WILL ARTIFICIAL INTELLIGENCE REPLACE LAWYERS IN THE PHILIPPINES?*

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ABSTRACT

The specialized and sophisticated work produced by artificial intelligence ("AI") has surfaced concerns on possible disruptions to the Philippine practice of law. As a starting point for local discourse, this Article reviews economic theories on labor displacement and job automation, as well as emerging global literature on legal practice in the age of AI.

Drawing from these works, it is posited that in the Philippines, not all tasks associated with lawyering will be susceptible to displacement and automation. Those which require creative and social intelligence will likely increase the market value of skilled lawyers. Meanwhile, routine and mechanical legal tasks typically performed by non-lawyers seem to be the most vulnerable. This Article then offers legal and policy recommendations to help meet the practical and ethical challenges posed by further AI integration.

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I. INTRODUCTION

On January 9, 2023, Joshua Browder tweeted that he was offering US\$1 million to any lawyer or person who was willing to use his "robot lawyer" to argue before the United States Supreme Court. Browder is Chief Executive Officer of DoNotPay, an application that provides legal help powered by artificial intelligence ("AI"). His tweet read:

DoNotPay will pay any lawyer or person \$1,000,000 with an upcoming case in front of the United States Supreme Court to wear AirPods and let our robot lawyer argue the case by repeating exactly what it says. (1/2)

We have upcoming cases in municipal (traffic) court next month. But the haters will say "traffic court is too simple for GPT."

So we are making this serious offer, contingent on us coming to a formal agreement and all rules being followed.

Please contact me if interested!1

While the offer did not materialize, mainly because of legal threats hurled against Browder,² the provocative statement shocked the public, especially the legal community. This came at a time when ChatGPT was "[taking] the world by storm." ChatGPT, a large language model ("LLM") founded by American AI company OpenAI, can generate accurate and coherent responses to just about any question.⁴ While not perfect, it surprised the world when its then-most advanced model, GPT-4, was able to "pass" many standardized examinations in

¹ Joshua Browder (@jbrowder1), X (formerly Twitter) (Jan. 9, 2023, 12:57 PM), at https://twitter.com/jbrowder1/status/1612312707398795264; Joshua Browder (@jbrowder1), X (formerly Twitter) (Jan. 9, 2023, 12:58 PM), at x https://twitter.com/jbrowder1/status/1612312710112481282.

² Anjali Thakur, "Robot lanyer" faces lawsuit for practicing law without a license in US, NDTV, Mar. 12, 2023, at https://www.ndtv.com/feature/robot-lawyer-faces-lawsuit-for-practicing-law-without-a-license-in-us-3855043.

³ Rob Waugh, ChatGPT 2.0: Creator of AI bot that took world by storm launches even more powerful version called 'GPT4' — and admits it's so advanced it could 'harm society,' DAILY MAIL, Mar. 14, 2023, at https://www.dailymail.co.uk/sciencetech/article-11860115/ChatGPT-2-0-Creator-AI-bot-took-world-storm-launches-powerful-version.html.

⁴ See Sakib Shariar & Kadim Hayawi, Let's Have a Chat! A Conversation with ChatGPT: Technology, Applications, and Limitations (Feb. 7, 2023) (pre-print version published online by ARTIFICIAL INTELLIGENCE AND APPLICATIONS), at https://arxiv.org/abs/2302.13817.

the United States, such as the Scholastic Aptitude Test, Advanced Placement Examinations, and the Medical Licensing Exam.⁵

As a testament to its ability to digest legal information and its competence in answering legal queries, ChatGPT also reportedly passed the United States Uniform Bar Examination, as well as the remedial law part of the Philippine 2020/2021 Bar Examinations.⁶ These series of events made a lot of people ask whether AI will finally replace lawyers⁷ the way it replaced certain workers, such as call center agents.⁸

While there are already several opinion pieces on the issue, ⁹ there has yet to be an article about it in prominent law journals in the Philippines. This paper aims to start the academic discussion by providing a preliminary literature review and analysis of the legal profession's susceptibility to automation in the Philippines. In so doing, it also aims to be the first legal paper to answer the question by applying economic concepts from findings of leading economists on automation, such as Daron Acemoglu, David Autor, Carl Benedikt Frey, Michael Osbourne, and Pascual Restrepo, among others.

More than its timeliness, this article also raises important policy implications for the practice of law, the legal industry in the Philippines, and the future of legal education in the country. Notably, this paper coincides with the

⁵ Lakshmi Varanasi, AI models like ChatGPT and GPT-4 are acing everything from the bar exam to AP Biology. Here's a list of difficult exams both AI versions have passed, INSIDER, Mar. 22, 2023, at https://www.businessinsider.com/list-here-are-the-exams-chatgpt-has-passed-so-far-2023-1.

⁶ Debra Cassens Weiss, *Latest version of ChatGPT aces bar exam with score nearing 90th percentile*, ABA J., Mar. 16, 2023, *at* https://www.abajournal.com/web/article/latest-version-of-chatgpt-aces-the-bar-exam-with-score-in-90th-percentile; Rabelais Medina, Facebook, Jan. 11, 2023, *at* https://www.facebook.com/rabelais.medina/posts/pfbid0eYGDdBU9aSoSV6rjXtBjkTi7PdD

nttps://www.racebook.com/rabelais.medina/posts/ptbidde/GDdbU9aSoSV6rjXtBjk11/PdDG5NBge5LHmA9z8LDGhQ4y82HsDpUX5dfSGmLNl.

⁷ See Steve Lohr, A.I. is Coming for Lanyers, Again, N.Y. TIMES, Apr. 10, 2023, available at nytimes.com/2023/04/10/technology/ai-is-coming-for-lawyers-again.html.

⁸ Katrina Domingo, *Displaced by robots, PH call center agents shift gears*, ABS-CBN NEWS, Feb. 28, 2018, *available at* https://web.archive.org/web/20231031192959/https://news.abs-cbn.com/business/02/

^{28/18/}displaced-by-robots-ph-call-center-agents-shift-gears.

⁹ See John Philip Siao, Will artificial intelligence put lawyers out of business?, PHIL. DAILY INQUIRER, Jan 10, 2023, available at https://business.inquirer.net/381587/will-artificial-intelligence-put-lawyers-out-of-business; John Molo, [ANALYSIS] Will ChatGPT (finally) 'kill' all the lawyers?, RAPPLER, Feb. 17, 2023, at https://www.rappler.com/voices/thought-leaders/analysis-chatgpt-artificial-intelligence-and-lawyers; Jemy Gatdula, Coming soon: Attorney Chatbox?, BusinessWorld, Feb. 2, 2023, at https://www.bworldonline.com/opinion/2023/02/02/502699/coming-soon-attorney-chatbox; Sycip Salazar Hernandez & Gatmaitan, Philippines: Atty. ChatGPT: Can AI Replace Local Counsel?, Mondaq, May 23, 2023, at https://www.mondaq.com/new-technology/1319420/atty-chatgpt-can-ai-replace-local-counsel.

announcement made by the Chief Justice of the Supreme Court of the Philippines that the Court plans to use artificial intelligence in the judiciary to streamline certain court processes, such as the digitization of judgments and the transcription of stenographic notes.¹⁰

In Part II of this paper, we will discuss the trend of job automation and displacements on a global scale. Here, we will briefly explain what the current studies say about job automation and its effects—notably, job displacement—on all industries and on the legal sector. In this part, we will also answer the question: what makes a job automatable? In Part III, we will provide a brief overview of tasks usually performed by lawyers and determine which of them have already been automated either fully or partially by newer technologies. In Part IV, we will apply the economic theories discussed in the earlier parts of the paper to answer why automation is not a threat to lawyers, at least for now. Finally, in Part IV, we outline certain legal and policy implications of job automation in the legal industry.

II. JOB AUTOMATION AND DISPLACEMENTS

A. In General

According to economists Acemoglu and Restrepo,¹¹ automation pertains to "the development and adoption of new technologies that enable capital to be substituted for labor in a range of tasks."¹² In simpler terms, it refers to the use of technology to perform tasks normally performed by humans.

Acemoglu posits that automation has several effects.¹³ First, it can destroy jobs, otherwise described as its "displacement effect."¹⁴ Displacement is an intuitive result of automation because machines enable the same level of production output while using less labor. Modern history is replete with examples of job displacements. The most notable among these is the automation

¹⁰ SC to Use Artificial Intelligence to Improve Court Operations, SUPREME COURT OF THE PHIL. WEBSITE, Mar. 4, 2022, *at* https://sc.judiciary.gov.ph/sc-to-use-artificial-intelligence-to-improve-court-operations.

¹¹ Professors Daron Acemoglu and Pascual Restrepo are highly regarded for their research on the effect of technology on jobs. *See* Daron Acemoglu & Pascual Restrepo, *Robots and Jobs: Evidence from US Labor Markets* (Nat'l Bureau of Econ. Research, Working Paper No. 23285, Mar. 2017), *available at* https://www.nber.org/papers/w23285.

¹² Daron Acemoglu & Pascual Restrepo, *Automation and New Tasks: How Technology Displaces and Reinstates Labor*, 33 J. OF ECON. PERSPECTIVES 3, 3 (2019).

¹³ Greg Rosalsky, A New Way to Understand Automation, NPR, June 22, 2021, at https://www.npr.org/sections/money/2021/06/22/1008354992/a-new-way-to-understand-automation.

¹⁴ *Id*.

of textile production using the "spinning jenny," a job which used to be performed by artisans in the early 19th century. The automation caused a group of English textile artisans, who felt that the machines jeopardized their livelihoods, to engage in a "machine-trashing rebellion." Another example involved typesetters, who were displaced by automated printing processes in the late 20th century. 16

The less intuitive effect, on the other hand, is the "productivity effect." The productivity effect means that automation makes the remaining workers valuable, thereby increasing their productivity and, in effect, their wages. 18 Bessen, Denk, and Chen noted that "[w]hile automation displaces labor on some tasks, it can also increase the returns to skill on the remaining non-automated tasks." The modern pattern of capital-skill complementarity gradually emerged in the late 19th century as manufacturing production shifted to increasingly mechanized assembly lines. Another example is the Automatic Call Distributor ("ACD") in the telephone industry, which removed the manual task of a central operator manually rerouting calls to different agents. Because of ACDs, the concept of a call center was made possible, increasing the number of calls an agent can take. 20

The third and final effect of automation is the "reinstatement effect." This means that automation creates new tasks in old jobs or new demands for new jobs.²¹ For instance, the emergence of personal computers and software,

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¹⁵ David Autor, *Polayni's Paradox and the Shape of Employment Growth* 2 (Nat'l Bureau of Econ. Research, Working Paper No. 20485, Sept. 2014), *available at* https://www.nber.org/system/files/working_papers/w20485/w20485.pdf.

¹⁶ James Bessen, How Computer Automation Affects Occupations: Technology, Jobs, and Skills Jobs, and Skills 6 (Boston U. Sch. of L. Working Paper No. 15-49, Oct. 2016) available at https://scholarship.law.bu.edu/cgi/viewcontent.cgi?article=1811&context=faculty_scholarship

¹⁷ Rosalsky, *supra* note 13.

¹⁸ Mark Muro, Robert Maxim, & Jacob Whiton, Automation and Artificial Intelligence: How machines are affecting people and places, 14, BROOKINGS, Jan. 2019, available at https://www.brookings.edu/wp-

 $content/uploads/2019/01/2019.01_Brookings Metro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf.$

¹⁹ James Bessen, Erich Denk & Chen Meng, The Remainder Effect: How Automation Complements Labor Quality 28 (Boston U. Sch. of L. Res. Paper Series No. 22-3, Feb. 4, 2022) available at https://scholarship.law.bu.edu/cgi/viewcontent.cgi?article=2355&context=faculty_scholarship

²⁰ Sue Fernie & David Metcalf, (Not) Hanging on the Telephone: Payment Systems in the New Sweatshops 8, LONDON SCH. OF ECON. WEBSITE, May 1998, available at http://eprints.lse.ac.uk/20275/1/(Not)Hanging_on_the_Telephone_Payment_systems_in_the_New_Sweatshops.pdf.

²¹ Acemoglu & Restrepo, *supra* note 12, at 4, 11.

which replaced some white-collar jobs, also created many new tasks²² like those "related to programming, design, and maintenance of high-tech equipment, such as software and application development, database design and analysis, and computer-security-related tasks."²³ Notably, the previously mentioned displacement of typesetters actually paved the way for the emergence of graphic designers.²⁴ Indeed, according to Acemoglu and Restrepo, a large amount of employment growth in the past decades has been found in jobs in which there was a change in the tasks performed by workers.²⁵

These three effects can simultaneously happen in the labor market, and it was observed that the net impact of automation has been changing throughout the past centuries. Accomoglu and Restrepo noted that between 1947 and 1987, the productivity and reinstatement effects were so large that they offset the displacement effect.²⁶ Since then, however, the displacement effect has outweighed both productivity and reinstatement effects.²⁷

This is not surprising, even as we are witnessing today a much more rapid pace of automation. Tech experts, professors and researchers, which included prominent figures such as Elon Musk and Steve Wozniak, publicly called out AI laboratories to "pause for at least 6 months the training of AI systems more powerful than GPT-4."²⁸ In their open letter, these industry leaders claimed that "contemporary AI systems are now becoming human-competitive at general tasks."²⁹ Notably, Acemoglu said that automation, right now, has been destroying more jobs than it generates, which results in wage distortion and income inequality.³⁰

Having discussed the three notable effects of automation, we now proceed to answer the question: *does automation affect the legal profession?* Understanding this, however, would require further discussion as to what makes a job automatable.

According to Autor, Levy, and Murnane, the impact of automation on a specific job is better measured by what people do at work (tasks) rather than the

²³ Id. at 4–5, citing Jeffrey Lin, Technological Adaptation, Cities, and New Work, 93 REV. OF ECON. & STAT. 554 (2011).

²² *Id.* at 4.

²⁴ Bessen, *supra* note 19, at 6.

²⁵ Acemoglu & Restrepo, *supra* note 12, at 5.

²⁶ Id. at 16.

²⁷ Rosalsky, *supra* note 13.

²⁸ Pause Giant AI Experiments: An Open Letter, FUTURE OF LIFE INST., Mar. 22, 2023, at https://futureoflife.org/open-letter/pause-giant-ai-experiments/.

²⁹ Id.

³⁰ Rosalsky, *supra* note 13.

capabilities they possess to carry out the activities.³¹ This is called the theory of "task-biased technological change,"³² which became popular because it became the leading explanation for "job polarization."³³ This global phenomenon—which was observed not only in the United States³⁴ but also in the United Kingdom,³⁵ Japan,³⁶ Korea,³⁷ and several European countries³⁸—saw the decline of middle-class and middle-skilled jobs. Essentially, the task-biased theory explains that middle-skilled occupations were displaced by automation because these jobs usually involve routine tasks, which are technologically easier to automate.³⁹

Thus, to help us understand the likelihood of AI replacing lawyers, we shall first discuss how it has already successfully automated some tasks that lawyers perform.

B. In the Legal Field

³¹ David Autor, Frank Levy, & Richard Murnane, *The Skill Content of Recent Technological Change: An Empirical Exploration*, 118 THE Q. J. OF ECON. 1279–1333 (2003); *See also* Lawrence Katz & Kevin Murphy, *Changes in Relative Wages 1963-1987: Supply and Demand Factors*, Q. J. OF ECON. (1992) and David Card and John Dinardo, *Skill-Biased Technological Change and Rising Wage Inequality*, J. of Lab. Econ. (2002).Both papers are advocating for another theory, the skill-biased technical change.

³² Id. See also Daron Acemoglu & David Autor, Skills, Tasks and Technologies: Implication for Employment and Earnings, in HANDBOOK OF ECON. LEARNINGS (2011); Adrian Adermon & Magnus Gustavsson, Job Polarization and Task-Biased Technological Change: Evidence from Sweden, 1975-2005, 117 SCANDINAVIAN J. ECON. 878 (2015); Daron Acemoglu & Pascual Restrepo, The Race between Man and Machine: Implications of Technology for Growth, Factor Shares, and Employment, AM. ECON. REV. (2018).

³³ David Autor, Lawrence Katz, & Melissa Kearney, *The Polarization of the U.S. Labor Market* 5–6 (Nat'l Bureau of Econ. Res., Working Paper No. 11986, Jan. 2006) *available at* https://www.nber.org/system/files/working_papers/w11986/w11986.pdf.

34 Id.

35 See Andrea Salvatori, The anatomy of job polarisation in the UK, 52(8) J. FOR LAB. MARKET RES. 1 (2018), available at https://labourmarketresearch.springeropen.com/counter/pdf/10.1186/s12651-018-0242-z.pdf.

36 See Yosuke Furukawa & Hiroki Toyoda, Job polarization and jobless recoveries in Japan: Evidence from 1984 to 2010 4–8 (Kyoto Inst. of Econ. Res., Discussion Paper No. 874, July 2013), available at https://www.kier.kyoto-u.ac.jp/wp/wp-content/uploads/2021/03/DP874.pdf.

³⁷ See Sung-min Kim, Computerization, Occupational Choice and Job Polarization in the Korea Labor Market, 35 KOR. J. OF LAB. ECON. 21 (2012).

³⁸ Maarten Goos, Alan Manning, & Anna Salomons, *Explaining Job Polarization: Routine-Biased Technological Change and Offshoring*, 104 AM. ECON. REV. 2509 (2014).

³⁹ Daren Acemoglu & Jonas Loebbing, *Automation and Polarization* 26 (Nat'l Bureau of Econ. Res., Working Paper No. 30528, Sept. 2022) *available at* https://economics.mit.edu/sites/default/files/2022-09/Automation%20and%20Polarization.pdf.

The phenomenon of job automation and displacement exist across all industries and professions, including law. For instance, Frey and Osbourne found that paralegals and legal assistants are at high risk of being displaced by automation. Similarly, economic analysts from Goldman Sachs found that 44% of the legal profession has tasks that are automatable. More recently, a study by Felten, Raj, and Seamans found that "legal services" was one of the industries heavily affected by ChatGPT. Notably, new technologies have been gradually taking on a number of tasks performed by paralegals as well as contract and patent lawyers as early as 2011.

Automation and its corresponding effects, however, are not something new to the legal industry, as technological advancement has long played a role in improving legal services. For instance, websites and software such as CD Asia, Lex Libris, Westlaw, and HeinOnline which act as repositories of various legal information, have allowed lawyers to take much less time doing legal research and increase their productivity. Alongside this is the decrease in demand for legal researchers and even for library staff who would help practitioners find relevant case law. As regards law students, photocopy machines and online case repositories have helped them maximize their time for studying. Meanwhile, law firms now rely on computers that can scan thousands of legal briefs and precedents to assist in legal research. In the United States, Symantec's Clearwell system is one of the applications often used for e-discovery. This software was known for being able to analyze and sort half a million documents in only two days.⁴⁴

Conversely, Frey and Osbourne found that lawyers, who are considered high-skilled, are in a low-risk category.⁴⁵ Interestingly, Chief Justice Alexander Gesmundo is aware of this phenomenon, as he highlighted the automation of "routine" tasks by lawyers in one of his recent speeches.⁴⁶ However, as will be

⁴⁵ Frey & Osborne, *supra* note 40, at 267.

⁴⁰ Carl Benedict Frey & Michael Osbourne, *The future of employment: How susceptible are jobs to computerisation?*, 114 TECH. FORECASTING & SOCIAL CHANGE 254, 267 available at https://www.sciencedirect.com/science/article/abs/pii/S0040162516302244.

⁴¹ Jan Hatzius, et al., *The Potentially Large Effects of Artificial Intelligence on Economic Growth*, GOLDMAN SACHS, 6, Mar. 26, 2023, *available at* https://www.ansa.it/documents/1680080409454_ert.pdf.

⁴² Edward Felten, Manav Raj & Robert Seamans, *How will Language Modelers like ChatGPT Affect Occupations and Industries?* 3, SSRN, Mar. 6, 2023, *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4375268.

⁴³ John Markoff, *Armies of Expensive Lawyers, Replaced by Cheaper Software*, THE NEW YORK TIMES, Mar. 4, 2011, *available at* nytimes.com/2011/03/05/science/05legal.html.

⁴⁴ *Id*.

⁴⁶ Chief Justice: Lanyers Will Remain Relevant Despite Automation of Legal Services, SUPREME COURT OF THE PHILS. WEBSITE, Oct. 13, 2022, at https://sc.judiciary.gov.ph/ chief-justice-lawyers-will-remain-relevant-despite-automation-of-legal-services/.

discussed in the succeeding section, there are already tasks traditionally performed by lawyers that have already been automated, either fully or partially.

III. WHICH TASKS HAVE BEEN AUTOMATED SO FAR?

Measuring the potential for job automation is easier done when viewed according to the tasks to be performed.⁴⁷ However, exhaustively outlining all of a lawyer's tasks is very difficult, considering that the Philippines adopts an expansive definition of what constitutes the practice of law, pursuant to *Cayetano v. Monsod.*⁴⁸ Nevertheless, in this Part, the paper will attempt to provide an overview of the regular tasks of a lawyer, at least in the traditional sense..

A. Legal Research

Rodriguez defines legal research in a general academic sense, describing it as "finding the laws, rules and regulations that govern activities in human society."⁴⁹ McGinnis and Pearce, in turn, posit that "legal search" is a kind of legal service in which machine intelligence will cause great disruption.⁵⁰

Conventionally, legal research involves looking up statutes, case law, and other rules applicable to a given set of facts. This task is used in a wide range of scenarios, from consultation to litigation, and from the hypothetical to the factual. This definition of legal research is the most predominant, with lawyers learning the skill as early as their first day in law school.

Arguably, legal research is the task most susceptible to automation. So far, technology has not automated the whole process; it has only streamlined some steps. Websites like CDAsia, LexisNexis, and WestLaw provide online libraries that make the lookup process less strenuous, but their use still requires knowledge of what to look for and how to look for it. These websites likewise require a working knowledge of how to maximize their functions, such as optimal use of keywords and Boolean search terms.⁵¹

⁴⁷ See infra Part IV.

⁴⁸ G.R. No. 100113, 201 SCRA 210, Sept. 3, 1991. The Court defined the practice of law as "any activity, in or out of court, which requires the application of law, legal procedure, knowledge, training and experience." *Id.* at 214.

⁴⁹ Rufus Rodriguez, Legal Research 1 (2002).

⁵⁰ John McGinnis & Russell Pearce, *The Great Disruption: How Machine Intelligence Will Transform the Role of Lanyers in the Delivery of Legal Services*, 82 FORDHAM L. REV. 3041, 3048–3050 (2014), *cited by* Benjamin Alarie, Anthony Niblett, & Albert Yoon, *How Artificial Intelligence Will Affect the Practice of Law* 68 U. TORONTO L.J. 106, 108 (2018).

⁵¹ Nicole Yamane, Artificial Intelligence in the Legal Field and the Indispensable Human Element Legal Ethics Demands, 33 GEORGETOWN J. OF LEG. ETHICS 877, 879–80 (2020).

One of the earliest disruptions caused by AI in legal research is ROSS Intelligence, a virtual legal assistant that can go through laws, cases, and even secondary sources at reportedly a million pages per minute.⁵² In one instance, a skeptical partner at a Miami law firm "tested" ROSS Intelligence against himself. It took the partner ten hours to find a case with almost the same facts as the one he was working on, while ROSS found it "almost instantly."⁵³

With the rise and release to the public of large language models like ChatGPT and Bard, the research process has become more optimized. Users no longer need to deal with finicky search terms and keywords.⁵⁴ The search process has become as simple as typing a question or command,⁵⁵ and LLMs can instantly output comprehensive data according to the input prompt.

More than just providing raw data or information to the lawyer, LLMs can also provide them in the desired format, such as a list, a table, or just paragraphs, adding a layer of automation to the research process. This effectively removed another technical requirement in the lawyer's skill set, making the legal research experience feel as if one is talking to a human assistant.

Indeed, the tedious and time-consuming nature of legal research is the very factor which makes it prone to large-scale disruption by AI, which can perform research tasks in a more efficient way.⁵⁶ However, while there are indeed layers of automation that already exist in legal research, the lawyer still has the burden of verifying the information and presenting them in an informational or persuasive manner—a task that is yet to be automated.

B. Legal Prediction

Clients are most interested in the outcome of a case. Naturally, they are drawn more towards knowing their chances of winning than in the procedural minutiae, such as prescriptive periods, formal offers of evidence, and motion

⁵² Willem Gravett, *Is the Dawn of the Robot Lanyer Upon Us? The Fourth Industrial Revolution and the Future of Lanyers*, 23 POTCHEFSTROOM ELEC. L.J. 1, 22–23 (2020).

⁵³ Id.

⁵⁴ Alarie, Niblett, & Yoon, *supra* note 50, at 116.

⁵⁵ In technical terms, this is described as "natural language queries," in which the user input is in the form of phrases or sentences as they are normally spoken, as opposed to containing a meticulously worded arrangement of keywords. *See* Robert Dale, *Law and Word Order: NLP In Legal Tech*, 25 NAT. LANG. ENG'G 211, 213 (2018), *available at* https://www.cambridge.org/core/services/aop-

cambridgecore/content/view/E8CC6743F2FĈCFD29FBC16A82F7F9B2A/S1351324918000475a.pdf/law-and-word-order-nlp-in-legal-tech.pdf.

⁵⁶ Gravett, *supra* note 52, at 22–23.

filings. Traditionally, a lawyer's prediction of the case outcome is based on their own legal knowledge, combined with the breadth of their experience handling similar cases. These opinions are valued and highly considered by the client in deciding whether to proceed with the case or not. However, inasmuch as these predictions are built on knowledge and experience, they are also susceptible to human bias, as is anything that requires the cognitive output of a human.⁵⁷ This susceptibility to bias increases with the complexity of the legal problem.⁵⁸

Using AI for case prediction involves the straightforward input of the applicable law and the facts, without the disadvantages that human biases can present.⁵⁹ At first glance, the advantage of this approach is obvious: there is an increased sense of objectivity, as the prediction is based solely on data and divorced from human opinion, which is harder to quantify.⁶⁰

Admittedly, its use in the Philippines to predict case outcomes is far from widespread adoption. In contrast, countries like the United States have service providers like LexMachina, LexisAdvance, and Ravel Law, which use proprietary programming to provide insights on how a particular case will be decided.⁶¹

AI prediction in the US is not just based on existing statutes and case law. In 2017, AI researchers Katz, Bommarito, and Blackman constructed an AI model designed to predict how the members of the Supreme Court of the United States ("SCOTUS") would vote.⁶² This AI model categorized possible predictions as "Affirm," "Reverse," or "Other." Drawing upon historical decisions from 1816 to 2015, the model encompassed a vast dataset of over 28,000 cases, and excluded the dispositive portions. Remarkably, the AI achieved an impressive accuracy rate of 71.9% in correctly predicting more than 240,000 votes within the dataset.⁶³ Their model also went beyond individual votes and aimed to predict the actual outcomes of cases using the same historical data. At this level, the AI correctly predicted the outcome of 70.2% of the more than 28,000 cases analyzed.⁶⁴

⁵⁷ Michael Legg & Felicity Bell, Artificial Intelligence and the Legal Profession: Becoming the AI-Enhanced Lanyer, 38 THE U. OF TASMANIA L. REV. 34, 36 (2019).

⁵⁸ IA

⁵⁹ Alarie, Niblett, & Yoon, *supra* note 50, at 118–20.

⁶⁰ Cody O'Brien, How Artificial Intelligence Will Affect the Practice of Law?, ACAD. FESTIVAL 10 (2019).

⁶¹ Legg & Bell, supra note 57, at 49.

⁶² Daniel Martin Katz, Michael Bommarito II, & Josh Blackman, A general approach for predicting the behavior of the Supreme Court of the United States, 12 (4) PLOS ONE 1, 2, Apr. 2017, at https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174698.

⁶³ Id. at 7-8.

⁶⁴ *Id.* at 8.

The work of Katz, Bommarito, and Blackman is not the sole AI model available for predicting judges' voting patterns. LexisNexis, a prominent entity in legal research, also developed a litigation analytics tool called Context. It makes predictions for case outcomes based on the trial court judge's prior rulings on similar issues, the cases cited, and the determinative language used. Notably, Context has found that arguments mirroring the language used by the judge in prior rulings tend to be most persuasive, increasing the likelihood of a favorable outcome.

In 2016, a similar study was conducted, focusing on decisions of the European Court of Human Rights ("ECHR") on Article 3 (prohibition of torture), Article 6 (the right to a fair trial), and Article 8 (the right to respect for private and family life) of the European Convention on Human Rights.⁶⁷ These articles were chosen because they were involved in 584 of the court's available decisions, and comprised a workable dataset.⁶⁸ The AI achieved a 79% success rate in predicting the outcome of the case, comparable to the success rate of legal predictions by other AI models using US data. According to the developers of the model, the facts of the case as presented by the ECHR is "the strongest indicator of the outcome."

There are, however, some caveats to the predictive AI model used in the ECHR's decisions. First, it is unclear if the Court's *ratio decidendi* was included in the dataset. Scherer claims that any trained lawyer, or even most non-lawyers, could guess the case outcome after reading the *ratio*. To Second, Scherer also notes the possibility that clues regarding outcomes may already be found within the actual text of the case, even as early as the factual background portion. The facts placed by the court may be selected to fit the ultimate decision. These highlight doubts on the overall efficacy of case prediction going forward, especially in cases where the prediction is primarily based on the facts and the law in favor of only one side.

⁶⁵ Herbert Dixon, Jr., What Judges and Lanyers Should Understand About Artificial Intelligence Technology, 59 THE JUDGES' J. 36, 37 (2020), citing Robert Ambrogi, This Tech Can Turn the Tables in Litigation, ABOVE THE LAW, Dec. 3, 2018, at https://abovethelaw.com/2018/12/this-tech-canturn-the-tables-in-litigation.

⁶⁶ Id.

⁶⁷ Maxi Scherer, Artificial Intelligence and Legal Decision-Making: The Wide Open? 36 J. INT'L ARB. 539, 547–48 (2019), citing Nikolaos Aletras, et al., Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective, 2 PEERJ COMPUT. SCI. 1, (2016), available at https://peerj.com/articles/cs-93.

⁶⁸ Id. at 548, citing Aletras et al., id. at 6.

⁶⁹ Dory Reiling, Courts and Artificial Intelligence, 11 INT'L. J. FOR CT. ADM. 1, 5 (2020).

⁷⁰ Scherer, *supra* note 67, at 549.

⁷¹ *Id.* at 550.

Legg and Bell also posit that AI prediction is only one side of the coin, with the other being human judgement.⁷² An AI's prediction of a case outcome, using multiple variables and plenty of data, is by itself just data. It is ultimately up to the lawyer to make the judgement call on what to do with that data.⁷³

On this note, the decision of the Second Circuit of the US Court of Appeals in *Lola v. Skadden* is interesting. Lola involves a labor dispute in which David Lola, a contract attorney, asked the Second Circuit to determine if he was entitled to overtime pay from the defendants, considering that: (1) his job involved reviewing, marking, and redacting legal documents; and (2) the Fair Labor Standards Act exempts licensed attorneys engaged in the practice of law from the overtime pay requirement.⁷⁴ Ultimately, the Second Circuit ruled that the practice of law requires independent legal judgement. As such, tasks that can be performed by machines and which do not involve independent legal judgement, like automated case prediction, do not constitute practice of law.⁷⁵ With specific regard to document review, the Second Circuit made no categorial pronouncement. Instead, it remanded the case to determine if Lola's document review tasks entailed an exercise of legal judgement.⁷⁶

In an Essay published in the Ateneo Law Journal, Herbosa speculated on the potential implications of the *Lola* ruling on the Philippine concept of practice of law. He argued that while *Lola* has virtually "zero influence" in the Philippine context, considering that the Supreme Court has a high degree of control over the practice of law, there is room for its applicability in the second sentence of the definition provided in *Cayetano*.⁷⁷ To recall, *Cayetano* provides that in addition to the application of legal knowledge, the practice of law also entails the performance of acts which are "characteristics of the profession." Since document review is undoubtedly a task that Filipino lawyers routinely perform as part of their profession, there is room to argue that document review—which calls for the application of legal knowledge—may be characterized as "practice of law." It would be interesting to see how this analysis would change with the newly introduced definition for practice of law under the Court's rules.

In sum, calibrating the degree of independent effort and judgment required to practice law, and how such may factor into case outcomes, remain

⁷² Legg & Bell, supra note 57, at 37.

⁷³ Id

⁷⁴ Angelo Francesco Herbosa, *Robot, Esquire? The Case of* Lola v. Skadden *and its Potential Application and Ramifications on the Concept of the Practice of Law in the Philippines,* 64 ATENEO L.J. 1287, 1296 (2020), *citing* Lola v. Skadden, Arps, Slate, Meagher & Flom, No. 14-3845 (2nd Cir. 2015).

⁷⁵ Yamane, *supra* note 51, at 887–88.

⁷⁶ Herbosa, *supra* note 74, at 1305.

⁷⁷ *Id.* at 1304.

⁷⁸ Cayetano v. Monsod, 201 SCRA 210, 214.

legitimate questions in assessing the methodologies of predictive AI models. Some AI models have been successful in case outcome predictions because they are not subject to the same cognitive limitations as that of human brains.⁷⁹ In terms of pure knowledge, data storage, and information recall, computers are much quicker and more efficient than humans are and ever will be.⁸⁰ However, a probabilistic analysis of major case factors, by itself, may not always completely determine how a judge will rule.

Legal prediction on the scale of those in the abovementioned studies may be more difficult to implement in the Philippines. This is primarily because the political leanings of the judges and justices are not as pronounced as they are in American and European tribunals. However, a Justice's voting tendencies may be deduced based on their expertise, their work experience, and the political leanings of the authority who appointed them.

For instance, a recent Rappler report noted Chief Justice Gesmundo's tendency to vote in line with the interests of President Rodrigo Duterte's administration.⁸¹ It was mentioned that these tendencies may be predicted from the Chief Justice's early career, having worked for the Office of the Solicitor General for 20 years immediately after passing the 1985 Bar Exam.⁸² The report also took note of an observation that judges who have extensively worked for the government throughout their careers tended to vote in favor of the government.⁸³

Similarly, Professor Antonio La Viña highlighted that a parallel deduction can be made in relation to Senior Associate Justice Marvic Leonen's inclination towards being more sympathetic to petitioners.⁸⁴ This can be attributed to his extensive background as a human rights lawyer prior to his appointment to the Supreme Court.⁸⁵

Another factor that may be considered in predicting voting outcomes in collegial courts is the affiliations among justices, whether from law school or prior workplaces. Citing an empirical study by Professors Bjorn Dressel and Tomoo Inoue, Rappler reported an increased probability of justices voting the

⁷⁹ Scherer, *supra* note 67, at 547, *citing* MAX TEGMARK, LIFE 3.0 27–28 (2017).

⁸⁰ *Id*.

⁸¹ Lian Buan, Chief Gustice Gesmundo: Supreme Court's stabilizing force, RAPPLER, Aug. 3, 2022, at https://www.rappler.com/newsbreak/in-depth/chief-justice-alexander-gesmundo-supreme-court-stabilizing-force.

⁸² *Id*.

⁸³ Id.

⁸⁴ Id.

⁸⁵ See Supreme Court, Incumbent Justices, SUPREME COURT WEBSITE, at https://sc.judiciary.gov.ph/incumbent-justices/ (last checked May 27, 2023).

same way as the chief justice if both knew each other "through university or work affiliation."86

Further, in a comprehensive review of voting outcomes in landmark Supreme Court cases since 2006,⁸⁷ it was found that Former Justices Diosdado Peralta, Lucas Bersamin, and Andres Reyes, Jr. tended to vote deferentially in favor of the Executive or of politicians. Meanwhile, former Justice Estela Perlas-Bernabe tended to be "more unpredictable" in her votes on the same matters. Though she was the *ponente* of the decision that abandoned the condonation doctrine, thereby removing reelection as a means of escaping liability for corruption charges, she also voted in favor of former President Gloria Arroyo's acquittal from plunder.⁸⁸

Indeed, despite the relatively small sample sizes used in the above reports, they nevertheless present an undeniable truth: the humanity of judges and justices allow for individual biases to sway their voting tendencies. In her article⁸⁹ in the JOURNAL, former Chief Justice Maria Lourdes Sereno cited American literature in discussing "what judges maximize."⁹⁰ According to her, one of the theories posit that the judge maximizes the interest of the group to which they belong. For instance, if they belong to the landowning class, they will generally favor landowners, and if they walk to work, they will generally favor pedestrians.⁹¹ As thoroughly discussed in the previous paragraph, the Philippines appears to be no exception to this phenomenon. These biases and inclinations may render case outcomes and voting patterns more predictable.

C. Document Analysis

The review and analysis of troves of documents is one area in which machines have already outpaced humans. Document review involves searching for flags that could be detrimental to a client's interest. As Gravett points out, lawyers and law firms have been using machines for the past decade to help reduce time spent in discovery and due diligence.⁹² Programmers can simply

⁸⁶ Lian Buan, First among equals: How influential is a chief justice on the Court?, RAPPLER, Nov. 1, 2018, at https://www.rappler.com/nation/215746-study-influence-of-chief-justice-on-supreme-court/2

⁸⁷ Lian Buan, #CJSearch: How did aspirants vote on key Supreme Court decisions? RAPPLER, Aug. 16, 2018, at https://www.rappler.com/newsbreak/iq/209651-how-supreme-chief-justice-aspirants-voted-on-key-decisions/.

⁸⁸ *Id*.

⁸⁹ Maria Lourdes Sereno, *Lanyers' Behavior and Judicial Decision-Making*, 70 PHIL. L.J. 476 (1996).

⁹⁰ Id. at 489

⁹¹ Id.

⁹² Gravett, supra note 52, at 18.

input these flags to a machine, and in a fraction of the time it would take humans to parse through these documents, that machine would have already pointed out the actionable aspects of these documents. In one instance, investment bank JPMorgan Chase & Co. announced that its learning software reviewed in seconds documents that would have taken lawyers hundreds of thousands of hours to examine.⁹³

The exact scope of AI use in document review in the Philippines has yet to be extensively studied, but unsurprisingly, many law offices continue to hire employees to manually and painstakingly go through documents. In addition to the technological gap between the Philippines and other developed countries, there are also plenty of older or more obscure government regulations and issuances without an accessible digital backup. These require lawyers and researchers to physically visit government offices and request physical copies. There are also other documents that, while uploaded and made accessible on the Internet, are nonetheless simply scanned images and not enabled for Optical Character Recognition or "OCR", 4 making computerized analysis of their contents remarkably difficult. These circumstances, taken together, paint a picture of a country where the adoption of machine use in document review is both slow and limited.

D. Drafting Legal Papers

Another aspect of lawyering that stands to be the most affected by AI automation, with far-reaching effects on the profession itself, is the drafting of legal papers. This includes contracts, private documents, and court documents like pleadings and motions. In truth, automated document creation has already existed for quite some time. Using this technology, the user engages with an interface that consists of text boxes to fill in. The result is a separate document, with the user's inputs neatly arranged according to some preprogrammed command.

One of the more rudimentary examples is Google Forms, which allows data from individual questionnaires to be exported and consolidated into a single spreadsheet that can then be viewed and rearranged according to the form owner's needs. This is the technology that DoNotPay—cited in the earlier pages

⁹³ *Id*.

⁹⁴ Optical Character Recognition is a process that allows machines to read and scan text in a particular document, allowing for search and markup commands to be executed. *See* Ranjan Jana, Amrita Roy Chowdhury, & Mazharul Islam, *Optical Character Recognition from Text Image*, 3 INT'L J. COMPUT. APPLICATIONS TECH. & RES. 239, 240 (2014).

of this paper—utilizes to automate the user's traffic ticket appeals.⁹⁵ In Australia, companies like the Macquarie Group reported that "one-third of large firms were using automated document review and creation software."⁹⁶

Automated document creation software was originally marketed to people who could not afford the services of a traditional lawyer to draft legal documents.⁹⁷ However, with the continued development of machine learning, this technology is slowly taking up a bigger share of the legal market.⁹⁸

One may argue that document drafting will inevitably be delegated to machines; it is the review of those documents that will remain with lawyers. However, as discussed above, machines are beginning to delve into document analysis and review as well, albeit subject to human oversight.

IV. LAWYER-COMPLEMENTING OR LAWYER-REPLACING?

A. Barriers to Automation

According to Autor, Levy, and Murnane, there are two broad categories of tasks that are "stubbornly challenging" to automate.⁹⁹ The first category refers to tasks that require problem-solving capabilities, intuition, creativity, and persuasion.¹⁰⁰ These are tasks which are generally found in occupations characterized as "professional, technical, and managerial."¹⁰¹ On the other hand, the second category of nonroutine tasks refers to those requiring situational adaptability, visual and language recognition, and in-person interactions that are "manual."¹⁰² According to Autor, manual tasks include food preparation,

⁹⁵ How to Avoid Paying Traffic Tickets With This Easy Trick, DONOTPAY WEBSITE, at https://donotpay.com/learn/how-to-avoid-paying-traffic-ticket/ (last checked June 4, 2023).

⁹⁶ Legg & Bell, supra note 57, at 53, citing An industry in transition: 2017 Legal Benchmarking Results 26, MACQUARIE WEBSITE, available at https://www.macquarie.com.au/assets/bfs/documents/business-banking/bb-legal-industry/macquarie-2017-legal-benchmarking-full-results.pdf.

 $^{^{97}}$ Id., citing Benjamin Barton, Glass Half Full: The Decline and Rebirth of the Legal Profession (2015).

⁹⁸ Id

⁹⁹ David Autor, Why Are There Still So Many Jobs? The History and Future of Workplace Automation, 29 J. OF ECON. PERSPECTIVES 3, 12 (2015), citing David Autor, Frank Levy, & Richard Murnane, The Skill Content of Recent Technological Change: An Empirical Exploration, 118 Q. J. OF ECON. 1279 (2003).

¹⁰⁰ Id.

¹⁰¹ *Id*.

¹⁰² Id.

janitorial work, maintenance, and security provision.¹⁰³ These tasks are hard to automate because they must be performed on-site or in person.¹⁰⁴

What can be observed is that these two broad sets of tasks are generally diametrically opposed in the "occupational skill spectrum." However, lawyers conceivably perform not only the first broad set of tasks but also the second set. The former is obvious. However, lawyers also perform a lot of manual work that need to be done in person, such as attending meetings and hearings, visiting sites related to their cases to gather information and interview witnesses, visiting government offices, having documents notarized, and filing pleadings.

Building on the studies of Autor, Levy, and Murnane, Frey and Osbourne identified their own barriers to automation, which they called as "bottlenecks." These are: (1) perception and manipulation, (2) creative intelligence, and (3) social intelligence. For our discussion, we will focus on the latter two categories.

First is creative intelligence.¹⁰⁸ Citing Boden, Frey and Osborne define creativity as the "ability to come up with ideas that are novel and valuable."¹⁰⁹ The inherent difficulty in the automation of creativity lies in the fact that contrary to automation, creativity requires that the output be produced without explicit instruction.¹¹⁰ In creative endeavors, the author taps into "implicit reservoirs of knowledge."¹¹¹ In contrast, automated machine outputs rely on explicit instructions on what to do and how to do it. Value, on the other hand, is inherently subjective, evolving across time and changing across cultures.¹¹² Understanding values requires an intricate understanding of emotions, culture, and myriad forms of implied communication. This is a subtlety that computer programming is, at present, incapable of encapsulating into a set of written commands.

¹⁰³ Id.

¹⁰⁴ *Id*.

¹⁰⁵ Id

¹⁰⁶ Frey & Osborne, *supra* note 40, at 261–262.

 $^{^{107}}$ $\emph{Id.}$ at 262, \emph{citing} Margaret Boden, The Creative Mind: Myths and Mechanisms (2003).

¹⁰⁸ *Id*.

¹⁰⁹ *Id.* at 9.

¹¹⁰ Carl Benedikt Frey, *How Susceptible are Countries Worldwide? Jobs at Risk of Automation, in* TECHNOLOGY AT WORK V2.0: THE FUTURE IS NOT WHAT IT USED TO BE 12 (2016), *at* https://ora.ox.ac.uk/objects/uuid:fe84f4c9-a194-

⁴⁰ee8c3eee185271bbe5/download_file?file_format=application%2Fpdf&safe_filename=Citi_GPS_Technology_Work_2.pdf&type_of_work=Report.

¹¹¹ *Id*.

¹¹² Frey & Osborne, supra note 40, at 262.

In legal practice, creative intelligence is most visible in the crafting of technical arguments and strategies that would best advocate for a client's interests and maximize the chances of success. While it would not be difficult for AI to come up with a sound, novel, and technical argument given the right inputs, a deeper understanding of what the judge and the client will find valuable is the missing link that would elevate the quality of the argument from "technically sound" to "creative."

The second relevant category is social intelligence.¹¹³ Social intelligence is a skill that is essential to the practice of law, albeit not as appreciated in legal education as the study of blackletter law.¹¹⁴ As opposed to the technical side of lawyering, social intelligence applies where negotiation, persuasion, or sensitivity is required.¹¹⁵ To a lawyer, this becomes useful in face-to-face client meetings or court hearings. In most cases, real-time responses are essential to reacting genuinely and intelligently in these situations. The lawyer's assessment of the other party's nonverbal cues is also crucial in such responses.

Social intelligence is thus seen as a roadblock to automation. While the current state of technology allows machines to simulate the emotional side of human interactions, they are still unable to present intelligent textual inputs that are indistinguishable from those of humans. The These interactions call for a more nuanced appreciation of the subtler, more "human" side of communications that can be difficult to contain in written lines of code. The contrast, a skilled lawyer's analysis and response to these situations are formed throughout their life. While it may be easy for a lawyer to immediately respond in these scenarios, the same lawyer may find difficulty in explaining, in detail, their entire thought process and their method of "reading the room" that prompted them to respond in the way that they did.

All in all, Frey and Osborne's framework on automation bottlenecks states that the susceptibility of a particular occupation to replacement by machines can be determined by the degree of perception and manipulation, creative intelligence, and social intelligence required. Since the practice of law requires high degrees of both creative and social intelligence, it is difficult to envision its total replacement by AI within the next few decades. As Chief Justice Gesmundo pointed out:

¹¹³ *Id*.

¹¹⁴ Christine Kelton, Clients Want Results, Lanyers Need Emotional Intelligence, 63 CLEV. ST. L. REV. 459, 481 (2015). See also Martin Seligman, et al., Why Lanyers Are Unhappy, 23 CARDOZO L. REV. 49, 59 (2001).

¹¹⁵ Frey & Osborne, supra note 40, at 262.

¹⁶ *Id*.

¹¹⁷ Frey, *supra* note 110, at 13.

Lawyers may be outperformed by computer applications involving routine tasks and those which dispense basic information on provisions of the law and procedural rules. But [such computer applications] cannot argue for a client's cause or evaluate evidentiary values in any given case. Indeed, for as long as adjudication involves a process of human reasoning in the application and interpretation of the law, the legal profession will never fade into the virtual future. 118

B. Artificial Intelligence as Labor-Complementing

In the previous parts of the paper, we discussed that artificial intelligence has automated some tasks of lawyers that can be characterized as routine. Most of these are tasks performed by legal researchers and paralegals, ¹¹⁹ which has resulted in their jobs being found as highly automatable. ¹²⁰ We also discussed that notwithstanding this, the jobs of lawyers are still unlikely to be automated because of the key two bottlenecks. ¹²¹ The question now is, what is the net effect of automation to lawyers and the legal industry?

All things considered, current technology and artificial intelligence in particular are more likely to complement lawyers, but displace other workers in the legal industry.

Based on the discussion, artificial intelligence provides many benefits for lawyers and law firms. Specifically, AI can help lawyers be more efficient by permitting them to focus on their creative analysis rather than the tedious and often frustrating or stressful aspects of their work. 122 Furthermore, artificial intelligence will also allow lawyers and law offices to cut down on costs by reducing the need for a legal researcher or a paralegal. Thus, as the earlier economic discussion would suggest, the use of AI will enhance the value of a lawyer's tasks and increase their overall productivity. 123

V. LEGAL AND POLICY RECOMMENDATIONS

A. Upskilling of Lawyers and Legal Staff

¹¹⁸ Chief Justice: Lanyers Will Remain Relevant Despite Automation of Legal Services, supra note

^{46.}

¹¹⁹ See supra Part III.

¹²⁰ See supra Part II.

¹²¹ See supra Part IV.A.

¹²² See supra Part II.

¹²³ See supra Part II.

While lawyers remain safe from displacement due to AI for now, the same cannot be said for the rest of the legal industry. The lowering of demand for legal assistants, paralegals, and other similar roles is good news for law offices looking to reduce costs, but displacements in the legal field could worsen overall unemployment. Law offices can help mitigate the displacement effect of artificial intelligence by upskilling their existing staff through training programs, which would allow them to be more productive.

Upskilling, however, should not be limited to non-lawyers in the legal field. As Professor John Molo of the University of the Philippines College of Law noted, lawyers must also upskill to understand where and when to utilize artificial intelligence. The proper use of AI "requires wisdom and a lot of trial and error." ¹²⁴ Because it tends to increase productivity, it is likely that AI will soon be mainstreamed in many aspects of legal practice. The lawyers who fail to equip themselves with the appropriate technical knowledge to maximize AI and AI-powered tools risk getting left behind. ¹²⁵

B. Addressing Ethical Concerns

The Code of Professional Responsibility, which served as the code of conduct for lawyers in the Philippines, was promulgated before AI became advanced enough to interfere with the practice of law. It did not contain any provision that governed the use of artificial intelligence in the legal profession. Unfortunately, even the new Code of Professional Responsibility and Accountability ("CPRA"), promulgated in April 2023, does not directly govern the use of AI by lawyers.

On this point, Yamane argued that Rule 1.1 of the United States Model Rules of Professional Conduct, ¹²⁶ which requires lawyers to provide competent representation to the client, could be used to govern the use of artificial intelligence. ¹²⁷ Notably, the Philippines has a similar provision in Canon IV of the CPRA which requires a lawyer to provide legal service that is "competent, efficient, conscientious." ¹²⁸

¹²⁴ John Molo, [ANALYSIS] Will ChatGPT (finally) 'kill' all the lanyers?, RAPPLER, Feb. 17, 2020, at https://www.rappler.com/voices/thought-leaders/analysis-chatgpt-artificial-intelligence-and-lawyers/.

¹²⁵ Gravett, supra note 52, at 26–28; Siao, supra note 11.

¹²⁶ "A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness[,] and preparation reasonably necessary for the representation." MODEL RULES OF PROF'L CONDUCT, Rule 1.1 (U.S.).

¹²⁷ Yamane, *supra* note 51, at 883.

¹²⁸ CODE OF PROF'L RESPONSIBILITY & ACCOUNTABILITY, canon IV,

§ 1.

Yamane argues that the requirement of competent representation necessarily means that the lawyer is obliged to thoroughly review an AI model's research outputs to ensure correctness. 129 This is important, as the use of AI in legal research is prone to errors which may be attributed to the model's limitations or weaknesses in the inputted commands. 130

To test the capabilities of AI in basic legal research, we used the popular LLM Bard to look for cases with certain fact sets. The LLM cited cases with complete titles and citations, but in most instances, the titles and citations returned each referred to different cases. Sometimes, the citation provided did not refer to an existing case at all.¹³¹ There were also certain instances in which the LLM purports to quote an excerpt from a case verbatim, but such an excerpt does not exist anywhere in the judicial records.¹³²

This limitation recently made headlines when lawyer Peter Loduca was found to have cited non-existent court decisions in a personal injury case against an airline company. Loduca's brief cited six cases which, when cross-checked by the opposing counsel, could not be found on legal reference databases such as Lexis Nexis and WestLaw. He was later found that it was actually Loduca's colleague, Steven Schwartz, who prepared the research and used ChatGPT to look for applicable case law. Unfortunately, the cases ChatGPT returned were all made up. Other than the fact that they simply asked ChatGPT if the cited cases were real, it appeared that neither lawyer verified the authenticity of their ChatGPT-led research. As a result, the court ordered both lawyers to explain why they should not be disciplined for their actions.

¹²⁹ Yamane, *supra* note 51, at 882–85.

¹³⁰ Id. at 884.

¹³¹ To cite one example using Bard, we used the prompt: "Look for an estafa case decided by the Philippine Supreme Court where the Court dismissed the case and ruled that the proper case should have been a private civil complaint for specific performance." Bard returned the case of People v. Francisco, G.R. No. L-14962, 102 Phil. 106 (1958) with a short summary of the facts and the Supreme Court's ruling. However, after separately looking up the citations "G.R. No. L-14962" and "102 Phil. 106," it appears that there is no such case with either citation.

¹³² Continuing the same conversation initiated by the above prompt, we typed: "Reproduce the last 2 paragraphs of the Supreme Court's ruling in that case verbatim." Bard provided a dispositive portion which, when inputted into Google with quotation marks, returns no search results containing the quoted text.

¹³³ Kathryn Armstrong, *ChatGPT: US lanyer admits using AI for case research,* BBC, May 28, 2023, *available at* https://www.bbc.com/news/world-us-canada-65735769.

¹³⁴ *Id*.

¹³⁵ *Id*.

¹³⁶ Id.

¹³⁷ *Id*.

¹³⁸ *Id*.

The case mentioned above is perhaps one of the most obvious ways that artificial intelligence could raise ethical concerns. Other ethical concerns can include breach of attorney-client confidentiality, such as when information is stored by artificial intelligence tools that are stored by third parties.¹³⁹ Other foreseeable ethical issues are the possible unauthorized practice of law by non-lawyers who use these artificial intelligence programs to render legal services, or the complete reliance of lawyers on AI tools.¹⁴⁰

C. Increasing Access to Legal Services

Despite possible negative implications, the automation of legal services would help increase accessibility. This would be immensely helpful to indigent clients, who are often faced with difficult choices in seeking legal services. Often, they are forced to either wait in long queues and hurdle bureaucratic processes for legal aid, or to pay the high costs of hiring private lawyers.

In her 1996 article in the JOURNAL, former Chief Justice Sereno opined that one way to reduce legal fees and increase access to lawyer services is to address the "phenomenon of oligopoly of information." ¹⁴¹ Sereno envisioned that this could be achieved through the wider dispersal of materials containing legal information, which can be facilitated by advancements in information technology. As discussed in the earlier parts of this paper, and 27 years after Sereno's article was published, today's technology is capable of so much more than just providing access to free legal information through the Internet. Applications with artificial intelligence can not only answer legal questions, but even perform other tasks traditionally done by lawyers.

D. Future-Proofing the Legal Profession in the Philippines

Finally, and as a response to rapid developments in this field, Philippine law schools need to introduce technology-related electives in their curriculum. In one survey, a good amount of US law firm partners said that their first-year

¹³⁹ Daniel Linna, Jr. & Wendy Muchman, Ethical Obligations to Protect Client Data when Building Artificial Intelligence Tools: Wigmore Meets AI, AM. BAR ASS'N, Oct. 2, 2020, available at https://www.americanbar.org/groups/professional_responsibility/publications/professional_la wyer/27/1/ethical-obligations-protect-client-data-when-building-artificial-intelligence-tools-wigmore-meets-ai/.

¹⁴⁰ Andrew Perlman, *The Implications of ChatGPT for Legal Services and Society*, THE PRACTICE, Mar./Apr. 2023, *available at* https://clp.law.harvard.edu/knowledge-hub/magazine/issues/generative-ai-in-the-legal-profession/the-implications-of-chatgpt-for-legal-services-and-society/.

¹⁴¹ Sereno, *supra* note 89, at 490.

lawyers could be replaced with artificial intelligence.¹⁴² This is because most first-year associates are given automatable tasks, such as legal research and document review.¹⁴³ While firms in the Philippines may not necessarily operate in the same way a US firm does, it is given that most of their legal research are done by the junior associates of the firms.

Therefore—and going back to the earlier discussion of the productivity effect of automation—future-proofing the legal field necessitates training future lawyers to be comfortable with using technology to deliver legal services more effectively and efficiently. This begins in law school, through the shift from a more barcentric approach towards one responsive to the needs of the time. Notably, courses on machine learning and artificial intelligence in relation to the law have been included in the curriculum of schools in the United States, like Columbia University, Georgetown University, and the University of Virginia. This tead of denying the rising influence of AI in the legal profession, Philippine law schools would thus be better off teaching law students how to effectively and responsibly use AI and AI-powered tools. This is a worthwhile shift not only to help students improve their skills and avoid AI's displacement effects, but also to better prepare them for legal practice.

VI. FINAL WORD

In this Article, we argued why artificial intelligence—at least for now—still cannot replace lawyers. First, we looked into the phenomenon of job automation and job displacement in the global context, and then in the context of lawyering. Subscribing to Acemoglu and Autor's "task-biased technological change" theory, we applied Autor, Levy, and Murnane's two broad categories

¹⁴² Debra Cassens Weiss, Will newbie associates be replaced by Watson? 35% of law firm leaders can envision it, ABA J., Oct. 26, 2015, available at https://www.abajournal.com/news/article/will_associates_be_replaced_by_watson_computing_35_percent_of_law_firm_lead.

Work, NPR, Nov. 7, 2017, at https://www.npr.org/sections/alltechconsidered/2017/11/07/561631927/from-post-it-notesto-algorithms-how-automation-is-changing-legal-work.

¹⁴⁴ See Erica Noonan, Keeping an Eye on AI, SUFFOLK UNIV., Apr. 24, 2023, available at suffolk.edu/news-features/news/2023/04/24/16/51/perlmanai.

¹⁴⁵ Chief Justice Gesmundo: Legal Education Key to Revolutionizing Law Profession, SUPREME COURT OF THE PHIL. WEBSITE, Feb. 13, 2023, available at https://sc.judiciary.gov.ph/chief-justice-gesmundo-legal-education-key-to-revolutionizing-law-profession.

¹⁴⁶ See Institute for Technology Law and Policy, GEORGETOWN LAW SCH. WEBSITE, available at https://www.law.georgetown.edu/tech-institute.

¹⁴⁷ Law and Artificial Intelligence, UNIV. OF VA. SCH. OF LAW WEBSITE, at https://www.law.virginia.edu/courses/law-and-artificial-intelligence-122820598.

and Frey and Osborne's "bottleneck to automation" framework in recognizing which types of tasks are difficult to automate. We then applied these to the legal profession by looking at the tasks which are most commonly performed by lawyers. We identified those which are most prone to automation, and which ones are unlikely to be automated. We found that tasks most prone to automation, and which have already been automated, are those which are mostly done by non-lawyers. These tasks are repetitive, voluminous, and routine in nature. However, while there are tasks that are automatable, the very nature of lawyering also involves acts which require a great deal of creative and social intelligence. These two traits are considered as bottlenecks to automation.¹⁴⁸

Subscribing to the productivity effect of automation, we believe that developments in artificial intelligence will lead to more productive and highly specialized lawyers. AI can enhance lawyers' capacity to perform the more cognitive aspects of their role by freeing them from some of the mechanical tasks that have traditionally consumed dozens, if not hundreds, of work hours. The prevalence of AI will also mean that those legal skills which draw on a lawyer's humanity and ethics—which AI cannot provide—will be more sought after and more valuable.

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¹⁴⁸ Frey & Osborne, *supra* note 40, at 262. The study's appendix is a ranking of different professions arranged from least to most automatable. Out of 702 listed professions, lawyers are ranked 115th, indicating a high resistance to automatability. *Id.* at 269–78.