

Operating #SafeBusiness under MCO

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WHY NOW ?

- Some business entities remain crucial even during the MCOs period.
- BENEFIT : To minimize the risk of economic impact, and also to sustain livelihood.
- Categories business allowed to operate:
 - MCO 1 & MCO 2 : Food , Health , Transportation..
 - MCO 3: further 9 is operating
- RISK : Business premises can be the site of infection transmission - if SD guidelines is not adhered to.

Questions ? On inherent RISK OF CONTAGION

- Is the rate of increase per day - associated with "Total POIs that still open in the 1.5 km radius from patient case? –
 - If yes, then can we quantify it?
- If 2, is yes - can we further analyze - what POI is associated with "the highest rate-of-increase" per day ?
 - Can we say that , e.g. among all the POIs - *the existence of wet market, pasar borong, - indicate highest rate of increasewhile existence of grocery store, convenience 24/7 - is non significant?*

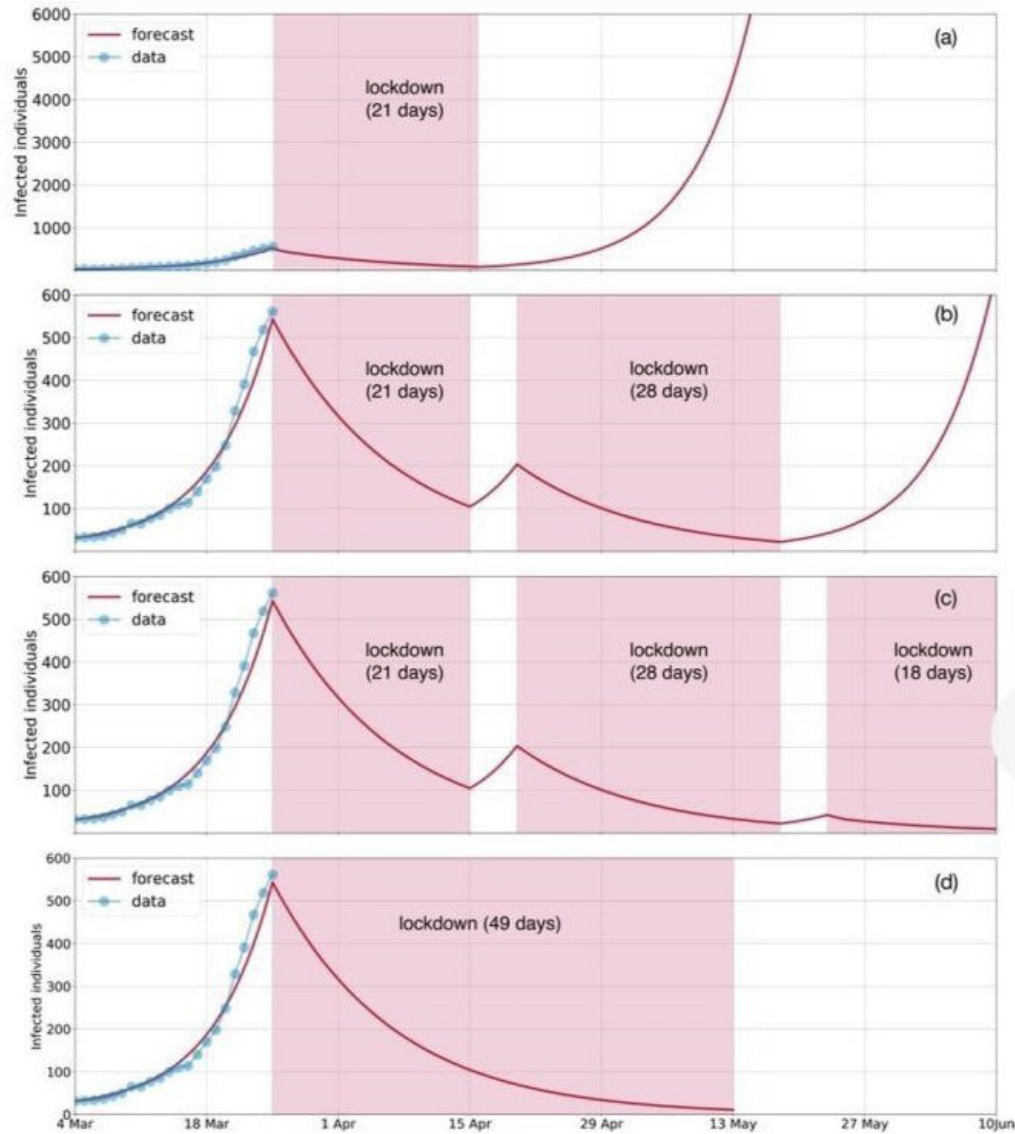


Figure 4. **Forecast of the COVID-19 epidemic in India with mitigatory social distancing.** Each of the four panels shows the variation in the number of infectives with lockdowns of various durations. The three-week lockdown starting 25 March does not prevent resurgence after its suspension as shown in panel (a). Neither does a further lockdown of 28 days spaced by a 5 day suspension, shown in panel (b). The protocols in panels (c) and (d), comprising of three lockdowns with 5 day relaxations and a single 49 day lockdown reduce case numbers below 10. This forecast is based on all cases being symptomatic so $\bar{\alpha} = 1$. The fit parameter is $\beta = 0.0155$ and we set $\gamma = 1/7$.

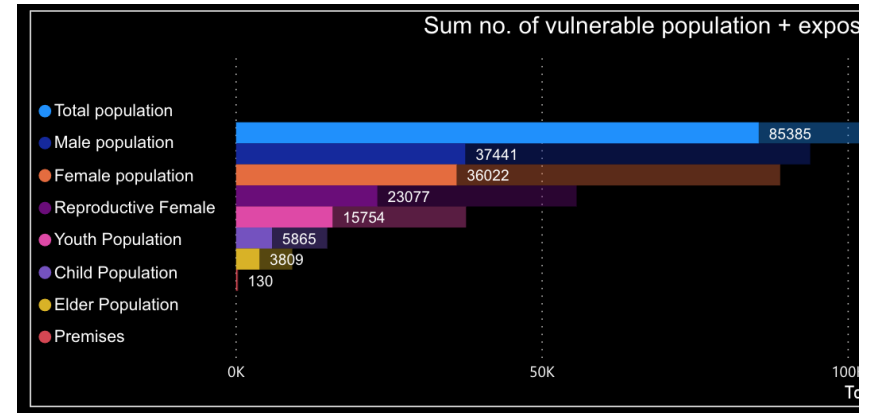
From this Research:

- Without any frameworks to Track and Trace, The Lockdown needs to continue for a longer period or periodically along the managed Curve determined by the Health Ministry.
- More Lockdowns would correlate to loss of revenue and would eventually cripple the economy.
- With the proposed Managed framework, Business continuity could happen whilst ensuring the infection is within the Curve's limits.
- This Framework aims to significantly reduce the spike after the lockdown (MCO).

total_convenient_s hop	total_hypermarket	total_mini_market	total_twofour_stor e	total_shopping_co mplex	total_shop	total_supermarket	total_wet_market	total_whole_sale	total_islamic_scho ol	total_fnb	total_atm	total_trading_food	total_toll	total_transport	CASES	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
80	40	140	153	60	153	80	20	0	126	2911	496	0	0	0	0	20
44	0	44	33	0	44	33	0	0	11	308	33	0	0	0	0	11
80	8	304	184	24	96	160	16	8	88	2024	304	48	0	24	24	8
24	8	96	48	0	64	24	0	0	16	560	64	0	16	24	24	8
24	0	109	51	1	57	14	7	0	40	448	89	0	0	13	13	7
77	14	322	147	0	147	49	7	0	84	1071	140	49	0	14	14	7
18	12	34	30	18	36	24	0	0	24	803	153	0	0	0	0	6
42	0	92	42	6	0	40	18	2	18	944	60	6	0	0	0	6
14	10	82	54	15	37	20	5	0	21	861	139	2	7	0	0	5
16	0	12	12	0	4	16	8	0	12	188	56	0	0	0	0	4
4	0	8	10	6	2	8	2	2	0	114	20	0	0	0	0	4
20	4	132	12	0	20	28	0	4	8	288	32	4	0	0	0	4
0	0	28	4	0	12	4	0	0	8	88	8	0	0	4	4	4
15	6	73	27	0	44	21	0	0	24	291	45	15	0	0	0	3
4	0	32	18	6	14	6	2	0	12	302	52	2	4	0	0	2
2	0	20	4	0	10	16	2	0	10	132	6	2	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	6	0	0	7	4	0	0	4	16	0	2	0	0	0	2
16	0	24	12	2	2	2	0	0	0	436	26	4	0	0	0	2

PROPOSED OPERATIONALIZATION (PETALING)

RANK	BUSINESS “MANAGED FRAMEWORK”	TOOLS / RESOURCES
RED	Adhere guideline *Register customer visit *Monitor compliances	Guidelines QR-based registry PBT Personnel
ORANGE	GUIDELINE *Track customers QR *Register customer visit	Guidelines QR-based registry
YELLOW	GUIDELINE *Track customers QR *Register customer visit	Guidelines QR-based registry
GREEN	GUIDELINE *Track customers QR *Register customer visit	Guidelines QR-based registry



ON

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QR – based registry - Framework Description

- SIMILAR IN CONCEPT LIKE REGISTERING ALL VISITORS TO A PREMISE / LONG HAUL TRANSPORT
- TRACKING ALL THOSE IN THE SAME AIRPLANE / TRAIN COACH
- IN EVENT OF “POSITIVE CASES” HAD A HISTORY OF TRAVELLING / VISITING THE PREMISE – THEN WE CAN IDENTIFY OTHER VISITORS



QR – based registry - Framework Description

- Aims to Flatten the curve of the COVID-19 spread in localised areas which are within the Movement Control territories.
- It presents a low cost - low entry, easily adoptable and replicable solution. No Apps required. Only QR Code Scan. Available in all Smart Phones.
- Tracks Secured GPS Coordinates, Time Stamp, and Phone Numbers with a single QR Code Scan.
- Provides a mechanism to self track Individuals, Investigate an outbreak, Alert and Test Individuals that are in Risk and Prevent such occurrences.
- Provides a system to identify Individuals that are within the infected zone and trace the movement history.
- Inherently, after a lockdown (MCO), facts prove that the spike in infection occurs that merits another lockdown. With sufficient tracking, this numbers would be severely reduced.
- Introduce a GOLD Standard of Retail Disease Free (ie ISO for Health) that's adaptable by local businesses.

A screenshot of a web application interface. The top table lists locations and their frequencies. The bottom table lists individual businesses with their addresses, coordinates, and status. Both tables have a 'Print' button and a search bar at the top.

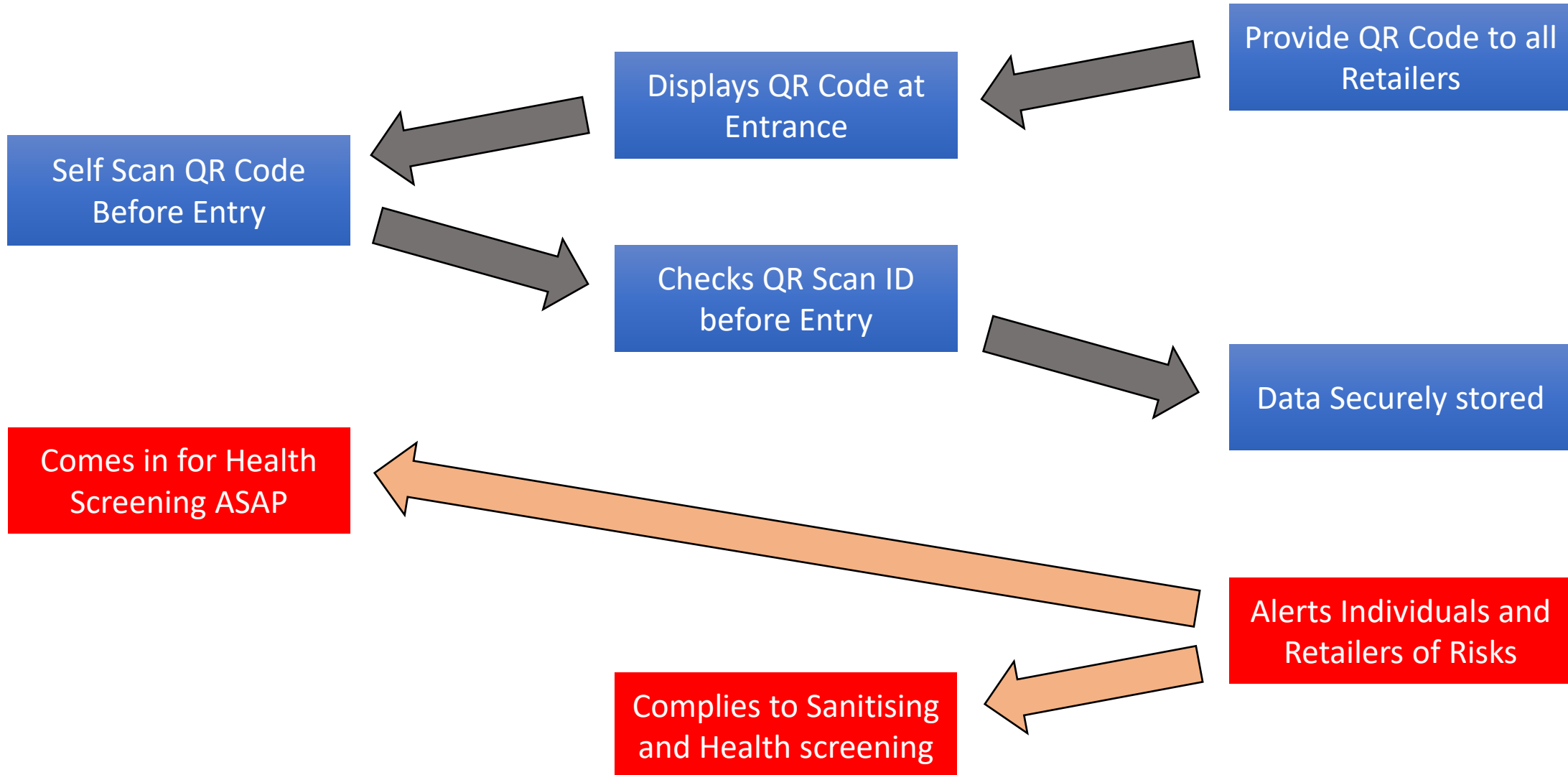
Name	Frequency	Zone Id
Penang	1,162	NULL
Ipoh	605	NULL
Malaka	463	NULL
Ampang Jaya	118	NULL
Bayan Baru	190	NULL
Cheras	538	NULL
Cyberjaya	592	NULL

Name	Address	Latitude	Longitude	Vertical	Zone Id
Kenny Rogers Roasters (Shahalbury Square)	P1-21, Shahalbury Square, 2350 Persiaran Multimedia, Cyber 6	2.9232	101.6616	restaurants	Green
Dapur Permyat (Cyberjaya)	No.3A, Cottage Walk, Persiaran APEC	2.9206	101.6592	restaurants	Green
O'Brien Irish Sandwich Cafe/Deli (Shahalbury Square)	P1-18, Shahalbury Square, Persiaran Multimedia, Cyber 6	2.9271	101.6548	restaurants	Green
Sero D Tamar	No 46, Jln prti 1/4, presat 9, 62250, putrajaya	2.9432	101.6716	restaurants	Green
Hando's (Cyberjaya)	Lot G-25, D'Pulvis, Ungkaran Cyber Point Timur, Cyber 12, 63000 Cyberjaya, ...	2.9222	101.6510	restaurants	Green
Nathan's Famous	L1-138, ICI City Mall, Lotuh IBC, ICI Resort City	2.9498	101.7132	restaurants	Green
Puffy Butty Cafe	G-22-4809, Cyberjaya Business District Perdana 2, Cyberjaya	2.9289	101.6516	restaurants	Green
Teppanyaki (Test Menu)	LG 73, Setia City Mall, Shah Alam	3.1097	101.4573	restaurants	Green
BBQ Chicken Cyberjaya	Lot UG-17, D'Kore Shopping Centre, Ungkaran Cyber Point Timur, Cyberjaya, ...	2.9221	101.6513	restaurants	Green
O'Tandoo (Priced 8 Putrajaya)	Lot A5-UG-1, Ayer @ B, Precinct 8 Jalan PRC, Putrajaya	2.9246	101.6796	restaurants	Green
Ayam Permyat Best SYNC MENU	null	NULL	NULL	restaurants	Green
Esquire Kitchen (Normal Outlets) - Test	null	3.1597	101.6981	restaurants	Green
Spiced Punjabi Cafe & Bakery - TEST MENU	null	3.1597	101.6981	restaurants	Green
Permyat Express - Test Menu	null	3.1597	101.6981	restaurants	Green
Restaurant Flavour Of China Mullins	No.12, Jalan GC 1, Glamis, Cyberjaya I	2.9247	101.6559	restaurants	Green
Subway (Shahalbury Square, Cyberjaya)	Cyber 6 Shahalbury Square, P2-8 & 9 2350 Persiaran Multimedia Cyberjaya, S. ...	2.9236	101.6523	restaurants	Green

Public's Initiative

Retail Business Initiative

Govt & Local Govt Authorities



Framework's Initiative

Public's Initiative

- Self Check In QR code at every Entry.
- Ensure to only patronise a Retail space that adheres to this Practice.
- Look for the GOLD standard Health measures issued by the relevant authorities
- .
- Practice Social distancing and practice proper hygiene.

Retail Business Initiative

- Adhere to the GOLD standard of Health and Tracking initiatives
- Refuse entry / service for those that do not Self check In.
- Respond to calls to action by authorities to clear, sanitise and enforce refusal of entry by those that do not check in.
- Display the GOLD Health Standard for public assurance

Health Ministry and Authorities

- Provide a GOLD Standard for Public's Assurance that is displayed by the Retailers and the Self Check In QR Code.
- Use the Dashboard for quick tracing of Individuals and Retail Outlets that are within the Risk levels.
- Issue Call to Action to Individuals and Retailers for Tests and Sanitisation
- Investigate on the causation for the outbreak and provide a collective feedback on the health procedures required

Anatomy of a QR Code Scan, NO Apps Required.



Scans the Unique QR Code in the Retailers Location.
The Identity and Location of the Retailers is known.
A timestamp of the Entry is noted

TIME



The QR Code contains a Unique Identifier Link that Informs us about the GPS coordinates and Retailers Identity

GPS

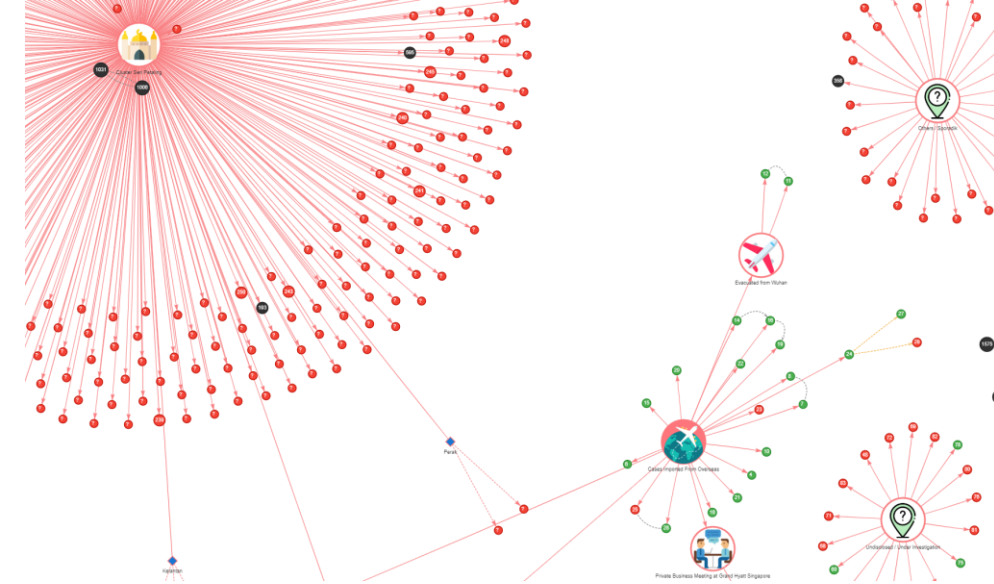
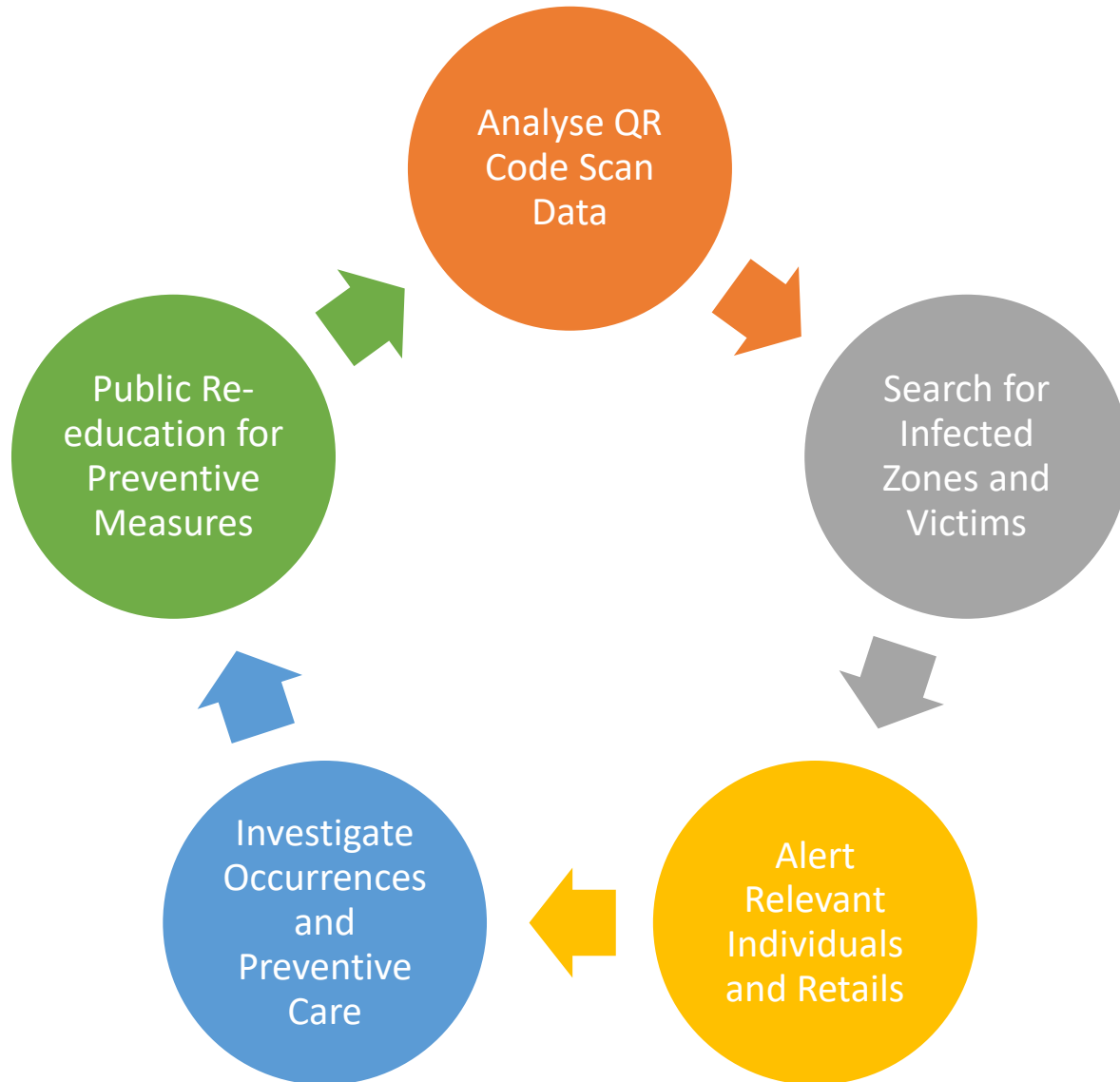


Major Telco Providers would provide the Phone numbers of the Users upon scanning the QR Code

@ The App will inform user of "Close-contact" incident with a +ve case – in case we fail a TELCO coop

(USER IDENTITY)

Authorities Dashboard



Phone Number Search:

TRACE ALL

Discover Individuals, Retailers and Locations

