Cyber4Good 2020

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Norfolk County Council

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Agenda:

- How threats are evolving

- What concerns me now

- An emerging tech challenge in Norfolk

- Where you can look for help

- My top tips for cyber security

Evolution of the Cyber Threat Landscape

When I started work…
Mainframe & LAN, updates via physical media (paper & mag tapes), offline backups (I'll come back to these) "enemies" were few and unsophisticated. Simple days.

Now:
Hybrid cloud environments, mobile & mass online 24/7 remote access via www, BYOD, multi-agency partnership working, lots of threat actors, some sophisticated. Not so simple.

Next:
Fully joined up multi-agency working & data sharing, access from any device anywhere, AI decision making, more IoT etc. Ever more complex.
<u>And yet it's still the basics that make the biggest difference…</u>

What concerns me now:

- "Secure", email & use of email as a data transfer mechanism
- Prevalence & sophistication of Phishing attacks
- Ramsomware & secure "offline" backups
- Privacy shield & Brexit impact on where data is stored & processed.
- Conferencing systems & their security
- Awareness raising & skills (from board to end-users)
- Balancing cyber controls with productivity and ease of use
- The demise of PSN & FN4G-AKA the Internet ;-)
- Budgets

A new Challenge for NCC in **2019** was to build the **largest** free public sector LoRaWAN **"innovation network"** deployment in the UK

We are working to make Norfolk
the **best connected** rural county in the UK
& to exploit the tech with **digital skills**

Connected Britain: 2020 Digital Council of the Year

Fibre
Mobile
* LoRaWAN
Mobile
5G

The Answer: Don't re-invent the Wheel…

- **Leverage security from existing communities and services**

-
  We use "The Things Network" worldwide community for our LoRaWAN network (featuring 128bit end-to-end encryption).

- **We also get help from our suppliers - Microsoft & Capita.**

- **Cloud platforms & standards are your friends.**

Where to look for Help....

WARPs, LRFs, Socitm Regions LGA, MHCLG, Cabinet Office/GDS/PSN/FN4G, CCS

- **C-TAG is where WARP leads come together to share knowledge and expertise with NCSC and other key UK public sector Cyber stakeholders**

- **Technical Reference group for Socitm LCIOC, NCSC, LGA, MHCLG+**

- **Promotes uptake of NCSC ACD and other leading practice in cyber & resilience across WARPS & to LAs**

- **Issues tech guides such as M360 config, Split Tunneling, incident response cookbook, etc.**

- **Thanks to NCSC & LGA for expertise & financial support.**

MY TOP CYBER TIPS

Local public sector cyber resilience must build upon solid foundations of **basic cyber hygiene**: patching, passwords, NCSC ACD.

My top 3 recommendations to improve your cyber resilience:

(1) **Engage** in national & regional **support networks** through NCSC, LGA, WARPs, LRFs, Cisp and Socitm regional groups.
Also work with appropriate suppliers and external organisations. **Find friends before the emergency…**

(2) Make sure **cyber resilience is a team effort** in your organisation. If you keep it to yourself in IT, you own it, alone…

(3) It's one thing to believe you are ready for an incident but if you don't **test and exercise**, you aren't well prepared. So practice…

& revenge of the tapes. "Offline" backups might just save your bacon!

https://socitm.net/about/warps/