ADDENDUM: Digital government and the COVID-19 pandemic

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DIGITAL GOVERNMENT BRANCH
DIVISION FOR PUBLIC INSTITUTIONS AND DIGITAL GOVERNMENT
COVID-19: Embracing digital government during the pandemic and beyond

SHARING INFORMATION
It is vital for governments to provide accurate, useful and up-to-date information to people, particularly during times of crisis. During the COVID-19 pandemic, governments started providing information on their national portals, mobile apps or through social media platforms. A review of the national portals of the 193 United Nations Member States showed that by 25 March 2020, 77 per cent (150 countries) have put in place some kind of information on COVID-19, while around 49 per cent (93 countries) did not provide any information; but a further analysis showed that by 8 April 2020, around 86 per cent (167 countries) have included information and guidance about COVID-19 in their portals (Figure 1).

Summary
Information and communication technologies (ICTs) play a vital role in promoting the health and safety of people and in keeping economies and societies working during the ongoing COVID-19 crisis. Digital government technologies either through information sharing or online services have kept governments and people connected during the outbreak. Digital technologies have also enabled governments to make rapid policy decisions based on real-time data and analytics; to enhance the capacities of local authorities for better coordination and to deploy evidence-based services to those who need them most. The efforts in developing digital government strategies after the COVID-19 crisis should focus on improving data protection and digital inclusion policies as well as on strengthening the policy and technical capabilities of public institutions. Even though public-private partnerships are essential for implementing innovative technologies, government leadership, strong institutions and effective public policies are crucial to tailor digital solutions to countries’ needs as well as to prioritize security, equity and the protection of people’s rights. The COVID-19 pandemic has emphasized the importance of technology, but also the pivotal role of an effective, inclusive and accountable government. This policy brief addresses how digital government has played a central role as a key tool of communication and collaboration between policymakers and society during the COVID-19 pandemic. Policymakers need to further embrace the future of digital government, even when the crisis is over.

Figure 1
Percentage of government portals with COVID-19 information

Figure I - Percentage of Government portals with Covid-19 information and world total confirmed Covid-19 cases
Figure 2: Different levels of e-government information-sharing during COVID-19

- **Low**
  - General health information (e.g. hygiene advice, emergency contacts)
  - Presidential statements and other political announcements

- **Medium**
  - COVID-19 statistics
  - Limited updates on policy developments and social distancing measures

- **High**
  - Regular updates on policy developments and social distancing measures
  - Information on social, financial and mental support (e.g. initiatives, other portals, telephone numbers)
  - Dedicated public COVID-19 portals
  - Government-supported apps

**Source:** UNDESA/DPIDG
Figure 3: Examples of local e-government applications in response to COVID-19

1. **DASHBOARDS**
   Vancouver, Canada introduced an online dashboard to enable citizens to track the city’s emergency response to curb the spread of Covid-19.

2. **New South Wales State, Australia**
   Developed a dashboard that offers information of confirmed cases by postcode and recommendations to slow spread of Covid-19.

3. **CHATBOTS**
   Sichuan, China launched a triage chatbot to assess patients’ risk of being infected and to provide information related to Covid-19.

4. **ONLINE SERVICES**
   The City of Buenos Aires, Argentina provided online access to films, operas, recitals, and museums virtual tours as strategy to ease effects of quarantine.

5. **Western Cape Government, South Africa**
   Established an online platform to strengthen remote teaching and learning practices.

6. **MOBILE APPS**
   Jarvar Vald in Estonia developed a community engagement app to share Covid-19 information, post social events and encourage people to provide feedback to local government officers.

7. **SMART CITIES**
   London, United Kingdom used cameras, sensors and AI algorithms, normally intended to control traffic, to measure distance between pedestrians and control social distance.

8. **Pimpri-Chinchwad, India**
   Used the Integrated Command and Control Centers (ICCCS) as Covid Control center, using monitors and drones to geolocate Covid cases, identify open pharmacies and control hospitals’ capacity.

Source: UNDESA/DPI/DG
This graph represents a sample of e-government initiatives at the local level. Additional initiatives from UN Member States can be found at https://bit.ly/EGOV_Covid19_Apps
Figure 4: Sample of popular e-government applications used during COVID-19

- **Contact-Tracing Apps**: Bluetooth-based mobile phone apps for tracking the spread of the virus, sometimes with text notifications or heatmap extensions.
- **AI Chatbots**: AI chatbots as "Virtual Doctors" on government portals for self-diagnosis, reducing pressure on healthcare systems.
- **Online Permits**: Online movement permits during curfews, ensuring people follow shelter-in-place orders.
- **E-Learning Portals**: Digital platforms supporting teachers and students with online resources and providing high quality teaching and learning from home.

*Source: UNDESA/DPIDG E-Government Survey questionnaire on COVID-19*
Some examples

- Blue-tooth based Contact Tracing Apps and their extensions (SMS notification, Danger Heat Maps)
- Use of AI Chatbots on the website for self-diagnosis and/or advice
- Online permit during curfews
United Nations E-Government Survey Questionnaire on COVID-19

Digital Government Branch (DGB) of the Division for Public Institutions and Digital Government (DPIDG) at the United Nations Department of Economic and Social Affairs (UN DESA) prepared this questionnaire to capture the emerging trends and provide timely analysis of digital responses of the UN Member States against the COVID-19 pandemic.

The responses will facilitate exchange of information and knowledge on e-government projects and assist the DGB in preparing a section in the upcoming edition of the United Nations e-Government Survey. Please note that the Addendum will not be able to feature all submitted initiatives but they will all be highlighted online.

More than one entry per country is allowed and encouraged. Deadline for submissions is NOW EXTENDED TO 3 MAY 2020 due to requests from some member states.

Submissions can be seen here: https://bit.ly/EGOV_COVID19_APPS

Thank you for your attention.

Partnerships

#EUvsVirus challenge

can you hack it?

COVID-19 Open Research Dataset Challenge (CORD-19)
An AI challenge with AI2, CZI, MSR, Georgetown, NIH & The White House

AI2 Allen Institute For AI and 8 collaborators • updated 4 days ago (Version 3)

Data Tasks (10) Kernels (32) Discussion (14) Activity Metadata Download (2 GB) New Notebook

UNITED ARAB EMIRATES
Virtual Labour Market

Powered & Managed By
NEW TECHNOLOGIES

SPOTON

*A smart thermal scanner for safe, easy and fast temperature screening*

Powered by Artificial Intelligence

✓ Advanced AI face detection capability
✓ Detects up to 10 faces at once
✓ ±0.3-0.5°C accuracy
✓ 2-meter detection range
✓ Not affected by masks, hats and headaddresses
✓ Not affected by hot or cold items (e.g., drinks)
Challenges

• Digital Divides
• Misinformation/fake information
• Privacy
• Surveillance
• Data protection
• Trust
How Digital Contact Tracing Slowed Covid-19 in East Asia

While mobile tracking of infectious disease has been available for at least a decade — Cambridge University's voluntary FluPhone app ... 3 weeks ago

India mandates workers use COVID-19 tracing app, France ...

... COVID-19 tracing app, France rolls out tracing tool and other tracking ... digital contact tracing – or any private, technology-driven response to ... 9 hours ago

Google and Apple ban location tracking in their contact tracing apps

Google and Apple ban location tracking in their contact tracing apps ... them —unique advantages in the move toward digital transformation. 6 hours ago

COVID-19 tracking apps raise privacy concerns in Asia

Digital technologies have proven a popular tool for governments across Asia to monitor and contain the spread of the coronavirus. Medical ... 2 days ago
Coronavirus tracking app to be rolled out in Australia only with privacy safeguards - minister

Paul Fletcher says app could be 'very effective tool' if significant portion of public sign up

- Sign up for Guardian Australia's daily coronavirus email
- Download the free Guardian app to get the most important news notifications
- Coronavirus Australia maps and cases: live numbers and statistics

⚠️ There are privacy concerns over app that tracks the contacts of people who have Covid-19. Photograph: Barcroft Media via Getty Images
<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Policy action</th>
<th>Digital government response</th>
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| Short-term   | React            | ● Use digital platforms (i.e., online portals, social media) for accurate and timely information-sharing  
● Lead two-way communication with people and foster e-participation (i.e., hackathons, brainstorming events)  
● Ensure protection of people’s human rights including data privacy and take into consideration unintended consequences of technology |
| Mid-term     | Recover & Resolve | ● Form effective multi-stakeholder partnerships (i.e., private sector, academia, NGOs and international organizations) on regional, national and local levels  
● Provide technology education for digital literacy, specifically targeted at public officials, children, women/girls and MSMEs  
● Offer financial and technical support local governments in the implementation of digital tools and technologies  
● Leverage lessons learned and policy ideas from the ongoing crisis |
| Long-term    | Reinvent         | ● Invest in new technologies (i.e., AI, blockchain, robots, drones) and ICT infrastructure to increase resilience of health economy and public services delivery  
● Develop digital infrastructure and engagement tools for the most vulnerable groups in society, particularly for migrants, refugees and ethnic minorities  
● Revisit data protection and privacy legislation along with lessons learned |