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THE DIGITAL ECONOMY: CHALLENGES AND OPPORTUNITIES

Permanent development and invention of technologies impacts not only science, but it changes the society, economies, and all economic agents. It does not alter the outcome of most processes, but it sets a new way of doing everything – a more efficient and quicker way, therefore, global economy adapts and transforms into digital economy. It is expected that the share of digitized enterprises in the world GDP will exceed 50% [1].

The digital economy distinguishes itself from a conventional economy by depending on digital technology, online transactions, and its transformative impact on established industries. COVID-19 became a significant push, which accelerated digital economy's growth, because of lockdowns, remote work, shopping etc. Even though the effects of Covid have already been decreased, digital economy is still undergoing constant evolution and rapid expansion, pursuing emerging technologies and innovations. In Ukraine, the war became an additional impetus for the development of the digital economy, since it is less dependent on physical assets than industry or agriculture [2].

On one side of the coin, digital economy partially benefits firms and households. Due to social media, businesses can directly connect with their future employees or partners. Furthermore, social media allows micromarketing – specifically targeted advertisement (recommendation systems), which is very efficient and cheap. Improved technology and innovations make production process more efficient – "lean production", which lowers costs in long-run.

Another benefit is e-commerce websites, that allow firms to expand, scalable and enter new markets. As well, digital economy reduces barriers to entry, due to avoidable physical costs (i.e., rent). This increases contestability of markets and increases competitors for companies, which improves quality of product or service for consumer (i.e., household). As well, it engaged to create new businesses, which promotes entrepreneurship. Moreover, firms can offer wide product selection without the limitations of physical shelf space. This helps to counteract "long tail" issues and sell more niche and low-impact products. Households also benefit from it, as they can leave quick feedback to companies, which is very useful for firms, and get better quality products. Also, digital economy solves "Principal Agent problem", as comparison websites decrease information asymmetry [3].

Overall, change to digital economy made consumers more involved into business and increased their contribution to markets. If consumers used to be dependent on Agents and firms, now they are independent as free and permanent access to internet allows them to find out more, for example, reviews, companies reputation and origin etc. Digital economy played a significant role by improving market cooperation worldwide. First of all, markets are opened 24/7 and can be accessed from any place at any time, which made trading much faster and cost efficient. Secondly, firms based in Ukraine can easily order any products or goods from overseas, for example, China. Those will be shipped from Chinese market to Ukrainian and local markets in a few days for a low fee.

Moreover, digital economy provided an opportunity to create new markets, such as trading platforms, e-commerce websites, comparison websites and review platforms, which have significant impact on already existing. Those new markets and firms in them make increase customer awareness about certain aspects of the distributors, suppliers, or providers, which affects their sales, therefore profit. As a result of it, digital economy and competition expanded markets to a global scale and created new [4].

However, on the other side, increased competition due to lower entry barriers forces firms to compete, which is costly and intense. Technological innovation often leads to creative disruption by outperforming obsolete products, which pushes them out of the market by "Digital natives". As well,

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digitalization limits firms' ability to differentiate and takes away their unique selling point (USP). Some established firms have to adapt or shift their business models to stay relevant, which requires shift from original idea. Firms can't also speculate on customers due to their information asymmetry, as it is decreased by Internet resources. Companies often feel skills shortages, as it is hard to find highly skilled workers for certain areas in IT, which leads to competition for labor and increases costs for recruiting and training staff.

Another challenge is Intellectual property, as anything can be easily copied or shared. Also, companies collect a lot of personal data and information about their customers, which they have to keep safe and prevent data breaches, other way they might get sued or fined. Furthermore, regulatory compliance requires firms to navigate strict regulations, which can be costly and require legal and compliance expertise [1]. Finally, firms are missing out from benefitting from economies of scale, as they operate on digital markets, not physical. Once a benefit for consumers possibility to directly contact producers or suppliers, is the threat to retailers. Despite the changes on markets and social life of consumers, there is a great challenge arising to the government: how to control the online market and how to manage digital economy. Since there is no longer any physical connection between online firm and real world (i.e., assets, real estate) anything can be distributed on it, which might possess national security risks.

Therefore, Ukrainian government set up new police and government departments: cyberpolice and Ministry of Digital Transformation of Ukraine, whose role is to maintain digital security for population, prevent any hacker attacks from abroad and to control product distribution on markets. Another major call is to provide fair taxation on online business. This all requires additional funding from the budget and regulatory actions, which increases government spending and brings in the "opportunity cost".

Nevertheless, digital economy can significantly increase the effectiveness of future reconstruction of our country because digital sector has shown the greatest resilience since the beginning of the full-scale invasion. In particular, the Ukrainian IT industry is the only industry, which export volume increased in 2022. Digital technologies are currently improving and will continue to improve production efficiency, distribution of international aid and control over its use at even larger scale, which will reduce corruption risks.

Summing up, digital economy is a modern type of economy that made any process much more efficient and cost-effective at some point. In contrast to consumers, firms have greater access to global markets, however not only firms face new challenges, but government as well.

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