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# BANKING APP FOR VISUALLY IMPAIRED

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# ASSUMPTIONS

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- I have chosen **SBI's Yono App** for this exercise (50M + App Downloads. SBI is the oldest, reliable Indian brand, also second largest bank owned by Indian Govt. They are serving more than 43 crores customers.)
- For simplicity, we have assumed only Android Users now.
- For research purpose, I searched few YouTube videos that how visually impaired users use cell phones. (I would've liked to talk to few of them, but couldn't manage in short deadline)
- **Sources :** <https://www.youtube.com/watch?v=IkQk8ZbToNo>
- <https://www.youtube.com/watch?v=atTl45j-Pjo>
- [https://www.researchgate.net/publication/324022490\\_Biometrics\\_solutions\\_for\\_blind\\_person\\_authentication](https://www.researchgate.net/publication/324022490_Biometrics_solutions_for_blind_person_authentication)

# USERS

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Visually Impaired Users are broadly divided into two types: Those with **partial** impairments and other who **cannot see anything**. We will cover them in detail in next two slides.

## **App Users :**

- Visually impaired person himself
- Person who is assisting the visually impaired person in proximity – say family member or nurse/ assistant.
- Person who wish to assist him over phone or app.

# PARTIALLY IMPAIRED CELL PHONE USERS

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## **Pain Point :**

Users with Partial Impairment have difficulty is reading small texts, high contrast backgrounds, color correction issue, etc.

## **Current OS solutions:**

- Display options like Font Size, Display Scaling, Magnification, Color Correction, Color Inversion
- Remove animations, Live Caption, Hearing Aid compatibility, High Contract texts, Shortcuts from launch screen

# FULLY IMPAIRED CELL PHONE USERS

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## **Pain Point :**

Users with Complete impairment cannot see anything.

## **Current OS solutions:**

- For them, there are features like Screen Reader, Voice over, talkbacks, Read Screen reader with Screen off (Privacy), Voice Dictation, etc.
- Other Apps:
- There are some Brail apps as well. Then there are apps like Be My Eyes, Seeing AI, etc. that help them scan and read stuff.

# WHY DO THEY NEED BANKING APP?

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- Banking Services : Check their balance, Call bank helpline for complains.
- Sending and Receiving money from their close ones.
- Doing Mobile recharge, pay bills.
- Buying insurance and other products.

# WHAT IS OUR GOAL?

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- Redesigning the current Yono SBI App to support both partial and completely impaired persons.
- We will cover current experience for both users and share suggestions for improving their experience.

# CURRENT EXPERIENCE – PARTIALLY IMP USERS

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I tried the current Yono app from a partially impaired user POV and the experience was bad.

- OS level Font Size changes – it showed me a fixed size only
- Magnifier – broken experience, unable to user
- No in app support for voice commands.
- Tap area of many icon, fields was too small for users

# SUGGESTIONS :

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Given the OS (both android & iOS) are working hard to cater to needs to Disability community – we should focus on providing support to honor OS changes for :

- For Partial impaired - honor all the screen related customizations like adapting to screen font change, magnifier support, etc.
- Voice commands are extremely helpful and provide multiple input options like searching a feature, raising a complaint, etc. – that can save user from typing texts

# CURRENT EXPERIENCE – FULLY IMP USERS

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- Pin is required to access Yono app, and I was unable to use accessibility to enter pin. The view got distorted and unusable.
- Content Description is the major info for all talkback supports.
- Landing page Hamburger main menu has description as “Button” and “Double tap to activate” was not working on it.
- For customer support, it reads – “Check box underscore graphic”, for Logout it says, “logout underscore purple graphic”, for search - ”textbox” and so on.
- Whole experience is poorly designed for Fully impaired users – Double tap to enter, navigation etc. was not working for many pages

# SUGGESTIONS :

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- A Settings to chose if you're a person with disability and then recreating your user experience.
- Voice commands supported can be extended.
- Revamped home page with feature reorganized to cater to top abled needs.

# FUTURE VERSIONS

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- We can implement a feature where you can add an assistant with say a transaction limit (say 5k for worker and 50k for family member) whom you can request to perform a transaction on your behalf.
- Advanced facial plus fingerprint unlock to save user from entering pin every time