

Digitalization and COVID-19 in the Justice Sector

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Abstract. The digitization of society has significantly changed the tools that society uses in all aspects of life. One of them is the judiciary sector, where it has moved significantly from emails to video conferencing or from electronic files to blockchain. On the one hand, COVID-19 demonstrated possible improvements and led to the streamlining of activities in the judiciary, but on the other hand, it also showed significant differences between countries in their digitization progress. One of the recommended solutions to improve digital services is to increase the budget. Our correlation between the results of the ICT development index in courts and the percentage of ICT expenditure in courts shows that this factor is not sufficient. At the same time, it turns out that although the justice department is a subset of public administration and e-justice is a part of e-government, there is no visible relation between them in the results of the various indices. A prerequisite for the implementation of e-justice is not only expenses for ICT, but also user education, i.e., court staff, which are complementary to each other. Ensuring the availability and fairness of the justice administration is an important factor in the rule of law that affects the perception of the country among investors.

Keywords: e-justice, COVID-19, digitalization, ICT, e-government.

JEL classification: K40, D80, H41

1 Introduction

“The internet is the defining technology of our age. Connectivity and information are utilities, like electricity or water, that touch and influence every aspect of modern life.” [7]

The demand and supply of digital government services is constantly growing as the number of internet users increases. This growth has also been developing since before COVID-19. Although the rise in the number of internet users (by 10,7 %) was in line with the growth in users of e-governance services (by 10,4 %) in the last 6 years in EU,

the number of internet users accounts only for 85,3 % (2019) the number of e-government users is just 67,3 % (2019) [10] [11].

Moreover e-justice has a specific position within e-government. It is an essential part of electronic administration in the field of justice when we talk about the formation of its modern public version. E-justice can be found under the more general umbrella term of e-government [4] and is a component of a comprehensive e-government system [32].

Information and communication technology (ITC) for courts is for:

- the back office (as a support for the processes that relate to the case administration, document production and court management),
- the external communication (as a communication channel with judicial parties and the external environment) and
- the courtroom (as a support and way to check the process in the courtroom) [30].

ICT has spread widely, becoming an element often budgeted for and integrated in many courts' activities, procedures, and practices. The European Commission for the Efficiency of Justice (CEPEJ) stated in 2006 that, although huge efforts are being made and financial resources are being used in ICT, the use of ICT often fails to bring the efficiency, productivity gains and service improvements that have been promised. At the same time, it points out that once technologies are in place, they need to be maintained, as applications need to be updated quite often in the light of legislative amendments [21]. These conclusions are also relevant in 2021.

The use of ICT can strengthen justice systems and make them more accessible, efficient, resilient and ready to face current and future challenges [14]. Digitization has definite positive effects, but it certainly also has negative ones. An example for this is a study that has shown that 50% of applicants heard via video link were refused bail, compared to 22% of those heard in person [33]. The increased use of digital tools in the justice sector should not be an obstacle but a tool to increase fairness [14].

The well-progressed development and proper use of ICT is an important element of well-operating judicial systems [20]. Efficient judicial systems have a positive impact on the growth rate of turnover and the growth rate of the number of firms [2]. The well-functioning judicial system relates to higher independence, which can increase the average turnover growth rate, productivity [2] and foreign direct investment inflows [3]. Good governance, including the rule of law can help long-term inclusive growth [23]. But we must remember that the efficiency of an institutional structure is not a reason but a result of growth [28].

One of the factors affecting the extended length of court proceedings (thus influencing the effectiveness of justice) is that a larger share of the justice budget is devoted to the ICT of courts. However, Contini and Cordella show that ICT is not a universal remedy to achieve fair justice in reasonable time. Many more organizational factors need to be addressed [5] [6]. Nonetheless, larger shares of the justice budget for automation are associated with better judicial performance [26].

The development and progress of ICT in courts can be monitored through the evaluation of CEPEJ, when the evaluation from 2006 (data 2004) quantifies ICT in courts through tools such as emails, electronic files, etc. [21], but the European

Commission's ICT evaluation from 2020 (data 2019) in courts via blockchain, video conferencing or artificial intelligence [16] [14]. CEPEJ already prepared principles of the Ethical charter on the use of artificial intelligence in judicial systems and their environment [15] and on the EU level is The E-Justice Strategy and Action Plan 2019-2023, in which artificial intelligence and blockchain in the justice field are identified as priority areas [9].

1.1 COVID-19

The justice system in any country plays an important role in COVID-19 crisis because it must be protected and be ready to protect people (domestic violence, job losses, evictions etc.) and firms (bankruptcies, debt etc.) in specific situations, which occur during crisis [29]. The well-prepared judicial system will protect the weaker parties and ensure justice, so the rule of law should be followed as well.

A significant rise in litigation is expected related to

- The business: An increase in commercial disputes is expected due to breach of contract. Labour disputes are anticipated because of redundancies and bankruptcy of employers. Another area that would be affected may be litigation due to tax obligations, which may be caused by disputes over the tax applications of financial benefits from the state during the lockdown [29].
- The unemployment: The unemployed will dispute the protection of their employment contract, social benefits, or other unemployment benefits [24].
- The women and children: Domestic violence against vulnerable populations is expected to increase during the pandemic. At the same time, due to the financial problems of households caused by job losses, the rate of evictions is expected to increase as well [27].
- The consumer: The number of consumer disputes will increase due to the postponement of holidays, border restrictions or increased online shopping [24].

This type of health crisis may be repeated. The CEPEJ prepared the following important principles that can help during crisis and not only protect the law, but also protect the people, who work in court:

- Human rights and rule of law must be always protected, especially during a crisis.
- Access to justice (the access must be maintained as much as possible).
- Safety of person (teleworking as a solution).
- Monitoring case flow, quality, and performance (case management systems and mechanisms of statistical data collection).
- Cyberjustice (reducing the cybersecurity risks).
- Training (new curricula to support the justice professionals during and after a health crisis, including IT training).
- Forward looking justice (implement new long-term solutions for the crisis) [20].

Because of these five out of seven principles which relate to ICT in justice, it is possible to see how important ICT in justice is in the 21st century.

2 Methodology and variables

Based on the initial theoretical framework on ICT in justice, we have defined several hypotheses, which we tested in the next section. We used the correlation function and the standard deviation function.

H1: There is a strong correlation between courts' expenditure on ICT and the ICT court index.

H2: The results of states with e-government influence e-justice.

H3: Positive impact of COVID-19 on e-justice.

Relevant dates about digitalization, which is important during COVID-19, are from:

- EU Justice Scoreboard and
- CEPEJ Evaluations Report

CEPEJ has been collecting data on the computerization and electrification of on behalf of the Council of Europe countries every two years since 2006. It also collects data on courts' expenditure for digitization. At the same time, the European Commission also processes data from the CEPEJ and creates a special report about the evaluation of the justice systems in EU countries. In 2020, the European Commission collected data on digitization, which was needed for the operation of the courts during COVID-19. To test the correlation between e-justice and e-government, we used data on the digitization of public administration from the UN, the OECD, and the EU. Due to data availability issues, we only used data for all CEPEJ countries in the case of the correlation between ICT expenditure and the ICT development index. In other cases, we used data only for EU countries.

The data on developments in justice in Slovakia during COVID-19 in 2020 was published by the Ministry of Justice of the Slovak Republic.

3 Results

To analyse the impact of the court budget on ICT regarding digitization results, we chose data from the ICT index and the share of ICT spending on the court budget. In 2020, CEPEJ published data on the ICT Development index in justice for the first time (data 2018), which combines results on digitization in the following areas of justice: development rate, communication with courts, courts and case management, decision support in civil, administration and criminal cases.

ICT spending needs a longer period to translate into practice, so we use the years 2014 and 2015. By analysing the relationship between expenditure on IT and the ICT index, we can observe that the variables have a negative correlation (- 0,05). It means that the rising costs of digitization slightly reduce the impact of it (Fig. 1).

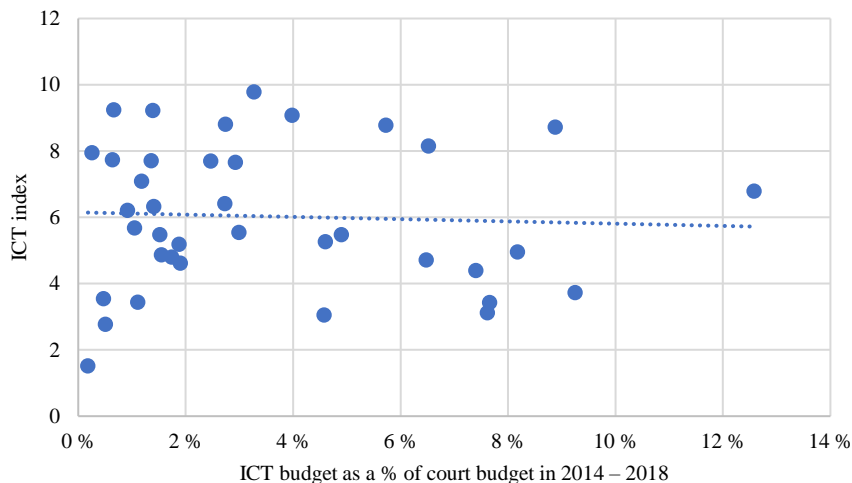


Fig. 20. Correlation between ICT budget as a % of court budget in 2014 – 2018 and ICT index in 2018

Data source: [16].

The same results were confirmed in the previous years, 2010, 2012 and 2014, when the values of the correlation parameter were close to zero, so there was no correlation between ICT expenditure and ICT results [17] [18] [19]. The reason for this zero correlation between variables may be, for example, that countries use significant financial resources to maintain existing systems without developing new and modern ICT. Another possible reason may be that, although they invest in ICT, they also invest in other areas of justice than those pursued by CEPEJ.

The challenge for each country is not only to have a sufficient ICT budget, but also to provide sufficient training for ICT judges, as the two areas complement each other [26]. Although the average ICT training for judges in 2016 – 2019 was between 23,8 – 25,5% (share of continuous training of judges on various types of skills), up to four countries (EU 27) in the given period reported 0 % of training in ICT skills.

A positive relationship between e-government and e-justice is to be expected because e-justice is another part of the digitalization of public administration. However, the results of the correlations show that there is a very weak positive correlation between the digitalization indices of public administration. The same results are confirmed in relation to the idea of telecommunication infrastructure or the idea of online services. There is a medium correlation between the results of the correlation between ICT justice and ICT tools during COVID-19. It follows that individual states must focus on specific investments in ICT in the courts and it is not possible to rely only on general investments in electronic public administration or vice versa.

Table 35. Correlations between ICT justice index and selected indexes

organization	UN	UN	UN	UN
name of index	E-Government Index	E-Participation Index	Online Service Index	Telecommunication Infrastructure Index
correl	0,26	0,15	0,30	0,15

organization	OECD	EU	EU	EU
name of index	E-gov index	ICT tools during COVID-19	The Digital Economy and Society Index	The Digital Economy and Society Index - Digital Public Services
correl	0,10	0,69	0,11	0,18

Data sources: [34] [10] [25] [12].

3.1 COVID-19

Most EU Member States use digital solutions, which were also useful during COVID-19. At the same time, however, COVID-19 also brought new challenges in the digitization of justice, to which individual states have already contributed and must do so further.

Digital tools played a major role during the COVID-19 waves, as they allowed litigants to communicate with the courts, continue hearings, supplement evidence, or render judgments. These tools have made it possible not only to continue working, but also to save the costs associated with a physical participation in hearings or postal services.

The data shows that countries were ready to provide evidence filed in a digital form. Nevertheless, they were insufficiently prepared for the challenges of distance communication, and especially had trouble conducting the oral part of the procedure entirely via distance communication technology. Figure 2 shows that there are differences in countries' approaches to e-justice. The most trivial difference can be found in the case of digital access to court proceedings; for instance, when the electronic acknowledgment of the receipt proving submission of documents with the court is needed. A negative example is again distance communication in which the most significant differences between countries can be found.

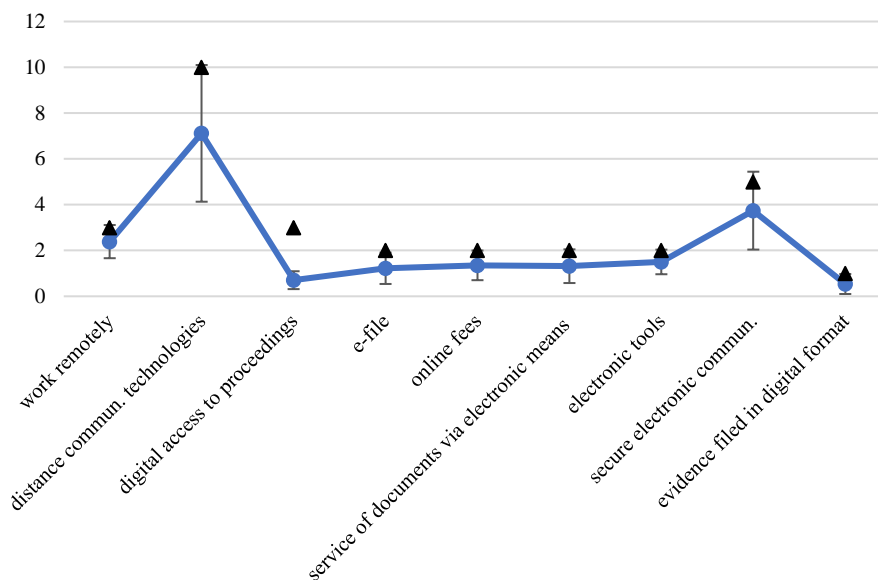


Fig. 21. Digital tools in courts during COVID-19 in EU-27 countries

Data source: [12].

It is too early to say how serious the impact of the COVID-19 pandemic on the efficiency of courts in handling cases will be, but several figures can already provide some initial insights on how the justice systems responded to it, including on how national courts adapted their procedures.

Statistics about the judiciary for 2020 are not yet available from the CEPEJ, so an international comparison is not possible. However, the results from Slovakia show that although the Slovak courts are among the top five EU countries, in terms of digitization, which was needed at the time of COVID-19, the number of hearings was reduced by 20 % in 2020 compared to 2019. The largest decrease occurred in March 2019 by 47 %, in April 2019 by 80 % and in May 2019 by 41 %. The most significant decrease in the number of hearings occurred in the business agenda (by 29%). Also, the data on the filing of new disputes show a decline in filing during lockdowns in 2020 compared to 2019. At the same time, however, it must be said that the number of petitions to the courts has been declining for a long time. Because of this data, it is possible to analyse the highest year-on-year decrease in petitions to the court in commercial disputes, which is by more than 11%. Disputes over consumer contracts fell by 8,6%. The data show that the preconditions for the growth of petitions to the court have not been met. However, they may rise again in the years following the end of the restrictions [1].

In Slovakia, the assumption of experts who expected an increase, the number of litigations in selected areas due to COVID-19, was confirmed. In Slovakia, data for 2020 show a correlation between the rising unemployment rate and proposals for labour disputes in the courts. Due to the increase in deaths, the number of inheritance

proceedings has also naturally increased. Due to restrictions on freedom of movement, homework, deteriorating household income, an increase in the number of marital divorces was expected in Slovakia. However, this expectation for 2020 has not yet been met. Expectations of an increase in family law proceedings due to possible conflict situations that could arise during a pandemic have also not been met [1]

4 Conclusions and policy implications

The comprehensive impact of ICT on individual courts and countries during the first wave of COVID-19 will only be possible if data from the CEPEJ is available, which shows the number of cases, clear rates, and other indicators about the efficiency of the judiciary during the pandemic year 2020. COVID-19's continuing impact on society and businesses, including the judiciary, which will be important to monitor immediately after the lifting of restrictions and the end of several state measures to mitigate the economic effects of the pandemic.

In ICT, national states should focus on the recommendations prepared by the CEPEJ, which have also been evaluated by the European Commission and show significant differences between countries. It is not possible to say which areas countries should focus on first, but an important determinant of the continued use of e-justice should be sufficient cyber protection for users. Judges must also have accessible and modern tools for distance communication.

An important finding is that there does not appear to be a relationship between the overall digitization of public government and the digitization of justice. This conclusion has a significant impact on the direction of expenditures, which are not evenly distributed between the two levels in each country. The overall digitization of public government should go hand in hand with the digitization in other areas of public administration as well as of justice. In addition to investing in e-justice, countries need to invest in the training of judges in ICT, as the two areas are interconnected.

As several studies have shown, it is essential that countries focus their efforts on ensuring a fair judiciary that citizens and businesses can trust. One of the tools for this is digitization, which, among other things, reduces corrupt behaviour. An accessible and fair judiciary during health crises may appear to be a factor influencing the development of future investments.

Answers to the questions of the comprehensive effectiveness of e-justice for the management of civil, administrative, and criminal cases will be of interest in further research.

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