



COVID19

Digital Prevention System for Schools, Colleges & Universities



The **COVID-19** Digital Prevention System has been validated by the **UN-WTO** & Awarded as a Top Solution Globally to mitigate **COVID-19's** impact on **Public Places & Tourism**.



AVI INFOSYS L.L.C.
DEFINE ► DESIGN ► DEPLOY



COVID19 *Digital Prevention System for Schools, Colleges & Universities*

Product Overview

Smartphone apps or staff smartcards and dedicated terminals installed in classrooms

Why COVID-19 is spreading fast?

Infected persons have an incubation period of about **14 days**, and there are no obvious surface symptoms.

Many people do not know if they have been in contact with **incubators**.

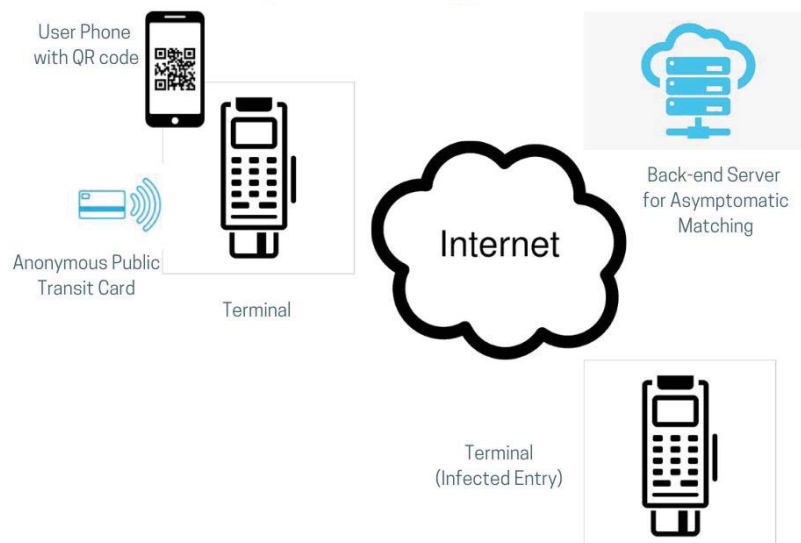
COVID19 Digital Prevention System (iBonus® DPS)

The most effective way to handle this problem is to use the smartphone apps or anonymous transit smartcards and also to install dedicated terminals in classrooms, canteens, gyms to record where and when the students, teachers, or staff have visited.

When a person is reported as virus-infected by medical authorities, the system immediately puts all persons who appear in the same place at the same time as the infected person in the past **14 days** into an Alert list and transmits it to all terminals.

This terminal gives an alert to potential **incubators** when they are entering into classrooms.

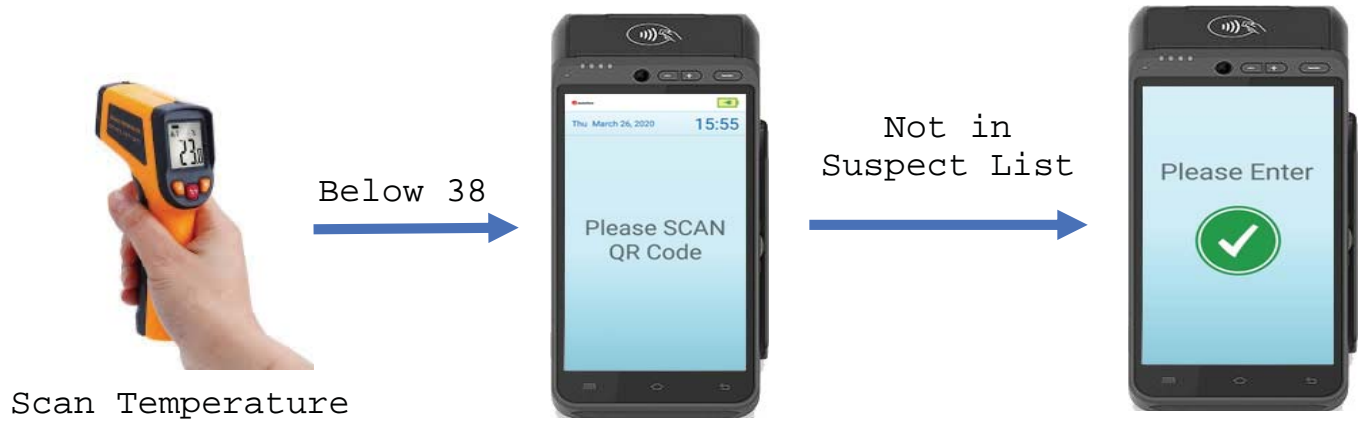
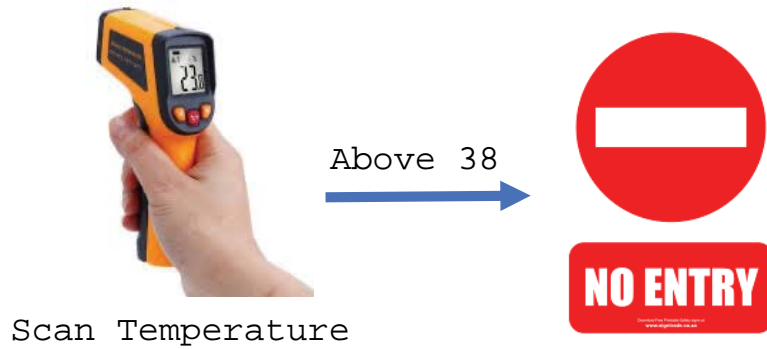
System Diagram





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PACS in Action





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Different Terminal Options

Terminal - it logs the entry time and gives an alert to potential incubators.

Terminal (Infected Entry) -It is for school administrators to report an infected person. When the smartphone or smart card of the infected person is tapped on the Terminal (Infected Entry), the entry will be sent to the server. The server will put all users who appear in the same place at the same time **(+/- 6 hours)** as the infected person in the past **14 days** onto an Alert list and transmits it to all terminals. The alert list is valid from one day to fourteen days depending on the date of contact.

Technical Specifications

Terminal Hardware Specifications

- ▶ EMV approved POS device
- ▶ Android OS with 5.5" Display
- ▶ Support NFC, QR code, Barcode user interface
- ▶ 4G/3G/2G and WiFi communication
- ▶ Rechargeable batteries with MicroUSB interface

iBonus Server Software Requirements

- ▶ Windows 2016 and SQL Server 2017
- ▶ Intel i7 3GHz or above
- ▶ RAM 128G minimum
- ▶ RAID 2T Storage minimum
- ▶ Azure Cloud server supported



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Key Benefits

- ▶ It isolates the incubators and limits the spreading of COVID19 to different classrooms and public places in the school.
- ▶ It makes school a safe place for students and teachers.

Technologies

- ▶ Over 20 years of proven off-line technologies.
- ▶ Off-line technology used in NATO in Iraq and Afghanistan, UNWFP in Syria.
- ▶ Off-line technology is used where the Internet is not reliable or unavailable.
- ▶ Off-line technology allows low-cost servers to handle billions of users and trillions of transactions.

Benefits beyond Social Distancing

- ▶ There are many research articles on the relationship between social gathering and **COVID19** spreading. Some examples:
- ▶ “What is the evidence for mass gatherings during global pandemics? “ Oxford **COVID-19** Evidence Service. [Link](#)
- ▶ What’s the safest gathering size to slow the coronavirus? National Geographic. [Link](#)
- ▶ These have been summarized as a mathematical formula for the relationship between asymptomatic growth and social gathering.

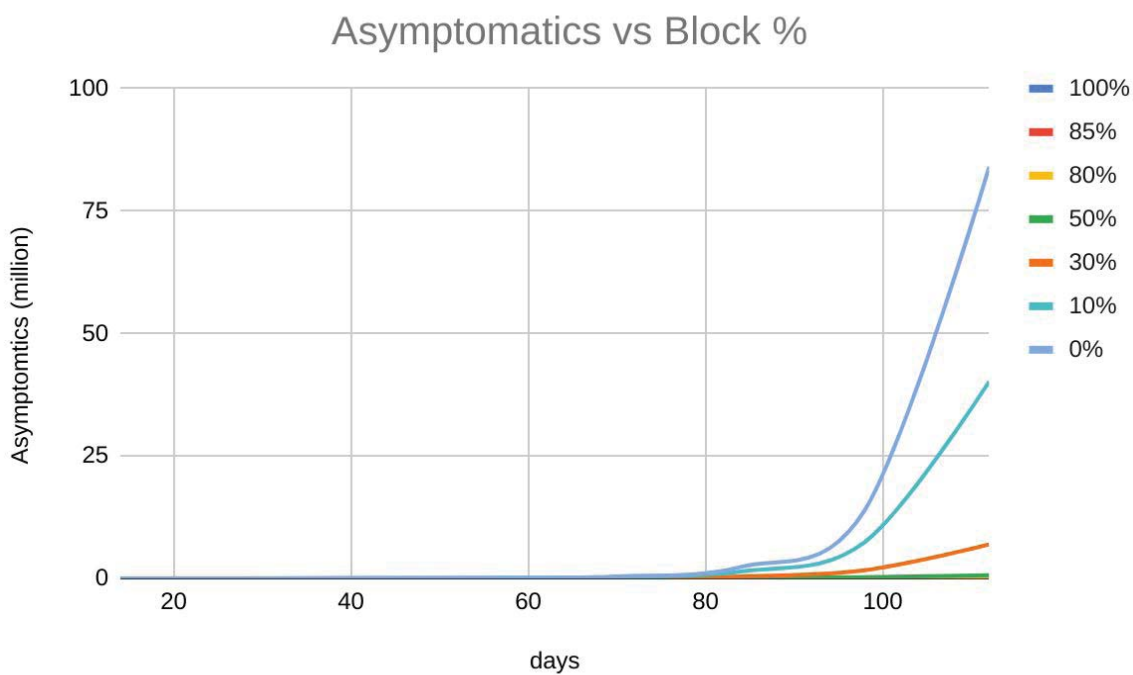


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Growth of Asymptomatic:

Asymptomatic Growth = (1-Block%) x Gathering Size x Infection Rate %.

► **(1-Block%)**, Block % is the percentage of people participated voluntarily.

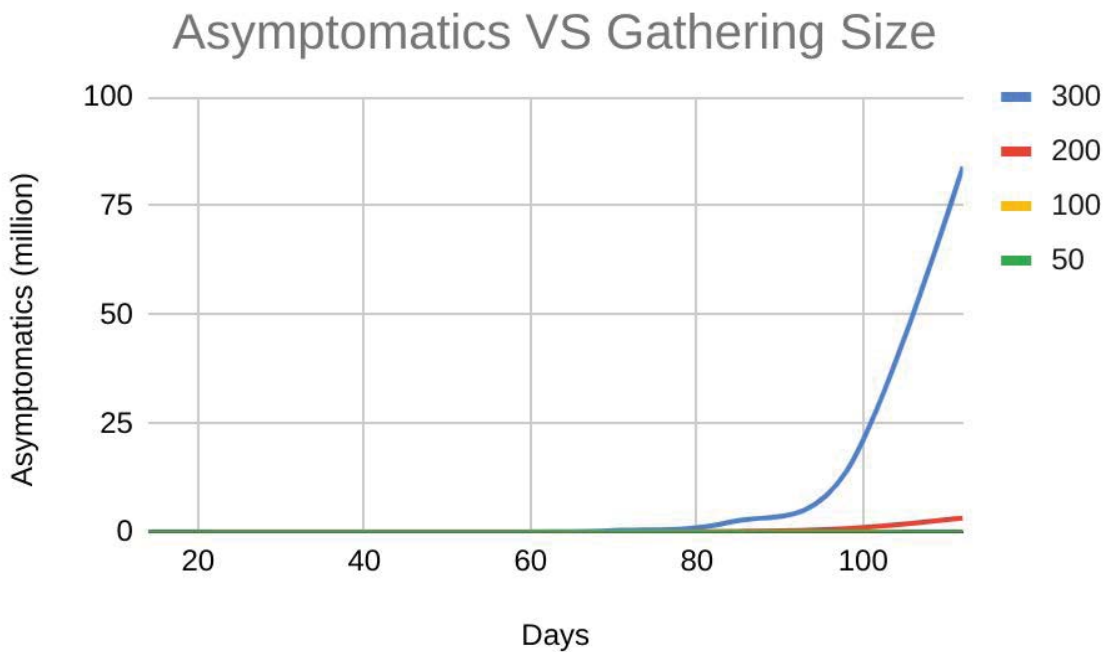


This above figure shows that a 10% blocking rate can help to reduce the spread by 40%, and a 30% blocking rate can reduce the spread by more than 80%.



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- ▶ **Gathering size**, the number of people gather over a relatively long period of time in a close environment. A large gathering size can be partitioned into a small size to reduce the growth of asymptomatic.

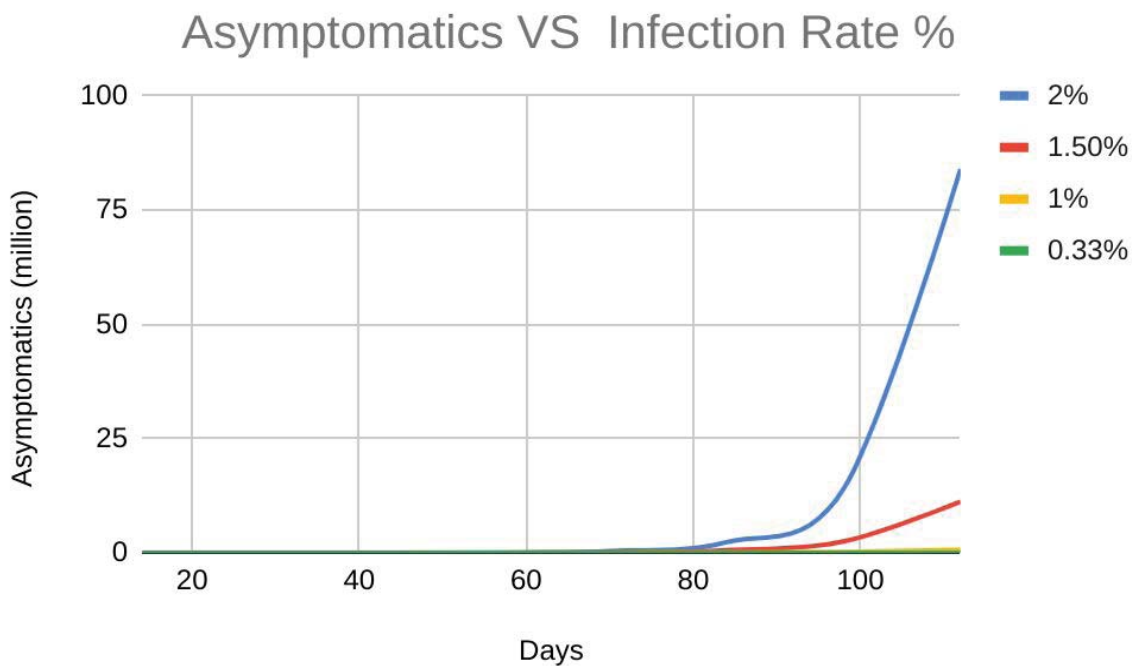


The above figure shows that the gathering size has a significant impact on spreading.



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- ▶ **The infection rate**, this rate is largely related to the nature of the gathering. A gathering in a canteen is believed to have a much higher infection rate than in the public library.

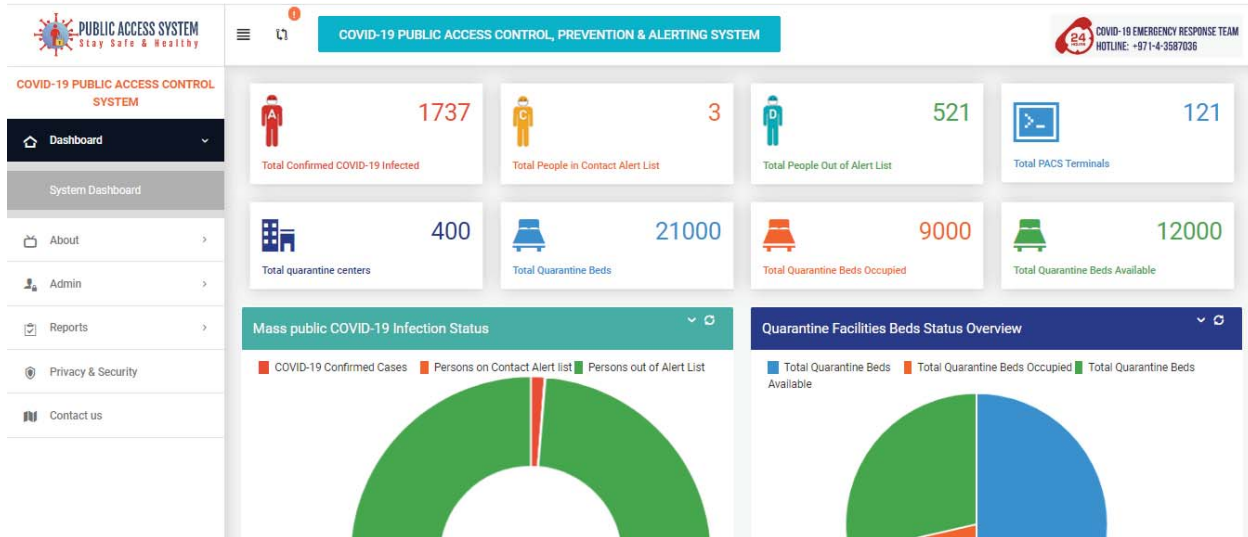


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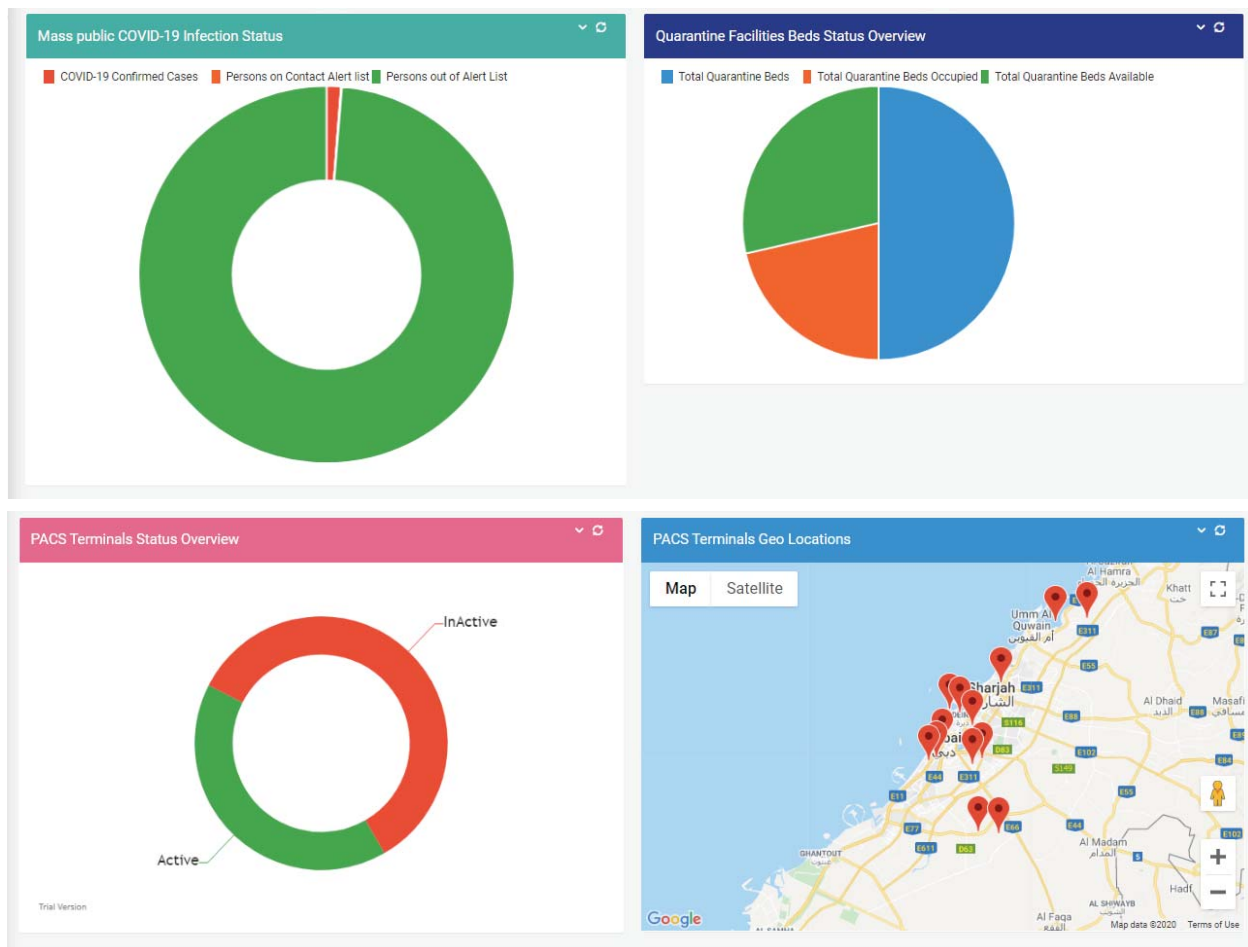


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Dashboard



Extended Dashboard page..





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Alerts issued on date | Out of list on date | Summary History

SrNo	Day	Month	Contact list Alerts
1	Thursday	April-30	1
2	Wednesday	April-15	189
3	Tuesday	April-14	366
4	Monday	April-13	696
5	Sunday	April-12	485

Showing 1 to 5 of 5 entries

Events | Clock IN

SrNo	Date	User	Type	Alert Type	Access Date	Device SN	Kept Alert Until
1	4/30/2020 6:54:21 AM	123	Blacklist	ConfirmedCase	4/30/2020 5:54:19 PM	186CCA809259	5/30/2020 5:52:47 PM
2	4/30/2020 6:52:48 AM	123	Blacklist	ConfirmedCase	4/30/2020 5:52:47 PM	186CCA809259	5/30/2020 5:52:47 PM
3	4/30/2020 6:51:25 AM	12345	Blacklist	PersonInContact	4/30/2020 5:51:24 PM	186CCA809259	5/14/2020 5:51:24 PM
4	4/30/2020 6:51:13 AM	1234	Blacklist	PersonInContact	4/30/2020 5:51:12 PM	186CCA809259	5/14/2020 5:51:12 PM

Confirmed Cases Report

COVID-19 PUBLIC ACCESS CONTROL, PREVENTION & ALERTING SYSTEM

COVID-19 EMERGENCY RESPONSE TEAM
HOTLINE: +971-4-3587036

Home / Reports / Confirmed Cases

SrNo	User	Device accessed	Access date	Kept alert until
1	123	4/30/2020 5:52:47 PM	4/30/2020 6:52:48 AM	20200430
2	94131597	4/12/2020 2:25:12 PM	4/15/2020 11:08:12 AM	20200405
3	95705300	4/12/2020 2:36:05 PM	4/15/2020 11:08:24 AM	20200413
4	93608967	4/12/2020 2:41:27 PM	4/15/2020 11:08:42 AM	20200408
5	91179614	4/12/2020 3:24:47 PM	4/15/2020 11:08:12 AM	20200414
6	96202195	4/12/2020 3:25:50 PM	4/15/2020 11:08:10 AM	20200403
7	90618989	4/12/2020 3:35:31 PM	4/15/2020 11:08:29 AM	20200413
8	95209766	4/12/2020 4:19:43 PM	4/15/2020 11:08:29 AM	20200403
9	90352309	4/12/2020 4:43:31 PM	4/15/2020 11:08:43 AM	20200413
10	96221987	4/12/2020 5:23:07 PM	4/15/2020 11:08:33 AM	20200414



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Cases Summary

Home / Reports / Case Summary Support

SrNo	Date	Records	Terminals	Alerts	Alert List Growth
1	30/04/2020	85	1	1	0.00529100529
2	15/04/2020	428	11	189	0.51639344262
3	14/04/2020	766	11	366	0.52586206896
4	13/04/2020	1517	47	696	1.43505154639
5	12/04/2020	1016	50	485	

Showing 1 to 5 of 5 entries Previous **1** Next

Out of List as On Date

Home / Reports / Out of List on Date Support

SrNo	AccountID	Type	Removal Date
No data available in table			
1	90000192	3	4/21/2020 7:08:53 PM
2	90000269	3	4/27/2020 8:46:32 PM
3	90000511	3	4/30/2020 10:45:06 PM
4	90000563	3	5/3/2020 6:18:09 PM

Showing 0 to 0 of 0 entries Previous Next

Blacklisted People in Contact

SrNo	AccountID	Type	Removal Date
1	1	2	5/14/2020 5:47:12 PM
2	1234	2	5/14/2020 5:51:12 PM
3	12345	2	5/14/2020 5:51:24 PM




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Contact us



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