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Upscaling Mindsets for a High-Performing Civil Service in the Tech-Powered New Normal

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The Tech-Powered New Normal

A condition of atypical situations that have become ordinary in the wake of the COVID-19 crisis and the resulting changes powered by an extensive use of technologies.

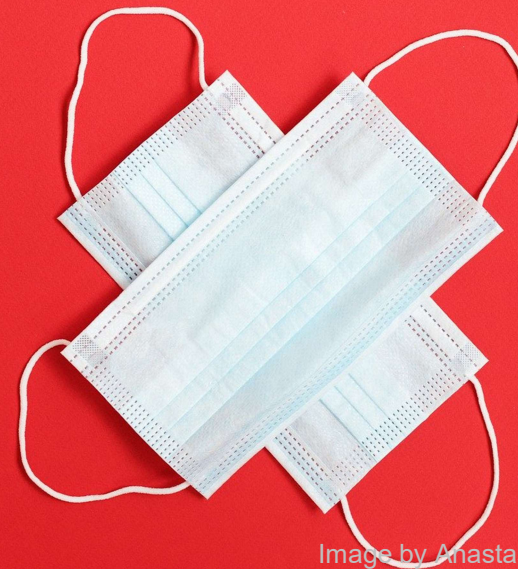
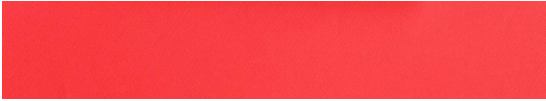
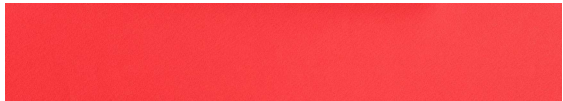


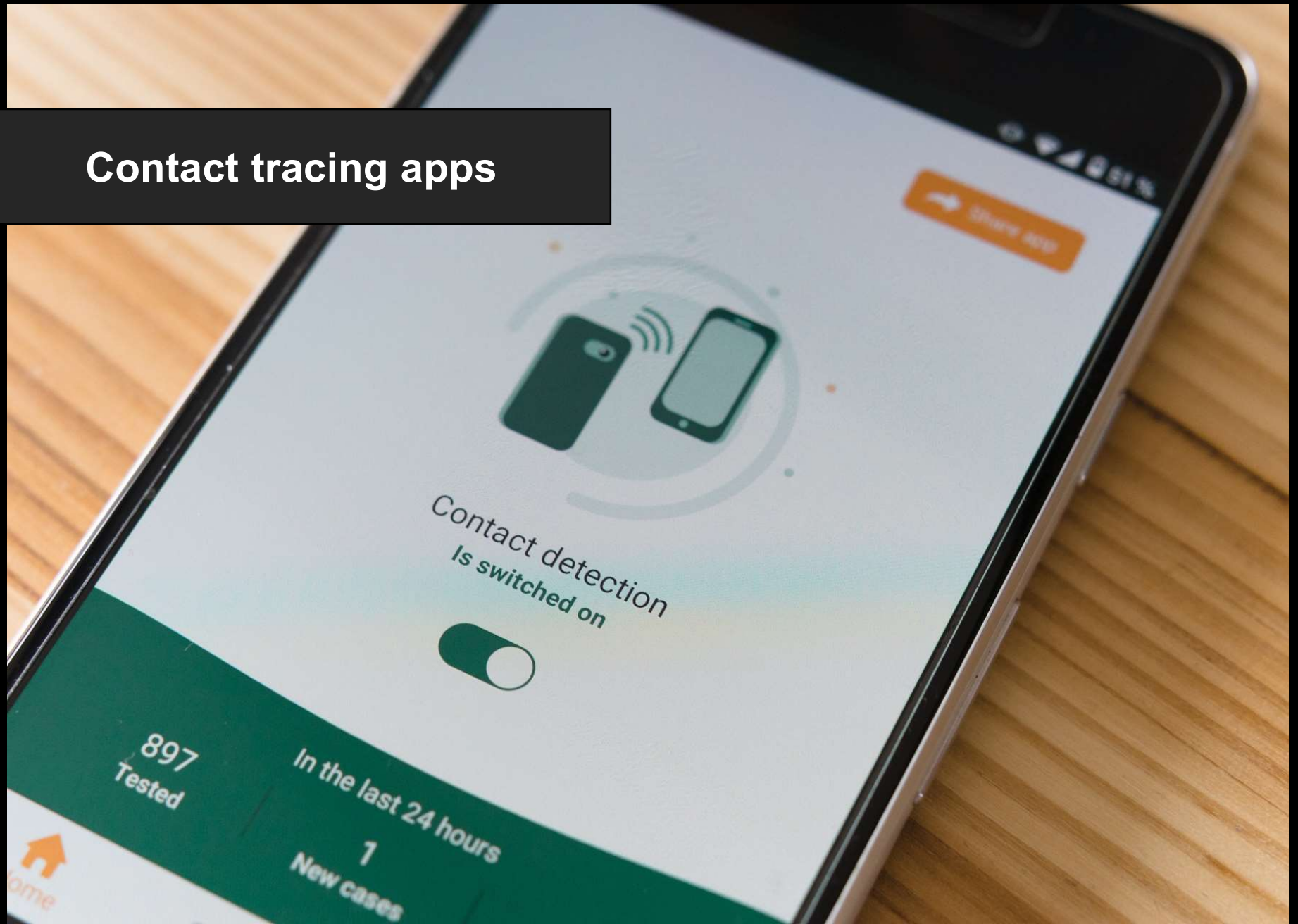
Image by Anastasia Gepp from Pixabay.



Uses of technology in the battle against the pandemic: Examples



Contact tracing apps



A collection of several blue surgical masks is scattered across a black background. The masks are made of a light blue, non-woven fabric with visible pleats and white elastic ear loops. The masks are arranged in a way that they overlap, with some showing the top edge and others showing the side or bottom edge. The lighting is even, highlighting the texture of the fabric and the stitching.

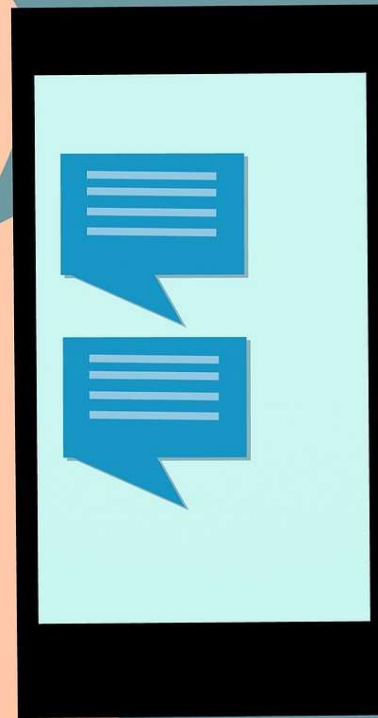
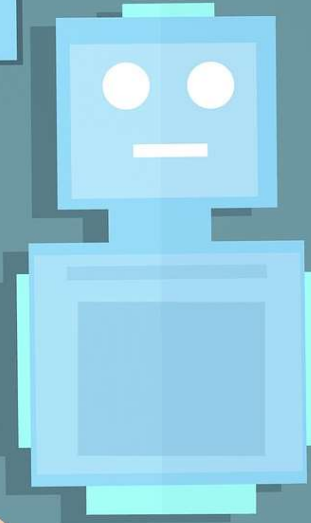
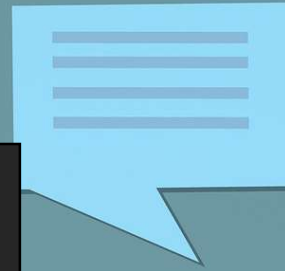
Mask purchase regulating system

Image by Markus Winkler from Pixabay.

Telemedicine



Chatbots



Robot for virus testing

Calleesen, J. T.
(2020), available at
the World Economic
Forum website:
<https://www.weforum.org/agenda/2020/06/first-swab-robot-can-teach-about-fast-innovation-covid-19/>

Global Agenda | Artificial Intelligence and Robotics | COVID-19 | Future of Health and Healthcare

Here's what the first coronavirus "swab robot" can teach us about fast innovation



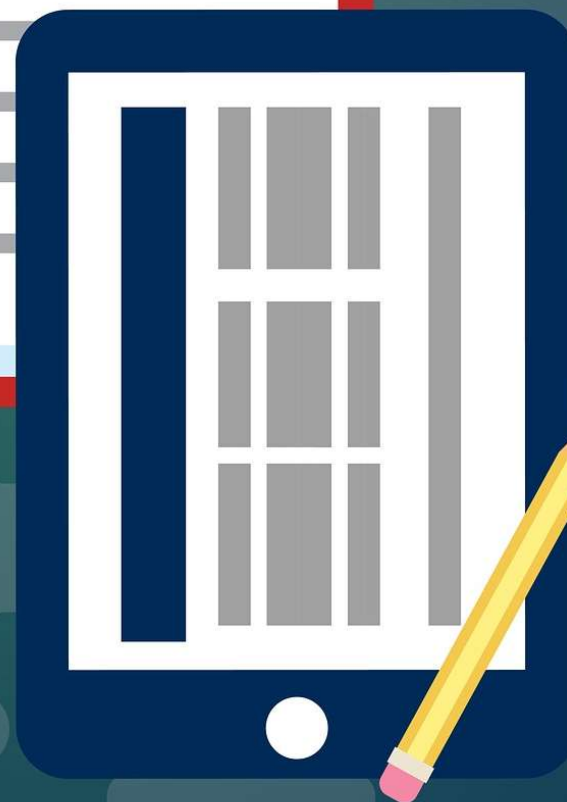
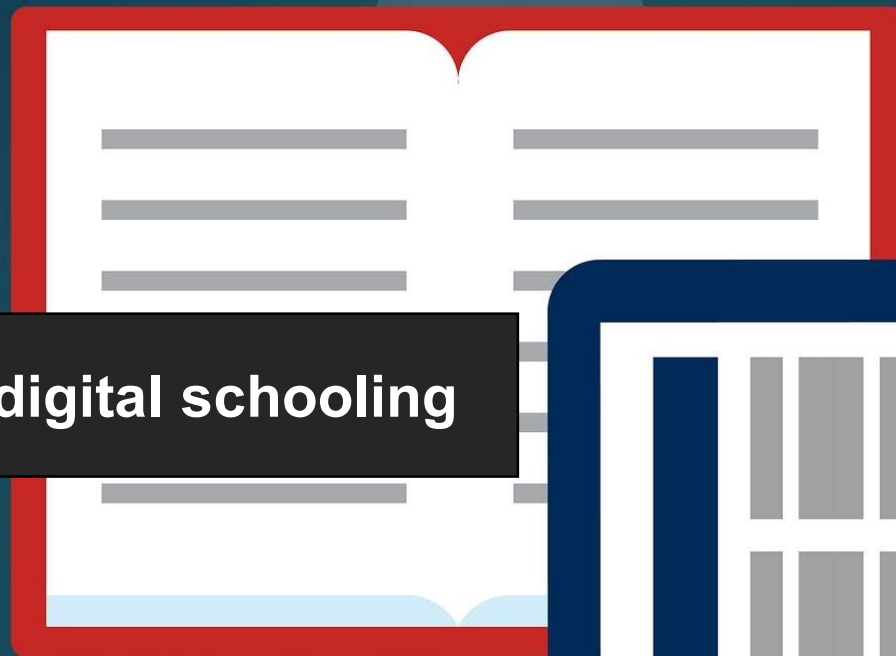
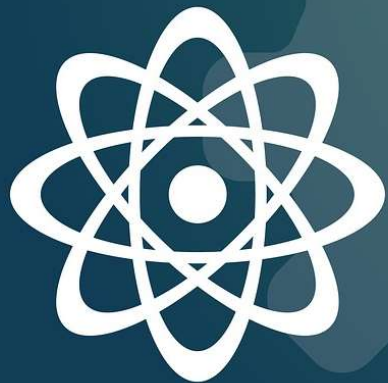
Researchers in Denmark have developed a robot that could be a game-changer in the fight against coronavirus.

24 Jun 2020

Jane Thoning Calleesen
Communication manager, Mærsk Mc-Kinney Møller
Institute, University of Southern Denmark

- Researchers in Denmark have developed a "swab robot" in the space of only four weeks, which could transform the fight against COVID-19.

Online and digital schooling



Telework





**Upscaling four mindsets for a high-
performing civil service**



1

Be open to open
innovation

2

Be mindful of design
thinking and user
orientation

3

Attend to public trust
in technologies

4

Care for the digitally
disadvantaged

1

Be open to open innovation

Open Innovation

is “a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with each organization's business model” (p. 27).

Chesbrough, H., & Bogers, M. (2014). Explicating open innovation: Clarifying an emerging paradigm for understanding innovation. In H. Chesbrough, W. Vanhaverbeke, & J. West (Eds.), *New frontiers in open innovation* (pp. 3–28). Oxford: Oxford University Press.

1

Be open to open innovation

Example 1: World Food Programme Innovation Challenge 2020

“WFP seeks cutting-edge solutions to transform emergency response and to achieve SDG2: Zero Hunger by 2030 for communities impacted by COVID19 and beyond. Innovations are needed more than ever before to achieve this goal.”

World Food Programme. (2020). *Apply to the WFP Innovation Accelerator*.

<https://innovation.wfp.org/apply>

1

Be open to open innovation

Example 2: Taiwan's open data

Taiwanese authorities made available real-time data on face-mask inventories in authorized stores and health centres, such that online civic and tech communities can use the data to develop software applications that indicate where masks are available for purchase.

Yuan, E. J., Hsu, C., Lee, W., Chen, T., Chou, L., & Hwang, S. (2020). Where to buy face masks? Survey of applications using Taiwan's open data in the time of coronavirus disease 2019. *Journal of the Chinese Medical Association*, 83(6), 557-560. doi: 10.1097/JCMA.0000000000000325

1

Be open to open innovation

Barriers to open innovation (OI)

“The organizational culture factors include several different aspects of the OI process: (a) type of agency and political context, (b) acceptance of external innovations, and (c) the lack of top-management support and buy-in” (p. 737).

Mergel, I. (2018). Open innovation in the public sector: Drivers and barriers for the adoption of Challenge.gov. *Public Management Review*, 20(5), 726-745.

<https://doi.org/10.1080/14719037.2017.1320044>

2

Be mindful of design thinking and user orientation

User-oriented thinking can help civil servants to identify a technological solution.



Image by Klaus Aires Alves from Pixabay.

Design Thinking

“can mean different things, but it usually describes processes, methods, and tools for creating human-centered products, services, solutions, and experiences. It involves establishing a personal connection with the people--or users--for whom a solution is being developed” (p. 86).

Bason, C., & Austin, R. D. (2019). The right way to lead design thinking. *Harvard Business Review*, March-April Issue, 82-91. <https://hbr.org/2019/03/the-right-way-to-lead-design-thinking>

3

Attend to public trust in technologies

Machines need to be as trustworthy as the humans who deliver public services because it is important for the public to be able to trust public services, whether or not they are provided by machines, and because people will not use machines if they do not trust them.

3

Attend to public trust in technologies

Does the public trust chatbots when they hear that the government is about to introduce “AI” chatbots to respond to their inquiries?

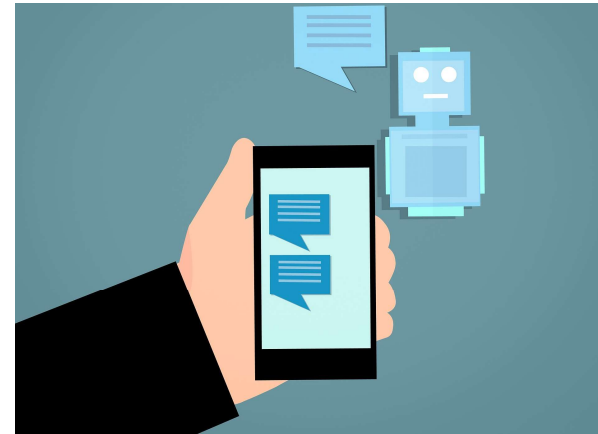


Image by mohamed Hassan from Pixabay

Aoki, N. (2020). An experimental study of public trust in AI chatbots in the public sector. *Government Information Quarterly*, 37(4), 101490. <https://doi.org/10.1016/j.giq.2020.101490>

3

Attend to public trust in technologies

Proposed sources of trust in chatbot responses in the public sector

Sources	Descriptions
<i>Process</i>	<ul style="list-style-type: none">• User's understanding of chatbot technology and the algorithms behind it
<i>Performance</i>	<ul style="list-style-type: none">• Chatbot's capability to show technical competency• Chatbot's capability to show empathy• Chatbot's capability to make a situational judgement
<i>Purpose</i>	<ul style="list-style-type: none">• The intention of a government to introduce or use a chatbot

Note. Table from the preprint version.

Findings

- The public's initial trust in chatbots depends on the area of enquiry.
- Certain purposes communicated by governments would slightly enhance the public's initial trust.

Aoki, N. (2020). An experimental study of public trust in AI chatbots in the public sector. *Government Information Quarterly*, 37(4), 101490. <https://doi.org/10.1016/j.giq.2020.101490>

4

Care for the digitally disadvantaged

“Digital inequalities are putting socially and economically disadvantaged people at more risk to the virus” (p. 1).

Beaunoyer, E., Dupéré, S., & Guitton, M. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, 111, 106424.

<https://doi.org/10.1016/j.chb.2020.106424>

eHealth literacy

is the "ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem."

Norman, C. D., & Skinner, H. A. (2006). eHealth literacy: Essential skills for consumer health in a networked world. *Journal of Medical Internet Research*, 8(2), e9. doi: [10.2196/jmir.8.2.e9](https://doi.org/10.2196/jmir.8.2.e9)

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Thank you.

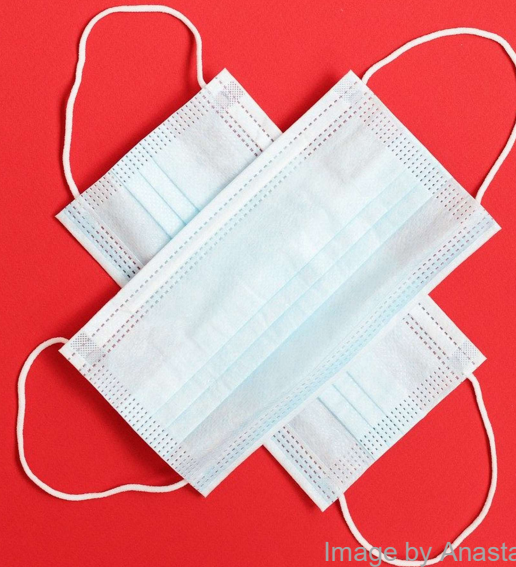
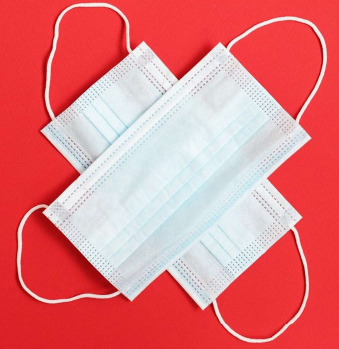
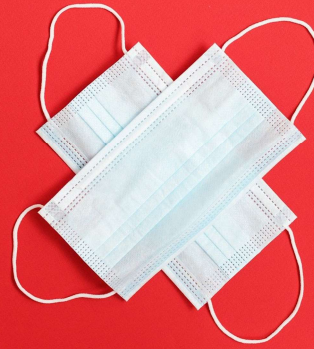


Image by Anastasia Gepp from Pixabay