

MOBILE APPLICATIONS AND CIVIC RESILIENCE IN EMERGENCY: THE CASE OF RUSSIAN WAR AGAINST UKRAINE

INTERNATIONAL SYMPOSIUM FOR NEXT GENERATION INFRASTRUCTURE 2022



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Session 3C: Critical Infrastructure Resilience

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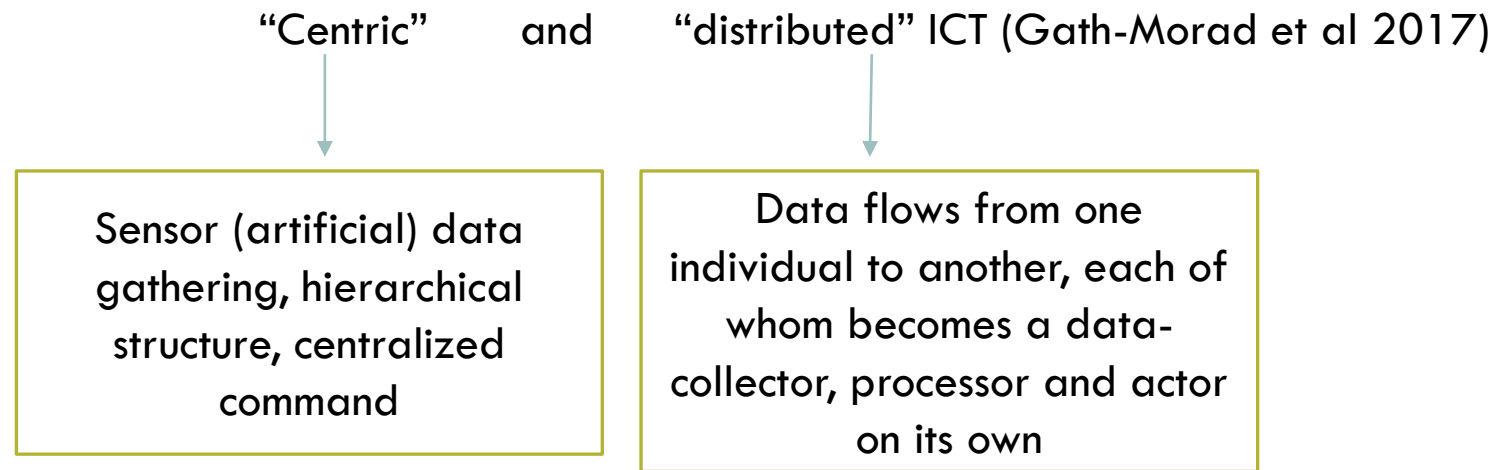
WAR AND ICT: WHAT CONNECTION?

- War as the instance of “emergency”
- “ICT has played a major role in all four [emergency] phases: preparedness, response, recovery, mitigation” (Scholl, Patin, Chatfield 2012, p. 2346)
- “Information is a, if not *the*, critical resource in extreme event resource management” (ibid, p. 2347)



ICT AS A HUMAN SECURITY PROVISION TOOL (WAR ASPECT) – INDIVIDUAL EMPOWERMENT

ICT allowing for an asymmetric response to a threat, not only protecting the individuals, but also **engaging the civilians and individuals in security and defence**



“a multitude of applications at citizens’ disposal **empowers** them with **new decision-making capabilities** which enable them to act accordingly to their **individual goals** as they gain “artificial spatial intelligence” (Gath-Morad et al 2017, p. 193)

“From a phenomenological point of view, people are not simply passive consumers of the new technology. They “do things” with it”. (Rohde et al 2016)

CASE STUDY: UKRAINE

In 2021 Ukraine's IT sector accounted for **4% of its GDP** and about **10% of all Ukrainian exports** (StrategEast 2022)

“State in a Smartphone” (Diia) program: replacing bureaucracy with an app.

*“Russia’s armed aggression has proved that **digitalization is critical** not only in recovery, but also **in defending the country**”*

Myhailo Fedoriv, Minister of Digital Transformation of Ukraine, World Economic Forum (Davos), 24 May 2022

STATE IN A SMARTPHONE (DIIA) APP

Дія

Цифровий паспорт громадянина України

Найголовніший документ кожного громадянина — відтепер у смартфоні.

Дія Надія Володимирівна

Дані оновлено 20.12.2019 о 9:00

Дія

Цифрове посвідчення водія

Дозволяє керувати автомобілем, подорожувати потягами та літаками в межах України.

Дія Надія Володимирівна

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Дані оновлено 20.12.2019 о 9:00

Дія

Цифрове свідоцтво про реєстрацію транспортного засобу

Надає право керувати автомобілем його власнику.

Свідоцтво про реєстрацію транспортного засобу

Марка:	ZAZ
Модель:	Vida
VIN:	DIA2019FORPEOPLE
Колір:	Зелений
Категорія:	В
Власник:	Дія Надія Володимирівна

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Дані оновлено 20.12.2019 о 9:00

Дія

Цифровий студентський квиток

Дозволяє підтвердити статус студента, а також отримувати пільги та знижки.

Студентський квиток

КВ 11341005

Дієсний до: 30.06.2020 р.

Форма навчання: денна

Академія адвокатури України

Дія Надія Володимирівна

Дані оновлено 20.12.2019 о 9:00

Дія

Надзвичайні ситуації

Повідомляємо про надзвичайні ситуації, що загрожують населенню.

Повідомлення про надзвичайні ситуації в Дії

В умовах надзвичайних ситуацій дуже важливо вчасно отримувати достовірну інформацію, адже попереджувальні — закриті, збірковий, Дія, як один із ключових каналів комунікації держави з українцями, буде ділитися з вами останніми новинами та порадами щодо запобігання поширенню COVID-19.

Дані оновлено 20.12.2019 о 9:00

UKRAINE'S DIGITAL RESISTANCE AND RESILIENCE

24 February 2022: the start of Russian full-scale invasion

New security-oriented apps appearing literally overnight (Table source: author's compilation)

Function	Examples of applications	Type of agency
News and updates	Telegram channels “Spravdi”, “Ukraine NOW”	State → society
Crowdfunding for Ukraine's Armed Forces	Diia, Aid for Ukraine website (cryptocurrencies)	Society → state
Shelter and physical security	eTryvoha, Karta Tryvog	State → society
Surveillance	eVoroh, STOP Russian war bot, Bachu.info	Society → state
Social and humanitarian aid (veterans, internally displaced persons (IDPs))	Diia (ePidtrymka), UA Veteran Bot	State → society
Documenting Russian war crimes	russian_war_tribunal_bot, warcrime_bot, Dokaz portal, “Moya viyna” Platform	Society → state

RESEARCH DESIGN: MOBILE APPLICATIONS AND CIVIC RESILIENCE IN EMERGENCY: THE CASE OF RUSSIAN WAR AGAINST UKRAINE

Research question: How did mobile applications contribute to civic resistance to the Russian war in Ukraine? Which effects and side effects did mobile applications have for the consumers? How did the applications influence their users' behavioral strategies?

Theoretical framework: security governance (“the expanding number of both threats and agents demands a more nuanced and complicated treatment of security” (Sperling 2014), in which civil society becomes a security actor of its own), asymmetric warfare

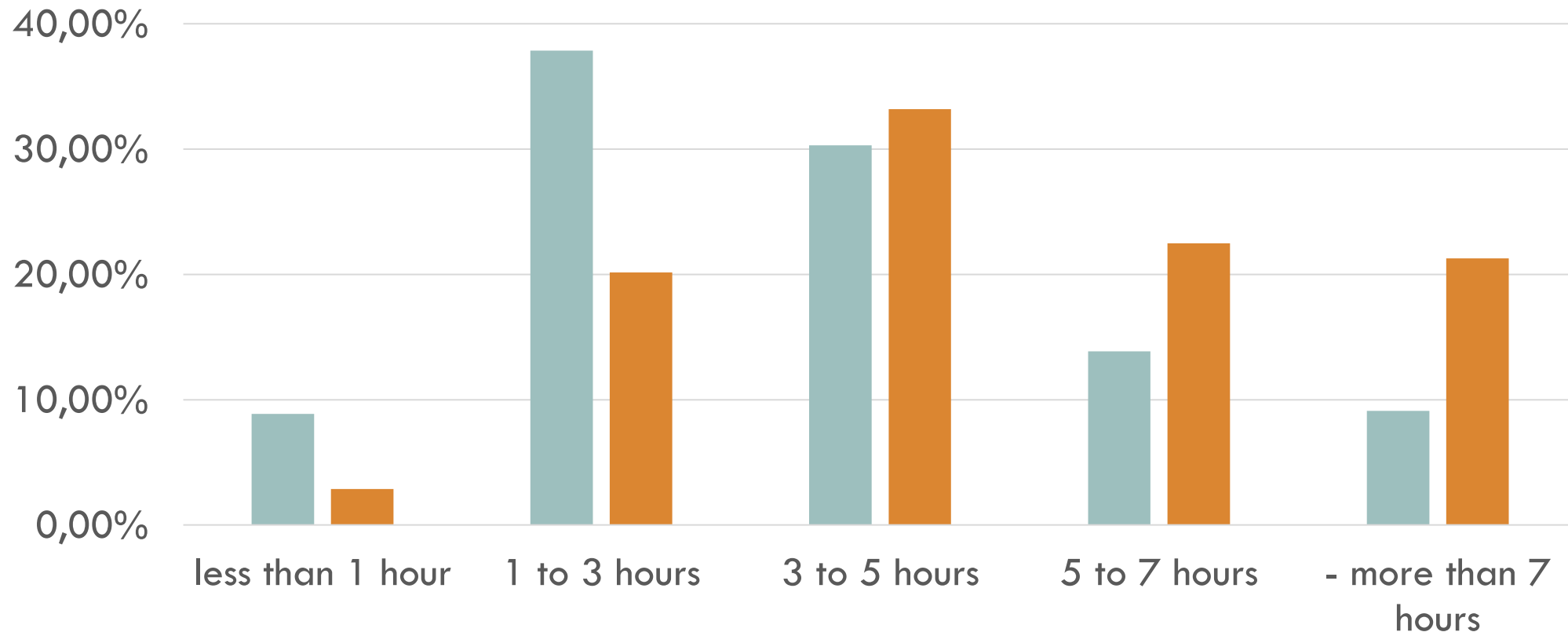
Methodology: explorative study

Method: mixed method, comprised by online quantitative survey and semi-structured qualitative interviews

ONLINE SURVEY SAMPLE:

- 1000 respondents
- 41% of those who use smartphones (60% of UA population use smartphones as of February 2022)
- Representative by gender, age and region of residence
- Biased towards active population
- Does not include towns and villages with population less than 50 000 and age group of 55 y.o. +
- 47% male and 53% female
- 31% displaced and 69% non-displaced

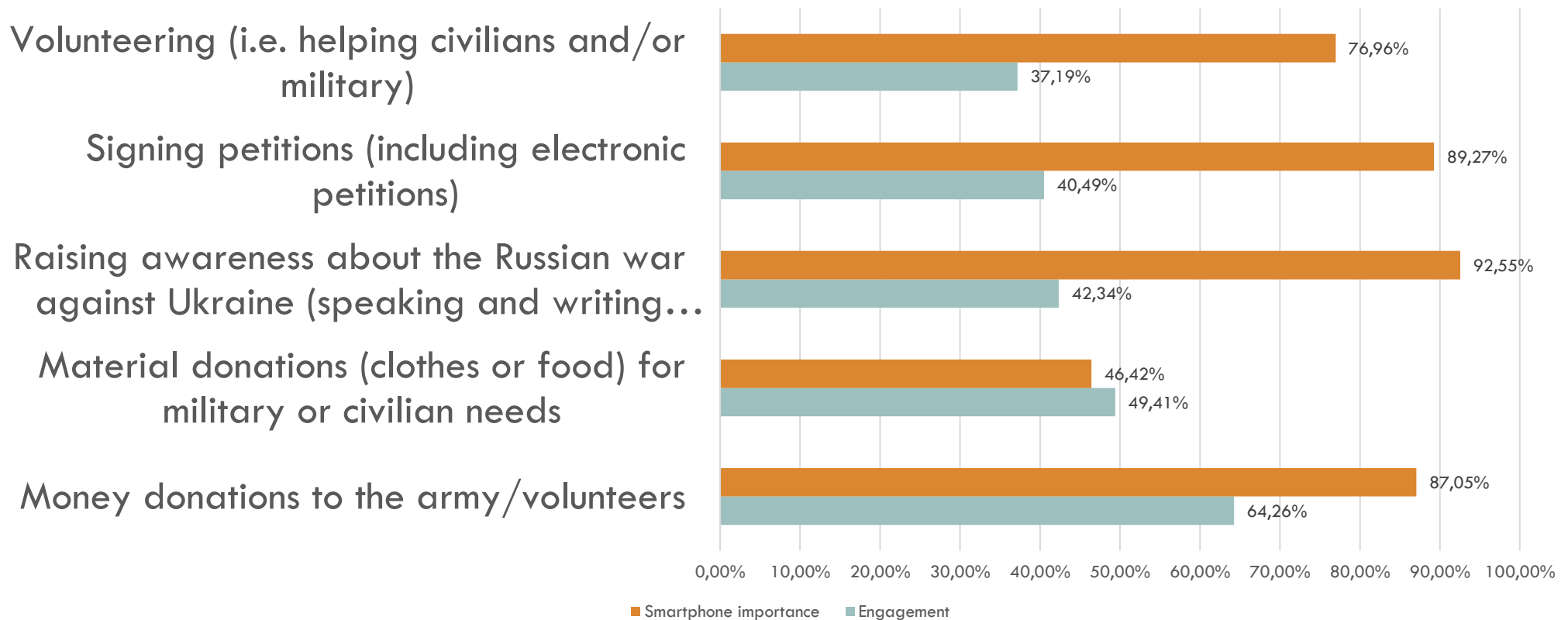
HOW MANY HOURS A DAY DID YOU USE YOUR SMARTPHONE? (BEFORE AND AFTER 24.02.2022)



HAVE YOU TAKEN PART IN ANY OF THE FOLLOWING ACTIONS SINCE THE RUSSIAN FULL SCALE INVASION OF 24 FEBRUARY, 2022 (CHOOSE ALL THAT APPLY):



HOW IMPORTANT IS YOUR SMARTPHONE FOR YOUR ACTIVITIES (“IMPORTANT” + “VERY IMPORTANT”)



WHICH MOBILE APPLICATIONS DID YOU USE FOR...

Activity	Mobile applications
Money donations to the army/volunteers	Privat24 (43%), various online banking applications, Monobank, Diia
Raising awareness about the Russian war against Ukraine (speaking and writing publicly, making posts on social media)	Facebook, Telegram, Instagram, Viber
Signing petitions (including electronic petitions)	Google, Diia, electronic petitions websites, Facebook
Volunteering (i.e. helping civilians and/or military)	Telegram, Viber, Facebook, Privat24

CONCLUSIONS

- A smartphone is a full-fledged tool for societal resilience and rear resistance
- Digital side of the resistance is paramount for its success
- Data and privacy security plays a limited role in the application selection and use
- Ukraine's civil resistance is a "social network resistance"

THANK YOU!

Questions?

