Civil Business Conference

Report on the survey of judicial attitudes

Judicial Institute for Scotland

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1. Executive Summary

This report presents the analysis of the recent Civil Business Survey undertaken by the Judicial Institute for Scotland at the request of the Lord President. The survey addressed two kinds of technology: telephone and videoconferencing using Webex.

The report is presented in two sections: one dealing with the quantitative data generated by the survey, the second concerned with qualitative analysis of the open-ended questions.

The quantitative data showed that a large majority of respondents had been involved in virtual courts in one form or another, and that there was significant recognition of the benefits that the technologies offered. However there was also acknowledgement that virtual courts made the exercise of the judicial function more difficult and presented challenges for other court users, such as agents, parties and the press.

In comparing the two kinds of technology the survey addressed, Webex was seen as preferable in almost every way to telephone, but both technologies were considered inferior to the in-person model across most types of court hearing. Nevertheless, respondents believed that there were efficiencies that virtual courts could deliver in the long term.

The qualitative data were more nuanced. Through the analysis of these data, a number of considerations were raised that should be read together with the largely positive responses from the quantitative section of the survey.

Firstly, there were concerns relating to court management: respondents reported an increased need for preparation time; difficulty in adapting the discipline they exercised in in-person hearings; and increased administrative burden on themselves and clerks.

Secondly, there were issues raised about the quality of justice that virtual courts afford. These ranged from worries about the dignity of the court and public faith in justice to specific concerns about the integrity of witness testimony delivered by videoconference. Above all, the opinion was expressed that, while certain types of hearing are very well suited to virtual courts, there were other types that the respondents considered to be wholly unsuitable.

Thirdly, the open-ended questions allowed respondents to express the impact that virtual courts had had on their health and wellbeing. Eyestrain, increased fatigue, low morale, isolation and other negative factors came to light in these comments.

Finally, the respondents reported that there were infrastructure problems that the quantitative questions did not ask about. There were requests for better training on Webex and better audio equipment and internet connections. This also relates to concerns raised that some parties might have difficulty accessing justice if they do not have stable internet and appropriate devices. In addition, there were frustrations voiced about the unsuitability of other software for use in virtual court settings.

Overall, the survey shows that there is support for the continuation in some form of virtual courts once the pandemic is over, but that their use is more appropriate for some settings than others. The survey also suggested that there are concerns around systemic issues which may need to be addressed related to health and wellbeing and adequate technology before confidence in virtual courts will become more robust.

2.   Methodology

The survey was posted on SurveyMonkey.com and invitations were sent to 226 Senators and Sheriffs, of whom 111 responded by the time the survey closed at the end of March 2021. This constitutes a response rate of almost 50% and would be considered an excellent response in the world of statistics.

As mentioned the report presents the results of the analysis in two parts. Part one is concerned with the quantitative data generated from the polling-style questions in the survey. These data are helpful in providing a barometer of judicial opinions on the use, effectiveness and future of virtual courts. They also help to establish the opinions of respondents by comparing the two different kinds of technology – telephone and Webex – which the civil courts have used to this point. The data were placed in a large table and then processed into several smaller tables for easier analysis. In total, around 20 of these smaller tables were created to compare data from different questions.

All percentage figures have been rounded to the nearest whole number for ease of reading. Please also note that the question numbers in the first section use the original survey numbering, while in the second section the open-ended questions are grouped differently.

Part two of this report is the analysis of the open-ended or comment-box responses to the survey. In order to systematically analyse responses, the open-ended questions were individually coded both by a person and by a sentiment analysis algorithm.[1] There were nine open-ended questions and these are given in the table below (Figure 13). Responses left blank and those that used "N/A", "Not Applicable", or similar statements were excluded from the count.

There is always a difficulty in assessing the value of qualitative data in a mixed study.[2] This can be due to several factors, one of which is the tendency for those with the

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[1] The package used for this analysis is QDAP (https://cran.r-project.org/web/packages/qdap/qdap.pdf). It was principally used as a sense-check on the human-encoded data. The QDAP score was normalised to match the formatting of the human scoring.

[2] See, for example: Gallen, A. S. et al. (2017) 'Perfect ratings with negative comments' in *Patient Experience Journal*: Vol 4: Iss. 3, Article 6. (Available at pxjournal.org/journal/vol4/iss3/6); and Boussat, B. et al (2018) 'The contribution of open comments to understanding the results from the Hospital Survey on Patient Safety Culture: A qualitative study' in *PLOS ONE*, 19 April 2018. (Available at

strongest views to leave the most comments[3]. With this in mind, the sentiment scores for each question are given as an average, but the overall number of answers and total sentiment score are also given to allow readers to weight the averages accordingly.

The human-encoded part of the sentiment analysis was performed as follows: each statement was evaluated for the presence of positive and negative sentiments and was assigned an overall score of -1 (for negative), 0 (for neutral or balanced), and 1 (for positive). Further to this, common topics addressed in the comments were similarly assessed, allowing for a further classification of where challenges and opportunities lie. The most common topics that interested respondents were:

- training

- infrastructure

- the experience of other court users, and

- health and wellbeing issues.

After this, the full text of all comments were analysed using the QDAP analysis package, which assigns a 'positivity score' to each in turn. To help with comparison to the human-encoded scores, this score was put through a linear transformation to give an average score between -1 and 1. This final calculation was important because the computer-based sentiment analysis was primarily used as a check on the human researcher's encoding. In any case that the computer analysis deviated significantly from the human analysis, these questions were reviewed by the researcher.

A table of the sentiment scores for each open-ended question can be found in Appendix B, Figure 14. For illustrative purposes, this report also carries quotations from the respondents under the relevant questions.

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https://doi.org/10.1371/journal.pone.0196089). The methodology adopted in this latter greatly informed the process in the present study, albeit with only one human researcher rather than three.

[3] See, for example, Decorte, T., Malm A., Sznitman, S. et al. 2019. 'Challenges and benefits of analyzing feedback comments in surveys' *Methodological Innovations*. Sage Journals. (Accessible online: https://journals.sagepub.com/doi/full/10.1177/2059799119825606)

The second part of the analysis from the open-ended data was to establish common topics that came up. Open-ended responses often allow researchers to see the answers to questions that are not asked by their surveys, and it was therefore deemed necessary to count and present common topics of concern.

3. Introduction

A small number of respondents noted some technical difficulties with the survey form, but the majority were able to answer all questions without problems.

The first questions in the survey were aimed at finding out what technologies respondents had been exposed to, and to allow them to compare their experiences of telephone and videoconferencing[4]. This section of the survey concluded with an open-ended question allowing respondents to report their opinions.

The next part of the survey sought to understand the overall shape of judicial opinion on the use of virtual technology in the courts. In this section, respondents were asked how they perceived their change in workload when using virtual technology and then to express their level of agreement with several statements. This was the area in which some respondents reported technical difficulties.

Finally, the survey asked whether the respondents thought there were efficiencies that the use of virtual hearings could deliver and invited them to share their opinions on the topic more widely with an open-ended question.

The full list of questions is recorded in Appendix A.

This report presents the quantitative findings of the survey before addressing the open ended section.

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[4] The videoconferencing tool that the Scottish Courts and Tribunal Service uses at the time of this survey is Webex, which is made by Cisco. It uses the Cisco backbone system of interconnected IP addresses which allows for strong connectivity and enhanced security features.

4. Section 1: Quantitative data

Only two respondents reported no experience of any virtual hearing technology, with 89% saying that they had used telephone at least once. 20% had not used Webex and only 5% had used Webex and not telephone.

Telephone was the most used technology in taking submissions and argument and for procedural hearings, while Cisco Webex was more used for witness evidence.

Figure 1: Experience of using Webex for Virtual Courts

WebEx for appeals	WebEx for submissions/argument	WebEx for witness evidence	WebEx for procedural hearings
21%	54%	38%	57%

Figure 2: Experience of using Telephone for Virtual Courts

Telephone for appeals	Telephone for submissions/argument	Telephone for witness evidence	Telephone for procedural hearings
21%	83%	8%	89%

Q. 4 How would you assess the use of telephone hearings as against an "in person" hearing?

Telephone hearings were not, in general, regarded as being comparable to in-person hearings. 90 people responded to this question, and rated them particularly poorly with regards to judges and parties.

Figure 3: Telephone compared to in-person for judges and parties
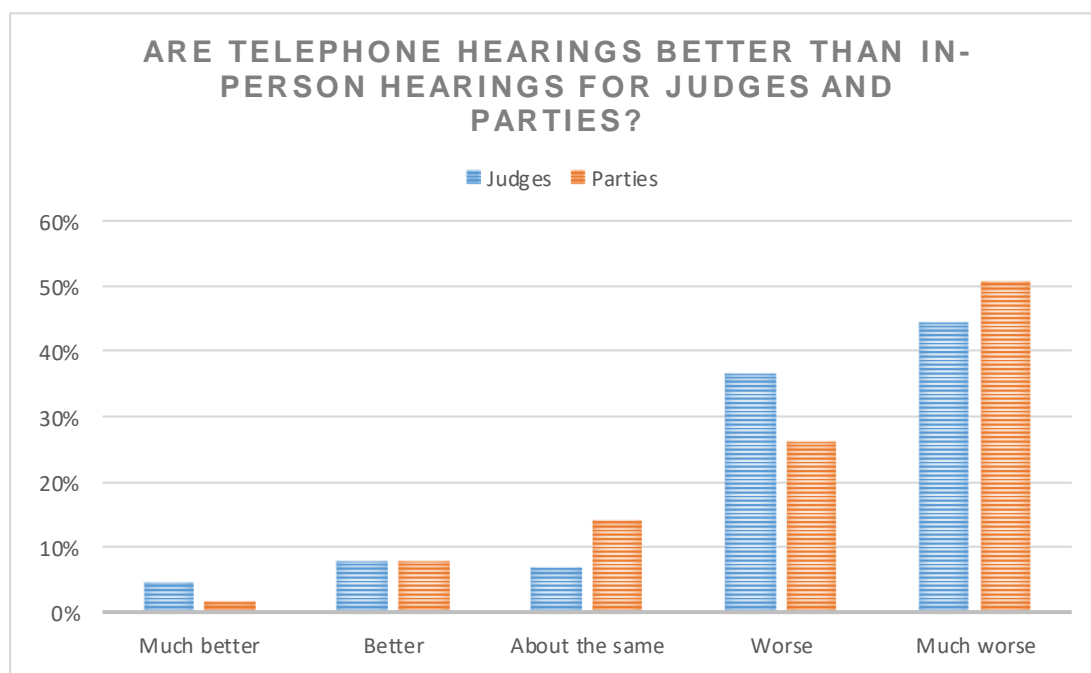
40% of respondents thought that telephone hearings were as good as or better than in-person hearings for clerks. Only 29% thought that telephone was as good as or better than in-person for solicitors, while the perceived gap grew for parties (24%), judges (19%) and the public and press (14%).

Q 6. How would you assess the use of Webex as against an "in person" hearing?

There is some indication that the use of Webex can, in certain circumstances, compare favourably with an in-person hearing. For example, 22% of respondents rated Webex as better than in-person hearings for parties, with 21% saying the same for solicitors. Once we consider the respondents that rated the experience as 'about the same' or better, we can see that the proportion of respondents averages out at 41% across the board, showing that there is a substantial minority who have found the use of Webex in courts helpful. The same calculation for the use of telephone gave only 25%.

Figure 4: Webex compared to in-person hearings

WEBEX COMPARED TO IN-PERSON ACROSS ALL COURT USERS

Better or the same 41%

Worse 59%
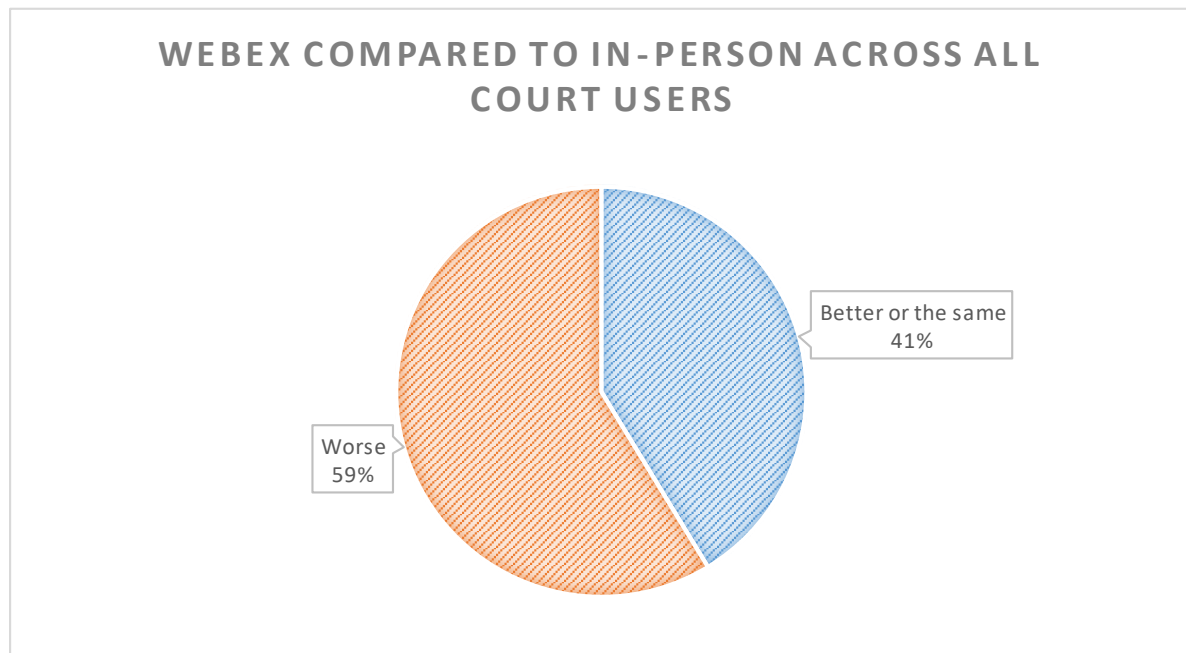
Q. 8 How would you assess the use of Webex as against a telephone hearing?

When comparing the two technologies there were no votes for telephone being better than Webex, with 89% preferring the videoconferencing technology and 11% ranking them equally. In fact, the closest that telephone came to parity with Webex was when the workload of clerks was considered: 30% of respondents thought that telephone

was just as good as videoconferencing for clerks. The additional work placed on clerks to set up virtual courts was also a common observation in the open-ended questions.

Figure 5: Webex is preferable to telephone hearings
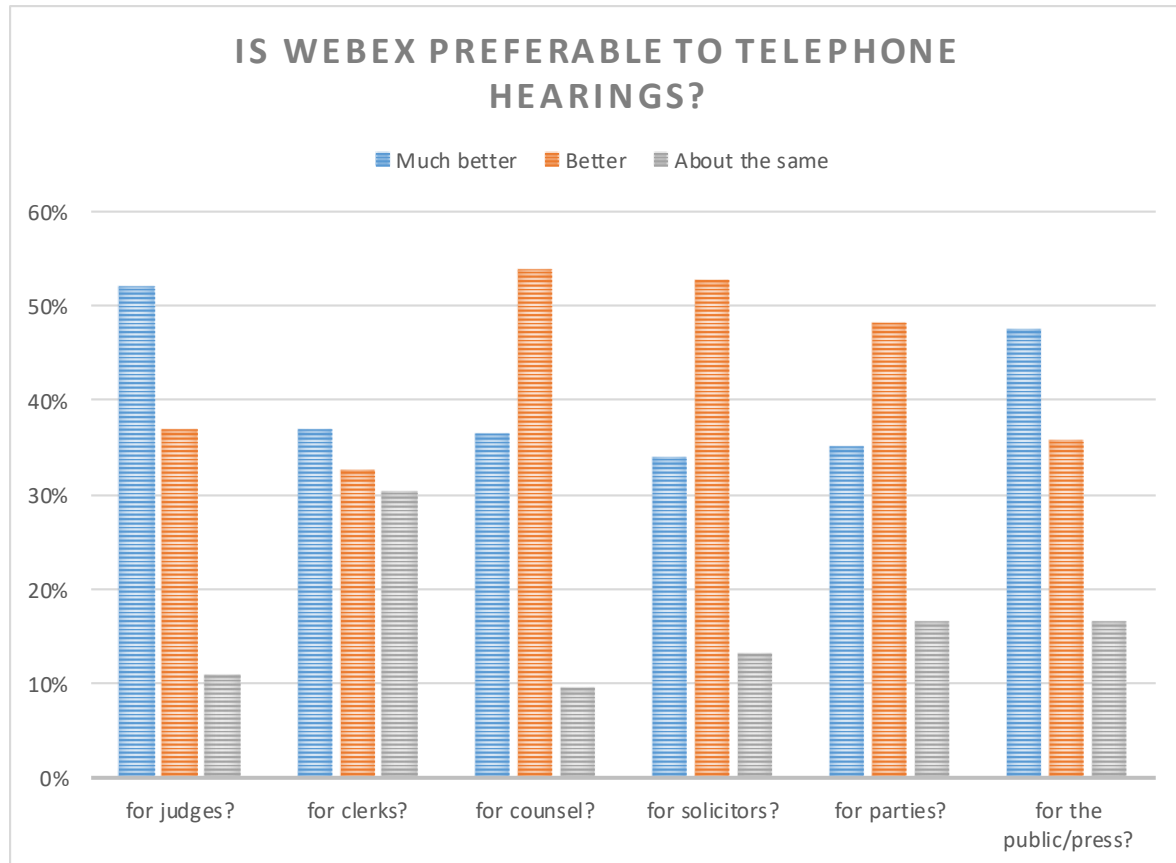
Figure 6 collates the respondents' ratings of how different categories of court users experience virtual courts. It is worth noting that this part of the survey had around 10% fewer answers: not all respondents were able to rely on personal experience of both kinds of virtual courts.

Figure 6: Table showing preferences for Telephone and Webex

	Are telephone hearings better than in-person hearings …					
	for judges?	for clerks?	for counsel?	for solicitors?	for parties?	for the public/press?
Much better	4%	6%	5%	5%	2%	4%
Better	8%	13%	9%	12%	8%	0%
About the same	7%	21%	11%	12%	14%	11%
Worse	37%	27%	44%	43%	26%	13%
Much worse	44%	33%	31%	28%	51%	73%
	Are Webex hearings better than in-person hearings …					
	for judges?	for clerks?	for counsel?	for solicitors?	for parties?	for the public/press?
Much better	4%	2%	4%	4%	4%	2%
Better	8%	11%	12%	17%	18%	13%
About the same	28%	33%	25%	25%	18%	21%
Worse	46%	37%	41%	40%	36%	34%
Much worse	14%	17%	18%	15%	25%	30%
	Are Webex hearings better than telephone hearings …					
	for judges?	for clerks?	for counsel?	for solicitors?	for parties?	for the public/press?
Much better	52%	37%	37%	34%	35%	48%
Better	37%	33%	54%	53%	48%	36%
About the same	11%	30%	10%	13%	17%	17%
Worse	0%	0%	0%	0%	0%	0%
Much worse	0%	0%	0%	0%	0%	0%

Q. 10 Is your work as a judge or sheriff more or less difficult when hearings are conducted virtually?

Figure 7 illustrates whether or not virtual courts make work more difficult for the judicial office holder. 2% considered that the job had become significantly less difficult, but the majority thought that virtual courts had made their job either more difficult, or significantly more difficult (76%).

Figure 7: Pie chart of difficulty of virtual hearings
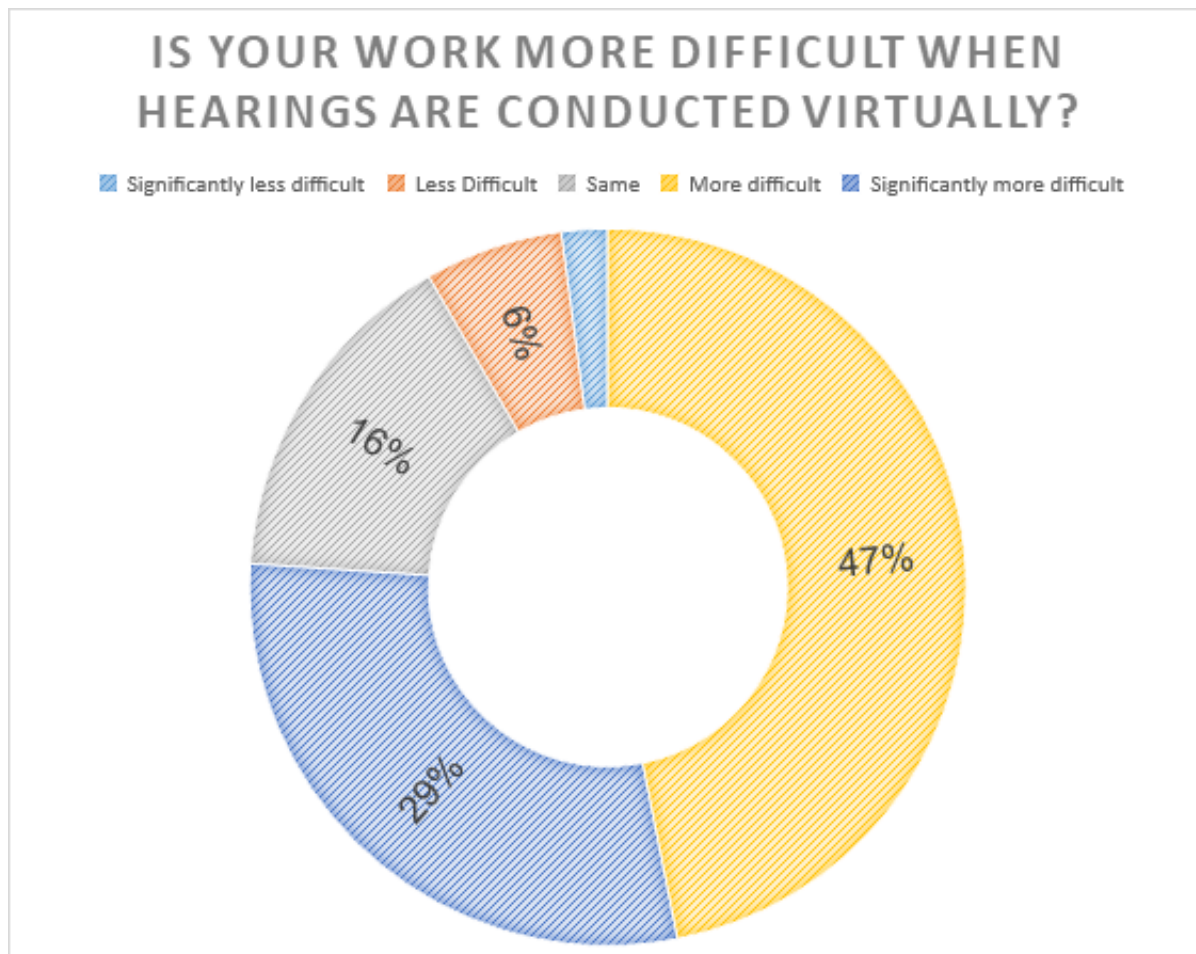
Q. 12 Please indicate the extent to which you agree with the following propositions.

To investigate the benefits and associated challenges of virtual hearings, respondents were asked to what extent they agreed with a set of statements. These statements were a mixture of positive, neutral and negative aspects of virtual courts and concentrated on such things as workload and expense, access to justice, and procedural uses of technology.

There was agreement that virtual courts were a useful option to have, with 82% agreeing or strongly agreeing. 77% also believed that virtual courts would see a reduction in the cost of attending court. Respondents believed that more written argument would be required in advance (63%) but the majority (53%) remained neutral on whether that would mean extra expense for parties. A slim majority (54%) agreed that virtual courts could increase access to justice, with a further 29% remaining neutral on this statement.

Where respondents disagreed or strongly disagreed was when virtual courts were suggested as a 'default' option. Except for procedural business (where 45% thought virtual courts should be the default), no suggestion of virtual courts becoming the norm achieved any significant support. Using technology for witness evidence was particularly unpopular: 81% of respondents rejected the idea that this should be the default way of taking testimony. Respondents also tended to doubt that virtual courts increased public attendance at court or that they were more accessible for parties. Both these concerns are weighed against the above-mentioned slim majority that virtual courts could, if used appropriately, increase access to justice.

On this last statement, along with the question of extra expense and the uniformity of the familiarity with virtual courts across all courts and tribunals, there were significant numbers of neutral answers, perhaps indicating that respondents felt less experienced in these matters.

Figure 8: Statements with a large proportion of neutral responses
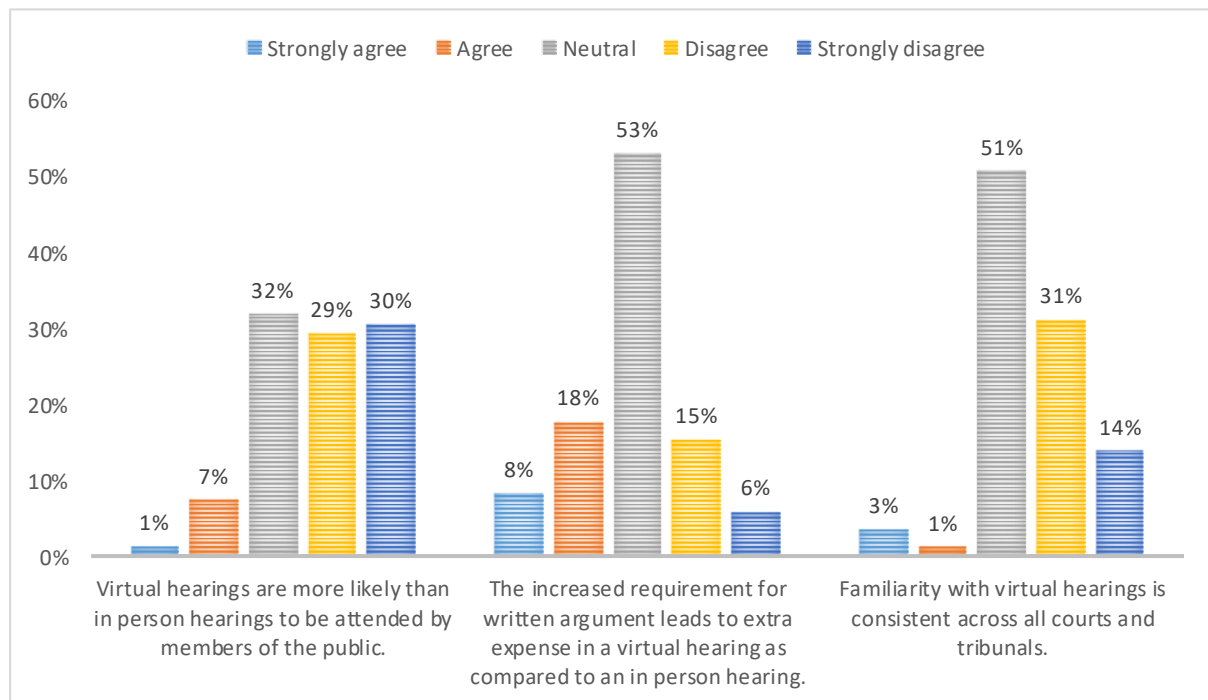
Figure 9: Stacked bar chart on agreement with statements.

Legend: ■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Familiarity with virtual hearings is consistent across all courts and tribunals.	3%	1%	51%	31%	14%
Virtual hearings should only be used in any case where the Court and parties agree.	14%	25%	21%	32%	8%
It is harder to make an argument at a virtual hearing than at an in person hearing.	18%	22%	22%	29%	9%
The increased requirement for written argument leads to extra expense in a virtual hearing as compared to an in person hearing.	8%	18%	53%	15%	6%
Virtual hearings require more written argument in advance.	14%	49%	15%	18%	4%
Virtual hearings are more likely than in person hearings to be attended by members of the public.	1%	7%	32%	29%	30%
Virtual hearings are more accessible for parties.	4%	12%	36%	38%	10%
Virtual hearings should be default for witness evidence in civil cases.	6%	1%	12%	32%	49%
Virtual hearings should be the default for submissions/argument.	14%	9%	20%	34%	23%
Virtual hearings should be the default for procedural business.	21%	24%	22%	19%	14%
Virtual hearings can, if used appropriately, increase access to justice.	15%	39%	29%	10%	7%
Virtual hearings can reduce the cost of attendance at court.	31%	46%	16%	5%	2%
Virtual hearings are a useful addition to the options available for court hearings.	38%	44%	7%	5%	7%

Q. 13 Do you think that the use of virtual hearings can deliver any efficiencies to the civil justice system?

Figure 10: Can the use of virtual courts deliver efficiencies?

DO YOU THINK THAT THE USE OF VIRTUAL HEARINGS CAN DELIVER ANY EFFICIENCIES TO THE CIVIL JUSTICE SYSTEM?

■ Yes ■ Don't know ■ Too early to say ■ No
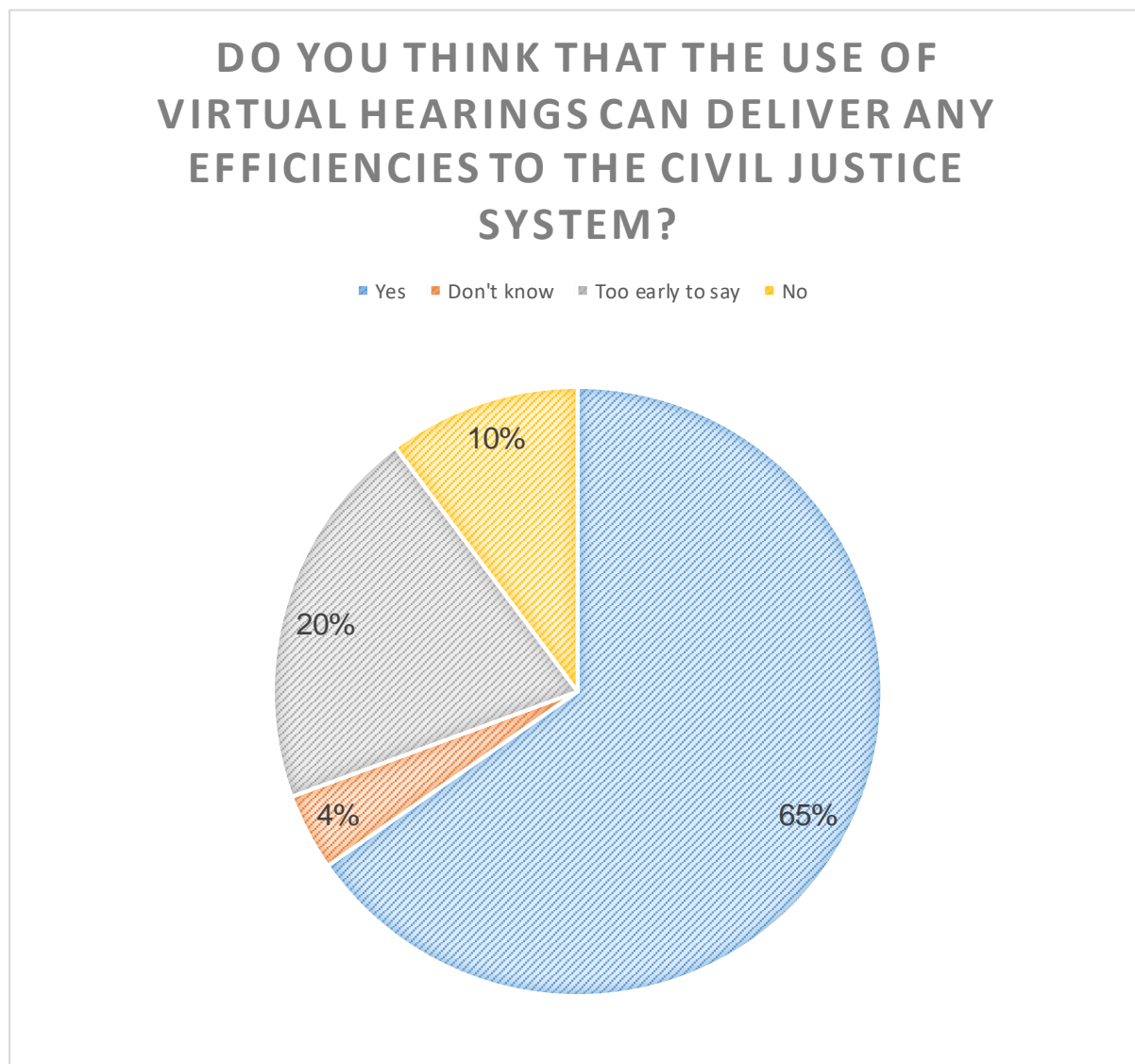
In answering this question, the majority were clearly of the opinion that there was potential for virtual hearings to deliver efficiencies: 65% said 'Yes', with a further 20% opting for 'Too early to say'.

Cross-referencing answers

Respondents' perception of particular aspects of virtual courts appeared to be influenced by which of the technologies they had experienced. If a respondent had used only telephone and not Webex, this affected their responses to both question 10 and question 13.

For example, the 20% of respondents who reported no use of Webex at all were more likely than the overall average to report in response to question 10 that their job became more difficult or significantly more difficult[5].

Figure 11: Different views of telephone users and all respondents: job difficulty

IS YOUR WORK MORE DIFFICULT WHEN HEARINGS ARE CONDUCTED VIRTUALLY?
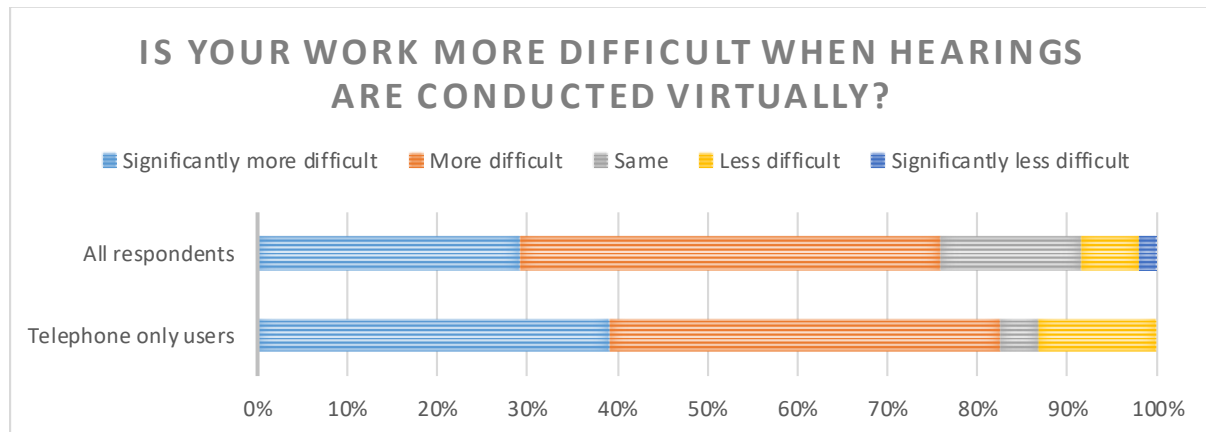
A similar difference surfaced when telephone-only users were cross-referenced with their answers to question 13. When asked whether or not there were efficiencies to be made by using virtual court technologies, respondents were less likely to say yes (57% vs the 65% average overall) and 'too early to say' (14% vs 20% on average) than the average of the total group of respondents.

Figure 12: Different views of telephone users and all respondents: efficiencies

DO YOU THINK THAT THE USE OF VIRTUAL HEARINGS CAN DELIVER ANY EFFICIENCIES TO THE CIVIL JUSTICE SYSTEM?
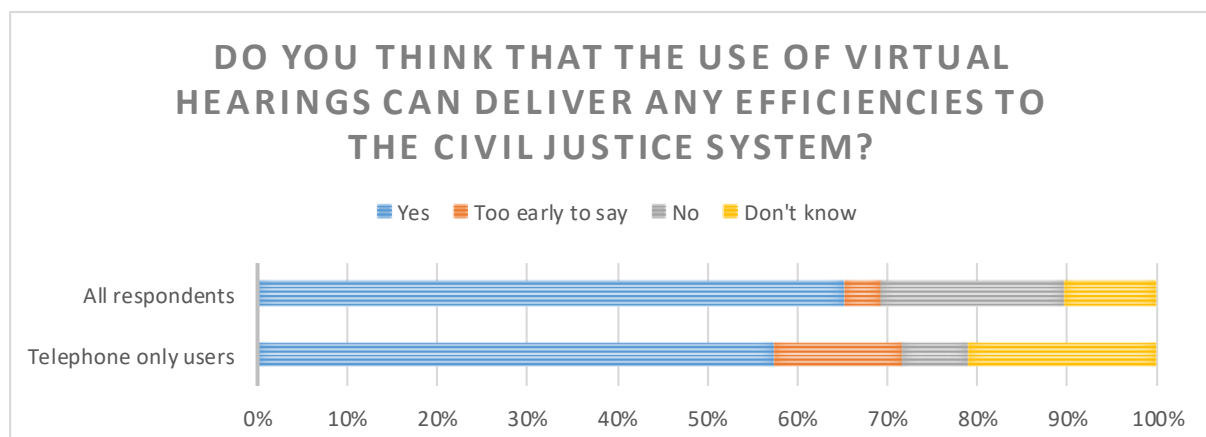
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[5] Taking all responses gives us 47% reporting that the job became more difficult and 29% reporting it became significantly more difficult, giving an overall disapproval rating of 76% (see Figure 7). Taking those respondents that only used telephone gives 43% (more difficult) and 39% (significantly more difficult) or disapproval rating of 82%.

There was a much smaller number of respondents (5%) who had only used Webex and not telephone. All of these answered 'yes' to the question "do you think that the use of virtual hearings can deliver any efficiencies to the civil justice system?"

Those who reported that their work becomes more difficult in a virtual court were slightly less likely to say that virtual courts can deliver efficiences to the civil court system. They were more likely than the average to say that there were no efficiencies to be delivered (17% versus the average of 12%) or that it was still too early to tell (28% versus the average of 24%).

When asked to compare the use of telephone and Webex with in-person hearings, only 12% of those canvassed would prefer the technological option. Although 22% thought that Webex would be better or much better for parties than in-person hearings, the majority considered that both telephone and Webex hearings were worse for all concerned.

5. Section 2: Qualitative data

As previously noted, there were 111 responses from 226 invitees. In order to make the open-ended questions easier to follow, they have been renumbered from the survey as follows:

Figure 13: List of qualitative questions

Q. no	Question
1	In general, how have you found the use of the telephone to conduct court hearings?
2	Please use this box to record any observations you have on the use of telephone hearings.
3	In general, how have you found the use of Webex to conduct court hearings?
4	Please use this box to record any observations you may have on the use of Webex.
5	Please use this box to record any observations you may have on the relative values of Webex and telephone hearings.
6	Please add any comments on how your work is impacted by virtual hearings.
7	Please use this comment box to elaborate on your answer to the above question. (Can virtual hearings deliver any efficiencies to the civil justice system?)
8	What can judges and sheriffs do to make virtual hearings more effective?
9	Please add any further comment.

As stated above in the Methodology, the responses to each of these questions were analysed and common topics of comment were recorded. The topics that came up most frequently were:

  a) training
  b) infrastructure
  c) the experience of other court users, and
  d) health and wellbeing issues.

The frequency of each of these can be seen in Appendix , Figure 15.

More detail on each of these is provided as the results are expanded upon below but, in general, the experiences recorded under these topics were, by a large majority, negative, particularly in the case of infrastructure. A good deal of frustration was expressed with inadequate tools, apart from Webex, and telephone technology, with the case management system (ICMS) being frequently mentioned as creating a bottle-neck for work. In addition to ICMS, many respondents felt that they are inadequately supported by the technological infrastructure and training provided to them:

> *"Webex is fit for purpose. However, ICMS is not. In fairness, I doubt whether ICMS was developed as a user-friendly electronic 'process,' as opposed to an electronic 'filing cabinet.' It's fine for the latter role, but inadequate for the former. By far the biggest downside of the practices we have adopted since the pandemic has been the need to prepare for busy civil courts using ICMS."*

Alongside this, many respondents also mentioned the additional workload for clerks involved in setting up virtual courts, or reported that they have had to take on duties themselves that would normally be assigned to clerks:

> *"Far more work involved for clerks in setting up a Webex hearing which is not balanced by reduction in work elsewhere."*

> *"Sheriffs in Glasgow are required to conduct these [courts] without the benefit/assistance of clerks."*

The increased workload for clerks has been recorded under c) other court users, but where there has been a report of increased workload for the respondent, this has been recorded under d) health and wellbeing. Under the methodology adopted, a comment can be coded under any and all of the four topics listed above.

Questions 1 and 2
1: In general, how have you found the use of the telephone to conduct court hearings?
2: Please use this box to record any observations you have on the use of telephone hearings.

Broadly, most respondents saw the use of telephone calls in a virtual court as useful in certain contexts, but overall less satisfactory than in-person hearings. Certain general disadvantages of telephone communication were noted several times: lack of non-verbal communication; difficulty in 'turn-taking' and knowing who is speaking; background noise.

On the whole, there was agreement that the telephone was a useful (and, at times, preferable) way to conduct short, simple matters where the parties have legal representation. In such cases, it was noted that it was crucial that the number of participants was kept low to maintain the perceived benefits.

> *"Coming from a commercial litigation background, I regard telephone procedural hearings as both the norm and the ideal - at least in cases where parties have legal representation. It saves everyone time and expense."*

Where certain types of hearing and processes were mentioned, there was near unanimity in considering that telephone was not appropriate for child welfare hearings. Further to this, many respondents also reported that managing the court by telephone required considerable effort. While there were some success stories in terms of laying down ground rules and enforcing them, the majority of comments focused on the lack of interaction with lawyers and parties.

On the subject of time, there was a split, with some comments reporting the need for increased preparation time and the challenge of trying to get all parties involved on a phone call. However, some respondents found that the use of the telephone forced parties and lawyers to be more concise and efficient. Overall, these comments seemed to fit the overall opinion that virtual courts conducted by telephone were efficient when used appropriately, for cases that suited the medium. Otherwise, the telephone was less than satisfactory.

There were some individual comments that deserve note when considering the use of the telephone:

"We are not routinely provided with a clerk and it therefore leaves the judge open to accusations by parties."

"Agents in family cases particularly remark on the loss of the benefit of getting parties into the same room, for discussions but also for the Sheriff to speak directly to them/admonish where needed."

"A constant worry for me is the security of the calls i.e. how do I know that I am indeed speaking to the person should be speaking to, is the call being recorded at the other end, is there someone listening into the call at the other end who shouldn't be etc."

Questions 3 and 4
3: In general, how have you found the use of Webex to conduct court hearings?
4: Please use this box to record any observations you may have on the use of Webex.

In general, Webex was more highly-regarded than telephone. A high number of respondents were content with their experience using the platform, and those who expressed discontent were often reporting specific technological problems, rather than problems with the principle of the platform itself. To what extent the failure of technology on a given day can be separated from the overall suitability of the platform is, of course, a matter for debate, but there were fewer comments about the inherent difficulties of managing a virtual court rather than an in-person one, suggesting that Webex as a platform is relatively satisfactory.

"The overall effect is draining due to the amount of time on the screen combined with attempting to access court documents, also on a screen"

The principal problem with the platform seems to be a health and wellbeing issue. As with the telephone, some respondents noted a lack of satisfactory interaction with the

court – and this will be mentioned again below – but the more important issue was the fatiguing effect of looking at a computer screen all day.

Another commonly raised issue was the security of witness testimony given by Webex. There are certain formal features of an in-person court that cannot be replicated using videoconferencing and the lack of these was raised by respondents, particularly for Child Hearings and cases with involved arguments:

> *"One party's audio was poor, and she was in the same house as a witness who also gave evidence, so I had to take their word for the fact that they remained apart when giving evidence."*

This also feeds into a concern that is stated later in this analysis: that the dignity or authority of the court is compromised by the use of Webex. In this section, respondents noted that, on occasion, agents appeared inappropriately dressed, that children were present in the background of calls and that, in general, it did not allow for dialogue between bench and bar. It is worth noting that this kind of caveat against the use of Webex was as common as complaints about the technological stability of the medium:

> *"Webex does not create an environment in which justice is publicly seen to be done. The inevitable technical hiccups and the lack of confining all the participants within a physical space tends to result in a second rate method of conducting proceedings. The problems are particularly acute for hearings where there is substantive argument and/ or witness evidence."*

Issues with ICMS were also mentioned, and several respondents were concerned by access to the technology. These were noted again as infrastructure-related comments. Respondents were undoubtedly anxious to avoid a situation where a lack of access to technology risked a lack of access to justice.

In summary, Webex was seen as generally preferable to telephone, but inferior to the in-person hearing. In addition there was a strongly perceived risk to the reputation of the court and access to justice. Finally there were health and wellbeing issues that could arise from the continued use of Webex.

Question 5: Please use this box to record any observations you may have on the relative values of Webex and telephone hearings.

Most of the points brought up by respondents in this question have already been addressed in the previous two sections. However, there are some comments that show the diversity of opinion in the survey that are reproduced below:

"I believe this is a wonderful opportunity to radically change the way we deliver justice. I certainly would not resist such a change and I believe, through the experience of the pandemic, many agents now have come to accept that we should 'do business' utilising a range of different options in which to serve their clients and the courts."

"A Webex hearing is the best option where in person hearing is not possible. Even then questionable if viable at all for proofs or leading of evidence. Other than basic procedural hearings, an in person hearing is very much the best option, including for hearing of legal submissions as well of course s leading evidence."

"Both are unsatisfactory, but telephone even worse".

Question 6: Please add any comments on how your work is impacted by virtual hearings.

There was almost unanimous agreement that virtual courts had made for a more tiring, less satisfying and overall poorer experience at work. While some respondents took time to point out some of the positives and, indeed, the temporary necessity of the arrangements, there were significant points raised, mostly in terms of health and wellbeing.

While the concerns about virtual courts – particularly Webex – being more tiring and causing eyestrain are noted above, it was clear that there was a wider concern about wellbeing that was brought out by this question. Included here are two longer quotes that offer context to the reader:

"Difficult"? I think not. I do not think there is any increase or decrease in difficulty. I would say that there is a significant diminution in job satisfaction and morale. Dealing with cases remotely has a very real and profound effect on us as individuals. It is very isolating. We lose a personal interaction in court - which

was, after all, an essential, valuable, intangible feature of the office (again, difficult to assess in a spreadsheet by those who value that sort of thing). One is left working alone all day in chambers like a battery chicken.

"The use of virtual hearings has made my work very much more challenging and immensely less satisfying. My working conditions and my work environment have been utterly transformed for the worse. I feel isolated, lonely and unsupported. There are major welfare issues which the administration and judicial leadership have ignored. The good will of the judges has simply been taken for granted. The level of communication with the judges has been poor. We are expected to reproduce the same high level of performance and output without any consideration being given to the impact of the new arrangements on our mental and physical health. Rumours are circulating about the SCTS and judicial leadership being determined to move to a remote system for all civil work and much criminal work no matter what the views of the judges and court users may be. This culture of secrecy is highly damaging to morale and to judicial welfare."

Even those comments that are neutral or positive mention extra work, additional preparation and the increased tiredness already noted above.

Question 7: Can virtual hearings deliver any efficiencies to the civil justice system?

For many, if not all, respondents, the efficiencies delivered by virtual courts were several and obvious: reduction of travel (particularly for courts outside the central belt); reduced cost of lawyers' time; ease of access for witnesses, especially expert witnesses; the ability to set a mutually agreeable time for a hearing; and reduction in waiting time.

Against this, several respondents raised concerns with the framing of the question.

"But at the expense of access to justice. Nor does it take account of any impairment/disability a judge may have which makes virtual hearings difficult/impossible to undertake."

"The question is misconceived. It is unclear what is meant by "efficiencies". The issue is whether the quality of justice is adversely affected. It certainly is."

"It depends on what is meant by "the civil justice system". Is that the court? the court + admin? the parties? their advisers?"

On balance, the majority of the respondents took the view that, if used appropriately, and for the right kinds of hearings and cases, there was more to be gained than lost from the use of virtual courts. In basic procedural hearings, short motions and hearing the testimony of medical witnesses, for example, there is broad support for the use of Webex and, to a lesser extent, telephone. However, aside from the objections noted above, there were the same concerns about the formality of court proceedings being diluted as noted above.

Question 8: What can judges and sheriffs do to make virtual hearings more effective?

"Once I am adequately resourced with and trained in the use of the appropriate technology, I would hope to be able to answer this question."

In response to this question, the issue of training and the infrastructure underpinning the technologies used arose frequently. Preparation, practice, proactivity and the pooling of knowledge were commonly recommended with the aim of increasing familiarity and confidence with the processes and technology employed in the virtual court. Having basic rules of procedure and reading these out as introductory remarks were felt to improve the management of the court, and one comment urged the reader to "keep an open mind".

1. *Be familiar with the technology.*
2. *Prepare well.*
3. *Communicate clearly during hearings.*
4. *Ensure that party litigants in particular understand that each party will have a fair opportunity to make their case.*

In effect, the advice was to 'lean in' to the benefits of virtual courts, preserve or translate what is missing from the in-person experience, and persevere with the drawbacks of the communications technology and case management system.

Question 9: Further Comments

Only 30% of respondents engaged with this question, perhaps due to having had ample opportunity to express their thoughts in earlier sections, or due to survey fatigue. Due to the undirected nature of the question, there is also a great variety in the comments, making it difficult to summarise succinctly. However, it is worth pulling out a few comments that offer more enthusiasm or scepticism than the survey has so far elicited:

> *"I am very enthusiastic about virtual hearings, particularly by Webex. I think the pandemic has been the 'mother of invention,' with regard to modernising many areas of practice and that there needs to be a focus on extending the use of Webex or similar for, particularly civil, hearings of all kinds."*

> *"We must maintain the progress made and emphasise the motivation on the part of the judiciary. There is widespread support for Webex based virtual courts and we should seize the moment. However open access must be the default."*

> *"I would add that, while I see virtual hearings as a helpful tool available to court users - especially where parties/witnesses/agents are at a distance - the acme for overall effectiveness remains in-person hearings. This is not a conclusion which I thought I would reach before virtual hearings became a reality as I assumed that they would make life easier for parties, agents and the courts. Unfortunately, in my experience, that has not been the case."*

> *"Virtual hearings have made the judge's job more difficult, more tiring, and more stressful. If this is the way forward, I'll be retiring just as soon as it is realistic to do so...."*

6. Conclusion

Combining the qualitative and quantitative data generated by this survey has shown that there is reasonable support for, and appreciation of, the use of virtual courts. They are seen to have served a useful purpose during the pandemic and there is some appetite for them to become a tool in the long term for some types of hearing. Balanced against that is a fear that the quality of justice dispensed, job satisfaction (and indeed, health) of judges and sheriffs and the authoritative image of the court will diminish unless the use of virtual courts is managed with appropriate care and consideration.

On the technology side, the consensus is that videoconferencing is generally preferable to telephone, save on the question of reliability, and that respondents want to receive training on how to make the best use of it. While this was a survey specifically asking about how telephones and Webex are used, it is clear from reading the qualitative data that these technologies must be considered in the round: the use of ICMS, the availability of second monitors and suitable audio equipment are equally important. Obviously, the same must be said for the stability, bandwidth and speed of internet connections.

This survey has shown that respondents care deeply about the integrity of the civil courts, that they are willing to adapt and learn, and that there is an appetite for progress. Where there are concerns, these are about infrastructure, training, the experience of other court users, and judicial job satisfaction.

Appendix A: Survey Questions

1. What experience have you had in the use of virtual technology to conduct court hearings?
2. In general, how have you found the use of the telephone to conduct court hearings?
3. In general, how have you found the use of WebEx to conduct court hearings?
4. If applicable, how would you assess the use of telephone hearings as against an "in person" hearing? Please have regard to all the circumstances, rating whether telephone hearings are better or worse ...
    1. for judges?
    2. for clerks?
    3. for counsel?
    4. for solicitors?
    5. for parties?
    6. for the public/press?
5. Please use this box to record any observations you have on the use of telephone hearings.
6. If applicable, how would you assess the use of WebEx as against an "in person" hearing? Please have regard to all the circumstances, rating whether Webex hearings are better or worse ...
    1. for judges?
    2. for clerks?
    3. for counsel?
    4. for solicitors?
    5. for parties?
    6. for the public/press?
7. Please use this box to record any observations you may have on the use of WebEx.
8. If applicable, how would you assess the use of WebEx as against a telephone hearing? Please have regard to all the circumstances, rating the two technologies are better or worse ...
    1. for judges?
    2. for clerks?
    3. for counsel?
    4. for solicitors?
    5. for parties?
    6. for the public/press?
9. Please use this box to record any observations you may have on the relative values of WebEx and telephone hearings.
10. Is your work as a judge or sheriff more or less difficult when hearings are conducted virtually?
11. Please add any comments on how your work is impacted by virtual hearings.
12. Please indicate the extent to which you agree with the following propositions.
    1. Virtual hearings are a useful addition to the options available for court hearings.
    2. Virtual hearings can reduce the cost of attendance at court.

3. Virtual hearings can, if used appropriately, increase access to justice.
4. Virtual hearings should be the default for procedural business.
5. Virtual hearings should be the default for submissions/argument.
6. Virtual hearings should be default for witness evidence in civil cases.
7. Virtual hearings are more accessible for parties.
8. Virtual hearings are more likely than in person hearings to be attended by members of the public.
9. Virtual hearings require more written argument in advance.
10. The increased requirement for written argument leads to extra expense in a virtual hearing as compared to an in person hearing.
11. It is harder to make an argument at a virtual hearing than at an in person hearing.
12. Virtual hearings should only be used in any case where the Court and parties agree.
13. Familiarity with virtual hearings is consistent across all courts and tribunals.
13. Do you think that the use of virtual hearings can deliver any efficiencies to the civil justice system?
14. Please use this comment box to elaborate on your answer to the above question.
15. What can judges and sheriffs do to make virtual hearings more effective?
16. Please add any further comment.

Appendix B: Sentiment and topic scores

Figure 14: Sentiment Analysis Scores

Q. no	Question	No of Answers	Percentage answered	Sentiment Score	Ave Sentiment Score	QDAP Score	QDAP Adjusted
1	In general, how have you found the use of the telephone to conduct court hearings?	96	86%	19	0.19791667	13.986	0.427466
2	Please use this box to record any observations you have on the use of telephone hearings.	55	50%	-13	-0.2363636	3.4677	-0.53242
3	In general, how have you found the use of Webex to conduct court hearings?	84	76%	58	0.69047619	24.266	1.647691
4	Please use this box to record any observations you may have on the use of Webex.	51	46%	4	0.07843137	4.1405	-0.42021
5	Please use this box to record any observations you may have on the relative values of Webex and telephone hearings.	44	40%	28	0.63636364	11.5695	0.744171
6	Please add any comments on how your work is impacted by virtual hearings.	75	68%	-58	-0.7733333	4.0558	-0.53168
7	Please use this comment box to elaborate on your answer to the above question. (Are there efficiencies)	66	59%	36	0.54545455	9.991	0.229812
8	What can judges and sheriffs do to make virtual hearings more effective?	85	77%	52	0.61176471	14.224	0.542805
9	Please add any further comment.	33	30%	-2	-0.0606061	4.0466	-0.29558

Figure 15: Topic analysis scores

Q. no	Question	Training	Infrastructure	Other Court Users	Health and wellbeing
1	In general, how have you found the use of the telephone to conduct court hearings?	0	5	10	0
2	Please use this box to record any observations you have on the use of telephone hearings.	0	1	8	5
3	In general, how have you found the use of Webex to conduct court hearings?	0	8	8	4
4	Please use this box to record any observations you may have on the use of Webex.	0	1	3	1
5	Please use this box to record any observations you may have on the relative values of Webex and telephone hearings.	0	0	2	2
6	Please add any comments on how your work is impacted by virtual hearings.	1	7	4	24
7	Please use this comment box to elaborate on your answer to the above question. (Are there efficiencies)	0	3	0	0
8	What can judges and sheriffs do to make virtual hearings more effective?	15	5	1	0
9	Please add any further comment.	5	7	9	8
	Totals	21	37	45	44