND USER PERSONA**

- While recruiting the user base for testing, include non-English medium school students and teachers. These professionals are helpful as they are partially literate and can read and converse with minimal vocabulary. Additionally, they will have an openness toward language use which helps with quick feedback.
- While testing with users, unearth their prior experiences while taking, to get feedback on the terms and designs at hand.

• To test terminology, include new-to-internet users in the feedback process.

These insights helped us in formulating recruitment criteria, research guides, as well as prototypes that helped in ensuring we were targeting the right audience and following the required line of questioning. We are thankful to the experts for their time and knowledge that has been indispensable in this research.

## 05. Limitations and Areas of Future Research

करत समय आप हमस क्या उम्माद कर सकत ह आर हम आपस क्या उम्माद कानूनों, और हमारे लिए हमेशा से सही मानी जाने वाली चीज़ों का पता चलता कि हमारी सेवाओं के साथ इंटरे कि माय, आपके और Google के बीच शीर्षकों वाले विषय शामिल ह बहुत ज़रूरी है कि की सेवाएं ह मेगायद इन सेवा की शतों को बिना प बहुत ज़रूरी है कि की सेवाएं ह मेगा में समय छ/प्र हमसे क्या उम्मीद क शतों सहमारी कंपनी पर ल रातीं सहमारी कंपनी पर ल रातीं यह तय करने में कि कि स्वार्थ के साथ इंटरेक्ट क चाहिए. उदाहरण के लि आपसे क्या उम्मीद क आपसे क्या उम्मीद क चीज़ों का पता चलता करने में मदद करती है कि की सेवाएं इस्तेमाल करते समय आप हमसे क्या उम् शतों में इन शीर्षकों वाले कि की सेवाएं इस्तेमाल करते समय आप हमसे क्या उम् As language continually evolves it will undergo iterations in the digital space as well. This implies user experiences with the terminology suggested may not stay consistent and applications will need to stay abreast of these changes to keep user comprehension and accessibility at the forefront.

The above research attempted to provide the best possible design patterns and terminology that allows users to understand privacy and consent notices and enable them to take the right decisions regarding their privacy. However, there are cases where a simpler alternative or a more visually appealing design pattern will not create the necessary change. For users to fully understand concepts such as 'Data transfer', 'Cookies', 'Ad partners', among others, as well as the details in privacy documents, there is a need for greater digital literacy. Users have to be educated on what comprises 'personal data', how this is used, and what rights they have around the same. It is only after users have a working understanding of these terms that they can fully comprehend issues of privacy.

Additionally, some Hindi terminology that was tested, was not a direct translation. For words such as 'Data breach', phrases such as "जानकारी का दुरुपयोग" are easier for users to comprehend, though they do not communicate the exact meaning of the original word. Such words require more work, both from linguistic and research perspectives.

Future research can look into how the digital literacy and communication of users have changed, what aids these changes, and how the same can be leveraged by mobile and web applications to communicate issues of privacy and consent.

### Annexure

#### Methodology

#### **Recruitment :**

A total of **40 user tests** were conducted. Participants were recruited from **7 cities** spread across Tier 2 and Tier 3, namely: Sawai Madhopur, Jabalpur, Patna, Sitapur, Kanpur, Varanasi, and Agra. Participants were users of mobile phones and apps in majorly Hindi language, this implied they used most of the applications in Hindi language and also used **Hindi** keyboard for typing. The age range varied between **16-39 years** and with equal representation of genders.

#### Prototypes :

A total of **5 prototypes** were created to test user experience and comprehension when faced with **9 distinct artefacts**, namely:

- Cookies
- Security Tips
- Notification of Terms and Conditions
- Two-Factor Authentication
- Access permissions
- Updates/ Changes (in Terms and Conditions/ Privacy Policy)
- Data collection for Ads
- Unsubscribe
- Account deletion

The prototypes mimicked the flow found in 3 domains -

Consumer Technology

- E-commerce Technology
- Media technology

#### **Research Method: Qualitative Usability Testing**

Users were presented with an app flow and asked to complete certain tasks. On each screen, they were asked to read out what they saw and what action they would take based on their understanding of the screen. The moderator probed for the following-

- 1. What did the user understand from the screen?
- 2. How does the user feel about the screen?
- 3. What would the user like to do to move forward (why/why not?)
- 4. Has the user seen something similar before? How did they respond then?

Three key components of this design research were:

- Contextual Inquiry: placed users in a situation as close to their real experience as possible, in this case, the experience of subscribing to products, facing access permissions, cookie policies, etc. This allowed us to observe real behaviour and identify problems that users face with certain words and patterns.
- 2. Think Aloud: asked participants to talk through what they read on each screen and how they would want to proceed from that screen. This was valuable because it gave us an unfiltered view into working memory, highlighting areas where certain terms didn't make sense or weren't clear.
- Assessments: The screens were interspersed with questions that were designed to evaluate users' comprehension of the text read so far. These served as additional points of inquiry into users' understanding of certain concepts.

#### **Research Analysis**

Basis user responses to the questions asked by the moderator, the users'

responses to assessment questions as well as qualitative observations of their body language and emotional responses, the data was analysed for each flow using deductive coding. Notes on how users interpreted each of the words were categorised into 6 codes-

- 1. Easily understood by users
- 2. **No recognition**: Users are not able to relate to the word or misinterpret it
- 3. Technical term: Needs higher digital literacy/ knowledge building
- 4. Needs more explanation/context setting
- 5. **Often skipped**: Requires more visual prominence (iconography/fontweight/colours)
- 6. New Word: Works best when paired with simpler terminology

Based on these codes, insights were generated around areas of frustration, comprehension, misconceptions, and learning when users are met with certain terminology.

The above set of learnings has evolved from analyses of these insights against existing research into localisation and designing for privacy and consent.

For a full analysis of the words tested please visit the web report.

#### **Preliminary research**

To propose alternatives to the existing terminology and design in privacy and consent notices, preliminary testing was done with a set of 12 users. The testing was to understand areas of struggle among users and what kind of terminology and design can alleviate the same. To read more about the study as well as the learnings that gave birth to proposed designs and terminology, please visit the web report.

## Bibliography

- App & website localization for Indian users think with google APAC. Think with Google. (n.d.). Retrieved May 11, 2022, from <u>https://</u> services.google.com/fh/files/misc/app-website-localization-indianusers.pdf
- Appinventiv. (2020, September 8). Challenges Associated With Developing Multi-lingual Apps. Retrieved May 11, 2022, from https:// appinventiv.com/blog/key-challenges-faced-in-developingmultilingual-mobile-apps/
- Bedi, A. K., & Kumar, R. (2022, June 15). Making data privacy policies and 'consent' work. The Hindu BusinessLine. Retrieved September 6, 2022
- Design Concerns in Creating Privacy Notices The Centre for Internet and Society. (2018, May 29). Centre for Internet and Society. <u>https://cis-india.org/internet-governance/blog/design-concerns-increating-privacy-notices</u>
- Ganesh, S. (2020, June 8). Priming and the Science behind Onboarding. Mind the Product. Retrieved August 25, 2022, from <u>https://www.mindtheproduct.com/priming-and-the-science-behind-onboarding/</u>
- Informed Consent Guidelines & Templates | Research Ethics & Compliance. (2021, October 29). Research Ethics and Compliance,

University of Michigan. Retrieved May 11, 2022, from https://researchcompliance.umich.edu/informed-consent-guidelines

- KANTAR & IAMAI. (2021, June). Internet Adoption in India. Retrieved August 25, 2022, from <u>https://images.assettype.com/afaqs/2021-06/</u> <u>b9a3220f-ae2f-43db-a0b4-36a372b243c4/</u> <u>KANTAR\_ICUBE\_2020\_Report\_C1.pdf</u>
- KPMG & Google. (2017). Indian Languages- Defining India's Internet. Https://Home.Kpmg/in/En/Home/Insights/2017/04/Indian-Language-Internet-Users.Html. Retrieved May 11, 2022, from <u>https://assets.kpmg/</u> <u>content/dam/kpmg/in/pdf/2017/04/Indian-languages-Defining-</u> <u>Indias-Internet.pdf</u>
- Nair, N. (2021, December 7). The framing effect in UX UX Collective. Medium. Retrieved August 25, 2022, from <u>https://uxdesign.cc/the-framing-effect-in-ux-d77df34369ec</u>
- Nielsen, J. (2010, October 17). Mental Models and User Experience Design. Nielsen Norman Group. Retrieved August 25, 2022, from <u>https://www.nngroup.com/articles/mental-models/</u>
- Rosala, M. (2019, April 28). 3 Design Considerations for Effective Mobile-App Permission Requests. Nielsen Norman Group. Retrieved May 11, 2022, from <u>https://www.nngroup.com/articles/permission-</u> requests/
- Sinha, P., & Paswan, M. (2021, December). 5 principles for building

user-friendly Indian language websites and apps. Think with Google. Retrieved May 11, 2022, from <u>https://www.thinkwithgoogle.com/intl/</u> <u>en-apac/future-of-marketing/creativity/app-website-localization-</u> <u>indian-users/</u>

- Techynotions. (2017, July 9). Usability of Indian language apps: here's how to fix it. Medium. Retrieved May 11, 2022, from <u>https://</u> <u>carnivas.com/usability-of-indian-language-apps-heres-how-to-</u> <u>fix-it-d1ba7f14e6f4</u>
- Whitenton, K. (2013, December 22). Minimize Cognitive Load to Maximize Usability. Nielsen Norman Group. Retrieved August 25, 2022, from <u>https://www.nngroup.com/articles/minimize-cognitive-load/</u>
- Yablonski, J. (2018, June 15). Designing with Occam's Razor Jon Yablonski. Medium. Retrieved August 25, 2022, from <u>https://jonyablonski.medium.com/designing-with-occams-</u> <u>razor-3692df2f3c7f</u>