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#### This report was prepared with the support of



Ministry of Digital Transformation of Ukraine



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Cover photos by grandeduc (www.123rf.com)

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International audiences watching videos chronicling Russian aggression against Ukraine only see the military and humanitarian components of this war. Large-scale Russian aggression in cyberspace and the tremendous economic damage inflicted on our country take place behind the scenes.

At the moment, Ukraine's IT industry and digital economy as a whole, which our ministry is responsible for developing, play a significant role in Ukraine's economic growth, bringing our economy tens of billions of dollars.

While the Ukrainian army is heroically defending our Motherland on the battlefield, our main task at the Ministry of Digital Transformation is to create a reliable digital backend. For that reason, even in this difficult time, we are continuing to develop the IT industry, which has become one of the most important components of our economic front.

Even now, our IT specialists continue to develop projects for international customers, confirming Ukraine's status a trusted global supplier of IT. But without tangible support from all our long-term partners, the industry, and Ukraine's future, will suffer almost irreparable damage.

I urge all of our international customers to continue their cooperation with Ukrainian IT companies. I call on global tech companies not only to leave Russia, but also to expand their presence in Ukraine. I ask global development agencies and international financial institutions to support the Ukrainian government's IT-related initiatives.

#### Mykhailo Fedorov,

Vice Prime Minister, Minister of Digital Transformation of Ukraine.

## **Executive Summary**

At the time Russia launched its campaign of aggression, Ukraine already enjoyed a highly-developed IT industry. In 2021, 250,000 Ukrainian IT engineers brought in \$6.8 billion¹ in export earnings, accounting for about 10% of all Ukrainian exports. Within Ukraine, the process of digital transformation of the state was underway, via President Zelensky's "State in a Smartphone" program, which ensured that most public services were available to citizens online;

after Russian Federation troops invaded Ukraine, the Ministry of Digital Transformation of Ukraine, along with the digital divisions of other ministries, shifted into wartime mode, giving preference to projects related to repelling Russian aggression, protecting civilians, evacuating and helping refugees, and keeping the Ukrainian economy alive;

in response to these events, the Ministry of Digital Transformation and other Ukrainian ministries ensured high levels of protection for personal and state data, launched hundreds of applications, websites, and channels through instant messengers that helped to ensure the safety of Ukrainian residents, particularly alert systems for air raid sirens and the movements of enemy troops. Numerous brigades of volunteers have been created to protect Ukrainian state-owned digital assets from Russian cyberattacks;

significant changes were made to Ukrainian legislation, allowing digital assets and the Ukrainian IT industry to continue operating during the war; in particular, the tax system was completely revised, all customs fees were canceled, and changes were made to the status of digital documentation;

the Ministry of Digital Transformation is undertaking special efforts to ensure the activity of Ukraine's export-oriented IT industry, which provides the necessary inflow of currency. Moreover, despite the martial law, new personnel are being trained to compensate for the labor force loss as a result of the war;

this report presents main activities of the Ministry of Digital Transformation that are being conducted during the war with Russia and provides policy recommendations to Ukraine's international partners.

## **Digital Resilience**



Within days of the war's beginning, the Ministry of Digital Transformation (*Mintsyfra*) has been actively engaging in digital diplomacy, urging global technology companies to close their business in Russia and to restrict access to their products for Russian consumers. The Ministry has already appealed to more than 500 technology companies asking them to withdraw from the Russian market, stop paying taxes to the Russian budget, and thereby stop sponsoring the war. Tech giants such as Amazon, Apple, Google, Visa, Mastercard, and many others have announced their decision to join the digital embargo of Russia. A list of companies that supported the sanctions can be found on the <u>Technology embargo</u> official website<sup>2</sup>.

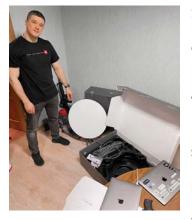
**Repelling Russian cyberattacks** and increasing the digital resilience of the state were critically important steps taken by the Ukrainian government. As part of these efforts, government agencies have taken a number of measures, including:

- relocation of equipment and database backups to safer areas of Ukraine that are inaccessible to Russian troops;
- <u>creation of a layered system of cyber defense</u> for the state IT infrastructure<sup>3</sup>;
- creation of a Security Service of Ukraine (SBU) hotline prompt response to the threat of cyberattacks on critical infrastructure IT systems<sup>4</sup>;
- the signing of an agreement between the State Archival Service of Ukraine and the National Archives of the United Kingdom on the temporary transfer of cloud data storage and backup copies of digital materials of Ukrainian state archival institutions in case of their potential loss<sup>5</sup>.

Since the beginning of active hostilities, state registries have been disabled in order to protect Ukrainians' personal data, and electronic documents have become inaccessible for many users of Diia (the Ukrainian government app for electronic public services). Given the urgent need for digital documents, especially for those who have lost or forgotten their paper documents while evacuating, a new format of electronic identity was created, known as <a href="mailto:eDocument6">eDocument6</a>. This type of document contains passport data and RNUKPN (taxpayer card) information, and is available via Diia, even when state registers are turned off.

As part of a joint initiative, the Ministry of Culture and Information Policy of Ukraine (MinCult) and the Ministry of Digital Transformation have created an IT Army<sup>7</sup> to launch cyberattacks on Russian websites, and the Internet Army<sup>8</sup> to combat Russian propaganda. Almost 500,000 developers, designers, copywriters, marketers, and other professionals have joined special chats to volunteer as part of these "armies".

Several amendments have been made to articles 361 and 361-1 of the Criminal Code of Ukraine<sup>9</sup>, which allow external specialists to be involved in the search for errors and vulnerabilities in state software products, information and communications systems, and promptly address any deficiencies and security gaps. Thus, the international IT community will be able to legally test state information systems for vulnerabilities, and the state will receive a tool to increase protections for such systems.



Shortly after the Russian invasion began, Minister of Digital Transformation Mykhailo Fedorov asked Elon Musk to provide Ukraine with access to his Starlink high-speed Internet. Starlink is a system of low-orbiting satellites (now numbering more than 5,000) that provides a connection to the network even when other forms of communication

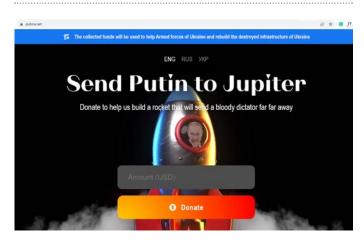
are not available. This became especially relevant after the Russians began to deliberately destroy the communications infrastructure. Musk responded to the request by activating Starlink in Ukraine, and also sent the terminals necessary for connection. The Starlink terminals were first equipped with critical infrastructure facilities responsible for providing healthcare, finance, and energy services.

IT companies also received Starlink terminals. Ukraine's IT sector is an important part of the national economy. According to the <u>Ukraine IT Report 2021</u>, <sup>10</sup> at the beginning of this year, 285,000 IT specialists were working in Ukraine, and IT services exports amounted to \$6.8 billion. Over the past year, the IT industry has paid about 23.5 billion hryvnias (\$870 million) in taxes and fees, and made up approximately 4% of Ukraine's GDP. In addition, the IT industry is Ukraine's third-largest source of foreign exchange earnings. For this reason, maintaining IT companies' stable access to high-speed Internet is a matter of economic security for Ukraine.

# Fundraising and mobilizing international assistance



Mintsyfra and the Ukrainian blockchain community have launched the **Metahistory NFT Museum**<sup>11</sup>, dedicated to the chronology of events during the Russian military invasion of Ukraine. The main goal of the NFT Museum is to preserve the memory of wartime events, disseminate truthful information among the global digital community, and raise funds in support of Ukraine. Artistic works are presented digitally as NFT tokens. Each NFT piece consists of an authentic media message from official sources and an artistic illustration. The museum's virtual exhibits will remain permanently in the digital space with the help of blockchain technology. All proceeds from sales of the museum collection will go to the Ministry of Digital Transformation's crypto wallet to be spent on humanitarian aid and worldwide communication campaigns about truthful events in Ukraine.



**"Send Putin to Jupiter" fundraising campaign.**<sup>12</sup> The Ministry of Digital Transformation has come up with the idea of building a rocket capable of launching Vladimir Putin to Jupiter because "it is a gas giant and the largest planet in the solar system". The Ministry has launched a fundraiser campaign for this endeavor, and it has already reached more than \$2M in donations.

Moldova and Poland have officially started to <u>accept digital</u> <u>documents</u> from Ukrainians, which are available through Diia.<sup>14</sup> This decision was made to speed up the procedure for crossing international borders.

Alongside Ukrainian cryptoplatform KUNA, crypto exchange FTX, and Ukrainian stacking platform Everstake, we launched an official website dubbed Aid for Ukraine<sup>13</sup>, where people around the world can donate via cryptocurrencies. Today, the platform accepts donations in 16 cryptocurrencies, including bitcoin, ether, tether, solana, and dogecoin.

The crypto community has already raised \$60M. The amount of crypto donations is notable, most likely the biggest crypto donations drive so far in history.

With the crypto donations raised by Aid For Ukraine, the Ministry of Digital Transformation was able to provide the Armed Forces of Ukraine with:

- over 5 500 bulletproof vest
- over 500 ballistic plates for bulletproof vests
- more than 3 427 doses of medicine
- over 60 walkie-talkies
- over 410 000 prepared lunches
- over 3 125 thermal imagers and optics
- over 500 helmets

Each and every helmet and vest bought via crypto donations is currently saving Ukrainian soldiers' lives.

In the future, the funds collected by the Crypto Fund of Ukraine will be spent on:

- informational opposition to Russian propaganda;
- a worldwide communications campaign about truthful events in Ukraine;
- cyber protection and the renewal of digital infrastructure;
- ensuring additional protection and migration of registers;
- technical special equipment and equipment acquisition.



PayPal launched operations in Ukraine. The company has expanded possibilities for p2p payments – private transfers from one person to another. "This will allow them to quickly and securely send money to their friends, family, and loved ones,"

the company said in its statement. The major innovation here is that now it is possible to withdraw money from your PayPal wallet and deposit it to linked Visa and Mastercard cards issued by Ukrainian banks. The company also temporarily canceled commissions for Ukrainians, allowing them to use the new services free of charge.

Revolut has become available for Ukrainians in the EU. The company has simplified many of the requirements for creating an account and has also waived a number of fees for currency exchange and account replenishment. In addition, users are able to access their money by linking the program to a Ukrainian bank account.

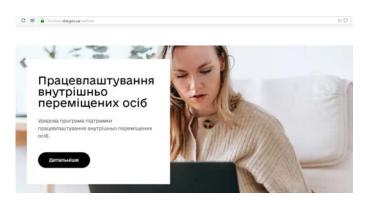
## **Supporting the IT Industry**

The Law "On Amendments to the Tax Code of Ukraine and Other Legislative Acts of Ukraine Concerning the Validity of Norms for the Period of Martial Law" was adopted¹⁵. This law enables individual entrepreneurs and legal entities with a turnover of up to ₹10 billion (UAH) (\$370 million) to pay a single tax or a flat rate on turnover in the amount of 2%, according to the rules established for the third group of individual entrepreneurs, who pay this single tax or a flat rate, that is, with exemptions from income tax, VAT, and other payments. Since most IT professionals are registered as the third group of single taxpayers, this initiative significantly reduces the tax burden on the industry.

A law on cloud services <sup>16</sup> has been adopted. This law will allow the use of cloud services in government agencies, thereby reducing corruption risks in the purchase of equipment and significantly reduce budget expenditures. In order to optimize data processing, the government decided to introduce the Cloud First principle – to transfer major government IT services to the cloud. The law on cloud services will also make Ukraine attractive to the world's largest providers of cloud services, such as Microsoft, AWS, and Google Cloud. This should encourage investment and provide incentives to building large data centers in Ukraine.



The Law "On Virtual Assets" was adopted <sup>17</sup>. Mintsyfra allows foreign and Ukrainian crypto exchanges to work legally. Additionally, banks will open accounts for crypto companies, and Ukrainians will be able to protect their savings in virtual assets. The law also provides the guaranteed judicial guarantees state legal protections of rights on virtual assets. "Since the beginning of the war, crypto assets have become a powerful tool for attracting additional funding in support of the Armed Forces of Ukraine. During the first three weeks of the war, the Cryptofund of Ukraine collected over \$54 million in crypto assets. The President signed the law "On virtual assets". We are launching a legal market for virtual assets in Ukraine and bringing the crypto sector out of the shadows," added Mykhailo Fedorov, head of the Ministry of Digital Transformation <sup>18</sup>.



A number of support programs for Ukrainian entrepreneurs have been launched, including an initiative to relocate companies from the affected regions, an expanded "Affordable loans 5-7-9%" program, a program for the employment of internally displaced citizens, and many others. All information about these programs is displayed on the **Diia.Business**<sup>19</sup> website. In addition, information on international support programs for Ukrainian entrepreneurs is constantly being updated on this portal. One of such these projects is **#BizForUkraine**<sup>20</sup>, a platform for creating an environment for partnership with Ukrainian and European companies, which helps to provide working projects for Ukrainian specialists in IT, consulting, and creative industries.

An IT profession training program known as "IT Nation" is in the process of development. As part of this project, 3,000 Ukrainians will have the opportunity to study and learn a profession in the IT field at the state's support and expense. Together with Ukrainian EdTech companies, the Ministry of Digital Transformation is expecting to reduce the gap between supply and demand of professional IT employees and give Ukrainians an opportunity to obtain modern and well-paid professions in IT field. This program solves two pressing problems at once: unemployment and a lack of IT specialists. Among the programs available, participants will have a chance to study on following courses: FrontEnd, QA, FullStack, Python, and Java, as well as non-tech programs: Project\Product Management, UX/UI Design, Marketing, Business Analysis, HR\Recruiting, English courses. The budget required to run this program is \$3,000,000.

The criteria for residency in **Diia.City**<sup>21</sup>, **-unique tax and legal space for the IT industry**, were simplified as much as possible. While martial law remains in force, non-compliance with the criteria for the number of employees and average salary is not a reason to deprive companies of resident status. This applies to both current residents and companies seeking to join Diia.City. Compliance and independent audit reports have been canceled. In order to simplify the administration process for companies, the report will not need to be submitted until January 1 of the year following the first year after the end of martial law.

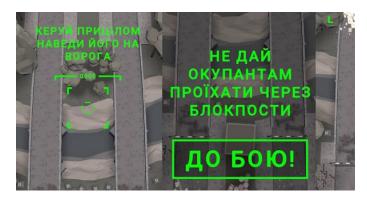
## **Supporting the Army**

**eVorog**, **STOP Russian War bot**, and **Bachu.info**: The Ministry of Digital Transformation has created a "eVorog"<sup>22</sup> chatbot, through which Ukrainians can report on the movements and deployment of enemy troops. Authorization in the chat is done through the Diia application, and once verified, the information provided by users is transmitted to the Armed Forces of Ukraine. The Security Service of Ukraine has also developed the "STOP Russian War bot" chatbot<sup>23</sup> and the "Bachu.info" platform<sup>24</sup> (a website and application). The main difference between these resources and the "eVorog" chat bot is the ability to transfer information to the Security Service of Ukraine (SBU) without the use of an Internet connection.

**The "ua veteran bot" chat bot**: The Ministry of Veterans Affairs of Ukraine, together with the Ukrainian Veterans Fund, has launched a Telegram bot for veterans, their families, families of the fallen Defenders, and territorial defense volunteers<sup>25</sup>. In the chatbot, users can find upto-date information about mobilization, the search for ammunition, evacuation, humanitarian aid, and much more.

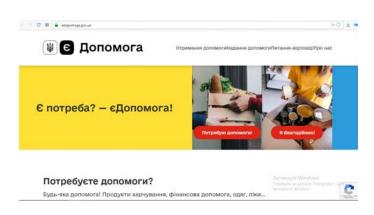
The ability to transfer funds to the "Return Alive" foundation was added to the Diia application. As of today (April 5, 2022), over **200 million UAH (\$200 million)** has been raised via this service<sup>26</sup>.

The Ministry of Digital Transformation informs the relatives of deceased Russians about their deaths in the war in Ukraine. For such purposes, **artificial intelligence technologies**<sup>27</sup> are used to search social network profiles with the help of facial recognition. Photos of Russian corpses are compared to photos posted on social media during their lifetimes. This was made possible thanks to testing facial recognition technology in the Diia app for the purpose of signing documents and generating COVID vaccination certificates.



**eBayraktar**: At the request of many Diia users, this feature allowing them to monitor the combat UAV "Bayraktar" has been added to the application. It is a mini-game called eBayraktar, which the Minister of Digital Transformation of Ukraine Mykhailo Fedorov described as a "digital sedative" 28. The aim of the game is to protect Ukrainian checkpoints from enemy' troops with the help of a Turkish drone, which has become one of the symbols of the Ukrainian resistance to Russian aggression.

## **Supporting Civilians**

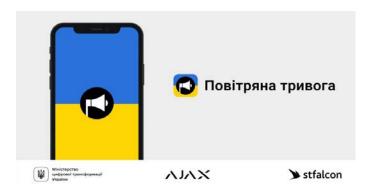


The <u>eDopomoga platform</u><sup>31</sup> was created by the Ministry of Social Policy of Ukraine with support from the Ministry of Digital Transformation of Ukraine and UNDP in Ukraine, to organize the process of effectively collecting and distributing humanitarian aid. The platform combines the capabilities and resources of the government, business, public organizations, charitable foundations, and volunteers in the provision of humanitarian assistance. It consolidates and processes requests for and delivery of humanitarian assistance.

## **Supporting Civilians**

The **ePidtrymka**<sup>29</sup> financial support program for Ukrainian citizens has been transformed. Now, aid in the amount of UAH 6,500 (\$216, the statutory minimum wage in Ukraine as of 2022) can be received by individual entrepreneurs of all groups, as well as employees, for whom the Unified Social Tax is paid, from regions where active hostilities are taking place. As of March 25,2022, Ukrainians have already received more than 20.7 billion UAH (\$690 million)<sup>30</sup>.

The official **Humanitarian aid portal** was launched for those who wish to provide Ukraine with humanitarian or financial assistance from abroad<sup>32</sup>. Anyone who wants to support Ukraine can find detailed instructions on the website on how to properly put together and ship humanitarian cargo, as well as how to deliver it to Ukraine through international hubs. This portal was developed jointly with the team of the Office of the President of Ukraine and the Cabinet of Ministers of Ukraine.



The "Povitriana Tryvoga" (Air Raid siren) application. Ajax Systems, at the initiative of IT company stfalcon.com and with support from the Ministry of Digital Transformation of Ukraine, has released an application to alert users about civil defense alarms. The application is an especially important tool for informing citizens who live in remote areas where there is no street warning system in place. The application receives information about alarms directly from regional state administrations, allowing it to notify users as quickly as possible about any danger. As of March 16, 2022, the application was uploaded by more than 4 million users, and has taken the top rankings on the second day of the launch: it is #1 in News on the App Store<sup>33</sup> and#2 in Social on Google Play<sup>34</sup>.

**Diia.Digital Education**: Due to the Russian invasion, most schools in Ukraine have either completely closed, or returned to online education. The main tool for distance learning is the "All-Ukrainian school online"<sup>35</sup> platform developed as part of the Diia digital education project. During the first month of war, results for the All-Ukrainian Online School were as follows:

- more than 110,000 new users;
- more than 1 million video lesson views (out of 2.2 million since the platform was developed);
- users from 134 countries (mostly from Ukraine, Poland, Germany, Czech Republic, and the USA)<sup>36</sup>.

**Pererobka platform**: The Ministry of Agrarian Policy and Food of Ukraine, together with the Zernotorg platform, created a website to search for regional suppliers of goods for food chains<sup>37</sup>. The goal of the project is to ensure the uninterrupted supply of food and prevent a food crisis in Ukraine.

**Telegram chat bot "Turbotnyk":** Administrative service centers in areas where active hostilities are not underway have been reformatted into stations providing assistance to internally displaced persons, military personnel, and territorial defense. In order to coordinate these centers' work and provide targeted assistance to citizens, the Ministry of Digital Transformation of Ukraine, together with Corezoid, launched the Turbotnik chat bot<sup>38</sup>. The bot allows users to submit a request for temporary housing or financial assistance.

**Diia TV and Diia Radio**: These applications were launched to inform Ukrainians on the latest news from trustworthy sources, even in the absence of television and radio signal. Users can watch or listen to a unified news stream of television channels covering the Russian war against Ukraine 24/7. The Diia TV service was launched in cooperation with the Megogo streaming service, and the National Public Television and Radio Company of Ukraine is a partner in the Diia Radio project.

Throughout the country, bomb shelters are being connected to Wi-Fi. To coordinate this process in Kyiv, the local government has created a special <u>platform</u>. Over 750 shelters have already been connected to the Internet thanks to this project<sup>41</sup>.

## **Supporting Civilians**

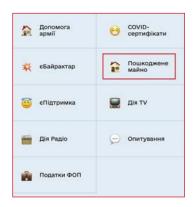
On February 24, Russia violently attacked Ukraine, forcing 4 million Ukrainians to leave their country and displacing 6.5 million more to its western and central regions. Most of these refugees are women rescuing their children. They hold Ukraine's Maternal Front, protecting its youngest citizens. That is why the Projector Institute has created **The Projector** Creative & Tech Foundation<sup>39</sup> to help Ukrainian female refugees who have found themselves forced to flee Ukraine or relocate within the country during the war to acquire new professional skills. The fund aims to cover 5,000 scholarships and is supported by the Ministry of Digital Transformation of Ukraine and national entrepreneurship development and export project Diia. Busines. Every Ukrainian woman with intermediate English skills who has lost a job due to the war and was displaced can apply for a scholarship to learn a new creative or tech profession.

Telegram chat bot "Mariupol now status"<sup>40</sup>: The city of Mariupol has been under siege almost since the war began, with street fighting and shelling going on for over a month. Many families have been separated and lost contact, and people are now forced to hide in bomb shelters enshrouded in uncertainty. To provide the residents of Mariupol with relevant information on the current situation in different districts of the city, Ukrainian Al/ML startup Reface has launched a chatbot entitled "Mariupol now status". After choosing a street for monitoring, the bot provides users with all the information available in local media about the condition that location and the availability of utilities there. Through the bot, users are able to find out about the conditions of their family and loved ones with whom they may have lost touch.

## **Gathering Evidence of War Crimes**



The **Dokaz** portal has been launched to collect evidence of crimes committed by Russian military forces<sup>42</sup>. Evidence collected will be used to get Russia accountable in international courts and tribunals. The project was implemented by the Ministry of Digital Transformation together with the Office of the President of Ukraine, the Ministry of Justice, the Office of the Prosecutor General, the Office of the President of Ukraine in the Autonomous Republic of Crimea, and the Kiev School of Economics. Information about the crimes committed by the Russian Army can be transmitted through the Telegram chat bots russian war tribunal bot<sup>43</sup> and warcrime bot<sup>44</sup> developed by the Security Service of Ukraine and the Ministry of Justice of Ukraine.



Applications for financial compensation for real estate property damaged during the hostilities can now be filed via the Diia app. According to Ukrainian President Volodymyr Zelensky, "The state will reimburse the loss of a house or apartment as a result of hostilities" <sup>45</sup>.

"Moya Viyna" Platform: The Ministry of Culture and Information Policy started the platform #MoyaViyna, allowing each Ukrainian to describe the real facts and his or her personal experiences during the war<sup>46</sup>. In addition to the text, users can also add a video or photo of confirmation of war crimes committed by the Russian military to their personal stories.

#### Our recommendations

## For international financial institutions and global development agencies

To support a large-scale educational program, which aims to acquire new IT professional skills from the Ministry of Digital Transformation – **IT Nation**. This program is capable of reducing the unemployment rate, which rose to  $53\%^{47}$  due to the war, while also allowing evacuated youth to join a new profession while they are forced to abandon their studies and jobs. This is also an investment in the future post-war reconstruction of Ukraine.

#### For global tech companies

- Join the sanctions imposed by Western countries on the Russian Federation and immediately curtail their activities in Russia.
- Continue to consider Ukraine as a trusted IT vendor and transfer orders taken from Russian IT companies to those operating in Ukraine.
- For those companies which have not yet opened access to their services to citizens of Ukraine, to allow access in Ukrainian territory. During wartime, access to such services can literally save lives.

#### For foreign governmental institutions

To simplify, as much as possible, the documentation flow with both the Ukrainian state and citizens of Ukraine who were forced to become refugees. In particular, the official recognition by neighboring countries Ukrainian digital documentation used by citizens via the official Diia application developed by the Ministry of Digital Transformation is critical, since refugees' paper documents are often lost or destroyed.

#### **Bibliography**

- Ukrainian IT companies paid UAH 23.5 billion in taxes for the year. Comprehensive Market Research. <a href="https://mc.today/ukrainskie-it-kompanii-za-god-zaplatili-23-5-mlrd-grn-nalogov-bolshoe-issledovanie-rynka/">https://mc.today/ukrainskie-it-kompanii-za-god-zaplatili-23-5-mlrd-grn-nalogov-bolshoe-issledovanie-rynka/</a>
- Technology embargo. Hello, Iron Dome! <a href="https://rfblokada.tech/en/">https://rfblokada.tech/en/</a>
- 3. Layered cybersecurity for government and business. https://cip.gov.ua/ua/news/eshelonovanii-kiberzakhist-dlya-derzhavi-ta-biznesu
- 4. The Security Service of Ukraine is stepping up cybersecurity of strategic objects and creating a «emergency» e-mail address. <a href="https://www.kmu.gov.ua/news/sbu-posilyuye-kiberzahist-strategichnih-obyektiv-i-stvoryuye-dlya-cogo-garyachu-elektronnu-adresu">https://www.kmu.gov.ua/news/sbu-posilyuye-kiberzahist-strategichnih-obyektiv-i-stvoryuye-dlya-cogo-garyachu-elektronnu-adresu</a>
- 5. The first agreement on backup storage of digital copies of documents of the National Archival Fund of Ukraine in the cloud storage of foreign partners. <a href="https://www.kmu.gov.ua/news/persha-ugoda-pro-rezervne-zberigannya-cifrovih-kopij-dokumentiv-naf-ukrayini-u-hmarnih-shovishchah-inozemnih-partneriv">https://www.kmu.gov.ua/news/persha-ugoda-pro-rezervne-zberigannya-cifrovih-kopij-dokumentiv-naf-ukrayini-u-hmarnih-shovishchah-inozemnih-partneriv</a>
- 6. eDocument has been added to the Diia. <a href="https://thedigital.gov.ua/news/u-dii-zyavitsya-edokument">https://thedigital.gov.ua/news/u-dii-zyavitsya-edokument</a>
- 7. IT ARMY of Ukraine. <a href="https://t.me/itarmyofukraine2022">https://t.me/itarmyofukraine2022</a>
- 8. Internet Army of Ukraine. https://t.me/ivukr
- 9. Parliament has allowed independent IT professionals to be involved in testing vulnerabilities in information systems. <a href="https://www.kmu.gov.ua/news/parlament-dozvoliv-zaluchati-nezalezhnih-it-fahivciv-do-testuvannya-vrazlivostej-informacijnih-sistem">https://www.kmu.gov.ua/news/parlament-dozvoliv-zaluchati-nezalezhnih-it-fahivciv-do-testuvannya-vrazlivostej-informacijnih-sistem</a>
- 10. The results of a national IT industry research. <a href="https://itukraine.org.ua/results-of-a-national-study-of-the-it-industry.html">https://itukraine.org.ua/results-of-a-national-study-of-the-it-industry.html</a>
- 11. Meta History Museum of War. <a href="https://metahistory.gallery/warline">https://metahistory.gallery/warline</a>
- 12. Send Putin to Jupiter. <a href="https://putina.net">https://putina.net</a>
- 13. Aid For Ukraine. <a href="https://donate.thedigital.gov.ua">https://donate.thedigital.gov.ua</a>
- 14. Ukrainians can cross the border with Moldova and Poland using the documents in Diia. <a href="https://dpsu.gov.ua/ua/news/%20video%20-ukrainci-mozhut-peretnuti-kordon-z-moldovoyu-ta-polshcheyu-za-dokumentami-v-dii/">https://dpsu.gov.ua/ua/news/%20video%20-ukrainci-mozhut-peretnuti-kordon-z-moldovoyu-ta-polshcheyu-za-dokumentami-v-dii/</a>
- 15. Law of Ukraine "On Amendments to the Tax Code of Ukraine and Other Legislative Acts of Ukraine Concerning the Effect of Norms for the Period of Martial Law". <a href="https://zakon.rada.gov.ua/laws/show/2120-20#Text">https://zakon.rada.gov.ua/laws/show/2120-20#Text</a>
- 16. Law of Ukraine "On Cloud Services". <a href="https://zakon.rada.gov.ua/laws/show/2075-IX#Text">https://zakon.rada.gov.ua/laws/show/2075-IX#Text</a>
- 17. Proposals of the President to the Law "On Virtual Assets". <a href="http://w1.c1.rada.gov.ua/pls/zweb2/web-proc4\_1?pf3511=69110">http://w1.c1.rada.gov.ua/pls/zweb2/web-proc4\_1?pf3511=69110</a>
- 18. Official Telegram channel of Mykhailo Fedorov. <a href="https://t.me/zedigital/1368">https://t.me/zedigital/1368</a>
- 19. Supporting business in times of war. <a href="https://business.diia.gov.ua/wartime">https://business.diia.gov.ua/wartime</a>
- 20. Business for Ukrainian companies. <a href="https://www.bizfo-rukraine.com">https://www.bizfo-rukraine.com</a>
- 21. Diia.City. <a href="https://city.diia.gov.ua/en/">https://city.diia.gov.ua/en/</a>
- 22. eVorog-bot. <a href="https://t.me/evorog\_bot">https://t.me/evorog\_bot</a>

- 23. STOP Rusian War bot. <a href="https://t.me/stop\_russian\_war\_bot">https://t.me/stop\_russian\_war\_bot</a>
- 24. Bachu. https://bachu.info
- 25. Help for veterans and their families. <a href="https://t.me/ua veteran bot">https://t.me/ua veteran bot</a>
- 26. More than UAH 200 million has been raised for the army through Diia. <a href="https://t.me/mintsyfra/2830">https://t.me/mintsyfra/2830</a>
- 27. Official Telegram channel of Mykhailo Fedorov. https://t.me/zedigital/1399
- 28. Official Telegram channel of Mykhailo Fedorov. https://t.me/zedigital/1392
- 29. <u>ePidtrimka</u>. https://guide.diia.gov.ua/view/nadannia-dopomohy-v-ramkakh-prohramy-iepidtrymka-u-zviazku-iz-vtratoiu-chastyny-zarobitnoi-platy-dokhodu-robota-ekonomichna-diia
- 30. Official Telegram channel of the Office of the President of Ukraine <a href="https://t.me/OP\_UA/6039">https://t.me/OP\_UA/6039</a>
- 31. eDopomoga. <a href="https://edopomoga.gov.ua">https://edopomoga.gov.ua</a>
- 32. Humanitarian Aid Portal. <a href="https://help.gov.ua">https://help.gov.ua</a>
- 33. Air Alarm App. App Store. <a href="https://apps.apple.com/ua/app/повітряна-тривога/id1611955391">https://apps.apple.com/ua/app/повітряна-тривога/id1611955391</a>
- 34. Air Alarm App. Google Play. <a href="https://play.google.com/store/apps/details?id=com.ukrainealarm">https://play.google.com/store/apps/details?id=com.ukrainealarm</a>
- 35. All-Ukrainian Online School platform. <a href="https://lms.e-school.net.ua">https://lms.e-school.net.ua</a>
- 36. Official Telegram channel of Mykhailo Fedorov. https://t.me/zedigital/1420
- 37. Pererobka. <a href="https://pererobka.org.ua">https://pererobka.org.ua</a>
- 38. Turbotnyk. https://t.me/turbotnyk\_bot
- 39. The Projector Creative & Tech Foundation. https://prjc-trfoundation.com
- 40. Mariupol now status. <a href="https://t.me/city\_state\_map\_bot">https://t.me/city\_state\_map\_bot</a>
- 41. Installation of the Internet in shelters. <a href="https://wifi.kyivcity.gov.ua">https://wifi.kyivcity.gov.ua</a>
- 42. Russian-Ukrainian war: Dokaz. <a href="https://dokaz.gov.ua">https://dokaz.gov.ua</a>
- 43. War of 2022 | Ukraine | Crimes of the occupiers | Tribunal. https://t.me/russian\_war\_tribunal\_bot
- 44. Warcrime bot. https://t.me/warcrime bot
- 45. Official Telegram channel of Volodymyr Zelenskyi. https://t.me/V\_Zelenskiy\_official/1018
- 46. My history of the war in Ukraine. <a href="https://mywar.mkip.gov.ua">https://mywar.mkip.gov.ua</a>
- 47. «Survival Market». As a result of the war, every second Ukrainian lost his job. What happens next? <a href="https://biz.liga.net/ua/ekonomika/all/article/rynok-vyjivaniya-iz-za-voyny-kajdyy-vtoroy-ukrainets-poteryal-rabotu-chto-budet-dalshe">https://biz.liga.net/ua/ekonomika/all/article/rynok-vyjivaniya-iz-za-voyny-kajdyy-vtoroy-ukrainets-poteryal-rabotu-chto-budet-dalshe</a>

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