

Interacting with AI at Work: Perceptions and Opportunities from the UK Judiciary

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Abstract

The integration of AI into judicial systems is transforming how judges and legal professionals work. AI tools have been proposed for tasks such as legal research, decision support, evidence analysis, and case management. However, little work has been done to inform the design of AI systems that might be used in judges' day-to-day work activities. Through a formative focus group study, in which 12 United Kingdom judges participated, including 5 members of the UK Supreme Court, we explore common perceptions of AI across different roles in the UK judiciary from first-instance hearings to appellate decision-making. We identify potential everyday uses, as well as hesitations and perceived benefits. Through this, we take initial steps toward understanding the opportunities, user expectations and requirements for integrating AI into the administration of law in the UK.

CCS Concepts

• **Human-centered computing** → **Human computer interaction (HCI)**; • **Computing methodologies** → **Artificial intelligence**; • **Applied computing** → **Law**; *Economics*.

Keywords

Human-AI Interaction, Judicial Work, Legal Judgment

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1 Introduction

Justice systems worldwide have entered a period of crisis and opportunity. Judicial workers struggle with increasing case backlogs while ordinary people face the prospect of delays that impede their access to justice and undermine the rule of law. Conversely, with the arrival of generative AI, justice systems have been presented with a technology which might allow them to eliminate backlogs but

which comes freighted with risks of its own for the legal system's legitimacy. Preliminary consideration of these risks and opportunities has so far taken the form of philosophical analysis [12], benchmarking projects [14], and experiments on the comparative performance of human lawyers with and without chatbot assistance [9]. We advance the inquiry by reporting a qualitative study of judicial perceptions of how the integration of AI into judicial systems might transform the way judges and legal professionals work.

AI tools are increasingly used for tasks such as legal research, decision support, evidence analysis, and case management. However, in high-stakes contexts like judicial decision-making, these tools also raise concerns. Although there is extensive research on the technical capabilities of AI, less attention has been paid to understanding the human factors involved in their integration with judicial systems. Judges, clerks, and other judicial staff may have differing perceptions of AI's benefits and risks, influenced by their respective roles and tasks. Few studies explore the nuanced interplay between human and AI strengths for specific judicial tasks. The introduction of AI may shift traditional job roles, potentially automating some functions while creating new opportunities for specialized human involvement.

In this paper, we describe a formative study consisting of three semi-structured focus groups featuring 12 judges who work in courts that span the UK judicial hierarchy. These focus groups explored the processes, beliefs, experiences, and needs of judicial professionals regarding the future of AI in their work. We aimed to identify task-specific considerations for designing AI systems that support rather than replace human judgment and that respect the complexities of judicial reasoning and preserve critical human oversight. Exploring perceptions across different judicial roles can inform design principles for AI systems that align with user needs and existing norms. Further, discussing the future of work in judicial contexts can provide valuable insight into new roles and skills required for working with AI systems. More broadly, the findings contribute to theoretical frameworks on human-AI collaboration in high-stakes, knowledge-intensive domains and on task allocation principles for human and AI systems, emphasizing the unique strengths of each.

2 Related Work

Legal theorists offer contrasting visions of AI's prospective contribution to judicial work. Alongside jurisprudence that emphasizes the risks of introducing such technologies [25], one finds philosophical analyses that highlight the efficiencies that they might



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bring [23]. Empirical work has broadly confirmed that the recent development of chatbots such as ChatGPT have brought us significantly closer to the creation of artificial legal intelligence. Whereas these chatbots have been found to be prone to a particular sort of error that humans are not, namely, the invention of fictitious legal authorities [11], they have also been shown to match human performance across a wide range of discrete legal tasks, such as writing [1], problem solving [21], and annotation [24]. There is even evidence that in hard cases chatbots simulate people's tendency to equivocate between the law's letter and the law's spirit [2].

It is perhaps unsurprising, therefore, that polling evidence suggests that 'judges, judicial support staff, prosecutors, and lawyers around the globe have started to use chatbots... to draft... judicial decisions, and elaborate arguments' [15]. In line with this trend, individual judges in several jurisdictions have sought to place the exploration of AI's potential on the public agenda, e.g., '[Judges] should consider whether and how AI-powered large language models... might... inform the interpretive analysis' Judge Kevin Newsom, Court of Appeal 11th Circuit, USA, 2024. But empirical inquiry into judicial perceptions of legal AI has not yet developed.

One notable initial advance has been a representative survey of the Portuguese judiciary, in which judges' responses indicated a wariness of robot judges together with an enthusiasm for AI judicial clerks [18]. This combination of survey answers attests to the scope for nuance and invites the application of a qualitative method that might be better suited to 'elicit fine-grained, practice-informed insights' [8]. Indeed, in a recent speech, the Deputy President of the UK Supreme Court, Lord Patrick Hodge suggested that 'collaboration between... judges... and academics (both legal scholars and computer scientists) offers the best prospect of facilitating and harnessing the new technology' [16]. This paper seeks to start an AI research agenda in law that answers this call for collaborative research.

3 Formative Focus Group Study: Judges and AI

We conducted a formative study to understand judges' perception of the incorporation of artificial intelligence into their future work. The objectives of the study were the following:

- (1) To learn about the way judges currently work without AI
- (2) To understand the areas of their work that are particularly appropriate or necessary for the human to lead
- (3) To identify the tasks that are likely going to integrate AI in the future and the benefits this could achieve
- (4) Across the different job roles, to uncover concerns and important considerations for AI in judicial work

3.1 Participants

The study consisted of 3 focus groups with between 2 and 6 participants. One focus group was conducted online via Microsoft Teams and the other two were conducted in-person in London, in the UK Supreme Court Building and in the Royal Courts of Justice respectively. All participants were current judges in the United Kingdom legal system, and included 5 members of the UK Supreme Court, 1 member of the Court of Appeal, 5 members of the High Court, and 1 member of the County Court (Circuit judge). The study received ethics approval from the Harvard University Institutional

Review Board and Maynooth University Research Ethics Committee (SRESC-2025-39914) and all participants signed an informed consent form.

3.2 Procedure

During each 60-minute focus group session, two researchers co-moderated the discussion, guided by a set of pre-determined questions (see Appendix). Follow-up questions were asked when appropriate to delve deeper into topics that were discussed by the participants. Audio from the session was recorded.

The first part of the focus groups looked at current workflows without AI, aiming to gain a detailed understanding of how judges currently perform key tasks, including their processes and challenges, and to identify critical aspects that need to be preserved with integrating AI. The second phase aimed to understand perceptions of AI, including its potential benefits and risks, and how these vary across roles. We then looked closely at specific tasks that came up in the discussion to determine the unique strengths of humans and AI in the context of a specific judicial task. Next, we looked at future implications of AI on judicial roles, assessing how participants envision their roles changing with AI integration, including the creation of new roles, the decline of certain tasks, and the potential for AI to improve or complicate their work. At the end, we allowed participants to share any additional thoughts or insights, summarized key discussion points and asked for any clarifications before closing.

3.3 Data Analysis

Audio recordings of the in-person sessions were transcribed using Open AI Whisper [19], while the online session was transcribed via Microsoft Teams. These auto-generated transcripts were then reviewed manually and errors were corrected and any identifiable comments (e.g. names) were removed. To uncover themes that emerged from the data, the focus group transcripts were analyzed using inductive thematic analysis based on the grounded theory framework [4]. One researcher coded the data using ATLAS.ti Version 9.1.3 for Mac [13] and ATLAS.ti Web, which facilitate qualitative analysis. This involved a *data familiarization* phase where the researcher reviewed the audio and transcripts, *initial coding*, *code refinement and recoding*, and finally *theme identification*. The initial codes were based on the study objectives and included work tasks, AI perceptions, AI benefits and risks, human and AI strengths, and changing job roles. Further codes emerged from the data. To protect confidentiality, we do not attribute quotations to particular participants.

4 Results

This section discusses the focus group findings, starting with descriptions of current judicial roles, responsibilities and functions. We then set out findings related to human and AI strengths for various tasks as well as judges' perceptions of AI and its benefits and risks.

4.1 The Work of Judges

The first focus group began with a discussion of the day-to-day tasks and workflows of judges in different roles. In subsequent

Task Category	Description and Subtasks
Legal Research & Pre-hearing Prep.	Reviewing case files, legal briefs, and relevant precedents before a hearing.
Courtroom Duties	Presiding over hearings, instructing jurors, ensuring fair hearing
Deliberation and Decision Making	Discussing cases, analyzing legal arguments, forming opinions
Judgment Writing	Summarize the facts, arguments, issue, and decision, drafting and revising
Writing for Other Audiences	Writing press briefs, explaining to public, creating child-friendly summaries
Sentencing	Reviewing any guidelines or precedent, identifying relevant considerations
Administrative and Managerial	Overseeing court staff, reviewing paperwork, creating orders, managing cases
Training and Development	Supporting judicial assistants, attending seminars
Public Engagement and Outreach	Writing and delivering speeches
Meetings	Administrative, leadership, outreach, committee meetings

Table 1: The Work of Judges: Task Categories and Descriptions

focus groups, we presented the tasks and phases of work that had emerged from the first focus group and asked for any additions or clarifications to ensure that we gained an inclusive set of task categories to describe the work of judges at the respective levels. The resulting categories can be found in Table 1.

Beyond this list of tasks, some critical aspects and values in judges' current work—without AI—were also discussed. For example, one participant stated *“judges are personally responsible for everything that goes out in their name and therefore they have to check everything that goes out in their name”*. The application of this principle to the integration of AI seemed to be on the mind of most participants, and is stated clearly in the recently released guidance document for the use of AI in the UK judiciary [5]. Another value that came up several times concerns the writing of judgments in the highest courts. There, the judge fully writes the judgment and puts great effort into the language used, the reasoning, etc. In lower courts, the task of establishing the relevant facts is more central. It is a tenet of the Rule of Law that litigants must receive normatively acceptable reasons for a legal outcome (e.g., [20, 22]), but how this tenet is understood varies between jurisdictions.

4.2 The Value of Humans in Judicial Work

While AI has many potential uses in judicial work that will be discussed in Section 4.3, the focus groups revealed several areas where the human factor is critical and this should not be ignored when developing AI support tools. We begin with these important constraints.

4.2.1 Justice is rooted in human decision making and reasoning. At a fundamental level, the work of judges comes down to the *“evaluative judgment that you ultimately make... I don't think AI could do that. No, I hope not.”* While there are strengths in AI's ability to analyze facts and potentially make logical decisions, one participant noted that *“law is not a matter of pure logic. It's a matter of practical reasoning”*. Thus, there is a sense that humans are deeply aware of human values and can identify situations when a line of reasoning will lead to an unjust decision: *“if logic is driving them to that end result, and the end result looks wrong, something's gone badly wrong... You're given the job, not just for intellectual ability, it's the judgment that you can see that logic is taking you in a direction that you shouldn't be going and you need a practical, humane result*

to a problem if it's humanly possible.” There was a feeling that AI would not have this capability.

Some discussion considered current practices related to human assistants (clerks) to contextualize possible future assistance by AI. In contrast to the U.S. Supreme Court [10], UK Supreme Court judges typically write their judgments by themselves. One participant stated, *“There's no question that anything in a judgment that I hand down will be written by anyone other than me. My judicial assistant will do research for me and maybe give me an analysis of cases, but I will then go to the cases. Similarly, the judicial assistant might produce a chronology, but I will go to the individual documents when I'm writing the judgment. So the tradition in the UK is very much for the judge to write the document.”* This was echoed by most of the judges at this level. In light of the existing emphasis on exclusive self-authorship, and the great care with which words are chosen, it may be less of a priority to have AI support for the drafting of legal reasoning. Another participant noted that *“I can't imagine it actually replacing most of the judgment writing that we do. Because each of us, I think, enjoys writing in possibly our own style. Now you could say, as I understand it, write this judgment in my style. [laughing]... We regard [the written judgment] as being an element of judgment that one might find difficult to replicate.”* Of AI's ability to articulate the reasoning behind a decision, a participant noted that *“AI isn't really undertaking that process.”*

However, perceptions change at other court levels, where case volumes are much higher and the time that is currently devoted to judgment writing may be lower. For courts of first instance, which, unlike appellate courts, also perform the function of resolving disagreement over a case's facts, AI support for opinion drafting may make more sense, particularly to improve efficiency.

4.2.2 The human component in justice holds value. Several participants noted that in some types of cases, a human judge is vital to providing emotional and psychological closure, and a sense of “dignity”. A participant in Focus Group 1 noted *“people take comfort from having a human face, a human decision maker, listening to what they have to say, hearing them and making a human judgment based on the evidence. And I doubt whether AI will achieve that cathartic role that human justice does.”* A similar sentiment was expressed in the second focus group: *“You can't underestimate the catharsis that there is in a trial and the importance of that for peaceful dispute resolution so that the person who loses at the end of the day can say,*

well, I had a fair hearing. I understand why I lost. I don't agree with it, but I can move forward now."

There also was a belief that people expect a human component in important legal decisions, particularly where a level of human empathy and understanding is important. *"I can imagine one might say that ultimately we would conclude that it's a matter of human rights to say the decisions about, for example, taking children away from families are decisions. It doesn't matter whether the AI would do it better. It doesn't matter if actually the AI would be less swayed by the well, you know, the human factors, because actually we want a decision as a matter of principle made by a human being."* However, there was an awareness from the judges that you could *"imagine a world in which society does accept that, you know, 15 years of everything else being done by [AI] decision making. That's going to affect things. I just say it's a moving picture there."*

4.2.3 The value of the human component is case-dependent and role-dependent. When evaluating the strengths of humans over AI for a particular task, participants noted that it can depend on the context. As discussed above, there can be an expectation of a human judge making the decision, but that does not necessarily apply to all cases with one participant noting: *"It's one thing to have cheap and cheerful AI tool to resolve a £500 dispute over a second hand car sales contract. It's quite another if somebody's being sent to prison or somebody's having their children taken away from them and put into care. And I really struggle to, to see the role for AI in the decision making process in those sorts of cases, partly because everyone would expect there to be a human component, because it's an intensely human judgment that has to be made."* In another discussion, AI was noted as valuable for laying out the factual information for a case, to enable judges to focus on the judgment and legal questions. However, this was more true in appeals courts where the facts have been determined. In first instance courts, a key role of the judge is to uncover the facts of the case, and this was an area that they would not delegate to AI. *"there's a big difference at what level we're talking about... one of the most important functions that first instance judges do is find the facts. And you couldn't rely on AI to set them out for you, because it may depend on who's telling the truth and not knowing the truth and all that. But when it comes on appeal, it is extremely tedious to set out the facts."* This was re-iterated by a judge that mostly handles such cases: *"that's the main part of our job, you know, in the county court, in the case, is finding the facts. And I would put that very much on the human side of the boundary."*

4.2.4 Decision making is collaborative with multiple points of view. Human collaboration and the social element was discussed as a critical aspect of judicial work at the highest level. One participant mentioned that *"there is a big social side to the job as well"* and proposed that if AI assists with other tasks, there might be more time for this human interaction. Another judge said *"the thing is the interaction between us, you know, before we go in and sit in a case, and when we come out of a case, we all meet together and discuss what we think about it and why. And that's, we can't have a room of robots doing that."* Notably, for the most difficult decisions, the judicial system has been designed to bring in more judges as a case goes up levels of appeal. Typically, the Supreme Court has five judges on a panel and the Court of Appeals often has three; one participant noted that *"you are more likely to be right*

with five judges over one." This led to a comment that *"it allows for plurality of opinions"* with a participant stating *"Now, in an AI world, I presume there's no point"* because the algorithm would likely to have a single line of reasoning. Another judge stated, *"if you went and looked up some decision in the Supreme Court where the judges are divided 3-2 with different reasoning and you came along, here's the AI answer. How are you ever going to say we're now doing it better? ... Conceptually, I just don't see how we'll ever say, certainly not in our legal careers, OK, AI can now do a complicated point of law with reasoning from lots of different traditions better."*

4.3 AI Opportunities and Benefits

Across all participants, while keeping in mind the values of humans in judicial work (Section 4.2), there was a general sense of opportunity regarding the use of AI for various tasks within the judiciary, particularly to improve efficiency and access to justice, across essentially all of the tasks in Table 1. One judge summarized it as *"I mean, all of these can be summarized as increasing productivity, reducing cost and reducing some of the drain on resources that we all have."*

While primary legal decisions, and their written form, were considered a fundamentally human task, there are follow up tasks that might be well-supported by AI, such as creating a version that is written for the public or for a child, in cases involving children. This could also extend into the tools available to create other formats such as podcasts or videos that help to bring important topics from the judiciary to wider audiences. In addition, for high volume courts, the initial judgment drafting or summarizing of background was considered a potential boost to efficiency and better proofreading would also be helpful. There is also potential for "small claims" and some other types of cases to be fully resolved through AI, with a possible tradeoff between efficiency and quality of judgment.

Sentencing was identified as an area that AI could support, as AI could analyse the relevant background information, precedents and additional considerations and make a recommendation. There could be similar support for deciding what would qualify as a fair amount in settlement agreements (e.g. personal injury).

Further, many "boring" or bulk administrative tasks were identified as areas in which AI could be beneficial.

Legal research and summarization of cases, disclosures, and bundles of documents was an area of much discussion. There is hope that AI could assist with these, but also currently a lack of trust that it would do so reliably without hallucination. Nevertheless, all judges agreed that there is sometimes an impossible amount of documents to read and also that AI may find things a human would require excessive time to discover. In addition, AI might remind judges or other legal professionals about aspects of the case that have been overlooked. As will be discussed below, however, there is also a concern that over-reliance on AI for such tasks could lead to de-skilling.

In relation to work within the courtroom, there was discussion of AI generating and presenting instructions to the jury for different types of cases and situations.

From an administrative perspective, some judges saw exciting potential for AI to "interrogate" recently digitalized legal data and provide insights into the overall state of the judicial system.

Category	Supporting Quotes
Increase Consistency	“And that would have the advantage of ensuring consistency, of course.” “We’re kind of going in two different directions because the whole line of sentencing guidelines is to get rid of subjectivity and the huge variation.”
Improve Information	“We can look up a case, and it’ll tell you what other cases it’s been referred to.” “I think it can also stop going around down a kind of rabbit hole where actually AI can say, no, no, that provision was actually repealed by the time that this happened.” “There are cases where it’s not realistic to think that any human being genuinely can actually amalgamate, can assimilate that material. And the AI can at least... identify relevant material out of that mass.”
Increase Efficiency	“Would save a huge amount of time.” “A considerable time-saving device and something that would help increase productivity.” “But one thing I’m absolutely certain AI could do that would save me 10 percent of my time is to take the paperwork and just make a suggestion, a short summary and suggestion of what the right answer is.”
Increase Access to Justice	“There’s no secret there are real resource constraints. There are backlogs in a number of courts. So anything that can improve efficiency and productivity whilst ensuring we don’t lose the essence of what justice is, is exciting and to be welcomed.” “We have a million and a half small money claims issued into the civil justice system every year. And the vast majority of them never get to a judge... And we could, you could imagine an AI resolving a lot of those. Now, not all of them... [but] most of them are very simple. Most of them, plenty are not.”
Increase Understanding of Judicial Effectiveness	“The ability of AI to process the data, to give us evidence-based material on which sensible decisions can be made will be important in running the court service.” “The aspect that I am most excited about is the opportunity with rich data to interrogate the data about how we do justice and to identify ways in which we might do it better, to identify whether there are inequalities in the way in which the justice system works. And I think there are opportunities to do that which we’ve just not had before, partly because we haven’t had the data and partly because we haven’t had the technology.”
Reduce Bias	“AIs don’t have other biases and the bias which we’re talking about in this context, which might matter most is confirmation bias. Because when you’re looking, when you’re hunting through some material, you’re immediately in a confirmation bias risk type situation, because you’re already beginning to think you know what the answer is. The AI doesn’t know what you think the answer is.” “For the mass majority of sentencing decisions, for more minor offenses, I actually think having a human involved is negative, because it allows all of those individuals with their slightly subjective preferences to allow the decision to be affected by those.”
Reduce Cost	“Small value claims are uneconomic to pursue. Because if they require the intervention of a professional lawyer... AI seems to be one way in which Western countries could enhance access to justice because many people are never going to be able to afford a lawyer.” “You could imagine an AI resolving a lot of those [small claims].”
Reduce Tedium	“There is a lot of boring stuff that we’ve still got to do manually.” “AI can do all of the extensions of time... the mundane stuff.. if it goes wrong, it’s reversible.” “English judgments... they’re too long because three-quarters of them are facts, what the statute may say, and then what the arguments were. I’d like to get to a system where I don’t have to do that three quarters, where the facts, what the statute says, and what the case law says, what the arguments were, is done by AI. And then this is my decision.”

Table 2: Potential Benefits of AI in the Judiciary by Category

AI’s integration into the work of judges was thought to promise several benefits including the provision of *improved information* for legal decisions, increased *consistency*, *efficiency* and *access to justice* as well as reduced *bias*, *cost* and *tedium*. In addition, an increased understanding of *judicial effectiveness* was mentioned. These are listed in Table 2 along with direct quotes from judges related to these benefits. It is likely that more opportunities will arise as people become more familiar with the capabilities of AI.

4.4 Concerns and Considerations Around AI in Judicial Work

Along with the perceived opportunities for AI to improve the administration of justice (Section 4.3), many concerns and important considerations were expressed that would need to be addressed before wide adoption of AI in judicial work.

4.4.1 *Reliability is currently insufficient for legal information.*

Reliability and trust in the AI came up frequently as a reason

that judges could not currently use AI in certain parts of their tasks, calling it a “non-starter”. Several participants described experiences they had while exploring AI where the results were factually incorrect, often also noting hallucinations, which are “confidence undermining”. Several participants recalled asking AI about particular cases with which they were very familiar, and noted that, while the results were “plausible sounding”, they were often glaringly incorrect: *“[it is] quite dangerous, because if you didn’t know the answer was wrong, it looked very plausible. It made up citations, which didn’t exist. It clearly knew the case in which the answer was to be found. But it summarised that case completely contrary to what the decision was. And it gave the opposite answer in language which it had obviously taken from the case.”* With several people having similar experiences, this was one of the highest priorities for enabling the use of AI in their work. Related to this, several judges had experience with an AI-generated service that summarizes press articles, but that have inappropriate headlines and are also full of typographical errors, again reducing trust in the reliability and accuracy of AI for their work. Another noted that they had tried using AI to produce a transcript of a hearing but that it was not usable. Similarly, a participant reported their use of CoPilot to summarize a group of documents but found that *“it was very bad at that... I wouldn’t be confident using it to summarize something that I didn’t already know”*. Another issue is that general-purpose AI systems seem to be trained more on American law which can be problematic for use in UK law. These experiences led one judge to conclude *“At the moment, it just looks so risky that you wouldn’t dream”*, with another noting *“we need to make sure that it is trustworthy and reliable and that it won’t undermine confidence in the judiciary if it’s used.”* Optimistically, one judge remarked *“Personally, I think there may come a time when it will be of utility for legal research if it is carefully trained on authoritative sources. So collections of judgments and statutes and if you can ensure that it cross references everything so you can see immediately that it’s a genuine source and that you can rule out confabulation in, in the results it gives you. But one has to be extremely careful about this.”*

4.4.2 Use of language is precise and critical in the work of judges. Beyond reliability, there was a discussion of the way that AI needs to consider language in the context of judicial work: *“I think also it being sensitive, to language and the importance of the choice of words and the nuance of words because so much of our job is reading and trying to understand what is meant by somebody else’s words and then expressing it in our words. The level of sophistication of the use of language is very important.”* AI is known to be well-equipped to adapt to linguistic and stylistic requirements. However, the legal context is specific and so more focus on this may be needed.

4.4.3 Privacy is a concern but not specific to AI. One judge noted that they were concerned that their search and conversation history may not remain private. Another agreed, but pointed out that it is a problem even in other areas such as doing a web search. Thus, it is not specifically an AI problem.

4.4.4 AI may develop misconceptions from uninformed user behavior. After discussing the way that current AI systems can confidently state incorrect facts, a concern emerged that these incorrect facts may be accepted by uninformed users. Beyond spreading

this misinformation, this brought up an *“AI specific worry that it’s learning from questions and answers that other people have asked. And they might be totally satisfied with the answers, but they may be completely wrong. And it [the model] is potentially drawing false inferences from the conversations that it’s having with other people.”*

4.4.5 AI bias needs to be understood. While gaining a better understanding of and mitigating human bias was brought up as a potential opportunity for AI, it also came up as a potential concern. All judges were aware that AI systems are trained on human data which has biases and that algorithms can also introduce bias with one noting *“there is the issue, the discrimination point. [... There is] a lot of discussion as to whether the databases are discriminating themselves.”*

4.4.6 AI could lead to de-skilling. The topic of de-skilling and training of new judges came up several times. For example, one judge noted that *“there’s a risk in that as AI presumably increases, humans never go into the source documents. So you rely on what AI is telling you about the source documents. Whereas when you’re browsing, whether it’s through the case papers or the authorities, you come across something that doesn’t fit or that does support something which you wouldn’t have come across necessarily without browsing. And I think the risk of some of it is that you’d rely on AI’s output without yourself ever going or properly going to the source documents or at least not in the same way.”* This was echoed in another group: *“I have a concern about skills... you’ve got really quite junior judges using it to generate model answers and so on. If people are doing that all the time, they’re not actually acquiring the skills or practicing the skills that they need to engage critically with the answers that the AI may be giving them. So, it’s kind of trying to strike that balance between people not just becoming de-skilled and pressing buttons and developing their skills, but also enabling the enhancement of their productivity and speed and so on.”* One participant noted that an aspect of having judicial assistants *“is to help them and to provide them with opportunity,”* and there was agreement in the room on this, indicating that this is something that should not be lost due to AI. In addition, there was recognition that *“there’s a lot of people here [in the judiciary] who rather like hanging around law libraries [and that get] great satisfaction from the chase and following of the footnotes... the satisfaction of problem solving, you’ve put the puzzle together.”* These practices, along with the discipline that goes into preparing for court and not taking “shortcuts” is something that should continue to be fostered in the training and mentoring of judges, and thus any work restructuring would need to take this important training into consideration.

5 Discussion and Future Work

The focus groups revealed both opportunities and important considerations for how judges may interact with AI at work, particularly in the United Kingdom. Throughout the sessions, across most participants, there was acknowledgment that AI will change future work practices, with many aspects discussed in the sections above. However, due to time constraints, we could not explore all topics in depth, which may have limited the breadth of themes uncovered. Additionally, participants’ attitudes towards AI are shaped by their

own levels of familiarity with AI and the current capabilities of AI tools—both of which are likely to evolve over time.

Much of the discussion, therefore, focused less on speculative or long-term transformations and more on how AI might support or augment existing judicial practices. For example, some discussions revolved around tasks that judges might already delegate to clerks or administrative staff. Such scenarios may have been easier to imagine, given the existing norms around human delegation. In this capacity, AI would create efficiencies by expanding existing human support structures rather than by offering novel functionality. In addition, there was discussion of the suitability and unsuitability of AI in decision making and practical reasoning, which are key responsibilities of judges.

There were suggestions, however, of AI's potential to enable tasks that might not otherwise be performed, even if granted an abundance of specialist legal or non-specialist administrative human assistance. Participants identified several functions as possibly ideal for AI, such as the analysis of bulk sentencing data, court administrative data, the handling of small claims that often are not brought to court, and the ability to bring judicial topics to a wider audience through podcasts, videos, and the generation of audience-specific language (e.g., the drafting of child friendly summaries). In this way, participants entertained the prospect of AI transforming the delivery of justice beyond mere acceleration.

Further work could expand our study's reach by conducting a survey with broad participation to explore the topics covered in the focus groups to understand the similar and different perceptions and expectations of AI in the broader population of judges in the UK and around the world. Moving forward, it will be essential to determine the impacts of these tools, for instance, whether they decrease or exacerbate existing human biases, preferably in early stages, before use is widespread. For example, in line with prior work [17], we suggest examining whether human decision makers become more or less biased in the presence of AI recommendations. Although AI systems can inherit biases from training data, ample evidence suggests that human actors may sometimes generate biases exceeding those of the very algorithms trained on their behavior [3]. This can occur, for example, when extraneous factors such as weather, sporting events, or time of day—variables absent from AI training—unduly influence judicial attention to legally relevant details [6, 7].

Several judges hypothesized that a rigorous, experimentally driven study could illuminate the true impact of AI on judicial decision-making. One judge mused, “*Suppose ... half the judges are given assistance by AI ... half were not. It's a randomized situation. And then you were to find that the ones with the AI assistance had decisions which went up the line of appeal ... much less frequently than the others.*” Others pointed out the practical barriers—“*You'd have to have 500 years to generate enough data*”—yet still considered this kind of controlled design as essential to testing whether AI indeed improves efficiency and fairness without eroding judges' capacity for critical reasoning. In other words, the bench is open to empirical evidence but insists that AI interventions be tested robustly, rather than simply be assumed to be beneficial.

In the same vein, the judges viewed the potential effects of AI through the three pillars of judicial state capacity—physical capital (the infrastructure of courts), human capital (the “skills” and “critical

faculty” of judges), and normative capital (trust and legitimacy). While some participants endorsed using “*cheap and cheerful AI*” to handle small claims and to clear backlogs in the system, they also underscored the danger of reducing public confidence if human oversight were absent in serious cases. Concerns emerged that over-reliance on AI could “*undermine confidence if the public suspects we're just rubber-stamping a machine's answer*,” thereby depleting the judiciary's normative capital even as its physical and human resources benefited. A well-designed, randomized control trial could thus measure not only “hard” outcomes—like case throughput or reversal rates—but also “soft” metrics such as litigant satisfaction, perceived fairness, and the system's overall legitimacy.

6 Conclusion

In summary, this study provides formative insights into the potential demand and considerations for integrating AI tools into the judiciary, as perceived by judges across the UK court hierarchy. By engaging directly with judges, the study highlights the complexities of judicial processes and helps to elucidate an approach that can enhance human-AI collaboration and prepares the judiciary for a future shaped by AI technologies. By investigating both algorithmic and human contributions to the delivery of justice, we aim to inform more responsible design and implementation practices that safeguard fairness and rule of law.

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A Focus Group Discussion Questions

As noted above, two researchers co-moderated the discussions, guided by a set of guiding questions and topics listed below. The order and content varied, depending on the flow of conversation and time constraints. Additional follow-up questions were asked when appropriate to delve deeper into topics that were discussed by the participants.

Understanding Current Workflows.

- Can you walk us through a typical day or week in your role?
- What is the process of doing X (today, without AI)?
- What are the most critical tasks you perform, and why are they important?
- If applicable: What factors do you consider when doing [a particular task]? What do you do if you are unsure? Where is there room for improvement in the process? When do you collaborate with others?
- What tools or systems do you currently use to support your work?
- Are there parts of your workflow that are particularly time-consuming/repetitive/difficult/other?

Perceptions of AI by Role.

- Have you used AI in work-related tasks or non-work purposes? If so, what was the experience like?
- Could you list some of the benefits that would make it worthwhile to use AI?
- What concerns or risks come to mind?

- Do you think your role gives you a unique perspective on AI compared to other roles?

Human vs. AI Roles/Strengths.

- What aspects of your job do you feel it would be difficult for AI to replace or support?
- Are there tasks that you think AI might perform better than humans?
- Are there tasks where humans should always be involved, even if AI could technically perform them as well or better?
- Are there aspects of the work that will be lost if an AI tool assists with or performs the task?
- Out of the many aspects of your job, are there ones that you are particularly concerned with or interested in?

Future Implications of AI on Judicial Roles.

- Do you see places where AI is being proposed in your work or where you imagine it coming soon in your work context?
- How do you think AI might change your role in the next 5 years?
- Are there tasks and responsibilities that will no longer be needed because of AI?
- Thinking about your own day-to-day work, if you had the perfect AI assistant in the future, what would you want it to do for you?
- What training will be needed in the future?

Closing Reflections.

- What's one of the most important things to consider related to AI and the work of the judiciary?
- Do you have suggestions for computer scientists regarding tools that might be integrated into judicial systems?
- Is there anything we have not discussed that is important regarding the use of AI in judicial work?