



On May 14, 2020, Benjamin Ang and Eugene Tan of the S. Rajaratnam School of International Studies (RSIS) discussed Singapore’s multi-faceted tech approach to managing Covid-19. The country is currently in a circuit-breaker period trying to end the cycle of infection. The speakers discussed the “ecosystem” of Covid-19 services and how various tools can assist human tracers and the public at large. Five key insights for Hawaii are described below.

1. These are the key features of Singapore's contact tracing approach:

- **TraceTogether app:** The Government Technology Agency of Singapore ([GovTech](#)) developed the mobile app “[TraceTogether](#)” to aid the efforts of the contact tracing teams to reduce the spread of Covid-19. It is not mandatory, but citizens are strongly encouraged to install it. The app works by exchanging short-distance Bluetooth signals between phones to detect other users in close proximity and enables contact tracers to inform TraceTogether users who have been in close contact. Only about one-fifth of the population in Singapore has installed TraceTogether. Ang noted that greater effort needs to be made to encourage the public to download and use the app.

Assuaging security concerns: In contrast to GPS-enabled apps, TraceTogether does not track the user’s location, but instead uses Bluetooth to determine if the user has been in close proximity with another user of the app. GovTech has also published assurances about its privacy friendly principles related to data storage, retention and consent. TraceTogether has also been made open source to enhance trustworthiness, allowing experts worldwide to review the code and confirm the app works as described. The government has also published a list of “[mythbusters](#)” addressing the most frequent misperceptions of the app's functions.

- **SafeEntry app:** The contact tracing teams are further aided by the use of “[SafeEntry](#),” a national digital check-in system developed by GovTech, which logs individuals’ entry into a venue. Individuals need only scan a QR code on their mobile devices. It is deployed at all public venues and operating businesses and contact tracers can use this information if there is a confirmed case at a given location.

Insight: Hawaii may consider complementing human tracers with a Bluetooth-enabled mobile app. The app would facilitate contact tracing by allocating resources more efficiently and helping identify cases faster. To incentivize residents to install the app, its launch could be complemented by an incentive scheme through public-private partnerships (e.g., discounts, credits) and/or a campaign that emphasizes the benefits it would bring in mitigating the outbreak and returning to “normal” life.

2. Singapore has also developed the following technological innovations in response to Covid-19:

- **Business transformation:** New technologies have facilitated business operations in different areas such as e-commerce, delivery services, wet market live streaming, and home-based learning.
- **Online services:** Singapore has set up many website services to provide essential information on different matters ranging from where to find masks ([MaskGoWhere.sg](#)) and financial aid ([AidHubSG.com](#)) to available services ([CanIGo.sg](#)) and cocktail delivery ([CocktailGoWhere.sg](#)). The government also provides [maps](#) with information on crowd levels in malls, supermarkets, post offices, and public parks. In addition, robots are being used to encourage social distancing and monitor crowd density in parks.

Insight: As it reopens shopping malls and medium-risk businesses, Hawaii could consider visual mapping tools to report information on crowd levels in high risk locations using real-time aggregate data provided by mobile phone location services.

3. Singapore provides measures to enhance the effectiveness of quarantine for incoming travelers:

Singapore has striven to simplify its 14-day mandatory quarantine system for travelers. It does so by presenting new arrivals with a pre-designated quarantine itinerary and utilizing existing infrastructure like empty hotels. Relevant authorities and hotels where individuals are isolating enforce compliance with quarantine orders. The main concern for the city-state is scaling up quarantine resources as it lifts restrictions on incoming travelers.

Insight: Hawaii could consider using empty hotel rooms as quarantine-designated areas for travelers and providing essential services to people in these hotels.

4. Singapore has taken a whole of society approach:

After initial success in effectively managing Covid-19, Singapore experienced wavelets of outbreaks linked to its foreign worker population. This was a reminder for Singapore's government to address the needs of the entire population by bridging language gaps ([TranslateFor.sg](https://www.translatefor.sg)) and accounting for those (e.g., children, elderly) who do not use phones for contact tracing. Singapore is exploring wearable contact tracing tools (lanyards, chips, etc.).

Insight: Hawaii should continue to ensure its policies are inclusive of all members of the state's diverse population.

5. Singapore is providing aid to its neighbors:

There is no coordinated ASEAN response to the current crisis, but Singapore has been providing assistance to its neighbors. One example is the PC gaming accessories company Razer shifting to PPE production and donating masks to neighboring countries.

Insight: Hawaii could consider lending assistance in managing Covid-19 to Pacific Island nations, particularly the Compact of Free Association nations, where requested.