

Legal Tech in Public Administration

Prospects and Challenges

Antonios Kouroutakis

15.1 INTRODUCTION

Humanity always moves forward. From the agricultural revolution, which substantially increased productivity with new tools and methods, and on to the industrial revolution with an unprecedented improvement of manufacturing processes. Another step forward is the recent transition from the industrial revolution to the information revolution. The information revolution has accelerated due to the growing computational power in combination with network connectivity, which allows every type of device to be connected to the Internet, while collecting and processing masses of data. Interestingly, big data and the Internet of Things has providing a bridge between the newer information economy and more traditional industries.¹

The information revolution affects every aspect of our life, such as communication, banking, learning and teaching, entertainment, and socializing, as well as in government and the administrative institutions. In some fields, the impact of the technology and information revolution is already apparent, as new kinds of value is created including, new forms of communication and marketing, the emergence of new business models in the financial industry (fintech), and the spread of social networks. Likewise, information, search, and predictive technologies have created opportunities, as well as disruption in the legal industry, with the emergence of legal tech (LT).²

In the field of public administration, the potential uses of new technologies have been primarily discussed in theory, but implementation has been slow, mostly in the form of experimental or pilot projects. As Section 15.2 will analyze the administrative use of technologies, at the experimental level, in a best-case scenario. A rapid shift, recently took place with economic and governmental lockdowns due to the COVID-19 pandemic. The pandemic is likely to have a

¹ “Adoption of standards brings credibility to technology advancements and facilitates an expanded interoperable marketplace.” National Science and Technology Council, “The National Artificial Intelligence Research and Development Strategic Plan” (2016) at 32 (“potential for AI, resulting in strong industry growth and commercialization of AI approaches”), www.nitrd.gov/PUBS/national_ai_rd_strategic_plan.pdf (accessed March 1, 2021).

² According to Law Society of England and Wales, the professional association of the solicitors for the jurisdiction of England and Wales, lawtech is “technologies that aim to support, supplement or replace traditional methods for delivering legal services, or that improve the way the justice system operates. Lawtech covers a wide range of tools and processes, such as: document automation, advanced chatbots and practice management tools, predictive artificial intelligence, smart legal contracts, and knowledge management and research systems.” See “What Is Lawtech?,” www.lawsociety.org.uk/support-services/lawtech/what-is-lawtech/ (accessed July 14, 2020).

lasting effect in the fields of administration and public law, as it has spurred the implementation of the new technologies to perform many functions remotely.

Within this framework, the chapter will focus on the existing use of LT in public administration, referred to in this chapter as “publictech,” and it will discuss the prospects of using new technologies to public sector efficiency, as well as the relationship between government administration and the citizens it is entrusted to serve. In addition, it will also discuss how new technologies may impact well-established principles of administrative law and procedure, such as due process, right to a fair hearing, transparency, and the protection of privacy.

Section 15.2 begins by describing recent projects to reform public administration, with a focus on the United Kingdom and the United States, that incorporate LT applications into public administration. Subsequently, the chapter focuses on the application of live chat services (chatbots), automated decision systems based on AI and machine learning, and the digitalization and virtualization of proceedings.

Section 15.3 will focus on the compatibility of such applications with the legal, constitutional, and administrative law values, such as due process and the right to a fair hearing, transparency, and right to privacy. It will analyze relevant case law and literature that considers the application of LT in public governance. Against this background, Section 15.4 will put forth a proposal. In particular, the chapter will argue that, before the employment of such innovative tools, a preliminary stage would be necessary, to assess and review their application and to assess their compliance with the existing legal framework.

15.2 THE PROSPECT OF LEGAL TECH IN PUBLIC ADMINISTRATION

The acceleration of information technologies has played a disruptive role in reshaping a plethora of industries, from finance and banking to medicine and marketing. New business models have emerged, reshaping businesses and the global market economy. The disruption of technology has impacted the traditional practice of law. A number of LT projects based on cloud computing, automation, AI and/or machine learning aim to modernize law firms and legal practice.³ With automated analysis of contracts, for instance, LT has revolutionized due diligence and contract review,⁴ legal research,⁵ and day-to-day tasks and operations in law firms.⁶

Initially, the role of government in the emergence of new technologies and AI mainly consisted in supporting research and development in these fields.⁷ The application of these new technologies in the government sector has proved to be, in various ways, also an opportunity and a catalyst for reform. Kraemer explains that “the era of E-Government, which can be defined as the use of IT within government to achieve more efficient operations, better quality

³ Susskind identifies a number of disruptive technologies in the legal field, e.g., automated document assembly, relentless connectivity, the electronic legal marketplace, e-learning, online legal guidance, legal open-sourcing, closed legal communities, workflow and project management, embedded legal knowledge, and online dispute resolution. For more details, see R. Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford: Oxford University Press, 2008) 99–145.

⁴ See, e.g., Diligen, offering contract review based on automation and machine learning, www.diligen.com (accessed July 14, 2020).

⁵ See, for instance, Ross Intelligence, aiming at making legal research more effective and efficient, <https://rossintelligence.com> (accessed July 14, 2020).

⁶ See, e.g., AbacusNext, a technology provider offering “practice management, payment processing, private cloud hosting, and document automation solutions,” www.abacusnext.com.

⁷ National Science and Technology Council, n. 1.

of service and easy public access to government information and services, is now underway.”⁸ As has long been predicted,⁹ information technology and computing power can bring about significant improvements and advancements not only in the private sector, but also in the public one. Within this context, governments and public administration may benefit from the use of LT in multiple areas, from special tasks (such as public procurement) to more general and day-to-day business, such as ordinary administrative or clerical decisions.¹⁰

For instance, the UK government has adopted a transformation strategy with fifty major projects to employ new technologies in various aspects of the administration to improve public services, make governance more efficient, and improve relationships between citizen and state.¹¹ According to an estimate, the implementation of these projects will realize almost 50 billion pounds worth of benefits.¹²

In the private sector, data collection, processing, and profiling play a critical role in the modern marketplace. Companies compete over big data and metadata, in order to generate insights into people’s preferences and create comparative advantages in the marketplace. Jack Ma, the founder of AliBaba, famously said that big data allows companies to see the invisible hand of the market.¹³ A report by the US National Science and Technology Council states that “with the rising capabilities of ‘data fusion,’ which brings together disparate sources of data [data born digital, created specifically for digital use by a computer or data processing system, and data born analog, emanates from the physical world but increasingly convertible into digital format], big data can lead to some remarkable insights.”¹⁴

In the area of public administration, the issue becomes how the government can best employ data collection and analysis to enhance administrative efficiency, gain insight into identifying people in need of assistance, and then tailor the delivery of services. In practice, in the public sector, data is critical in areas such as crime prevention. For instance, the US Defense Advanced Research Projects Agency (DARPA) uses geo tracking (the identification of current physical locations with GPS), in combination with AI and machine learning.¹⁵ the Nexus 7 program processes data from satellites, helping commanders to “visualize how traffic flowed through road networks, making it easier to locate and destroy improvised explosive devices.”¹⁶ Likewise, geo tracking is employed by the police in the context of a program called Geographic Information Systems (GIS) to map crime.¹⁷

Interestingly, during the COVID-19 pandemic, geo tracking and facial recognition technology have been employed for the purposes of digital contact tracing, to stop the spread of the

⁸ K. Kraemer and J. L. King, “Information Technology and Administrative Reform: Will e-Government Be Different?” August 2003 1 <https://escholarship.org/uc/item/zrd511db> (accessed August 21, 2021).

⁹ H. Leavitt and T. Whisler, “Management in the 1980s” (1958) 36 *Harvard Business Review* 41; K. Laudon, *Computers and Bureaucratic Reform* (Hoboken: Wiley, 1974).

¹⁰ On the benefits of governance based on new technologies, see W. Eggers, *Government 2.0: Using Technology to Improve Education, Cut Red Tape, Reduce Gridlock, and Enhance Democracy* (Lanham: Rowman 2004).

¹¹ “The 7 Lenses of Transformation,” www.gov.uk/government/publications/7-lenses-of-transformation/the-7-lenses-of-transformation (accessed July 14, 2020).

¹² Ibid.

¹³ Jack Ma, “Can Technology Plan Economies and Destroy Democracy?,” *The Economist* (December 18, 2019), www.economist.com/christmas-specials/2019/12/18/can-technology-plan-economies-and-destroy-democracy (accessed August 21, 2021).

¹⁴ National Science and Technology Council, n. 1.

¹⁵ Ibid. at 6.

¹⁶ Ibid.

¹⁷ For more details, see Fahui Wang, “Why Police and Policing Need GIS: An Overview” (2012) 18 *Spatial Crime Analysis and Modeling* 159.

virus.¹⁸ In particular, Apple and Google are designing the operative systems for mobile phone with Bluetooth technology to enable governments and health agencies in conducting contact tracing.¹⁹ Singapore, United Kingdom, and Ireland employ apps to trace the contacts of a person who has contracted the virus.²⁰

The most revolutionary application of LT in public administration is the incorporation of automated decision systems. As Pasquale explains, “critical decisions are made not on the basis of the data per se, but on the basis of data analyzed algorithmically, that is, in calculations coded in computer software.”²¹

In the past, computers assisted public administrators in the decision-making process, now-adays AI and machine learning have replaced human decision-makers.²² Automated decision systems are capable of delivering outcomes with minimum human intervention;²³ such systems are provided data and an algorithm to process the data. Examples include automated decision systems are used to terminate healthcare programs or to impose travel bans on travelers.²⁴ Such systems deliver faster decisions and consistent outcomes.²⁵

In the United States, the administration has applied AI and machine learning analytics software at the Centers for Medicare and Medicaid Services, in order “to flag likely instances of reimbursement fraud before claims are paid.”²⁶ This analytics software has enhanced the fraud prevention system and helped “identify the highest risk health care providers for fraud, waste and abuse in real time, and has already stopped, prevented or identified \$115 million in fraudulent payments – saving \$3 for every \$1 spent in the program’s first year.”²⁷

Another application with potential benefits for public administration is the use of “chatbots.” Public Service Chatbots use live chat software with the ability to communicate with written and oral speech, also known as robo-advisers; they are widely used in the private sector in the banking, finance, travel and marketing industries, as well in the area of customer care services.²⁸ In public administration, chatbots are used to handle frequently asked questions and conduct transactions. This type of application has a number of benefits, including the easing of public servants and staff workloads, increase of productivity, cost savings, and improvement of citizens’ satisfaction by substantially improving communications with government agencies.²⁹

¹⁸ K. Grind, R. McMillan, and A. Wilde Mathews, “To Track Virus, Governments Weigh Surveillance Tools That Push Privacy Limits,” *The Wall Street Journal* (March 17, 2020), www.wsj.com/articles/to-track-virus-governments-weigh-surveillance-tools-that-push-privacy-limits-11584479841 (accessed August 21, 2021).

¹⁹ “Apple Google Privacy-Preserving Contact Tracing,” www.apple.com/covid19/contacttracing (accessed July 14, 2020).

²⁰ “Why Britain Is Ignoring the Google-Apple Protocol for Its Tracing App,” *The Economist* (May 9, 2020), www.economist.com/britain/2020/05/09/why-britain-is-ignoring-the-google-apple-protocol-for-its-tracing-app (accessed July 14, 2020).

²¹ F. Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Cambridge, MA: Harvard University Press, 2015) 21–22.

²² D. Keats Citron, “Technological Due Process” (2008) 85 *Washington University Law Review* 1249 1252.

²³ *Ibid.* at 1260.

²⁴ *Ibid.* at 1252.

²⁵ Eggers, n. 10 at 113.

²⁶ Executive Office of the President, “Big Data: Seizing Opportunities Preserving Values” (2014) at 6, https://obamawhitehouse.archives.gov/sites/default/files/docs/big_data_privacy_report_may_1_2014.pdf (accessed August 21, 2021).

²⁷ *Ibid.*

²⁸ See, for instance, “The Chatbots in Banking Report: How Chatbots Can Transform Digital Banking,” *Business Insider*, www.businessinsider.com/the-chatbots-in-banking-report-how-chatbots-can-transform-digital-banking-2017-1 (accessed July 14, 2020).

²⁹ A. Androutsopoulou, N. Karacapilidis, E. Loukis, and Y. Charalabidis, “Transforming the Communication between Citizens and Government through AI-Guided Chatbots” (2019) 36 *Government Information Quarterly* 358 359.

In response to the pandemic and general lockdowns, public institutions such as courts and lawmaking bodies have gone online. The UK House of Commons amended standing orders and allowed the use of remote technology in core business, namely, scrutiny proceedings (such as questions to the ministers), substantive proceedings (presentation of bills), and by launching hybrid proceedings.³⁰ However, the use of hybrid proceedings were made temporary, subject to a sunset clause.³¹ According to the hybrid proceedings order, the speaker is entrusted with the power to select the electronic means for the virtual session; in case of technical problems, the speaker has the power to interrupt and suspend the session.³²

Even before the COVID-19 pandemic, court proceedings had begun to implement online tools.³³ In Britain, courts have accepted e-filing and online case management for some cases beginning in 2014.³⁴ In 2016, the HM Courts & Tribunal Service (HMCTS), an Executive Agency of the Ministry of Justice, allocated a £1 billion program to implement a pilot program to transform the justice system, introducing and testing an online dispute resolution platform.³⁵ The digital transformation with online cases and virtual hearings has made justice more accessible and more efficient with less delays, it frees judges from bureaucratic and time-consuming tasks, and increases the satisfaction of the parties with faster and more convenient proceedings.³⁶ In addition, due to the pandemic, most of the UK courts have started to conduct hearings via Skype, with all parties involved (including, solicitors, counsel, and witnesses) participating via videoconference and accessing electronic bundles.³⁷

Despite these advantages, doubts persist as to whether virtual proceedings meet appropriate procedural and substantive standards. As stressed by Završnik, “a fair balance should be struck between the right to participate effectively in the trial, on the one hand, and the use of opaque AI systems designed to help judges arrive at more accurate assessments of the defendant’s future conduct, on the other.”³⁸ In particular, online courts may not be suitable for certain types of cases. For instance, during the COVID-19 period, a family dispute was brought before the family division court in the United Kingdom. The local authorities alleged that the mother of a seven-year-old child abused the child by fabricating or inducing illness. The issue was whether the hearing should, or should not, be conducted remotely via the Skype for Business platform.³⁹

Sir Andrew McFarlane, the judge and president of the family division of the courts, ruled that this “category of cases [involves] a particular form of child abuse which requires exquisite sensitivity and skill on the part of the court”⁴⁰ and thus refused to allow the final hearing to take place via Skype. The judge explained his decision by clarifying that

³⁰ HC Orders Relating to Hybrid Proceedings – Addendum to Standing Orders (Public Business) (April 23, 2020).

³¹ About the utility of sunset clauses, see A. Kouroutakis, *The Constitutional Value of Sunset Clauses* (Abingdon-on-Thames: Routledge, 2017).

³² HC Orders, n. 30.

³³ A. Sela, “E-Nudging Justice: The Role of Digital Choice Architecture in Online Courts” (2019) *Journal of Dispute Resolution* 127.

³⁴ See e-filing, www.judiciary.uk/you-and-the-judiciary/going-to-court/high-court/the-rolls-building/e-filing/ (accessed July 14, 2020).

³⁵ “HMCTS Reform Programme Projects Explained” (June 20, 2018), www.gov.uk/guidance/hmcts-reform-programme-projects-explained (accessed July 14, 2020).

³⁶ <https://publications.parliament.uk/pa/cm2019/cmselect/cmjust/190/190.pdf> (accessed July 14, 2020).

³⁷ “Trial by Skype” (April 9, 2020), www.judiciary.uk/announcements/trial-by-skype/ (accessed July 14, 2020).

³⁸ A. Završnik, “Criminal Justice, Artificial Intelligence Systems, and Human Rights” (2020) 20 *ERA Forum* 567–577.

³⁹ *Re P (A child: remote hearing)* [2020] EWFC 32 (16 April 2020).

⁴⁰ *Ibid.* at 11.

it is a crucial element in the judge's analysis for the judge to be able to experience the behaviour of the parent who is the focus of the allegations throughout the oral court process; not only when they are in the witness box being examined in-chief and cross-examined, but equally when they are sitting in the well of the court and reacting, as they may or may not do, to the factual and expert evidence as it unfolds during the course of the hearing.⁴¹

Apart from remote hearings, the most challenging application of LT would be the automation of judicial decision-making. Some LT projects have already implemented autonomous dispute resolution mechanisms in the field of ADR. For instance, Cybersettle offers online settlements and payment solutions with minimal human intervention.⁴² Currently, in the sphere of public courts, criminal courts in the United States use AI systems to assess the possibility of recidivism for those awaiting trial, as well as those petitioning for release on bail or parole.⁴³

15.3 PUBLICTECH CHALLENGED: CONCERNS COMING FROM CASE LAW AND THEORY

The implementation of technological advancements has potential to substantially improve public administration, but there are challenges that should not be neglected. Guidance published by the UK government on the transformation of the public sector has stressed, among other concerns, that “rushing to action before there is sufficient clarity” or “proceeding with a vision which is either undeliverable or not sufficiently challenging of the current service model” may cause preventable harms to the public.⁴⁴

From a legal point of view, new models and applications based on technology challenge a number of well-established norms of administrative law, such as the transparency and due process in the decision-making process, the lack of bias, and the protection of privacy. As Pasquale has stated, “credit raters, search engines, major banks, and the [Transport Security Administration] take in data about us and convert it into scores, rankings, risk calculations, and watch lists with vitally important consequences.”⁴⁵ In particular, data collection and processing in the area of law enforcement create privacy and data protection. Law enforcement agencies using advanced technological means of surveillance and collection of data create new ways to profile citizens known as “dataveillance.”⁴⁶ Privacy rights predates these advancements requiring courts to adapt “old doctrines to new facts.”⁴⁷

The relationship between a state and its citizens is based on the ideas of due process and fair hearing, allowing citizens access to the decision-making process and the ability to argue their

⁴¹ Ibid. at 12.

⁴² Cybersettle, www.cybersettle.com (accessed July 14, 2020). For more details, see A. Sela, “Can Computers Be Fair? How Automated and Human-Powered Online Dispute Resolution Affect Procedural Justice in Mediation and Arbitration” (2018) 33 *Ohio State Journal on Dispute Resolution* 91.

⁴³ According to Završnik, “the Arnold Foundation algorithm, which is being rolled out in 21 jurisdictions in the USA, uses 1.5 million criminal cases to predict defendants’ behaviour in the pre-trial phase.” Završnik, n. 38 at 570.

⁴⁴ “The 7 Lenses of Transformation,” n. 11.

⁴⁵ Pasquale, n. 21 at 4.

⁴⁶ Dataveillance is defined as “the proactive surveillance of what effectively become suspect populations, using new technologies to identify “risky groups”: M. Levi and D. Wall, “Technologies, Security, and Privacy in the Post-9/11 European Information Society” (2004) 31 *Journal of Law and Society* 194 200. See also L. Amore and M. De Goede, “Governance, Risk and Dataveillance in the War on Terror” (2005) 43 *Crime, Law and Social Change* 149 151.

⁴⁷ A. Butler, “Symposium: Millions of Tiny Constables – Time to Set the Record Straight on the Fourth Amendment and Location-Data Privacy,” www.scotusblog.com/2017/08/symposium-millions-tiny-constables-time-set-record-straight-fourth-amendment-location-data-privacy (accessed July 14, 2020).

positions and concerns.⁴⁸ These due process rights have been grounded in long recognized rationales. From a “consequentialist” perspective, fair hearings increase the chances of a fair outcome as decision-makers hear both sides before reaching a decision. The “deontological” perspective, according to which individuals affected by administrative decisions are to be treated fairly from a procedural perspective, which again is likely to result in a just outcome.⁴⁹

In practice, automated decision systems are often incompatible often with due process and fair hearing rights by not providing proper notice and an opportunity to be heard.⁵⁰ This tension or incompatibility was the focus of a challenge brought before the Wisconsin Supreme Court pertaining to the use of closed-source risk assessment software in sentencing.⁵¹ The state of Wisconsin applies a Correctional Offender Management Profiling for Alternative Sanction software or COMPAS, which performs an algorithmic assessment to estimate the risk of recidivism. Mr. Loomis was sentenced to six years of imprisonment, with five years of extended supervision, on the basis of such an assessment. Loomis appealed the decision, claiming that use of algorithmic assessment software encroached upon his right to due process as it “violates a defendant’s right to be sentenced based upon accurate information in part because the proprietary nature of COMPAS prevents him from assessing its accuracy; it violates a defendant’s right to an individualized sentence; and it improperly uses gendered assessments in sentencing.”⁵² However, the Wisconsin Supreme Court held that COMPAS was not the decisive factor that led to the calculation of the sentence, and thus the due process rights of Loomis were not violated.⁵³

The case at hand confirms that automated decision systems are allowed to assist decision-makers. However, it remains to be seen whether decisions exclusively and solely based on automated systems will comply with due process principles. Simply stated, automated decisions do not necessarily lead to fair outcomes. Simply put, searching big data may find a correlation but not a definitive causal link. The importance of finding causation is need before there can be reliance on an AI prediction or decision that have a serious impact on individuals.

Automated decision systems are equally problematic from a procedural point of view.⁵⁴ While public administrators provide the data to be processed by the algorithm, how algorithms operate in rendering decisions remains opaque. Because of this lack of transparency, automated systems allow for less human scrutiny. Such opacity means that citizens do not have access on how decisions are reached, thus limiting the possibility to hold the administration accountable for its actions and decisions.⁵⁵

In the United States, the administrators have an obligation to reveal the content of the algorithm in detail, that is, how it operates, which factors are critical, and which specific data

⁴⁸ Levy and Shapiro discuss how the administrative state employs procedures that resemble court procedures. Thus, principles of justice implemented in the adversarial trials (such as *audiatur et altera pars*) have been modified to comply with the non-adversarial nature of the administrative procedure, and this gave rise to the right to due process. See R. Levy and S. Shapiro, “Administrative Procedure and the Decline of the Trial” (2003) 51 *Kansas Law Review* 473.

⁴⁹ Swati Jhaveri, “Right to a Fair Hearing in Administrative Law Cases” in *Max Planck Encyclopedia of Comparative Constitutional Law* (Oxford: Oxford University Press, 2016), n.p.

⁵⁰ P. Schwartz, “Data Processing and Government Administration: The Failure of the American Legal Response to the Computer” (1992) 43 *Hastings Law Journal* 1321 1343–1374; Keats Citron, n. 22 at 1281.

⁵¹ *Loomis v. Wisconsin*, 881 N.W.2d 749 (Wis. 2016).

⁵² *Ibid.* at 34.

⁵³ *Ibid.* at 104. Subsequently, the US Supreme Court declined to hear the case. *Loomis v. Wisconsin*, cert. denied, 137 S.Ct. 2290 (2017).

⁵⁴ A. Vermeule, “Deference and Due Process” (2016) 129 *Harvard Law Review* 1890.

⁵⁵ Keats Citron, n. 22 at 1254.

influenced its decision. In *Kansas v. Walls*,⁵⁶ the court reviewed the practice of criminal courts making decisions on probation, rehab, and imprisonment based on an automated decision system, the so called Level of Service Inventory-Revised (LSI-R) assessment. The LSI-R assessment is a diagnostic tool based on an algorithm that assesses a person's data from ten categories: criminal history, education/employment, financial, family/marital relationships, accommodation, leisure and recreation, companions, alcohol and drug use, emotional/personal, and attitudes/orientations.⁵⁷

The Court allowed Walls, who was assessed as a high-risk, high-needs probation candidate to access and review a copy of the completed LSI-R report. The Court ruled that "Walls was denied access to the LSI-R, which necessarily denied him the opportunity to challenge the accuracy of the information upon which the court was required to rely in determining the conditions of his probation. We find the district court's decision to deny Walls access to the LSI-R violated his right to procedural due process."⁵⁸

Transparency as to the way algorithms operate is necessary in the public sector. As Pasquale explains, "faulty data, invalid assumptions, and defective models can't be corrected when they are hidden."⁵⁹ If the data pool and algorithmic models are not properly monitored and made accessible then due process rights will be in danger.

At a theoretical level, there is the danger that algorithmic models based on misleading data will lead to automated bias and discrimination. Furthermore, automated bias and discrimination might be an unintended consequence of the design of the algorithm, irrespective of the quality of data that it processes.⁶⁰

15.4 PRELIMINARY REVIEW AND SCRUTINY OF PUBLICTECH

Section 15.3 has shown cases where publictech (automated assistance and automated decision-making) was challenged successfully on a number of grounds before the courts, for due process violations and lack of transparency. Furthermore, a number of scholarly concerns were voiced, namely, regarding automated bias and discrimination. In order to minimize these concerns, policymakers should ensure that the adoption of publictech complies with existing norms and principles. To this end, policymakers should review and scrutinize, for example, automated decision systems before their implementation. Such pre-implementation scrutiny is not unknown in the public sector: for instance, a recent report from the European Data Protection Supervisor (EDPS) underlines "the responsibility of the legislator to assess the proportionality of a measure."⁶¹ In a similar vein, the UK Parliament has instituted the practice of prelegislative scrutiny, which is an examination stage that takes place before the drafting of a bill that often includes public consultation.⁶² The United Kingdom's Parliament also is

⁵⁶ *State of Kansas v. John Keith Walls*, 116,027, Court of Appeals of the State of Kansas (2017).

⁵⁷ S. Manchak, J. Skeem, K. Douglas, and M. Siranosian, "Does Gender Moderate the Predictive Utility of the Level of Service Inventory-Revised (LSI-R) for Serious Violent Offenders?" (2009) 36 *Criminal Justice and Behavior* 425–430.

⁵⁸ *Kansas v. Walls*, n. 58.

⁵⁹ Pasquale, n. 21 at 17.

⁶⁰ S. Barocas and A. Selbst, "Big Data's Disparate Impact" (2016) 104 *California Law Review* 671–674–675. See also, Androutopoulou, Karacapilidis, Loukis, and Charalabidis, n. 30 at 359 (importance of data feeding to algorithms, regarding the development and building of the knowledge base of chatbots).

⁶¹ European Data Protection Supervisor, "EDPS Guidelines on Assessing the Proportionality of Measures That Limit the Fundamental Rights to Privacy and to the Protection of Personal Data" (December 19, 2019), https://edps.europa.eu/sites/edp/files/publication/19-12-19_edps_proportionality_guidelines_en.pdf.

⁶² See J. Smookler, "Making a Difference? The Effectiveness of Pre-Legislative Scrutiny" (2006) 59 *Parliamentary Affairs* 522.

obligated to review proposed new laws to make sure they are compatible with the Human Rights Act;⁶³ in France, acts of Parliament and other institutional acts may be referred to the Constitutional Council before their promulgation, or a review of their conformity with the Constitution.⁶⁴

A preliminary review of publictech tools should first of all define the purpose of the planned initiative (enhancing the administration's responsiveness to questions from the citizens). Second, a review should seek to identify the appropriate tools to achieve the given purpose (such as, via the implementation of public service chatbots). Third, any new tools need to be assessed for compatibility with public law norms and policies, for instance, evaluating whether there is any risk of automation bias.

In between these steps, it would be necessary for policymakers to conduct consultations, draft impact assessments and perform compatibility checks. Stakeholder consultation (with the support of new technologies and crowdsourcing) is an essential instrument in reviewing a publictech proposal and to guarantee transparency. Although not determinative, such practices provide probative information that courts can use when assessing whether any proposed publictech application is compatible with the existing legal framework.

15.5 CONCLUSION

This chapter has examined publictech, that is, the use of legaltech (LT) in public administration. It has shown that a number of countries have adopted data processing, online platforms, AI, and machine learning technologies in a number of administrative sectors, such as automated decision systems, chatbots, and virtual proceedings before courts. A multitude of benefits arise from these technologies, such as more efficient procedures at lower costs. In particular, the COVID-19 pandemic has normalized and amplified the digitalization and virtualization of courts proceedings, which until recently was only at the experimental or pilot phase.

However, the use of publictech has also had negative consequences including undermining well-established public law norms and principles, such as due process and fair hearing rights, the right to privacy, nondiscrimination, and transparency. Within this framework, this chapter proposes a preliminary review before the implementation of publictech tools and human monitoring after implementation to ensure the technology's compliance with public law norms. Additionally, a feedback loop should be established in which feedback from public consultation is provided in order to improve the technology's function, make it more transparent, and enhance public support for LT in public administration.

⁶³ Human Rights Act 1998 c 42, section 19.

⁶⁴ Constitution of the French Republic, Article 61.