

Building resilient and sustainable future – what can we learn from Ukraine?

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Hybrid warfare and the cyberwar in Ukraine





Microsoft on the Front Lines

Protecting

715K

organizations
in 120 countries

Analyzing

24T

threat signals
every day

Tracking

40+

nation-state actors &
140+ threat groups

Blocked

32B

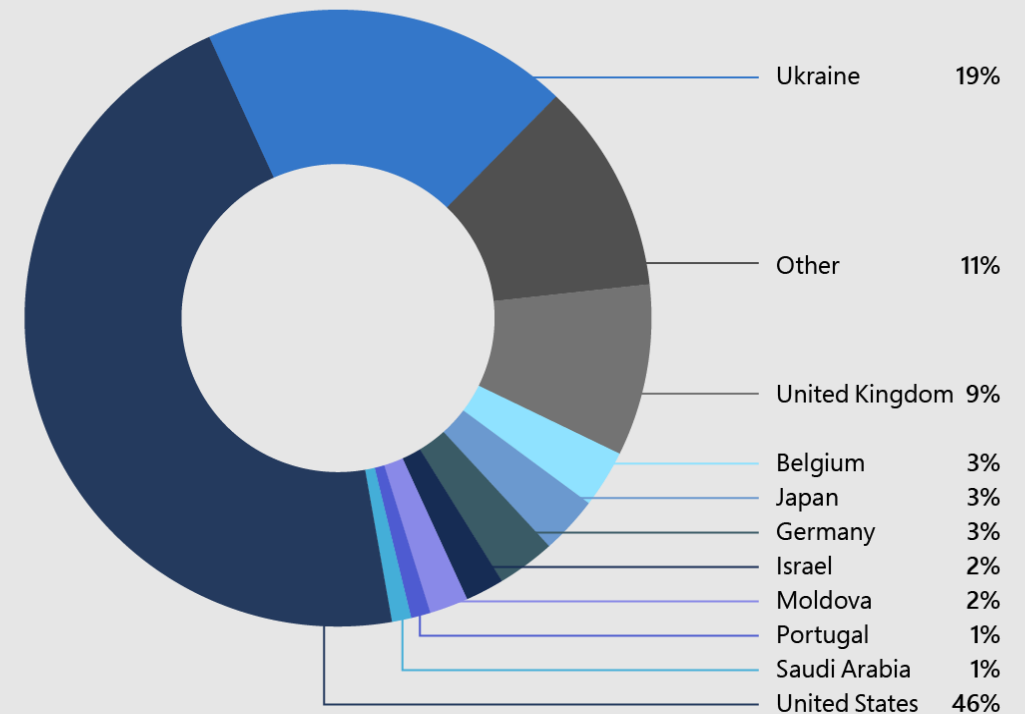
email threats
last year



Russia targets Ukraine

Between July 1, 2020, and June 30, 2021, Ukraine was the second-most impacted country we observed, with 19% of all notifications for nation-state activity.

Most targeted countries
(July 2020 to June 2021)



Hybrid Warfare

- The cyberwar in Ukraine started February 23rd
 - Targeting government agencies, and critical infrastructure, especially energy, financial and IT; more recently, transportation and logistics
- Microsoft is helping Ukraine
 - 24/7 secure communication of threat intelligence
 - RiskIQ scanning for unpatched vulnerabilities
 - Technical countermeasures to block Russian wipers
 - Move to the cloud
 - War crimes support
 - Technical and financial assistance totaling more than \$260M



Russian government's cyber influence operations



Coordinated Russian cyber and military operations in Ukraine



April 19

IRIDIUM launches destructive attack on Lviv-based logistics provider



April 29

IRIDIUM conducts reconnaissance against transportation sector network in Lviv



May 3

Russian missiles strike railway substations, disrupting transport service



March 4

STRONTIUM targets government network in Vinnytsia



March 6

Russian forces launch eight missiles at Vinnytsia airport³



March 16

Russian rockets strike TV tower in Vinnytsia



February 14

Odessa-based critical infrastructure compromised by likely Russian actors



April 3

Russian airstrikes hit fuel depots and processing plants around Odessa



February 28

Threat actor compromises a Kyiv-based media company



March 1

Missile strikes Kyiv TV tower



March 1

Kyiv-based media companies face destructive attacks and data exfiltration



March 11

Dnipro government agency targeted with destructive implant



March 11

First direct Russian strikes hit Dnipro government buildings, among others



March 2

Russian group moves laterally on network of Ukrainian nuclear power company



March 3

Russia's military occupies Ukraine's largest nuclear power station



Cyber



Kinetic

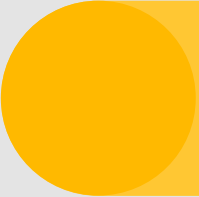


State actors

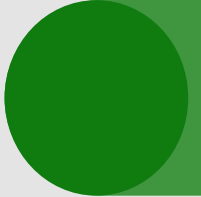
Cyberspace is the new battlefield where attacks by state actors also target civilians



Political and socioeconomic disruptions



Sophisticated phishing campaigns



Masked behind false domains

Protecting your organization

01

Harden identity systems and authentication credentials to minimize credential theft and account abuse

02

Secure and update all internet facing systems and remote access solutions

03

Leverage anti-malware, endpoint detection, and identity protection solutions

04

Enable logging to improve investigations and recovery

05

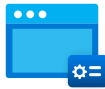
Implement best practices for defense in depth

06

Follow government advisories and guidance for threats, which continue to evolve as the crisis continues and more is learned

Zero Trust Approach from Microsoft

Identities



Endpoints



Applications



Data



Infrastructure



Network



Securing critical infrastructure

Case HSY



Security has never
been more critical



Cyber-attacks are becoming more
frequent and sophisticated

Pressures to address
multi-cloud IT environment

Increasingly **complex**
regulatory landscape

Technology, Security and Future for us all





“Going forward, digital technology will be the key input that powers the world’s economic output.”

SATYA NADELLA
MICROSOFT CEO



Skilling

The big challenge of digitalization





Technology Industry's need for experts:
130,000 new experts
over the next 10 years

13,300
ANNUALLY

- 50% comes from growth
- 50% from retirements

60%
HIGHER EDUCATION

40%
PROFESSIONAL
COMPETENCE

317,000
EMPLOYEES
NOW

Source: Technology Industries of Finland - [Study: Finland's technology industries will need 130,000 new experts within 10 years – The skills shortage in ageing Finland threatens to devastate digi-green economic growth](#)

**Microsoft
Finland
ambition**

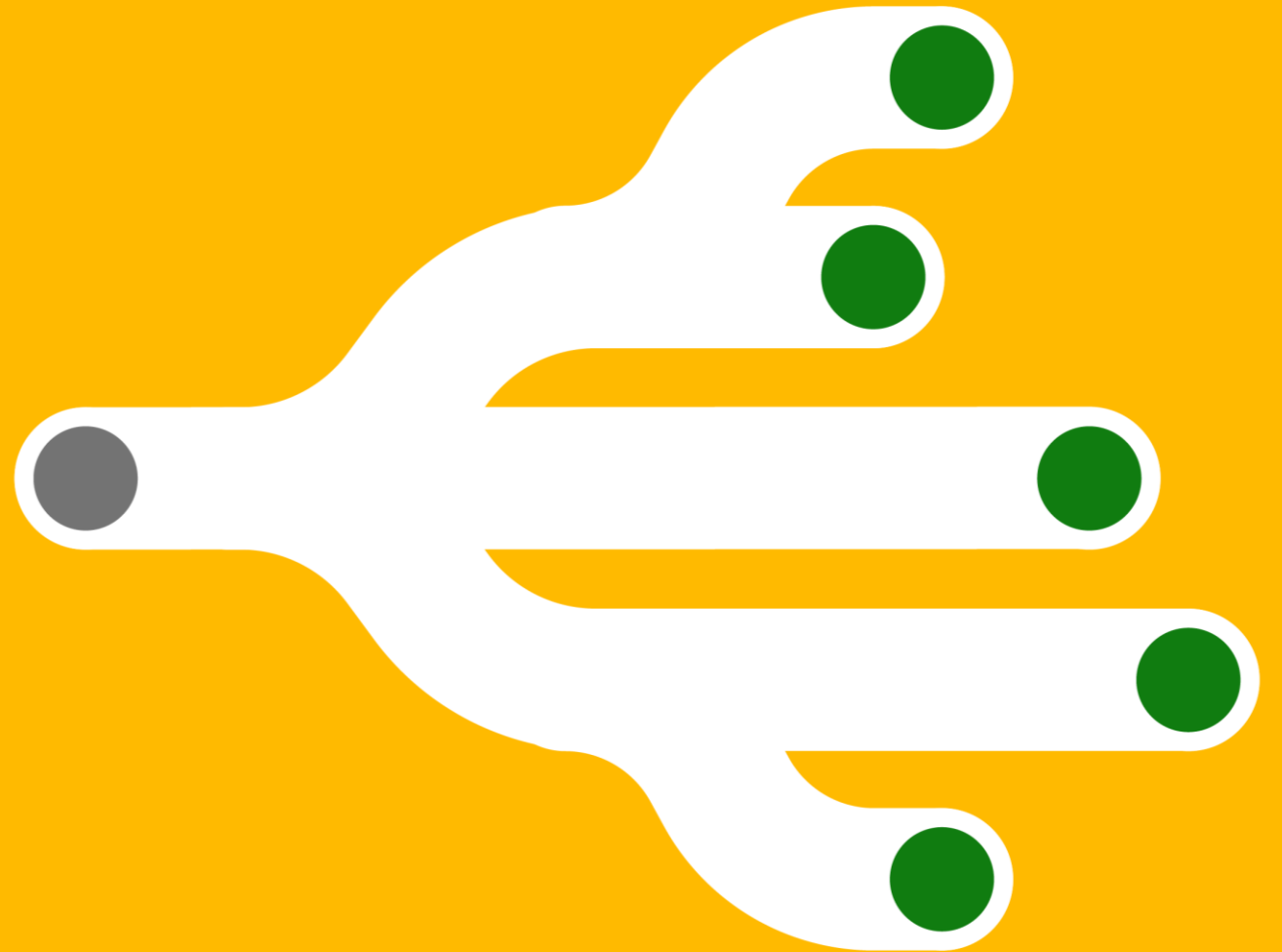
100K

**NEW AND UP-SKILLED
TECHNOLOGY EXPERTS IN
5 YEARS**



The "no code, low code" revolution

Case Kempele Municipality







Thank you.

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