



Aarogya Setu VS CovidSAFE

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Aarogya Setu

- Released on 2nd April 2020. (Sharma, U., 2020)
- Automatic contact tracing using Bluetooth and GPS. (Kumar, A. and Barik, 2020)
- The app creates digital id for each user. (Jhunjunwala, A., 2020.)
- Risk status of user. (Jhunjunwala, A., 2020.)
- Self-assessment test based on ICMR guidelines. (Baskaran, K., Baskaran, P., Rajaram, V. and Kumarathan, N., 2020)

Sharma, U., 2020. Understanding aarogya setu: navigating privacy during a pandemic proves to be tricky. LSE Covid 19 Blog. Sharma, S., Basu, S., Shetti, N.P. and Aminabhavi, T.M., 2020. Current treatment protocol for COVID-19 in India. Sensors International, 1, p.100013. Kumar, A., Kumar, A. and Barik, M., AAROGYA SETU APP (APA) FOR COVID-19: RECENT ADVANCES AND FUTURE PROSPECTIVE". Baskaran, K., Baskaran, P., Rajaram, V. and Kumarathan, N., 2020, October. IoT based COVID preventive system for work environment. In 2020 Fourth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC) (pp. 65-71). IEEE. Jhunjunwala, A., 2020. Role of telecom network to manage COVID-19 in India: Aarogya Setu. Transactions of the Indian National Academy of Engineering, 5, pp.157-161.

Key Features (Aarogya Setu)

Updates & Informative Videos

Videos regarding safety during the pandemic and functioning of the app

(IASbaba, 2020)

Helpline Contact Info

Various Helpline Numbers mention in the App in case of emergency

(IASbaba, 2020)



Vaccination Details

Details Like Vaccine Certificates and Vaccination Slot Booking information provided in the App

(IASbaba, 2020)

Region-Wise Covid-19 Statistics

App gives information on Covid Situation in the country according to region

(IASbaba, 2020)

CovidSAFE

- Released on 26th April 2020. (Australian Government Department of Health, 2020)
- 40% of population need to download to be effective.
(BBC News, 2020)
- The app creates an encrypted reference code for each user. (Australian Government Department of Health, 2021)
- Uses Bluetooth based technology. (Australian Government Department of Health, 2021)

Australian Government Department of Health. 2020. COVIDSafe: New app to slow the spread of coronavirus. Australian Government Department of Health. [Online]. [Accessed 13 October 2021]. Available from: <https://www.health.gov.au/news/covidsafe-new-app-to-slow-the-spread-of-coronavirus>. Australian Government Department of Health. 2021. Report on the on the operation and effectiveness of COVIDSafe and the National COVIDSafe Data Store (NCDS). [Online]. [Accessed 2 November 2021]. Available from: https://www.health.gov.au/sites/default/files/documents/2021/07/report-on-the-operation-and-effectiveness-of-covidsafe-and-the-national-covidsafe-data-store_0.pdf. BBC News. 2020. Coronavirus: Australians download COVIDSafe contact tracing app. BBC. [Online]. 26 April 2020. [Accessed 2 November 2021]. Available from: <https://www.bbc.co.uk/news/world-australia-52433340>

Key Features (CovidSAFE)

Covid-19 Statistics

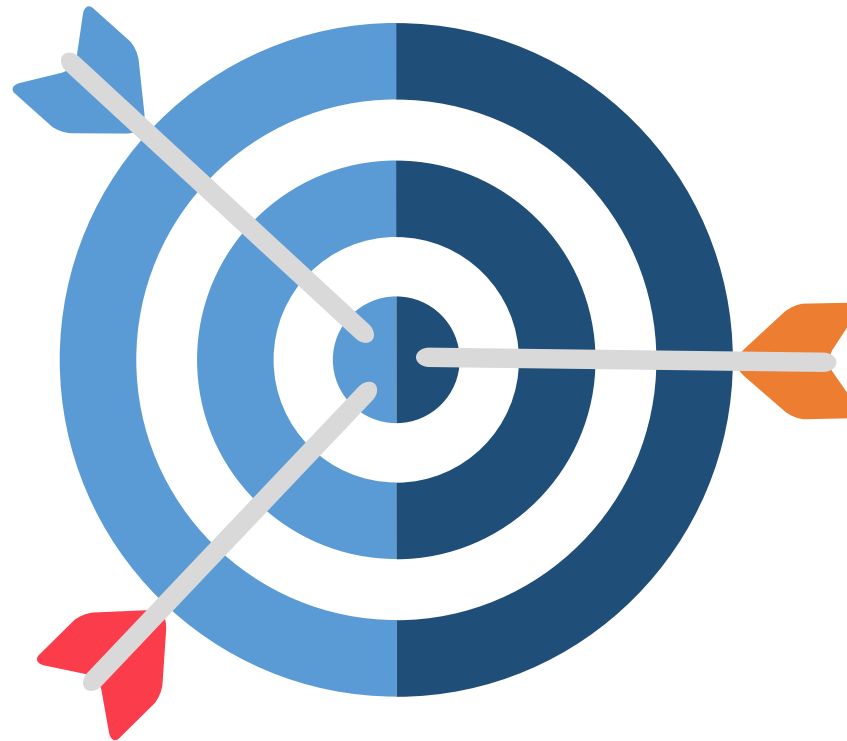
App should give information on Covid Situation in the country.

(Australian Government Department of Health, 2021)

Backwards Compatibility

Has improved backwards compatibility to allow android 5.1 users to download.

(Australian Government Digital Transformation Agency, 2020)



Text To Speech Technology

Helpful for elder people or people with eyesight issues who can't see small text on the screen sometimes

(Australian Government Digital Transformation Agency, 2020)



PROS

Compatibility – iOS, Android, 2G phones. (IAS Baba, 2020)

No internet connection required. (IAS Baba, 2020)

Uses location proximity history. (IAS Baba, 2020)

E – pass. (IAS Baba, 2020)

Supports 12 languages. (IAS Baba, 2020)

Mentions precautions to be taken. (IAS Baba, 2020)



PROS

Only Bluetooth to trace so a continuous internet connection not required. (Australian Government Department of Health, 2021)

Voluntary. (Australian Government Department of Health, 2021)

More accessibility. (Australian Government Digital Transformation Agency, 2020)

Open source. (Australian Government Department of Health, 2021)

Government Department of Health 2021. [Online]. [Accessed 4 April 2021]. Available from: <https://www.covidsafe.gov.au/index.html#how-anchor>.

Government Department of Health, 2021. [Online]. [Accessed 26 July 2021]. Available from: <https://www.health.gov.au/resources/apps-and-tools/covidsafe-app>.

Government Digital Transformation Agency, 2020. [Online]. [Accessed 13 October 2021]. Available from: <https://www.dta.gov.au/news/increased-adoption-and-accessibility-covidsafe-app-users>

Government Department of Health 2021. [Online]. [Accessed 8 May 2021]. Available from: <https://www.dta.gov.au/news/dta-publicly-releases-covidsafe-application-source-code>.

Limitations – Aarogya Setu

- 1) Lack of Consent and data minimization. (Dhindsa and Kaushik, 2020)
- 2) Lack of Algorithmic Accountability. (Dhindsa and Kaushik, 2020)
- 3) Unauthorized Data Sharing and Lack of Transparency.(Dhindsa and Kaushik, 2020)
- 4) Cyber Security flaws. (Dhindsa and Kaushik, 2020)
- 5) Battery overuse and heating of phone. (Kumar and Barik, 2020)
- 6) Limited features for 2G version of app. (IASbaba, 2020)
- 7) Too many Covid-19 apps in India. (Jha et al., 2020)



Dhindsa, A. and Kaushik, S. 2020. The Constitutional Case against Aarogya Setu. *papers.ssrn.com*. [Online]. [Accessed 12 October 2021]. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3610569.
IASbaba 2020. Arogya Setu app: Advantages and Issues. *IASbaba*. [Online]. [Accessed 15 October 2021]. Available from: <https://iasbaba.com/2020/05/arogyasetu-app-advantages-and-issues/>.
Jha, V., Bassi, A., Arfin, S. and John, O. 2020. An overview of mobile applications (apps) to support the coronavirus disease 2019 response in India. *Indian Journal of Medical Research*. **151**(5), p.468.
Kumar, A. and Barik, M. 2020. A TEXTBOOK OF THE SARS-CoV-2 CHAPTER 12 AAROGYA SETU APP (APA) FOR COVID-19: RECENT ADVANCES AND FUTURE PROSPECTIVE. MAHI PUBLICATION.

Limitations – CovidSAFE



1) 1/3 of users have not updated the app. (Taylor, 2021)

2) Cost \$100,000 AUD to run weekly. (Potter, 2021)

3) App lacks features.

4) Public uncertainty about the app

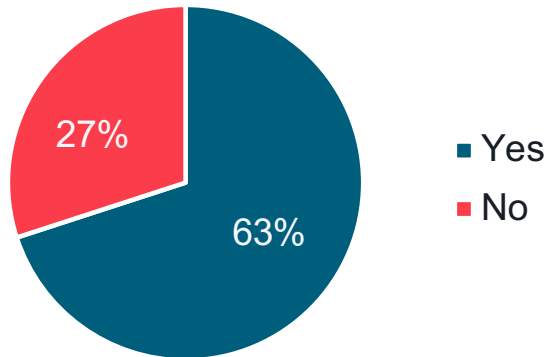
5) Lack of users to be effective

Taylor, J. 2021. One third of Australian users have not updated CoviSafe app. The Guardian. [Online]. [Accessed 1 January 2021].
Available from: <https://www.theguardian.com/technology/2021/jan/14/one-third-of-australian-users-have-not-updated-covidsafe-app>.

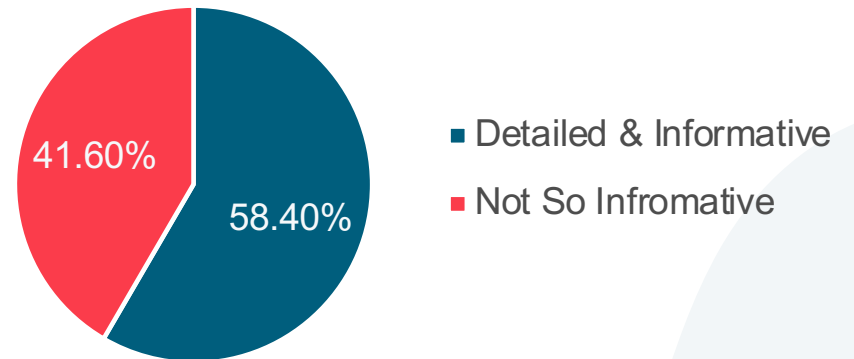
Potter, C. 2021. Australia's COVIDSafe app fails again not detecting new Delta strain. Mail Online. [Online]. [Accessed 1 July 2021].
Available from: <https://www.dailymail.co.uk/news/article-9744041/Covid-19-Australia-Failed-COVIDSafe-app-not-updated-fight-deadly-new-Delta-variant.html>.

Statistics – Aarogya Setu

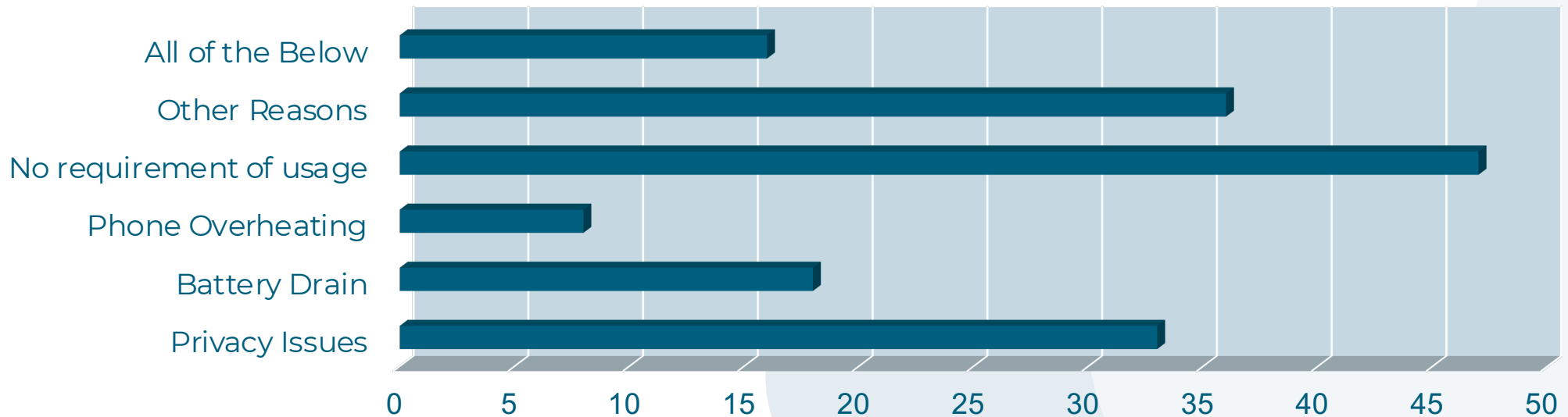
Q1) Have you installed the app? (208 responses)



Q2) If Yes, How did you find the App ?

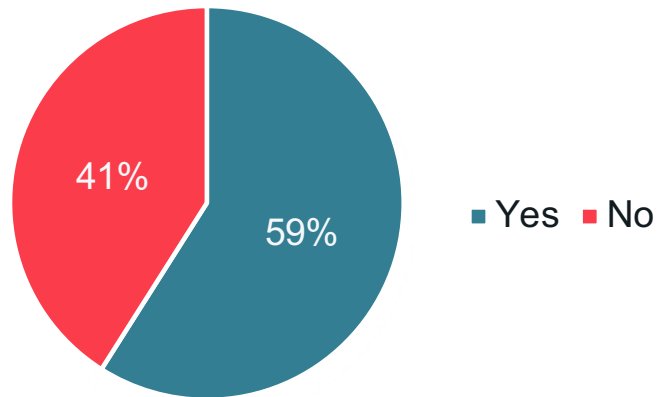


Q3) Reason why you didn't install the app?

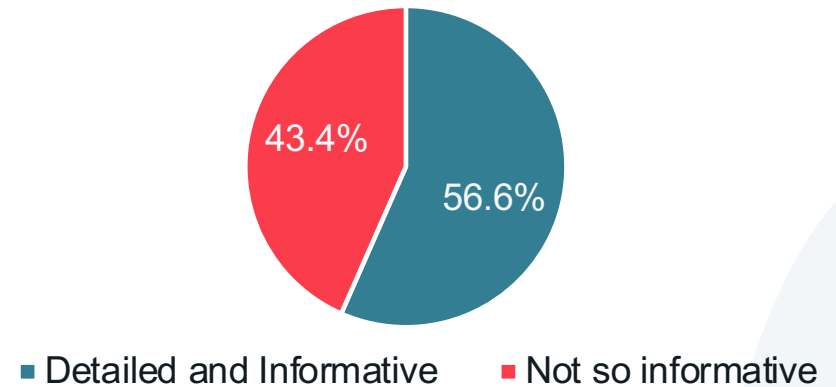


Statistics – CovidSAFE

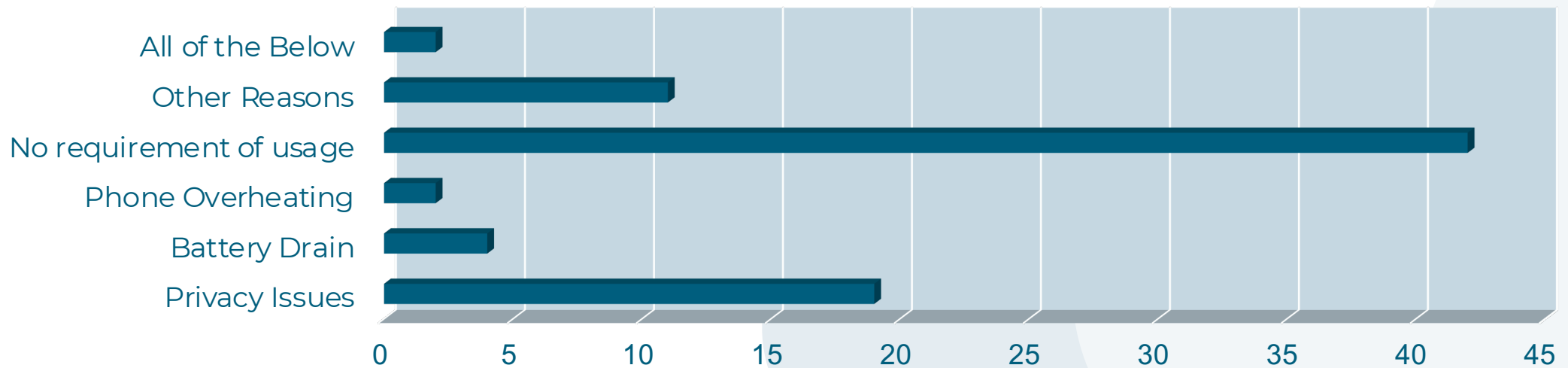
Q1) Have you installed the app? (100 responses)



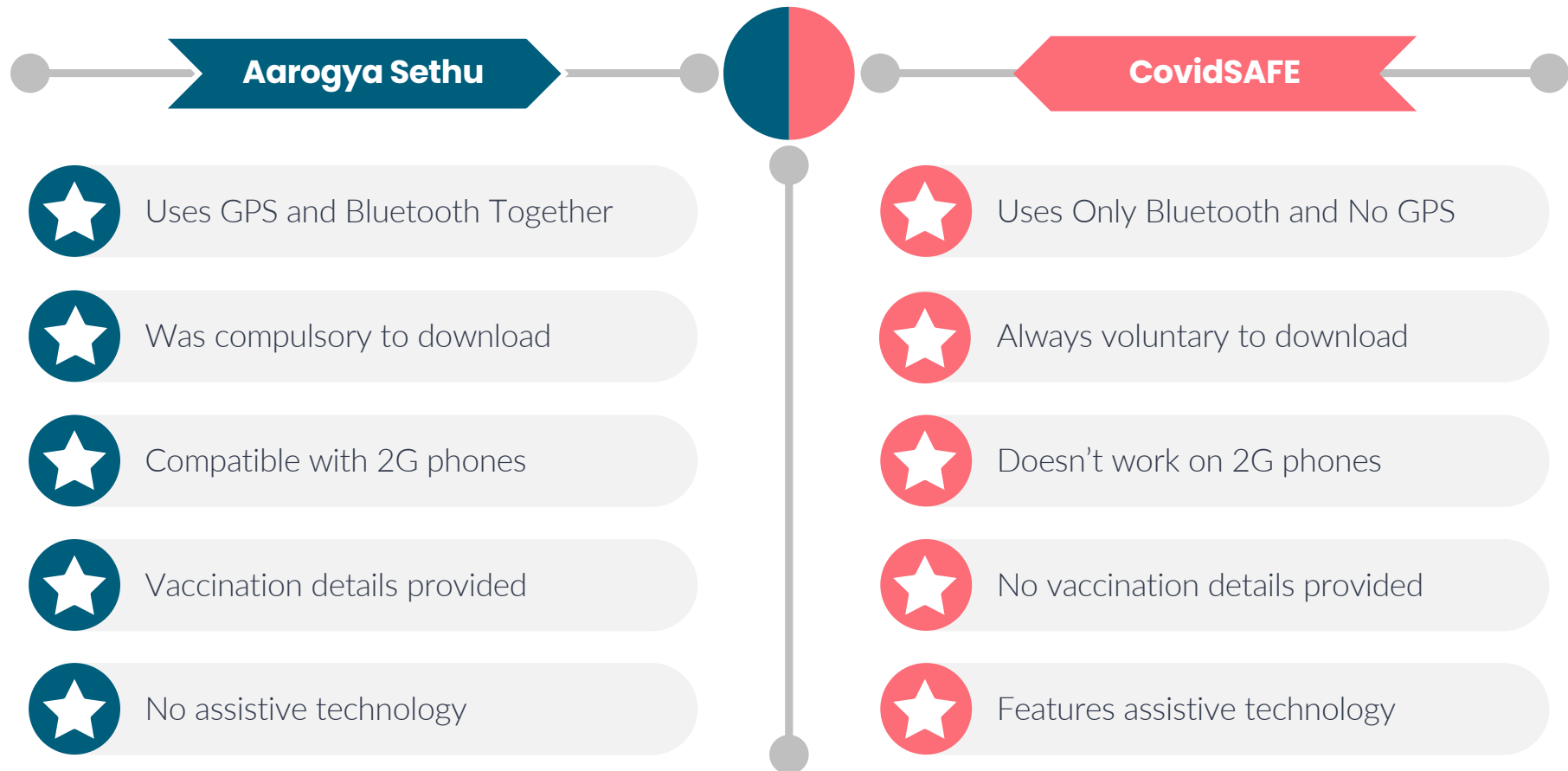
Q2) If yes, how did you find the app?



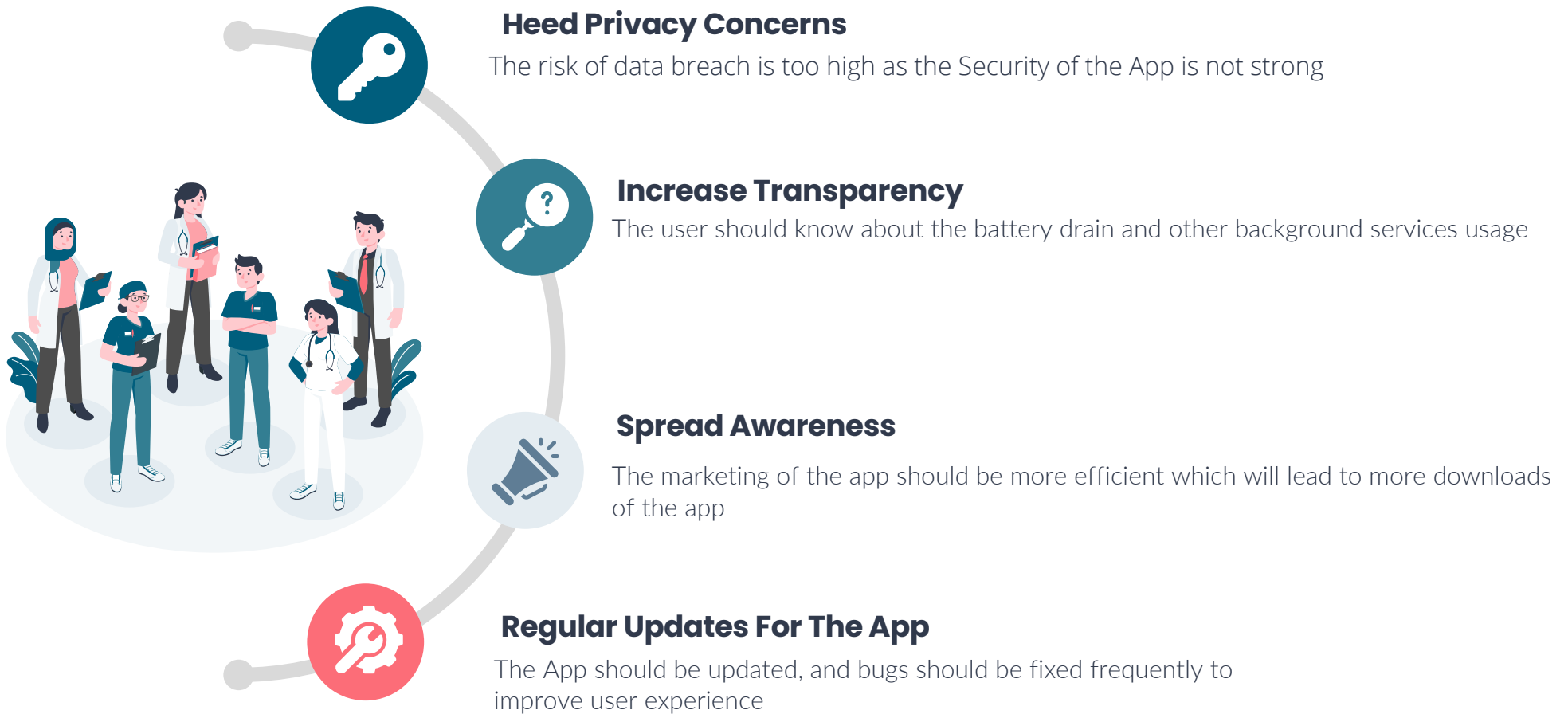
Q3) Reason why you didn't install the app?



Differences



Solutions



Conclusion

- ❖ Both countries have invested heavily in their respective apps, but India takes an edge over with its effectiveness.
- ❖ Due to the compulsion of downloading its app, India makes sure the majority of the population's data is being entered into the app.
- ❖ Australian CovidSAFE failing to reach its goal of 40% downloads makes it less effective.



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SLIDE 3 & 4

- i. Sharma, U., 2020. Understanding aarogya setu: navigating privacy during a pandemic proves to be tricky. LSE Covid 19 Blog.
- ii. Sharma, S., Basu, S., Shetti, N.P. and Aminabhavi, T.M., 2020. Current treatment protocol for COVID-19 in India. Sensors International, 1, p.100013.
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- ii. Australian Government Department of Health. 2021. Report on the on the operation and effectiveness of COVIDSafe and the National COVIDSafe Data Store (NCDS). [Online]. [Accessed 2 November 2021]. Available from: https://www.health.gov.au/sites/default/files/documents/2021/07/report-on-the-operation-and-effectiveness-of-covidsafe-and-the-national-covidsafe-data-store_0.pdf.
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- i. Australian Government Digital Transformation Agency. 2020. Increased adoption and accessibility for COVIDSafe app users. Australian Government Digital Transformation Agency. [Online]. [Accessed 13 October 2021]. Available from: <https://www.dta.gov.au/news/increased-adoption-and-accessibility-covidsafe-app-users>

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- i. Aarogya Setu App: Advantages and issues. [online] Available at: <https://iasbaba.com/2020/05/aarogya-setu-app-advantages-and-issues/> [Accessed 2 November 2021].

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- i. Australian Government Department of Health 2021. [Online]. [Accessed 4 April 2021]. Available from: <https://www.covidsafe.gov.au/index.html#how-anchor>.
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- iii. Australian Government Digital Transformation Agency, 2020. [Online]. [Accessed 13 October 2021]. Available from: <https://www.dta.gov.au/news/increased-adoption-and-accessibility-covidsafe-app-users>
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- i. Dhindsa, A. and Kaushik, S. 2020. The Constitutional Case against Aarogya Setu. *papers.ssrn.com*. [Online]. [Accessed 12 October 2021]. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3610569.
- ii. IASbaba 2020. Arogya Setu app: Advantages and Issues. *IASbaba*. [Online]. [Accessed 15 October 2021]. Available from: <https://iasbaba.com/2020/05/arogya-setu-app-advantages-and-issues/>.
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- i. Taylor, J. 2021. One third of Australian users have not updated Covidsafe app. The Guardian. [Online]. [Accessed 1 January 2021]. Available from: <https://www.theguardian.com/technology/2021/jan/14/one-third-of-australian-users-have-not-updated-covidsafe-app>.
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The background features several abstract, light blue shapes. At the top left, there is a semi-circular shape. Below it, on the left side, is a larger, more complex shape with a circular cutout. On the right side, there is a large, irregular shape that resembles a stylized cloud or a splash. The text "Any Questions?" is centered in the middle of the slide in a bold, dark blue font.

Any Questions?