



# Digital Technology in Fighting Against COVID-19

## Digital Solutions for Governments and Society

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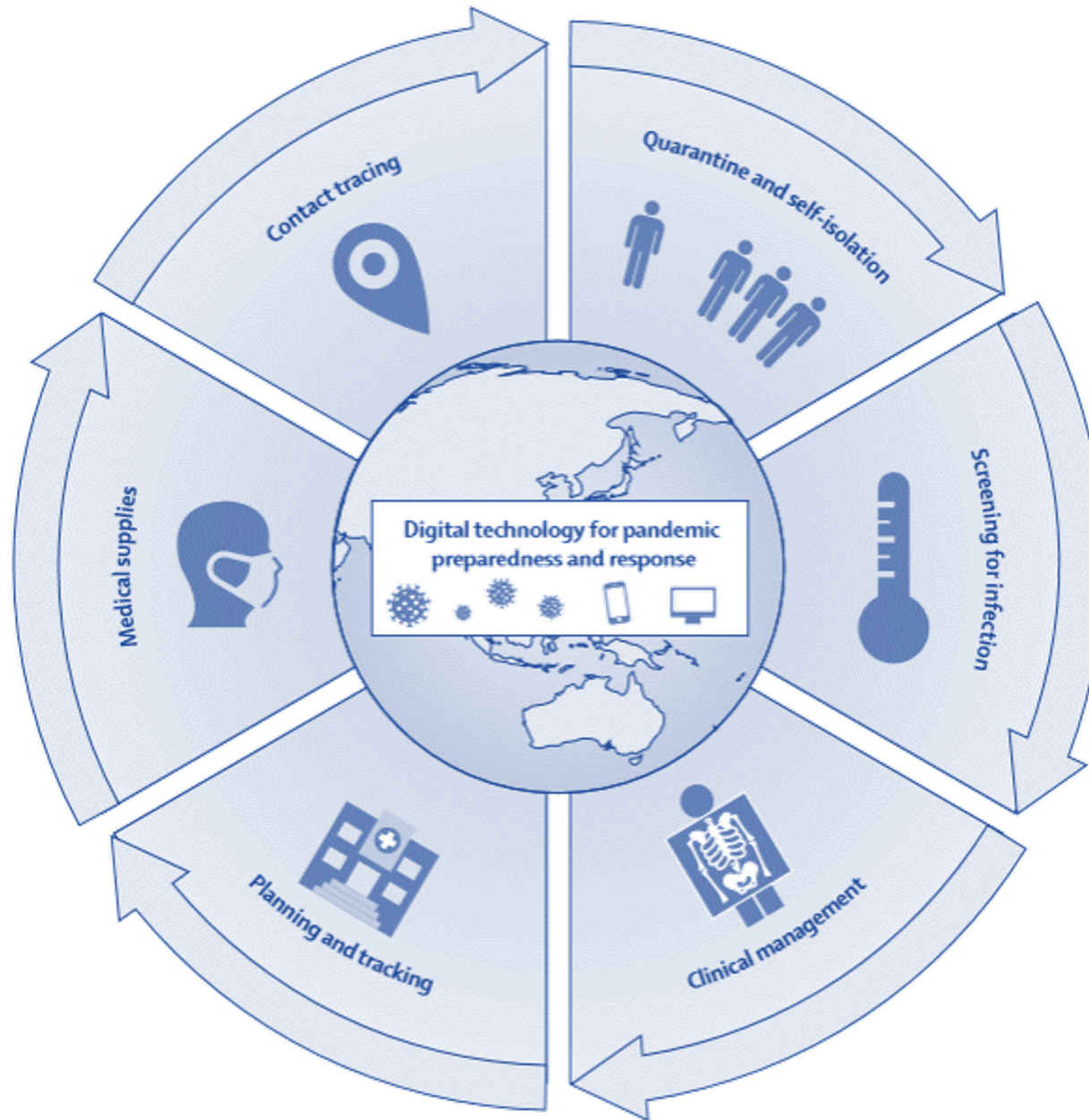






# Chinese People's Daily Life During Covid-19





# Digital Technology as a Tool for Pandemic Preparedness and Response





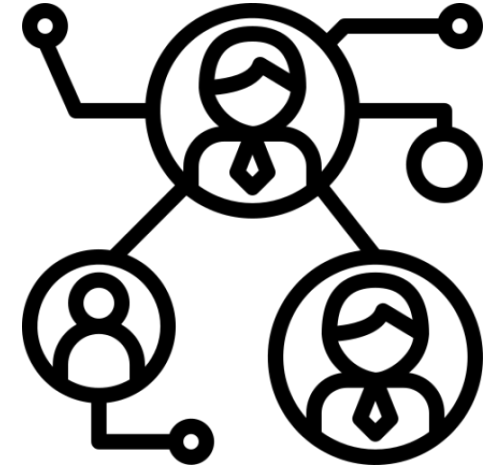
# Contact Tracing

Based on the information of  
health + telecommunication + transportation

- Mobile phone roaming;
- Data of tickets from the transportation department;
- Data of confirmed and suspected cases from health department;

Available to the public inquiry

- People can check if they were travelling with anyone infected ;
- Solve the credibility problem of self-declaration of travel histories.



*China' s mobile  
subscriber  
penetration rate  $\geq$   
82% in 2018*



# QR (Quick Response) Code



*It will change from green to yellow or red if the user has been in contact with anyone infected, noticing both the individuals and the pandemic prevention department.*

## A digital health certificate and travel pass

- On Feb 11, 2020, to help people return to work, Hangzhou Municipal Government took the lead in introducing QR code.
- Over 200 cities adopted the application in the next two weeks.
- On Feb 29, the national QR code platform was launched to achieve mutual recognition across provinces.



# QR Code

**The innovation has generally been well received by the public**

## For Individuals:

- Save the efforts from repetitively filling out forms and reporting health conditions;
- Help people learn about their exposure to risks.

## For Epidemic Prevention and Control Agencies:

- Help with tasks like community registration, employee registration, health self-check and report;
- Improve the efficiency of disease prevention and control.





# Personal Data Protection

**The Chinese government has taken measures to make sure the legitimate use of personal data, emphasizing the principles of anonymization, data minimization, purpose limitation and legitimate use.**

## ① Clarifying the applicable laws and regulations

On February 9, the Cyberspace Administration of China released the *Notice of Effectively Protecting Personal Information and Using Big Data to Support Joint Prevention and Control*. It provides a legal basis and technical specifications to protect personal information while using big data during the pandemic.



# Personal Data Protection

## -major legal requirements

1. Only entities that are authorized by the health department of the State Council are allowed to collect the relevant personal information to contain the COVID-19. They have to do it in accordance with the laws such as *Cybersecurity Law of the P. R. China*, the *Law of the P. R. China on the Prevention and Treatment of Infectious Diseases*, and the *Regulation on Responses to Public Health Emergencies*.
2. The collection of personal information to contain the COVID-19 shall adhere to the requirements outlined in the national standards listed in *Information Security Technology – Personal Information Security Specification*. In particular, the principle of data minimization must be complied with.
3. Personal information collected to contain the COVID-19 shall not be used for any other purposes. Without consent, no one is allowed to disclose personal information such as name, phone number, and home address.
4. Entities collecting or possessing personal information shall take responsibility for data security and protection. They must implement strict management and technical measures to prevent theft or leakage of such information.
5. Any individual or entity that discovers a violation of the use, collection, or disclosure of personal information may report to the cyberspace or public security authorities.





# Personal Data Protection

## ② Make sure laws and regulations are strictly followed

**Governments** at all levels have followed these regulations when they released the COVID-19 case updates and maps every day.

**Telecommunication companies** have improved their technical capacity to strictly discipline themselves and manage their collaborating partners while providing data in line with the laws and regulations.



# Personal Data Protection

## ③ Enhancing law enforcement

Law enforcement agencies in different places have punished behaviors such as invading personal privacy and violating the laws in a very timely manner.

e.g. the police departments in Guangdong, Tianjin and Inner Mongolia have imposed punitive measures upon individuals who have disclosed personal information illegally. Measures include administrative detention, penalty and so on.

- ✓ **China' s National People' s Congress has been stepping up efforts to formulate laws concerning the protection of personal information and data security, so as to provide a more solid legal basis for the use of big data in normal times and emergency situations.**





# Key Messages

## I

Digital Solutions are spurred by social demands and will be continuously shaped by social demands.

## II

The role of digital technology depends on how they are integrated into policy and policy making need to be context specific.

## III

There are loopholes in every digital solution, as China's practice shows that these solutions are upgrading and making up the loopholes in a fast pace.



# Thank you!

