DIGITALIZATION OF LOCAL LEGISLATION - POTENTIAL USES-CASES FROM HUNGARY

Gergely László Szőke
Associate professor, University of Pécs, Faculty of Law
Corresponding address: szoke.gergely@ajk.pte.hu
ORCID: 0009-0003-1873-6227

Adrián Fábián
Full professor, University of Pécs, Faculty of Law
Corresponding address: fabian.adrian@ajk.pte.hu
ORCID: 0000-0003-0103-3077

Kristóf Benedek Fekete
Assistant lecturer, University of Pécs, Faculty of Law
Corresponding address: fekete.kristof@ajk.pte.hu
ORCID: 0009-0002-1536-8409

Dominik Horváth
Assistant lecturer, University of Pécs, Faculty of Law
Corresponding address: horvath.dominik@pte.hu
ORCID: 0009-0006-7984-7563

Gergő Kollár
Junior research fellow, University of Pécs, Faculty of Law
Corresponding address: kollar.gergo@ajk.pte.hu
ORCID: 0009-0008-4595-2941

Erika Lutring
Doctorate student, University of Pécs, Doctoral School of Law
Corresponding address: lutring.erika@ajk.pte.hu
ORCID: 0009-0008-1955-654X

Péter Tilk
Full professor, University of Pécs, Faculty of Law
Corresponding address: tilk.peter@ajk.pte.hu
ORCID: 0009-0001-9387-6591

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ABSTRACT
The digitalization of local legislation can take several directions: on the one hand, the automatization of the legislative process itself (or certain elements thereof) and, on the other hand, the "coding" of the legislation that has been drafted ("Law as a Code" concept) so that it can be almost instantly implemented in the various legislative systems, thereby enabling certain legislative sub-systems to implement the "coded" legislation automatically and immediately, or enabling them to track changes automatically. In our paper, after a review of the relevant literature, we examined the possibilities and limitations of the realization of the concept in practice starting at the very first phase: what attitudes and demands can be identified by the local authorities.

KEYWORDS
Local Legislation; Digitalization of Legislation, Law as a Code, Rules as a Code, Legal Logic.

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I. Introduction

Since 2010, we have seen the implementation of a number of concepts in Hungary aiming at digitalization[1] and making administration faster, more flexible and more efficient for customers. However, the digitalisation of public administration should not be assessed solely from the perspective of organisational efficiency, since it is also closely connected to the transparency of administrative action, including the accessibility, traceability and comprehensibility of administrative and regulatory processes.[2] Regarding the courts, the digitalization process also started a few years ago, with many services and procedures available electronically. In these areas, there have been similar developments across Europe, and different LegalTech solutions "did not only affect the private sector of legal services but have found their way into the field of the judiciary in some jurisdictions."[3] However, this paper does not focus on these issues, but rather on the digitalization of legislation, especially local legislation, and its future potential uses.

The digitalization of local legislation can take several directions: on the one hand, the automatization of the legislative process itself (or certain elements thereof) and, on the other hand, the "coding" of the legislation that has been drafted ("Law as a Code" concept) so that it can be almost instantly implemented in the various legislative systems, thereby enabling certain legislative sub-systems to implement the "coded" legislation automatically and immediately, or enabling them to track changes automatically.

The use of advanced information and communication technologies in the field of legislation – to support consultation on draft legislation, to simplify drafting of legislation, to publish legislation, to facilitate access to existing legislation, etc. – is no longer considered to be an absolute novelty. It is clearly a decade-old trend.[4] In Hungary, the Integrated Legislative System (ILS), launched in 2016, is perhaps the most significant milestone in the digital decision-making process of the government to date. As the main module of the ILS, the Electronic Legislative Drafting System (ELDS) serves the 3 main specialized systems, "ParLex", which

[1] Anett Kalmárné Pölöskei, *Elektronikus közigazgatás* [Electronic Public Administration] (2018) 5 <https://bmkszf.hu/dokumentum/2944/EKozigazgatas.pdf> accessed 31 March 2026.

[2] Balázs Hohmann, 'The Principles and Fundamental Requirements of the Transparency on the Public Administrative Proceedings' in Suresh P (ed), *Proceedings of the IIER International Conference, Dubai, UAE* (International Institute of Engineers and Researchers 2019) 1–4.

[3] ana Soukupová, 'AI-Based Legal Technology: A Critical Assessment of the Current Use of Artificial Intelligence in Legal Practice' (2021) 15(2) Masaryk University Journal of Law and Technology 279, 280 https://doi.org/10.5817/MUJLT2021-2-6

[4] Tímea Drinóczi, 'Összehasonlító jogalkotástan: trendek és kihívások' [Comparative Theory of Legislation: Trends and Challenges] in Tibor Nochta and Gábor Monori (eds), *Ius est ars – Ünnepi tanulmányok Visegrády Antal professzor 65. születésnapja tiszteletére* [Ius est ars – Commemorative Papers in Honour of the 65th Birthday of Professor Antal Visegrády] (Pécsi Tudományegyetem Állam- és Jogtudományi Kar 2015) 172–173, 175, 177.

supports the parliamentary legislative drafting and decision-making workflow, "GovLex", which supports the governmental legislative drafting workflow, and "LocLex", which is used for drafting municipal decrees.[5]

Another potential approach to the digitalization of legislation could be the creation, publication and immediate integration of legislation into certain specialized systems as computer codes, either during the legislative process or after the legislation has been adopted, a concept widely referred to as "Law as a Code" or "Rules as a Code" (RaC).[6]

A clear, widely accepted definition of "Law as a Code" has not yet been crystallized in the literature.[7] The essence of the concept can be captured in the authentic representation of legislation in a form suitable for machine interpretation, as a computer program code,[8] that is, it aims to produce normative content in a computer-interpretable form, in addition to the current natural language form, optimized for human understanding and interpretation. This is not just a machine-readable format, but a machine-consumable format, which requires that the legal norm "is available in such a code or code-like form that the software can understand, interact with, for example, to perform a calculation or establish an eligibility condition."[9]

Some of the legal norms are ultimately reflected as computer codes even today, in many cases, business stakeholders use software solutions to comply with legislation,[10] but we can also think of how an accounting program can perform certain calculations, or how specialized administrative systems are developed to implement the legislation. However, coding is done independently of the legislator and, in some cases, by different actors in different ways. A central element of the RaC concept is that the transformation of legislation into codes takes place within some kind of organized and regulated framework, even at the level of legislation. This has the significant added value of enabling different software solutions to interpret the law directly, thus minimizing the time between legislation and implementation and enabling efficient, uniform application of the law.

This concept can be applied at almost all levels of legislation. In addition, in our view, there are particularly significant advantages to be gained from the fact that

[5] E Balás, 'IJR és Nemzeti Jogszabálytár: mi változik április 1-től?' [ILS and National Legislation Repository: What Will Change from 1 April?] (Jogkövető, 2021) <https://jogkoveto.hu/tudastar/integralt-jogalkotasi-rendszer> accessed 31 March 2026.

[6] These terms will be used as synonyms throughout the paper.

[7] James Mohun and Alex Roberts, *Cracking the Code: Rulemaking for Humans and Machines* (OECD Working Papers on Public Governance No 42, OECD Publishing 2020) 16 https://doi.org/10.1787/3afe6ba5-en

[8] Mohun and Roberts (n 6) 16–17.., See also Matthew Waddington, 'Machine-consumable Legislation: A Legislative Drafter's Perspective – Human v Artificial Intelligence' (2019) 2 *The Loophole* 21, 23 https://doi.org/10.1787/3afe6ba5-en

[9] Mohun and Roberts (n 6) 18.

[10] Mohun and Roberts (n 6) 16–17.

interfaces between legislative provisions - whether at the same or different levels of the sources of law - can be better identified through coding, and even, in some cases, changes to a related provision that are inevitably required as a result of a change in one of the norms can be automated.

The Law as a Code approach is unlikely to apply to the legal system as a whole, and it is more realistic to suggest that this concept may represent a way forward in the area of certain rules[11] that involve quantifiable processes in the application of and compliance with the law and require less discretion, or in the resolution of challenges arising from the interfaces of legislative provisions. We believe that, in addition to a general approach to the concept, it may be useful to analyze a specific, well-defined use-case. With this in mind, our research focuses to local legislation and implementation, namely to examine the need for digitalization options in relation to the municipalities' internal law drafting (internal policies).

However, before presenting the details of the research in Chapter 3, it is worth briefly reviewing the basic literature on the coding of law.

II. Literature Review

Examining the regulatory role of technology and the interface between technology and law as regulatory instruments is not a recent development. One of the best-known milestones in this discourse is undoubtedly the work of Lawrence Lessig, his essay "The Laws of Cyberspace",[12] presented at a conference in 1998 draws attention to the fact that in cyberspace, in addition to the regulatory role of law, the regulatory power of the "code" is very important, and that the latter ultimately has as much coercive power over the behaviour of users as the physical infrastructure of the real world. By code, Lessig mean "the software and hardware that constitutes cyberspace as it is—the set of protocols, the set of rules, implemented, or codified, in the software of cyberspace itself, that determine how people interact, or exist, in this space."[13]

The Law as a Code concept seeks to eliminate the discrepancy between legislation and the regulatory impact of technology, including time lags (rules often take a significant amount of time to be coded into software) and differences in interpretation (the code ultimately does not produce the exact output intended by the legislator in the text of the legislation).[14] In addition, the relevant literature identifies a number of other advantages of the concept, in particular the testing and simulation of the impact of public policy objectives,[15] the increased transparency of

[11] Mohun and Roberts (n 6) 19.
[12] Lawrence Lessig, 'The Laws of Cyberspace' (1998) <https://cyber.harvard.edu/works/lessig/laws_cyberspace.pdf> accessed 31 March 2026
[13] Lessig (n 11) 3-4.
[14] On the translation-gap phenomenon, see Mohun and Roberts (n 6) 31-32.
[15] Waddington (n 7) 30-31.

the codes that ensure implementation,[16] the clear and unambiguous formulation of the norm, which is unavoidable for coding purposes,[17] or the reduction of bureaucracy in the application of the law.[18] Furthermore, there are of course significant limitations and challenges in applying the concept, which may arise, for example, from the complexity and rapid change of legal relationships or the possible lack of equivalence between the natural language version and the coded text.[19] It can be a serious problem that the rules and codes, while transparent in principle, can be difficult for the average person to understand. This "*phenomenon may undermine confidence in the predictability of law and in law in general, and the legitimacy of law*".[20] From this perspective, transparency cannot be understood as the mere formal availability of the applicable rule or code; it also requires that the addressees and the bodies applying the law are able to understand, reconstruct and verify the normative links between the natural-language rule, its digital representation and its practical administrative application.[21] The risks of Rules as Code extend beyond mere technical translation errors. Kennedy identifies a particularly serious structural problem, the 'ossification' whereby the executable code, once deployed, becomes practically irreversible, embedding potentially mistaken legislative interpretations and making subsequent corrections disproportionately costly.[22]

Classification of the levels of digitalization is also an important question in the relevant legal literature. Based on Wong's classification,[23] there are seven levels of digitalization of legislation from a technological point of view, and an overview of these will help to put the cases we are researching into context. These are the followings:

- Level 0: the authentic medium of the legal instrument is analogue (paper-based) and it does not exist in any digital or electronic form.

[16] Mohun and Roberts (n 6) 41.

[17] Nicoletta Rangone, 'Artificial Intelligence Challenging Core State Functions: A Focus on Law-Making and Rule-Making' (2023) 8 Revista de Derecho Público: Teoría y Método 95, 104 https://doi.org/10.37417/RDP/vol_8_2023_1949

[18] Mohun and Roberts (n 6) 42.

[19] Mohun and Roberts (n 6) 31-32.

[20] Zsolt Ződi, *Platformok, robotok és a jog* [Platforms, Robots and the Law] (Gondolat 2018) 201.

[21] Balázs Hohmann, *Az átláthatóság értelmezése és követelményrendszere a közigazgatási hatósági eljárások tükrében* [The Interpretation and Requirement System of Transparency in the Light of Administrative Authority Procedures] (Novissima Kiadó 2022) 16.

[22] Kennedy also refer to an actual case: the Australian Pintarich case, in which an automated tax decision was found unreviewable under conventional judicial review standards because the relevant legal reasoning was embedded in software. Rónán Kennedy, 'Rules as Code and the Rule of Law: Ensuring Effective Judicial Review of Administration by Software' (2024) 16(1) Law, Innovation and Technology 170, 178–179, 185–187 https://doi.org/10.1080/17579961.2024.2313801

[23] Meng Weng Wong, *Rules as Code: Seven Levels of Digitisation* (Singapore Management University Centre for Computational Law 2020) 2–23 <https://ink.library.smu.edu.sg/sol_research/3093/> accessed 31 March 2026.

- Level 1: the legislation is available electronically (but not yet suitable for computer processing).
- Level 2: the level of use of digital applications and products. In this context, legislation can be accessed and applied through some specialized application (specialized systems) into which the provisions are written via the implementing programming language, typically as an "if-then-else" function. In this case, the service provider directly encodes the relevant legislation into the software.
- Level 3: the creation of a separate "rule engine", in the course of which a specialized, standardized programming language is used to encode the rules, which can then potentially be used by any application capable of processing that programming language.
- Level 4: creating ontologies. This entails the creation of machine-processable ontologies with definitions, typologies and sets of relations and rules to complement existing systems. Ontologies specialize in describing essentially constitutive rules and often provide answers to cross-cutting questions (e.g. what counts as a working day).
- Level 5: creating "digital twins". This involves the creation of a natural language version and a machine-processable coded version, integrated into the legislative process, simultaneously and with respect to each other during the first drafting, even by having a dedicated software develop the natural language version.
- Level 6: tooling automation. At this level, the coded version can be directly linked to services for automation purposes (e.g. expert systems, document generators, contract management systems).
- Level 7: universal adoption of RaC concept. This is not actually a new level in terms of technological implementation, the authors merely specifically mention the stage at which the use of the above becomes widely accepted.

Of course, these seven levels do not necessarily appear as purely distinct stages, they may overlap or some levels may be omitted, and, with the exception of the seventh level, each level may be interpreted in relation to a well-defined set of rules. The practice of encoding certain legal provisions in target software in certain areas of law, which is still widespread today, represents only level 2 under this classification.

Finally, we must mention that the Large Language Models (LLMs) may affect the RaC approach, so the potential role of LLMs in automating parts of the encoding process has attracted considerable research interest. Soni and Kennedy first emphasise a fundamental incompatibility: RaC systems rely on deductive reasoning applied to fixed, encoded rules, whereas LLMs operate through inductive, probabilistic inference – generating statistically likely strings of words rather than deterministically applying legal norms. This structural mismatch creates a 'black box' problem in the field of RaC: since LLM reasoning cannot be fully traced or

explained, integrating LLMs directly into RaC systems would undermine the transparency and predictability that the Rules as Code approach is designed to guarantee. According to the authors one answer may be Chain-of-Thought prompting ('CoT'), which „*involves providing a multi-step few-shot learning approach where a larger problem is broken down into smaller intermediate steps to solve before arriving at the final solution. The application of CoT in legal reasoning lies in breaking down complex legal questions into smaller steps that incorporate various legal equations such as court judgment, repeal of legislation and other factors.*"[24]

III. Methods and Results of the Research

In the field of digitalization of local legislation, the Faculty of Law and Political Sciences of the University of Pécs and one of its market partners, DMS One Kft., interested in potential software development, conducted research between July 2022 and March 2023, which was complemented by a research between October 2022 and September 2023, supported by the programme of the Ministry of Justice. In addition to a general literature review of the subject, we aimed to answer to the research question, that *how could the internal policy-making of municipalities (or other organisations with similar self-governing structures, such as universities) be affected by the use of IT tools to manage the links between the internal policies and the central legislation that partly determines their content; is there a need for such IT solutions on the part of the concerned organisations?*

Our assumptions were the following:

- A number of internal policies are adopted by the municipalities, the content of which is partly determined by central legislation, and which must be amended periodically in the light of changes to such legislation;
- Monitoring legislation in this regard and the resulting amendments to the policies requires significant human resources;
- IT tools can help organisations to identify the interfaces between internal norms and central legislation.

In the course of the research, we aimed to confirm or refute these assumptions, in short, to assess the need for such an IT solution. To this end, we chose a questionnaire survey and in-depth interviews as our research methods.

III.1. Research Methodology

The questionnaire survey (the content of the questionnaire can be found in Annex 1) had been carried out in the cities of three different counties of Hungary, assuming

[24] Keshav Soni and Rónán Kennedy, 'Rules as Code and Large Language Models' (Law School Policy Review, 28 February 2025) <https://lawschoolpolicyreview.com/2025/02/28/rules-as-code-and-large-language-models/> accessed 31 March 2026.

that, even without statistical representativeness, these cities roughly represent the cities of Hungary in terms of size and sensitivity to the problem.

Our questionnaire survey sought to answer the question of what "user" needs the technological implementation of digital lawmaking should meet, what priorities can be identified, and, on the other hand, our analysis is focused on local legislation, given that municipalities are those entities that issue the most legislation and have experience in using electronic specialized systems in recent years (since the introduction of the so-called ASP systems[25]). The sample was drawn from urban municipalities in three counties, as cities are considered to be the type of municipality where digital implementation of legislation and lawmaking can be identified as a more realistic vision compared to other (small) municipalities. The questionnaire was sent to all the cities (52) of county Somogy, Bács-Kiskun and Baranya, with the administrative assistance of the government offices of the counties concerned, in March 2023.

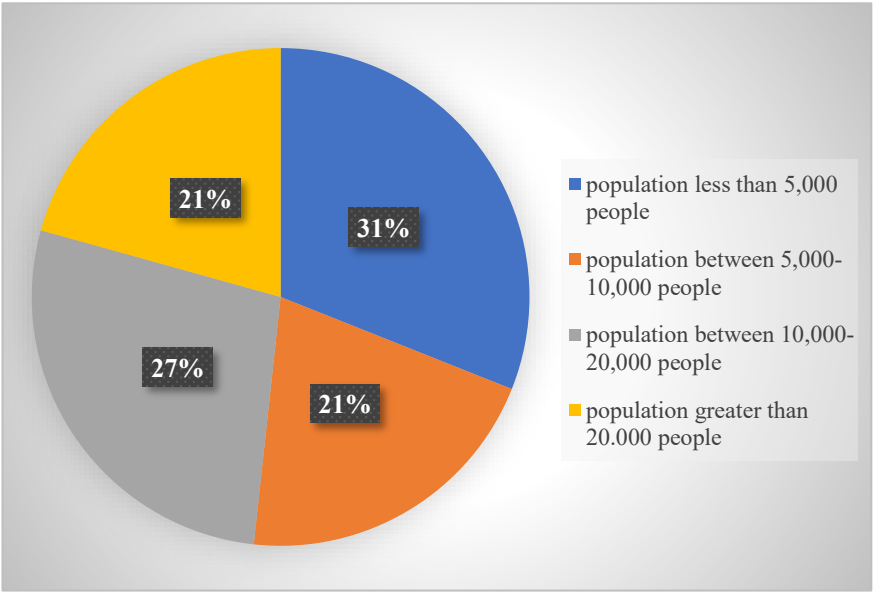
Moreover, in-depth interviews were conducted with some stakeholders to gain a deeper understanding of the issue and to collect feedback that could not be quantified in the questionnaire survey. The questionnaire was prepared jointly with a representative of a municipality, a county government office – the authority responsible for the legal supervision of municipalities – and a university, an organization with a large number of bylaws and operating under the principle of self-government.

III.2. Results of the Questionnaire Survey

The questionnaire received a total of 29 responses from the three counties (55% completion rate). Somogy and Bács-Kiskun counties had 10 to 10 respondents, while Baranya county had 9 respondents. The distribution by population of the cities that completed the questionnaire is shown in the figure below:

[25] The ASP system is composed of a framework system, specialized systems (e.g. municipal tax system, management system, real estate cadastral system, document management system), supporting systems and the data warehouse. See 'Az önkormányzatok szolgálatában' [In the Service of Municipalities] (Önkormányzati ASP Alkalmazásközpont) <https://alkalmazaskozpont.asp.lgov.hu/node/13> accessed 31 March 2026.

Figure 1 – Distribution of respondents by population



Source: Author's own empirical research, own edited.

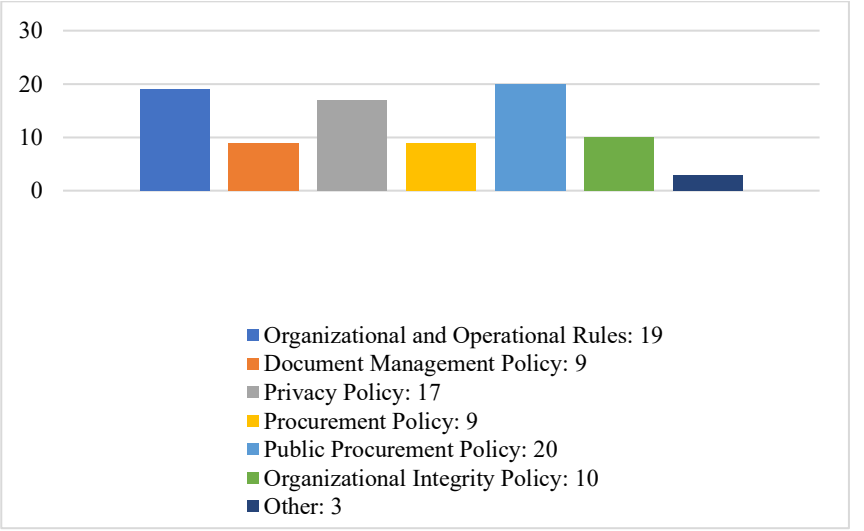
The questionnaire survey addressed the importance of using IT tools to support the recording and modification of policies ("How important do you think it is to have an IT system to support the recording and modification of your policies? (1 - not important; 5 - very important). The overall score of the responses to this question was 4.41 out of 5, i.e. the municipalities concerned (would) consider IT support for the management of the policies to be of great importance.

The questionnaire also addressed the question of which policies are most likely to be affected, i.e. which policies are most affected by the changing legislative environment. For this question, more alternatives could be selected from a choice of seven:

- Organizational and Operational Rules
- Document Management Policy
- Privacy Policy
- Procurement Policy
- Public Procurement Policy
- Organizational Integrity Policy
- Other

The responses suggest that all of the above policies have a significant "exposure" to changes in legislation. The results of the responses are summarized in the figure below.

Figure 2 - Aggregated designation of a given policy



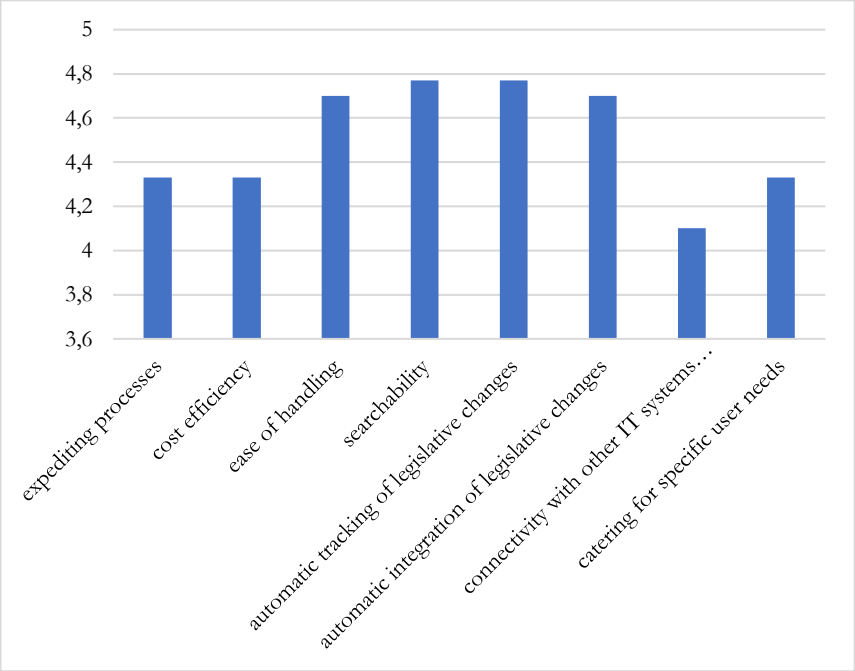
Source: Author's own empirical research, own edited.

From the aggregated results, it can be seen that exposure to changes in legislation is realistic for all of the pre-defined policies, but there are three in particular that are noteworthy also in this context: the Organizational and Operational Rules, the Privacy Policy and the Public Procurement Policy.

The research also assessed the expectations that municipalities think an IT system should meet. The relevant question read as follows: "Please rate on a scale of 1 to 5 the following aspects of IT systems supporting the management of policies:

- expediting processes
- cost efficiency
- ease of handling
- searchability
- automatic tracking of legislative changes
- automatic integration of legislative changes
- connectivity with other IT systems supporting decision-making
- catering for specific user needs."

Figure 3 - Summary of responses on expectations



Source: Author's own empirical research, own edited.

The aggregated results show that all pre-defined and potential "user-friendly" support services received high scores, with none scoring below 4 in importance. Among these high scores, searchability, tracking legislative changes and automatic integration of changes stand out, which shows that these are important requirements of the target group.

III.3. Experiences from the In-Depth Interviews

The in-depth interviews were based on the assumption that digitalization could also bring significant progress in the area of internal rule-making (policy-making), and that there are real and significant user needs and administrative burdens in this area.

An in-depth interview revealed that the Municipality of Terézváros, District VI of Budapest, operates according to more than 50 internal instructions and policies, which together "exceed 1,000 pages". The continuous adaptation of this body of local rules to the changing legislative environment is a "major challenge" for the staff of the municipality. The review is carried out on a quarterly basis and at least 10 to 15 pieces of legislation have to be taken into account, in particular in the areas of public finance, public procurement, labour and occupational health and

safety, data protection and whistleblowing. The drafting, reviewing and validation of internal policies is not a separate professional activity within the municipality, and there are no dedicated human resources available for this legal task.

It can be concluded that, although it is a real and continuous task (burden) for the offices of the municipalities to ensure the legal compliance of internal policies, this task is not carried out with sufficient intensity, given the human resources and time required, and the belief that "these regulatory instruments do not have the same role in a municipality as in a ministry."

Furthermore, "there are primary policies (public service, public procurement, commitments) that we keep up-to-date, and there are policies that are not used on a daily basis, which are more of a way of tracking events."

It is thought-provoking that in the office examined, legislative changes affecting internal policies are notified "on an ad hoc basis", in fact, it is the task and responsibility of the department of the office to monitor changes in the legislation to the portfolio of which the given sector belongs.[26]

A further in-depth interview sheds light on the same issue from the perspective of the county government office responsible for legal supervision.

According to the interviewee:

- "*The notaries of municipalities are often unable even to identify the cases in which policies are to be issued, as the regulatory area is very broad.*"

- "*In several cases it is unclear who is authorised to issue policies (notary, mayor) and whether the policy should be approved by the municipal council based on its content*."

- *"Once issued, the policies are not kept in force. In its reports, the State Audit Office often criticizes the absence of policies or the failure to revise them, or the confusion between the office's organizational and operational rules and its rules of procedure under the Public Finance Act."*

- *"The regulations are issued by the head of the body in a normative instruction under the Act on Legislation[27], which does not constitute a decision under the Act on Municipalities in Hungary[28], thus they do not have to be submitted to the legal supervisory procedure, and their content is not known to the government offices."*[29]

The experiences of the in-depth interview with the legal counsel of the University of Pécs are very similar. The University of Pécs operates according to a total of at least 1-2000 pages of about 120 different policies. Keeping up-to-date of this huge body of internal legislation is also "a very serious challenge due to the volume and the volatility of the legislation". The University has a wide range of activities and the relevant legislation is therefore also very diverse, including rules

[26] Based on an interview with Dr. Sándor Mogyorósi, notary (Office of the Municipality of Terézváros, District VI of Budapest), 25 March 2023.
[27] Act CXXX of 2010 on Legislation
[28] Act CLXXXIX of 2011 on Municipalities in Hungary
[29] Based on an interview with Dr. Bernadett Müllerné Juhos, director-general (Government Office of Baranya County), 29 March 2023.

on education, contracting, labour issues, employment protection, document management, public procurement or data protection. Monitoring changes is a routine task, with "two lawyer colleagues monitoring the Hungarian Gazette on a daily basis and reporting changes." However, this is a time-consuming task in itself, "as, first of all, the amendments relevant to the University have to be selected, and then the internal professional responsible for the area affected by the amendments has to be contacted and agreed whether the change in legislation requires a change in the policy."

The monitoring of changes is a continuous process, but policy changes are made every few months, according to the schedule of Senate meetings. There is no dedicated colleague (or department) whose sole responsibility is to prepare the amendments to the policies, but all the staff in the Legal Department are involved in the process to a greater or lesser extent.

Policies that are not up-to-date can pose significant risks, especially as they include many forms that are used in everyday processes. In a possible administrative or judicial procedure, it can cause serious problems if the day-to-day processes do not follow the legal requirements. The storage and management of policies in a uniform order, as well as the identification and visualization of the interfaces between policies and legislation, would be of great help in keeping policies up-to-date.[30]

Summarizing the experience of the in-depth interviews, it can be concluded that

- Municipalities/universities are responsible for the compliance of a large number and scope of internal standards with a wide range of legislation, which poses a significant challenge on a day-to-day basis, both in terms of monitoring changes and implementing amendments;

- In this area, any technical solution that could help to identify the link between policies and central legislation and to track changes to this central legislation would be of considerable help.

These findings are fully in line with the results of the questionnaire survey, complementing and explaining the reasons behind the results shown there.

IV. Conclusions

Among the possible directions for the digitalization of legislation, one of the most exciting issues is the practical application of the Law as a Code concept, the essence of which is that in addition to the form in which it is currently published in natural language, optimized for human understanding and interpretation, the normative content will be produced also in a form that can be processed by computers. Many levels of this can be envisaged, but as a result of our research we believe that rather

[30] Based on an interview with Dr. Emese Hadnagy, Head of Department (University of Pécs), 3 March 2023.

than a general, broad application of the concept, it is worth thinking in terms of small, focused projects that address a specific problem. In our study, we examined the directions of digitalization possibilities in relation to the internal rule-making (policy-making) of the municipality, the requirements for IT solutions and, above all, the existence of the need for them. In this area, we concluded that there is a significant user demand for exploring the links between internal policies and legislation, including the transposition of policy changes that inevitably result from legislative amendments, which the Law as a Code concept can also support.

STATEMENTS

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Data deposition and availability

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Author contributions (CRediT)

Gergely László Szőke: Conceptualization; Methodology; Investigation; Formal analysis; Resources; Data curation; Writing – Original Draft; Writing – Review & Editing.

Adrián Fábián: Conceptualization; Methodology; Resources; Writing – Review & Editing.

Kristóf Benedek Fekete: Investigation; Formal analysis; Data curation; Writing – Original Draft.

Dominik Horváth: Investigation; Formal analysis; Writing – Original Draft.

Gergő Kollár: Investigation; Formal analysis; Writing – Original Draft.

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PhD Studies in Administrative and ICT Law

ANNEX 1 – Questionnaire for municipalities

1. How important do you think it is to use an IT system in your office that supports the administrator's work in individual cases in the application of the law by the authorities?

(Please rate your answer on a scale of 1 to 5; 1 - not important; 5 - very important)

1 2 3 4 5

2. How important do you think it is to have an IT system to support the recording and amendment of your policies?

(Please rate your answer on a scale of 1 to 5; 1 - not important; 5 - very important)

1 2 3 4 5

3. Which are those policies the content of which is most affected by the changing legislative environment? (You can tick more than one answer)

- ☐ Organizational and Operational Rules
- ☐ Document Management Policy
- ☐ Privacy Policy
- ☐ Procurement Policy
- ☐ Public Procurement Policy
- ☐ Organizational Integrity Policy
- ☐ Other

4. Please rate on a scale of 1 to 5 (1 - not important; 5 - very important) the following aspects of IT systems supporting the application of law by authorities in specific cases:

- expediting processes
  1 2 3 4 5
- cost efficiency
  1 2 3 4 5
- ease of handling
  1 2 3 4 5
- searchability
  1 2 3 4 5
- automatic tracking of legislative changes
  1 2 3 4 5

- automatic integration of legislative changes
  1 2 3 4 5
- connectivity with other IT systems supporting decision-making
  1 2 3 4 5
- catering for specific user needs
  1 2 3 4 5

5. Please rate on a scale of 1 to 5 (1 - not important; 5 - very important) the following aspects of the IT systems supporting the management of the policies:

- expediting processes
  1 2 3 4 5
- cost efficiency
  1 2 3 4 5
- ease of handling
  1 2 3 4 5
- searchability
  1 2 3 4 5
- automatic tracking of legislative changes
  1 2 3 4 5

- automatic integration of legislative changes
  1 2 3 4 5
- connectivity with other IT systems supporting decision-making
  1 2 3 4 5
- catering for specific user needs
  1 2 3 4 5