# OPUS 2 INTERNATIONAL 

Horizons Issues - Alan Bates \& Others v Post Office Limited

$$
\text { Day } 6
$$

March 19, 2019

Opus 2 International - Official Court Reporters

Phone: 02030086619
Email: transcripts@opus2.com
Website: https://www.opus2.com

```
(10.30 am)
MR JUSTICE FRASER: Yes.
MR DE GARR ROBINSON: If I can give your Lordship an update.
    I have been looking at these documents overnight. So
    far I have found one document where I believe a small
    redaction was mistaken and that's F/1225 and a clean
    copy has been provided to my learned friend, two
    documents where I believe the redactions are correct
    which is F/1549 and F/708. My Lord, with the others
    I simply need more time.
MR JUSTICE FRASER: I didn't intend you to have to do them
    straight away.
MR DE GARR ROBINSON: One of them is 109 pages long.
MR JUSTICE FRASER: Yes. So why don't we just leave it that
    there's no need now for you to give me an update until,
    shall we say Thursday morning, and then if you just give
    me a date by which you think you might be able to have
    finished. I'm not expecting you to have done them
    straight away or on Thursday there will be no criticism
    if you haven't been able to do any more than just these
    three because you are in the middle of calling your
    evidence.
```

    1
    MR DE GARR ROBINSON: And it is a slow process. I have to
say, on skimming the other documents I have not found
what appear to be any serious errors that are glaring.
There are some passages where I would like to speak to
my instructing solicitors so that I can understand what
they're about. They seem to be completely irrelevant
but I just want to ensure that they are for my own
satisfaction .
MR JUSTICE FRASER: Yes. I will be taking a slightly
different approach if I'm told these redactions are made
on the grounds of relevance rather than made on the
grounds of legal professional privilege or anything of
that nature.
MR DE GARR ROBINSON: Some of them are on the grounds of
irrelevance and confidentiality, some of them are on the
grounds of privilege.
MR JUSTICE FRASER: Well, you're going to need to identify
the ones that are on the grounds of irrelevance because
I'm likely to be taking a different approach if they are
said to be irrelevant -- obviously if it's legal
professional privilege or litigation privilege then
that's one thing. If it is said to be on the grounds of
relevance I will be adopting a slightly different
approach.
MR DE GARR ROBINSON: Well, my Lord, I hear what
your Lordship says. It should be understood that the Post Office business is massive and extremely diverse, so, for example, if there's a review of the car accident statistics in a given year, my Lord, that is completely irrelevant. I don't know if your Lordship would expect that to be included in any disclosure. But those are the kind of issues we're talking about.
MR JUSTICE FRASER: Well, when one begins to dissect a document on the basis of parts of that document being irrelevant, in the circumstances of this case that's something that I can look at and I might choose to look at it to decide whether it is in fact irrelevant. If it is legally professionally privileged, I'm not obviously -- the assertion of privilege brings that to an end.
MR DE GARR ROBINSON: Well, my Lord, that would be an unusual course for your Lordship to adopt.
MR JUSTICE FRASER: It might be, but it 's not an improper course for me to adopt. But let's deal with these one step at a time, all right? You have reviewed three, you will give me the update on Thursday. I would like to make it clear, though I have already, I don't want to impose a burden on you during your evidence of time because I have asked you to do it, so if on Thursday all you can do is give me an intended timeframe by which the

## 3

exercise might be completed, then that will help.
MR DE GARR ROBINSON: Very good, my Lord.
While we are on the subject of documents there is one other point I should mention. Your Lordship will recall the evidence last week, Mr Tank saying that he had a box file of documents, and Mr Latif who is still a subpostmaster saying that his staff searched records which revealed that his transaction correction issue occurred in January 2018 not March. My Lord, my understanding is that Mr Tank has now disclosed three documents and Mr Latif has disclosed none at all. Just so your Lordship is aware, on Friday my instructing solicitors wrote to Freeths making those points and seeking disclosure of records and transaction logs consulted by Mr Latif for the purpose of preparing his witness statement, any notes by Mr Tank, documents in the box file and CCTV recordings that were consulted by Mr Tank, any other documents that any of the witnesses consulted when preparing their witness statements and of course any adverse documents. It sought a response by close of business yesterday, we have all been very busy, no response was received. I will keep your Lordship informed as to progress on that issue.
MR JUSTICE FRASER: Thank you.
MR GREEN: I'm grateful, my Lord. My Lord, I don't know
whether there's a copy of the unredacted document available for your Lordship and the witness.
(Pause).
MR JUSTICE FRASER: Thank you very much. MS ANGELA VAN DEN BOGERD (continued)
Cross-examination by MR GREEN (continued)
MR GREEN: Mrs van den Bogerd, we looked briefly at this document yesterday.
MR JUSTICE FRASER: Is this 1225 ?
MR GREEN: It is 1225 , my Lord, yes.
If we look on page 2 of 4 , at the top of it we will see there are six bullet points at the top --
A. Yes.
Q. -- which were previously redacted and now can be seen.
Do you see those?
A. Yes.
Q. And those are introduced in fact by the bottom paragraph on the previous page, which is page 1 of 4 .
A. Yes.
Q. And that says "Key performance indicators":
"The programme will track performance against the
following key performance indicators."
Yes?
A. Yes.
Q. And what we see there is that the key performance
5
indicators for the programme were reduction of operating cost by $£ 3$ million a year.
A. Yes.
Q. Reduction in net agent debt by $£ 1$ million. Reduction in subpostmaster suspensions as a result of audit short annuals to a level of 60 per year. Reduction of calls into NBSC by $25 \%$. Reduction of audit losses of 10 k or over, I think that should be, by $50 \%$ and satisfaction with online training models of $95 \%$.
So it's fair so say, isn't it, that one of the key thrusts of that KPIs is cost saving?
A. Part of it, yes.
Q. And indeed that mirrors what we saw yesterday about the introduction of Horizon Online?
A. Yes partly, yes.
Q. And --
A. Sorry, can I just say on this particular one the cost reduction will come as if -- so the whole thrust of this is if we eliminate the errors at the front end then we won't need to obviously deal with errors at the back end and that's obviously what the cost saving is driven from.
Q. And so you could see when putting the branch support programme together that it was likely to reduce subpostmaster suspensions as a result of audit
shortages, couldn't you?
A. Yes.
Q. So the measures that you had in mind would be likely to lead to reduction in those suspensions?
A. Yes.
Q. And in a reduction of audit losses of $£ 10,000$ or more?
A. Yes.
Q. And to greatly increased satisfaction in online training models?
A. Yes.
Q. And that reflected a recognition by you of where the scope for improvement lay after you had carried out sort of horizon scanning exercise, no pun intended, of the difficulties that were being encountered by branches?
A. Yes. As I said yesterday it was across a number of areas including what was coming through Business as Usual, what I saw from the mediation scheme and the branch support programme; all of those.
Q. Thank you. Could you now be shown very kindly $\{F / 1330\}$. This is a spreadsheet of call logs that you have referred to in your witness statement. I will just read out your witness statement, paragraph 184 \{E2/5/42\}, to you while that's downloading. Under the "NBSC" heading at paragraph 184:
"In terms of the use of the Helpline and NBSC
7
generally, my colleague, Dean Whitehead, WFM \& Telephony
Manager ..."
What's WFM?
A. Workforce management.
Q. Workforce management and telephony manager:
"... has prepared the attached spreadsheet which appears ..."

We can see it is $\{\mathrm{F} / 1330\}$ :
"... which includes the NBSC call data volumes from 30 March 2015 to 11 November 2018."

And the aggregated volumes, I understand, were not tracked prior to March 2015, is that right?
A. I'm not sure it was in this format actually. We always recorded the number of calls but how they have been presented has changed.
Q. Let's just look then -- in the light of that answer let's look at $\{\mathrm{E} 2 / 5 / 43\}$, which is what you say at 185.5 . So you say:
"In terms of the period of the available call volume data, to confirm, while Post Office hold records of the calls received that predate 30 March 2015 ..."

Because we have seen some in this trial, haven't we?
A. Yes.
Q. "... we do not hold in a readily accessible place any aggregated call volume data from before this date."
A. Yes.
Q. So you would actually have to look and see what the numbers of calls were?
A. Yes.
Q. And then give evidence about that if you wanted to explain it?
A. Yes.
Q. If we can go back please to $\{\mathrm{F} / 1330\}$, let's just look at the headings at the top of the columns if we may. We've got A is obviously date, B is "Calls offered" which is calls made to the NBSC, C is calls answered, which is calls answered by the NBSC, and then D is forecasted calls and E is the difference between calls offered and called answered. So that's the number of people not getting through, isn't it?
A. Hanging up or -- yes, yes, or --
Q. Not getting through?
A. Yes.
Q. They make a call and the call is not actually answered?
A. Or they don't progress, yes, through ...
MR JUSTICE FRASER: For whatever reason, they don't get through to the person.
MR GREEN: For whatever reason.
A. Yes, because sometimes -- sorry, there's an IVR message on the answer, so if you pick up the phone and it will

9
say "If you're ringing about this" -- so say we had a known problem in the network, we would put a message on to the helpline that would say " If you're ringing about this particular issue we are aware of it, we're looking at it and we will update as soon as we can", so at that point someone might drop off.
Q. So might these numbers be where there were known problems on the network? Might some of these drop-offs be people who had been affected by known problems on the network?
A. Sometimes, or it could be that they would ring and they decide that they don't want to continue to wait, it might be that a customer comes in whilst they are on the phone and therefore they serve the customer rather than waiting on the call.
Q. But one way or another they don't actually get through to somebody on the helpline?
A. Yes, absolutely, that's correct yes.

MR JUSTICE FRASER: Mr Green, is this going to be of enormous assistance to me in resolving the issues?
MR GREEN: My Lord, it probably is of small relevance but I have pretty much finished my examination.

Was there any increase in budget for the helpline in the branch support programme?
A. In the branch support programme? I don't ... I don't
recall an increase in budget. What we did is we restructured so that we had more focus on the tier 2 support, so that when the calls came in if there were calls that couldn't be easily rectified at the T1, that get to T 2 and we made Horace information available to tier 2 as well so they could look into the data in branches to be able to assist with problems.
Q. So previously, prior to the branch support programme, tier 2 couldn't look at the Credence data?
A. That's correct.
Q. Let's move please to the section in your witness statement where you deal with the subpostmaster evidence and if we look at paragraph 30 please $\{E 2 / 5 / 11\}$, you explain there:
"To prepare this evidence, I have had to rely on a small team of people at Post Office (predominantly former trainers and auditors who have complemented their hands-on branch knowledge with investigative skills honed from several years of investigating claims of accounting issues in branches) to help me investigate the allegations raised."

So that sounds like a pretty impressive group of people skills wise, is that fair?
A. They are good, yes.
Q. As you have described them there?

11
A. Yes, yes.
Q. And how many people have been in this small team?
A. About ten.
Q. Ten. And they are all people at Post Office?
A. Yes.
Q. And can you remember who they are?
A. Yes.
Q. Could you tell us who they are?
A. So there's Kath Alexander, Shirley Hailstones, Reanne Fox, Michelle Cohone(?), Karen Derb(?), Peter Todd, Paul Smith, Keith Scott, Matt Waller -sorry, how many is that? I'm trying to think if I have forgotten anybody.
Q. Well, at least those?
A. Yes.
Q. If you remember any more you can tell us.

MR JUSTICE FRASER: That was nine.
A. That was nine. I'm in trouble now because I have forgotten one, haven't I?
MR GREEN: That's not something to be in trouble over.
You say that they have assisted with the preparation of your evidence responding to the subpostmaster's evidence?
A. That's right, yes.

Sorry, one more was Hugh Williams. Sorry, it has
 13
data?
A. Yes.
Q. And the NBSC helpline call logs where available?
A. Yes.
Q. And the helpline logs would not normally be available to an SPM if they called up themselves?
A. They are not routinely provided, no.
Q. After a call they don't get sent the record --
A. No, they don't.
Q. -- to see whether it has been correctly recorded or fairly reflects what they have rung up about?
A. No, that's correct.
Q. In fact we see Angela Burke later on has to make a data subject access request --
A. Yes.
Q. -- to get hold of a transcript of her own call.
A. Yes.
Q. And pay the fee and produce ID in order to get the transcript of her own call with the helpline. Yes?
A. Yes.
Q. Just parenthetically, do you think that's a satisfactory way to respond to a subpostmaster or subpostmistress asking for a transcript that you hold of their call?
A. No, I think we should be providing it. If it is -- so if we were to routinely provide every call that would be
quite an onerous task as you would imagine with the number of calls. If it is to support a particular issue where there is an issue with, you know, a loss or something then I think we should provide.
Q. That hasn't been the practice thus far as we have seen?
A. No, it hasn't.
Q. And let's turn, if we may, to Mr Latif's case which -if we look please at paragraph $90\{\mathrm{E} 2 / 5 / 23\}$. You say:
"My strong belief is that Mr Latif has recalled these events incorrectly. The transaction data for the branch ..."

You give three POL numbers:
"... shows that in the relevant period (June to August) every transfer out has a corresponding transfer in. I also note that the ARQ data show that there is no stock unit SJ1 as asserted by Mr Latif, however there is a stock unit SP1."

Let's take that in stages. He fairly accepted there was a typo on SJ1 and SP1 so let's leave that aside. Now, you understand, do you, the different types of data that you can have, transaction data, event data and session data?
A. Yes.
Q. And do you understand the difference between them or not?

15
A. From this -- yes, yes, I do, yes.
Q. Did you know the difference between them before you did this exercise?
A. Yes, I have seen the data before. We have used this before.
Q. But did you have a really clear understanding of the difference between event data and transaction data?
A. So the transaction data is everything that -- all the transactions. The event data are things that would record transfer in, rem ins, it was the other information.
Q. What about session data?
A. Session data referred to the sessions on there, yes.
Q. Do you know really what that means very well, or ..?
A. I've not -- in terms of getting into the detail of it then not at that level.
Q. No.
A. What I look at is the information that would be able to walk me through a sequence of events and getting under the skin of what we can see, put the picture together.
Q. Is that level of knowledge why the three POL documents you refer to in your witness statement were in fact event data not transaction data?
A. Sorry, the transaction data should be in there as well.
Q. Well, yes, it should, but the three specific document
references that we had to go and read and look at to try and find what you were saying, there's no row or anything like that mentioned, those documents are event data documents, aren't they?
A. Sorry -- well, I understood them to be transactions as well.
Q. Let's have a look and just trace it through. Let's look at $\{\mathrm{F} / 1354\}$ please as an example. This is the second of the POL references in that paragraph. If we could go to sheet 1 rather than the summary please. So this is the event data.
A. Yes.
Q. It's not the transaction data and it's not data from which we can see that every transfer out has a corresponding transfer in of the same amount, is it? Do you want to go across to the right a bit?
A. Not on this you won't see that, no.
MR JUSTICE FRASER: Could you keep your voice up please.
A. Sorry, yes.
MR GREEN: And it shows receipts printed and things like that, it shows reversals, variance checks, things like that.
A. Yes.
Q. So you can't actually see that?
A. Not from this one, no.

17
Q. No. And all three of the specific POL numbers, documents, at paragraph $90-$ go back to page 23 of your witness statement $\{\mathrm{E} 2 / 5 / 23\}$-- were actually references to events data. Were you aware that this was taken up with your solicitors in February?
A. No, I wasn't. Because to look at this I have looked at the event data, as you say, to look at corresponding transfers in and out and then the transaction data to look at the values of those to see from which stock unit, so ... sorry, I didn't put the reference numbers on the document, so ...
Q. But the POL number documents that were in the statement that you had in front of you when you were being shown this, I asked you at the beginning did you look at those documents to see whether they could support what you were saying they showed and you said yes.
A. Because I --
Q. So did you have other documents in front of you, or ...?
A. So I understood that to have included the transaction data as well, so that's my mistake in terms of the number in there.
Q. Very briefly I will just show you this: $\{H / 186 / 2\}$. This is a 4 February 2019 letter and it relates to, at the bottom of the page, Mr Latif. Paragraph 8:
"Mrs van den Bogerd refers to 'the ARQ data' at
paragraph 90, without exhibit. Please identify the intended document.
"Also at paragraph 90, Mrs van den Bogerd exhibits transactional data for June to August 2015. We anticipate that data outside of this range was identified by Post Office and considered by ... her small team ... As Post Office must recognise, Mr Latif may have misremembered the date of the incident."

Go over the page please $\{\mathrm{H} / 186 / 3\}$ and then there's a reference to data in paragraph 98 , checking that, do you see that?
A. Sorry, where are we?
Q. Paragraph 11?
A. Yes.
Q. The reference to the POL document: is this the correct document or not? And if we look at $\{\mathrm{H} / 196 / 18\}$ there's a response on 11 February and the reference to ARQ data at the bottom, in paragraph 90 without exhibit says:
"The reference to 'ARQ data' is to the transaction data for the branch which referred to the exhibit mentioned in the previous sentence."

So it specifically asked about is this the transaction data in these three event data logs and then that comes back. Were you aware of any of this going on in the background in relation to what you had said in

19
your witness statement?
A. No. I understood the transaction data was there.
Q. Okay. Because it was actually disclosed on 21 February and Mr Latif went to Kashmir on 19 February.
A. Right.
Q. So if we go back to paragraph $90\{\mathrm{E} 2 / 5 / 23\}$, you will see that the three additional references underneath at $\{\mathrm{F} / 1353.1\},\{\mathrm{F} / 1365.1\}$ and $\{\mathrm{F} / 1371.1\}$, are additional documents which are not those POL documents, but you didn't know about any of that?
A. No, sorry, I didn't know about that.
Q. To find the information about the value of stock transfers, which was what was in issue --
A. Yes.
Q. -- we need to look at the transaction data, don't we?
A. Yes, yes.
Q. Pausing there, were you aware that there had been two quite widespread and persisting bugs which related to transfers between stock units going awry when you made your statement? Did anyone tell you that?
A. At this time?
Q. When you made your statement did you know that within the Horizon system there had been two quite important bugs which related to problems with stock unit transfers, or not?

```
A. Not specifically .
Q. No. Because both the Callendar Square bug and the
Dalmellington bug related to problems arising on
transfers between stock units, didn't they?
A. I knew about the Dalmellington one, that's an outreach -- an outreach issue, so I was aware of the Dalmellington. I hadn't heard about the Callendar Square one.
Q. But you didn't have the overlap with that in mind when you were putting your witness statement together about Mr Latif's situation?
A. So, no, when I put this together we have looked at the data to see whether that -- does the data support what Mr Latif has said and what we can see and what we can see in there is that we've got the information that shows that those transfers have been transferred out and transferred in within the branch.
Q. Well, let's look at it quickly if we may.
MR JUSTICE FRASER: Just before we do I would just like to understand your last answer. Mr Green was asking you if you had the overlap between Dalmellington bug and Callendar Square bug in your mind when you signed or prepared your witness statement dealing with Mr Latif.
A. Not specifically .
MR JUSTICE FRASER: You didn't, all right.
```

21

## Mr Green.

MR GREEN: Thank you very much.
Could we look please now at $\{F / 1365.1\}$. And can we look at sheet 1 please rather than the summary. There are 28,890 rows. You didn't refer to any particular row number in your witness statement because when you made your witness statement you weren't looking at this document, or weren't referred to this document, which had a different POL number. Can you remember roughly where it was?
A. Sorry, where what was?
Q. Where you were looking. Did you do it by date?
A. So I would have filtered on it by date.
Q. You think you would have done that?
A. By value.
Q. Did you have it in paper form --
A. By stock unit.
Q. -- or electronic?
A. Electronic .
Q. Can we go to row 3478 please. So there we've got SP1, 4 July 2015, 13.16.04. Then 2,000 in column L. Do you want to just quickly see what column $L$ is?
A. If you can go to the top that would be the value, yes.
Q. So column L is "Sale value", can you see?
A. Yes.
Q. Column K is quantity, column J is "Product number". Do you see that?
A. Yes.
Q. If we click back on 3478 , so that's on 4 July, $£ 2,000$, and a minus $£ 2,000$ underneath it. Is that what you were looking at, or not?
A. Specifically that particular row, is that what you mean? Or -- because this is the data, yes.
Q. So you filtered by date so we have gone to 4 July, beginning of July. Where did you look?
A. So for the whole of July filtered on the value of 2,000 which would obviously condense the spreadsheet.
Q. Okay, do you want to do that?
A. Yes.
Q. The short point is you can't tell -- let's just pause before we do that exercise. The short point is you can't tell from this line what that is, can you?
A. Not on this particular line. So what -- so using the event data and the transaction data, looking at the event data for the record of the transfers in and transfers out, that would tell you all the transfers in and the transfers out that had happened in that particular -- however you wanted to filter it. So, for instance -- so we looked at June, July and August. That would filter it, looking then -- going from the

## 23

event data then to the transaction log for the corresponding times and then filter it by stock unit and user to narrow it down.
Q. Okay. Do you know what the code 4910 is in that line? Do you know what product code that relates to?
A. Sorry, I would need that list at the side of me to -I'm not that close to the detail. So there's a list of all the product codes and the IDs that we have disclosed and I would -- my team would know that off the top of their head, I would need to work off the sheet.
Q. You would need to look at the ID list. We can see what's been disclosed at $\{F / 1292.2\}$. Those are the product ID lists, aren't they?
A. Yes.
Q. And one of the things we notice about the product ID lists is they are different lengths, aren't they?
A. Yes.
Q. So Royal Mail label balance is 32072, that's five digits, and, for example, Visa debit payment is also five digits, but some other things, stamps and things, are only two digits?
A. Yes.
Q. And they vary, don't they? We've got four digits for Christmas second stamp books.
A. Yes, they do.

```
Q. They vary in length. And some of those product codes
    are provided by third parties, aren't they, so
    Post Office is not in control of them?
A. Yes. I don't know where they come from.
Q. Okay.
    Let's go back please -- let's just look, if we may,
        at your statement at page {E2/5/23}, paragraph 91.2.
        That was the analysis that you did in your witness
        statement when you did it in November.
A. Yes.
Q. And you say there:
    "... there were two transfers of £2,000 from the AA
    stock unit to the SP1 stock unit, both of which were
    successful."
A. Yes.
Q. And then you say:
        "There were 4 separate transfers of £2,000
    in August 2015 (on the 1st, 3rd, 5th, 26th) all of which
        were successfully transferred into stock unit SP1."
            So that's what you said in --
A. November.
Q. -- November. Then you have had to amend your account of
    what transactions in fact took place, haven't you?
A. Yes.
Q. So 91.2 should now read that in July }2015\mathrm{ there were two
```

25
transfers of $£ 2,000$ "between" instead of "from", yes?
A. Yes.

MR JUSTICE FRASER: We are still in paragraph 90 ?
MR GREEN: We are still in 91.2, my Lord.
MR JUSTICE FRASER: 91.2, yes.
MR GREEN: So it is "between" instead of "from" and "and" instead of "to" and then after stock unit effectively saying one each way.
A. Yes.
Q. Both of which were successful, and then 91.3 has also been changed to say that instead of four separate transfers, in total there were five, adding at the end of the sentence "and one on 3 August which was successfully transferred into stock unit AA".
A. That's right.
Q. That correction reflects the fact that the account that you had previously given wasn't actually right, was it?
A. It wasn't as -- it didn't have as full an explanation as I have done on my correction, no.
Q. That's slightly finessing it on the first one, isn't it, because have a look. You say there were two transfers from AA to SP1.
A. Yes.
Q. And that wasn't correct, was it?
A. No.
Q. It's not a question of being full or not full, it's just wrong, isn't it?
A. Which is why I made the correction, yes.
Q. But it is wrong, it's not a question of full or not full, is it?
A. The statement that said that the transactions -- there were corresponding entries for transfers in and out for 2,000 is right and what I have done in the correction is, particularly on 91.3, brought in the other one as well and expanded the other one, yes. So I wanted to make it clear on there that there was more than I'd put in my statement.
Q. Well, I understand adding in the fifth one, but just the very short point is 91.2 was wrong, the statement was wrong. They weren't two transfers from AA to SP1 at all, were they? It was one way --
A. And one the other.
Q. -- and one the other?
A. Yes, that's correct.
Q. Right. And you would agree that getting these things correct would be very important for fairly resolving any issue about discrepancies raised by an SPM?
A. Yes, of course.
Q. And whether or not the transaction correction process is a countermeasure within the Horizon system --

## 27

A. Yes.
Q. -- as Dr Worden has suggested, you are not suggesting that this trial is part of the Horizon system and the countermeasure, are you?
A. Sorry, can you repeat that?
Q. Dr Worden regards transaction corrections as one of the countermeasures in the robustness of Horizon.
A. Yes.
Q. It would be are ridiculous to suggest this trial is a countermeasure for the robustness of Horizon, so the things we find out here are wrong and then can be corrected?
A. I see, yes, agree.
Q. That's an absurd suggestion, isn't it?
A. I agree.
Q. So let's look, if we may please, at the transaction data itself, which is $\{\mathrm{F} / 1365.1\}$. And let's look at 21 July. Parenthetically while that is loading, you didn't actually refer to or exhibit the product list, product ID list, did you, in your statement?
A. No, I didn't.
Q. That was necessary to try and decipher these spreadsheets?
A. Yes.
Q. So that had to be found in the disclosure, yes?
A. Yes.
Q. So having done that let's go please to row 18358 please. Now, is this the row that you think is a relevant row for this, or is it the next one?
A. Sorry, relevant for ..?
Q. Relevant for Mr Latif's transfers --
A. The transfers in and out from AA to SP1?
Q. Which ones should the court look at?
A. So it would be both.
Q. Okay, do you know what they are both doing?
A. It's moving the cash out of --
Q. Which one is moving the cash?
A. So the first one is 13.54 , that's the first one, and the corresponding one is the second one below it then.
Q. Okay.
A. So it happens in two stages on this report.
Q. So when Mr Latif was being cross-examined on this -- and the transcript reference is Day $2 / 63$ lines 1 to 14 \{Day2/63:1\}, we don't need to go there -- it was suggested to him that the transactions either side of these two entries were back office entries that he didn't need to worry about. Actually, code 1 is cash, isn't it?
A. That's right.
Q. So that's an important part of the transaction?

29
A. Yes.
Q. But you would need the product list to know that, wouldn't you?
A. You would, yes.
Q. And 6276 means a transfer in, doesn't it?
A. Yes.
Q. And 6277 means a transfer out?
A. Yes.
Q. Are you just being agreeable, or is that something you know?
A. I would need -- well from this, yes, I know that, but as

I said earlier, the list is what I would need --
Q. If you take it from me at the moment.
A. Yes.
Q. Us having found the list, that does appear to be what it says.
A. Yes.
Q. And how much of this did you know when you signed your witness statement? Or is this something that you have learned more about since you suggested the corrections in preparing for the trial?
A. So as I said in my witness statement, because of the time to put that together I relied on the team to pull it all together. I had reviewed it but not into this level of absolute detail. So what I have looked at is
the list of the product IDs, that list is something that I would need to use as I do use -- because I don't do the same frequency as my team, is something I would use and that's when I have made the corrections to say actually I need to explain that a bit more, which is why I made the corrections.
Q. Let's compare the transaction data with the event data for a second. Now, if we just look just a little bit higher up, can you see 6277 in row 18352?
A. Yes.
Q. 6277, with a 1 above it, that's cash and a transfer out, yes?
A. Yes.
Q. So this sequence appears to begin at 13.52 .17 , do you see that?
A. Yes.
Q. And Horizon automatically prints out one receipt for a transfer in and one receipt for a transfer out, doesn't it?
A. Yes.
Q. I think you mentioned that at paragraph 88 of your witness statement.
A. Yes.
Q. And indeed I think that -- it's probably uncontroversial but I can take you to a reference of the original design

31
of Horizon, but that's how it was designed to work from the outset?
A. Yes. And with a place to sign on the piece of paper as well, yes.
Q. Can we go please now to the event data at $\{F / 1354\}$, which was the second of the original POL reference documents you gave in your witness statement, and let's look please at row 8528. Do you see that? "AP branch receipt"?
A. Yes.
Q. Yes? And we have then got "Transfer out slip - office copy", do you see that?
A. Yes.
Q. And then at 56134 we've got "AP branch receipt", "Transfer in slip - office copy" and "Transfer in slip office copy".
A. Sorry, I have lost you.

MR JUSTICE FRASER: Use the row number please.
MR GREEN: Sorry, 8534. Do you see 8534?
A. The one that is highlighted now, yes.
Q. How many transfer in slips do you see printed out there; one or two?
A. There's one below that as well.
Q. Yes. And they are 4 seconds apart, aren't they?
A. Yes.
Q. Did you notice that instead of one transfer in slip, two
had printed out, when you made your witness statement?
A. No. I can't say I did, no.
Q. But this was the event data document to which your
witness statement expressly referred?
A. Yes.
Q. Two separate receipts being printed out instead of one
was a feature of the Dalmellington bug, wasn't it?
A. I can't recall exactly.
Q. Let me show you. Let's look at \{E2/11/26\} please. This
is in the table annexed to Mr Parker's witness statement
and do you see the short name is "Unexplained
discrepancies (duplicate rem in)"; do you see that?
Under the short name?
A. Yes.
Q. And there is Mr Coyne's summary and then if we go to
"Response to Mr Coyne", Fujitsu 's comments, if we go
across to the right, "Financial impact on branch
accounts":
"This issue caused a discrepancy in the
subpostmaster's outreach branch which was easy to
identify from the transaction logs available through
Horizon and the fact that separate receipts were printed
for each transaction ."
Yes? 33
A. Yes, I see that.
Q. Did anyone in your small team flag any of this up to you to help you give the court a fair picture in your witness statement?
A. Are you referring to the Dalmellington case or to the slips?
Q. The fact that there had been two transfer in slips printed --
A. No.
Q. -- and the fact that that was what was being said by a witness in this case to be how you could spot the Dalmellington bug; did anyone tell you that?
A. Sorry, so the Dalmellington bug I knew was specific to outreaches.
Q. I understand that, but you knew there had been problems -- well, you didn't have in the forefront of your mind, we have established --
A. Yes, yes.
Q. -- that these two bugs are about transfers between stock units and that was obviously potentially relevant to the Mr Latif case. My question to you is simple: did anyone point out to you the two transfer in slips and you have said no.
A. No.
Q. And did anyone point out to you that where there had
been previous issues with transfers between stock units, known problems, one of the indicators was a duplicate slip being produced? No one pointed that out to you, did they?
A. Not -- no, they didn't, but the Dalmellington is an outreach, which is a different scenario to within branch transfer anyway, because it's a rem out and rem in in the Dalmellington case.
Q. Does any of that cause you to wish to think again about what you have said about Mr Latif's situation? Does it worry you at all?
A. So it is something that I would want to go back and have a look at.
Q. I understand.
A. But if we go back to -- so in terms of the data that I have looked at, and I have looked at Mr Latif's data in detail, if you go back to and use the data to look at the transfers in and out, look at what Mr Latif has said, including what he said last week around the fact he did that himself, that doesn't show on the data that we've got.
Q. Okay, well, let's look -- on your understanding of it?
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. Let's look at paragraph 98, the TC/TA issue. It is at $\{\mathrm{E} 2 / 5 / 24\}$. This is still in Mr Latif's case.

35
A. Yes.
Q. "The transaction data [and you give a POL reference] including data relating to TCs, shows that the branch received two TAs on 18 January 2018."
A. Yes.
Q. Now, the POL reference given to that event data was actually to March 2018 data. Did you spot that when you were compiling your witness statement?
A. Sorry, no. I didn't. The data I looked at was the correct data.
Q. Yes. It has now been hyper-linked. If we follow the link that's now on there, it is to the transaction data for January 2018 which is the relevant set of data, yes?
A. Yes, which is the data I looked at.
Q. Okay, did you actually look at the data yourself at the time you did this?
A. I had a high level, but I have done more work since then, yes. Which is what I set out in my statement as I said.
Q. I see. Let's look please at $\{F / 1761.1\}$ and again there's no reference in your witness statement to where the data that you are referring to shows what you are saying.
A. Yes.
Q. And you can see why that would be helpful for other
people to understand what your theory is?
A. Yes, these aren't the easiest things to ...
Q. Especially difficult if no one tells you which specific entries they are talking about?
A. Yes, agreed.
Q. If we look at row 12983 please. Can you see there are four entries there? Are those the entries you had a look at?
A. Sorry, on 12983 ?
Q. Yes, 12983 is the first of four entries.
A. Right, yes.
Q. Are those the ones you had in mind, or can you not really remember?
A. It was the 25 .
Q. Yes.
A. Two 25 s booked in.
Q. There are two 25 s there, aren't there?
A. Yes.
Q. And they are both positive 25 s ?
A. Yes.
Q. And do you know what the product codes were? Did you look that up?
A. From this I can't recall, but what came in was the scratchcards.
Q. Okay, well, just to help you, 35341 appears to be $£ 10$
scratchcards?
A. Yes.
Q. 33327 is $£ 3$ scratchcards and 5473 is $£ 5$ scratchcards.
A. So the issue was with the $£ 10$ ones.
Q. Okay, let's look at that and follow it through. You say in your witness statement that two transaction
acknowledgements decreased stock when they should have increased stock.
A. That's correct.
Q. Which ones are they?
A. 25.
Q. And if we could look please at line 35341.

MR JUSTICE FRASER: Can you use the row not the product code.
MR GREEN: I'm so sorry.
Can we just go please to 4 January I think at row 2237. So we've got 2237, 4 January. I just want to show you how this appears to work. So at 6.55 , this is the same code, yes, 35341?
A. Yes.
Q. At 6.55 in the morning you've got minus 20 , do you see that?
A. Yes.
Q. If we look at row 2309 , at 8.54 in the morning we've got plus 20, do you see that? 35341.
A. Yes.
Q. So you've got minus 20 followed by plus 20. Let's go to row 6046. Do you see that's 9 January at 6.11 in the morning? You've got again 35341, you've got minus 25 .
A. Yes.
Q. And then if we go to row 6213 , at 9.15 , do you see there you've got plus 25? And the way we found this was by searching on the code -- it is obviously quicker in court to go to the specific row numbers, but this is by searching the code 35341 and tracing through the entries.

So you get a negative entry and then a corresponding positive one?
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. Yes? And we see it again at row 10202 and there's the minus 25 and 10331, plus 25. Had anyone pointed out that pattern to you before you did your witness statement?
A. Not before I did my witness statement.
Q. No. Has anyone pointed it out since?
A. So what I asked and I have seen is that the two TAs that came in actually came in with the wrong signage on it , so it actually came in and it decreased the stock rather than increasing the stock and that's why the TC was sent to correct that.

39
Q. Yes, but what I'm asking about first is looking at the underlying transactions to see what actually happens first.
A. Yes.
Q. And trace the transaction through from the beginning, not just look at the TA.
A. Yes.
Q. Now, it may not be that this is something you know about or understand and that's a perfectly reasonable answer to give to the court. You're not required to answer questions you don't know.
A. Yes.
Q. So is this something that you yourself actually know about, or has it come from other people who aren't here?
A. So my team are closer to this --
Q. I know.
A. -- but the working -- so the team do the working of it . I have interrogated the information to see if I can see exactly how that flows and on this what I can see is that two lots of scratchcards, $£ 10$, came in and they came in the wrong way and it has actually decreased instead of increased, therefore they weren't -- they weren't effectively remmed in, which is what the TA does now, and when you look at the data you can see that flowing through and what's happened in branch.
Q. Well, let's have a look at it, what does actually happen
on 18 January and I will suggest something to you and
you tell his Lordship whether you can agree or disagree
with it.
Let's look at row 12983 . We've got two positive 25 s
there, do you see that?
A. Yes.
Q. And if one of the 25 s should have been minus 25 he is
going to be actually 50 short, isn't he? Because
instead of recording the amount of stock he actually
should have had and cancelling out, he is going to end
up with a record which is 50 rather than zero and
therefore he is going to be 50 short, do you agree?
A. Right. What he had was minus though.
Q. Well, he's got two positive $25 s$ there, hasn't he?
A. Yes.
Q. He has not got what we have seen elsewhere, minus
$25 /$ plus 25 . So all I'm pointing out to you is on this
premise he is going to be 50 short, the different
between the $25 s$ cancelling each other out and them both
being the same sign, the difference is not 25 , it's 50 ,
isn't it?
A. Sorry, when you say 50 short, what do you mean, because
he has already got the scratchcards in the branch?
MR JUSTICE FRASER: Okay, let me just try and speed this up. 41

I know what your evidence is in totality . What Mr Green is doing is he is taking you through some steps.
A. Yes.

MR JUSTICE FRASER: Now, you might not agree with the steps, which is why he is putting it as a premise, but his most recent question was the other examples he had shown you had a positive 25 and a negative 25 that had an overall effect of zero.
A. Yes.

MR JUSTICE FRASER: Yes? And what he is putting to you here, which is a hypothesis on his case, is that if one of these should have been a minus 25 , instead of the two 25 s having a net effect of zero they would have an effect of 50 .
A. Okay.

MR JUSTICE FRASER: He is going to reput the question because I'm not going to put questions for him, but that's what he is trying to do.
A. All right.

MR GREEN: So if that hypothesis is right, the difference is that it will show an additional 50 of stock compared to what it would have showed had it netted to zero?
A. I think so, yes.
Q. And he would then not have the artificially inflated stock on this premise?
A. Yes.
Q. And so he would be 50 short. Real life --
A. Yes.
Q. -- would fall short by 50 ?
A. Yes.
Q. And he would then regard himself as due a transaction correction for 50 cards rather than for any other number, yes?
A. For 50 cards?
Q. Yes.
A. Yes.
Q. On that premise?
A. Yes.
Q. And in the event that he reverses a transaction for 50 cards, his cards should go down by 50 ?
A. Yes.
Q. But his cash should go up by 50 correspondingly?
A. Yes.
Q. And so he would want, in fairness, a transaction correction to increase his stock by 50 cards?
A. Yes. And reduce his cash.
Q. Yes. In fact the TC that he was sent increased his stock by 100 cards, which caused a 50 card overshoot, a $50 £ 10$ card overshoot. He is therefore left $£ 500$ short on that premise, isn't he? If that's correct?

43
A. Yes, but that's not -- so if I can just -- can I just explain? So what he should have had was -- so it is two $25 \mathrm{~s}, £ 500$ worth. Effectively he has activated the scratchcards and therefore what he should have had -sorry. So if you just think about it before we did the PING. So it is basically you activate your scratchcards and you get the rem in so it balances. What came in was actually the wrong way round so it didn't take the 500 to zero, it took it to a minus so it actually is 1,000 not 500 is the effect.
Q. But the difference he is complaining about is 500 .
A. Yes, why -- okay, the difference is then -- so Mr Latif's practice was to -- as soon as he activated the scratchcards in his post office he would then buy them -- sell them on to his retail. So what he would do straight away is he would process a sale for $£ 500$. That's what he would do and that was his practice and that's quite -- a lot of people do that because it is easier to keep the cash separate.

That would show as a sale on the information. Now, what he has done in this case is when -- because he's got negative stock figures, he couldn't balance with the negative stock figures and then when they have looked they can see that they've got negative stock figure on the scratchcard, it's showing a minus. So they then

```
    reversed the sale of the }500\mathrm{ but actually they had never sold them in the first place, so actually he had reduced it. So what that means is actually the scratchcards that were in the retail hadn't been paid for, so there's actually \(£ 1,000\) short is what the TC comes in should do and that was correct.
Q. Well, let's look on the call logs, \(\{F / 1834.1\}\). If we look at 25 January and we look at row 48 . So row 48 is 10 August 2015 and you see there:
"We have received the wrong TAs for \(£ 5\) cards."
That's what he is calling the helpline about in August 2015?
A. Okay.
Q. Yes? And then if we go to row 56, 13 August 2015:
"Can PM has received TAs this morning and the office has been charged for the free games."
```


## You see that?

```
A. Yes.
Q. And then if we look at row 57, 14 August 2015, rollover with discrepancy, yes? Caused by lottery TAs being wrong. This happened quite a lot to him. Yes?
A. Yes.
Q. And then row 72, on 25 January 2016, rather than 2018, he's got a duplicate lottery TC there as well.
A. Yes.
```


## 45

Q. Can you see that?
A. Mm-hm.
Q. So there's a history there of him having these duplicate lottery problems and raising them and if we go to row 171,25 January 2018, do you see:
"TC received for ... $£ 10 \times 100$ scratchcard games ..."

And if we look at the top, he says:
"... only received 50 ... if we accept the TC, will cause a discrepancy?"
A. It is right he had 50 but because of the way the TA was sent, it was sent -- it is because it had the complete opposite effect it actually went from being 500 to 1,000. So it didn't -- so whereas he should have booked in 500 , he booked in a minus 500 which is the effect of $£ 1,000$. That is the difference.
Q. He is specifically complaining about the fact that the TC that he has received is not to correct the 50 , it's to correct 100 and if he accepts it it will increase his stock by 100 lots of $£ 10$ scratchcards. That's precisely the discrepancy that he has complained about in his witness statement, isn't it, £500?
A. But the value of the TC was 1,000 --
Q. Precisely --
A. -- which is what it should have been.
Q. -- so it overshot by 500 on his case for the reasons we have just outlined and put to you?
A. No, it didn't though. Because -- because of the way it was -- sorry, I'm not explaining this obviously. Because of the way it was booked in, instead of taking it to a zero it took it to a minus, so it had the double effect of that coming in, so he -- actually he only had 50 scratchcards, two packs of 25 and $£ 10$, only 50 , but because of the way it came in, instead of increasing it decreased so basically instead of going from 500 to zero it took it down again, so it’s $£ 1,000$. And from what you -- you know, there you say he's got a couple -- and I have said it clearly is confusing for him in branch because of the way that's happened and because of the way he actually sells his stock to the retail and because of the way they reversed that transaction, it wouldn't be particularly easy to follow in branch, but that TC was correct.
MR JUSTICE FRASER: Mr Green, I am entirely comfortable that I can see the degree to which the call log either does or doesn't match either Mr Latif's evidence or Mrs van den Bogerd's understanding of that.
MR GREEN: I'm most grateful, my Lord. I was going to move on anyway.
MR JUSTICE FRASER: There is nothing to be gained by
47
continuing.
MR GREEN: I'm grateful.
Would that be a convenient moment for a break, my Lord?
MR JUSTICE FRASER: Yes. I do have to explore with you your intended timings.
MR GREEN: My Lord, yes.
MR JUSTICE FRASER: You have the whole of this week but you're not going to get any more time just because we are going slower with one witness than you expected.
MR GREEN: No, we're not seeking in any and we're planning on that basis.
MR JUSTICE FRASER: All right. Mrs van den Bogerd, we're going to have a short break now. We will come back in at 11.53 . Thank you very much.
(11.45 am)
(Short Break)
(11.54 am)

MR GREEN: Mrs van den Bogerd, can we now look please at paragraph 77 of your witness statement at $\{\mathrm{E} 2 / 5 / 20\}$.

Now, this was in fact a shortfall raised by you rather than raised by Mr Tank, wasn't it?
A. Yes.
Q. So in a sense it's a slightly random one, it's not one that he was specifically complaining about but it's one
that you identified as having occurred in December 2011 and you say that he contacted NBSC regarding the shortfall, the call was made on the 13th:
"I understand from Post Office's solicitors and Fujitsu that this particular issue was resolved following an investigation as PEAK PCO214226. It is possible that Mr Tank contacted the banking team direct (if he had their contact details), but such calls are not logged."
And the result of this is that he is repaid.
A. Yes.
Q. And you say at paragraph 87 you have described above at paragraph 53:
"... the process which subpostmasters need to follow when there is a system outage or power failure and, providing this process is followed, Horizon will either recover or cancel the transaction. The online banking transaction which Mr Tank has described is a recoverable transaction and therefore ..."
This is the important bit:
"... if the correct recovery process had been properly followed in accordance with the Horizon Online quick reference guide, a copy of which appears at [POL number which you have now amended to the correct one], the branch would not have sustained any shortfall ."

49

So the point there is user error by Mr Tank; that's the point you're making?
A. So -- no, the point here is that the -- well, there was a user error from Mr Tank in that he gave all the receipts to the customer.
Q. Sorry, say again?
A. In that he gave all the receipts to the customer, that was his error, so he didn't have that information. But in this -- so there's two things. In the case of Mr Tank then what's happened in his situation is that other than give the receipts, didn't do anything -- it wasn't user error because the recovery failed and actually --
Q. Yes.
A. Sorry. And what happened here was that the failed recovery was then picked up by Fujitsu in the back end that comes in to Post Office and then we generate the TC to the branch, which is what actually did happen here.
Q. Well, let's see what actually did happen, I mean let's just be very precise, because I'm going to suggest to you that when anything happens because of Horizon, if there is any user error by an SPM that happens at the same time but is not causative, Post Office mentions user error in a way that suggests it is causative. Do you recognise that?
A. In this situation, yes.
Q. Yes. And the fact is that any user error by Mr Tank was not causative of the error that was generated?
A. No, it wasn't.
Q. And so when we re-read that part which I said was the important bit at the top of page 21 , you say:
"... therefore if the correct recovery process had been properly followed in accordance with the Horizon Online quick reference guide ... the branch would not have sustained any shortfall ."

That's not correct, is it?
A. Not in this situation, no.
Q. No.
A. It was -- so in this situation it was the receipts, because on the receipts it actually does tell Mr Tank what -- you know, what the situation -- what's happened.
Q. Well, let's take it in stages. Do you know what UEB is as an acronym?
A. Sorry, U?
Q. UEB, have you ever heard of that?
A. No.
Q. User error bias?
A. No, I can't say --
Q. It is where people in IT constantly blame the user when actually it is not their fault?

51
A. Okay, I haven't heard that before.
Q. You haven't heard that?
A. No.
Q. Well, let's look at this because I'm suggesting to you this is a common theme that runs through Post Office's approach when these issues are raised. Is that a fair suggestion?
A. I think what I have tried to explain is what the approach is, in 99 out of 100 that would be the case. In this situation it is slightly different.
Q. Well, it's slightly different in the sense that it is not his fault and you have suggested that it is?
A. Right, well, I didn't intend to suggest it was completely his fault. I mean him giving the receipts back to the customer was user error and had he held onto those he would have seen exactly ... but other than that I mean he couldn't have done anything because it was a failed recovery anyway and he did do what the receipts will have told him which is to pay out, which is what he did.
Q. He did what the receipts told him to do, didn't he?
A. To pay out. It was an authorised payment, yes.
Q. So when we follow it through -- I'm going to have to take it reasonably speedily, stop me if there's anything that you need more time on.
A. Okay.
Q. But if we look at $\{\mathrm{F} / 870\}$ we can see this is the PEAK and if we go to page 2 please $\{F / 870 / 2\}$ and look at the summary, do you see the second box down:
"The banking transaction had completed (A3 received and authorised ...), including the receipt print ... and money should have changed hands."

## Yes?

A. Yes.
Q. So that's what Horizon would be directing him to do on the receipt, wouldn't it?
A. That's correct.
Q. And that is what he did?
A. Yes.
Q. We then see:
"The disconnected session receipts show 'cash to customer 195.04', so the customer's account should be correct but the branch will have a shortage (for a withdrawal) because the session hasn't been recorded."
A. That's correct.
Q. Can we pause there. Is this Horizon working as it should?
A. In that it catches it in the back-end, then yes.
Q. And there's a reference to a further PEAK I need not take you to it, but it's at $\{\mathrm{F} / 871.2\}$ which shows us

## 53

that there are in fact 492 failed recovery transactions captured in that PEAK. Were you aware of that?
A. I wasn't aware of that number, no.
Q. Did anyone show you the KEL at $\{\mathrm{F} / 1700\}$ ? Can we look at that please. And you can see the date of this KEL has been -- it has been raised by Anne Chambers on 28 February 2010.
A. Yes.
Q. Did you know that there was a KEL relating to all this that had been going on since 2010 ?
A. I wasn't aware.
Q. You weren't aware of that.
If we just go down please under "problem", just have a look there, there's a paragraph underneath the subparagraphs (a) to (e):
"If a T1 recovery request times out at the counter ..."
Because timing out is a problem, isn't it?
A. It is if it is mid-transaction, yes.
Q. "... recovery is abandoned and no second attempt is made to get the recovery information. This is as designed; it was decided to keep recovery simple and not have too many error paths. The priority is to get the user working again, so in this sort of error path we just mark the recovery as failed and leave it for SSC to sort
out."
So it is designed into the system that in that situation the SPM will have a discrepancy that they can't figure out and has to be corrected by SSC; that's the effect of it, isn't it?
A. When you say not figure out, the receipts which is -- as Mrs Burke's evidence was, she had the receipts and she could figure it out, but it would have a discrepancy, absolutely.
Q. Well, they can't figure out why, when they have done what the actual receipt, if they have kept it, tells them to do, they have still got a discrepancy?
A. No, what I'm saying is when you say "figure out", it would be -- as Mrs Burke's evidence was it was obvious to her what that problem was because it didn't show on the transaction log, so ...
Q. That's as designed anyway?
A. Yes, as designed, yes.
Q. Let's look please now if we may at the forum post which relates to this. It's at $\{\mathrm{F} / 1257.1\}$. You see:
"Hi all,
"Some advice/help required.
"Yesterday during HOL failure [Horizon Online failure ] was in process of POCA card withdrawal. Transaction seemed to go through okay apart from Horizon

## 55

printing 3 identical receipts.
"Receipts showed a disconnected session with recovery code.
"Receipts also showed CAWD limit [minus 195.04] total due to the customer."

Et cetera, we have confirmed he is right about that?
A. Yes.
Q. We have seen it in the PEAK?
A. Yes.
Q. "Because receipts showed cash due to customer, we paid out.
"Come evening balancing till showed approximately $£ 200$ loss. Thought at time must be miscount and will try to sort in morning.
"This morning produced transaction log for the period of HOL failure. No record of 195.04 transaction at all !!!!"

Yes?
A. Yes.
Q. That's because it is not recorded internally as a transaction?
A. That's right.
Q. And it doesn't show up on the report that the subpostmaster has access to?
A. No, it doesn't.
Q. "Phoned helpline and was told by very irate member of staff that loss is mine unless I can sort out with customer directly ..."
In your experience is that the sort of typical response in that situation?
A. No, and that's the wrong response clearly.
Q. It's wrong, but is it typical?
A. No, I don't recognise that. I mean if he has rung up and said "I've got a disconnected session receipt" then that should trigger a -- clearly not an irate member anyway but it would trigger a different response.
Q. On a lot of these helpline records we see them say that they read out the KBA in response.
A. Yes.
Q. That's the knowledge based article.
A. Yes.
Q. Another word for that is a script?
A. It would be where the information is, yes.
Q. Yes. So often the helpline are responding by reference to something from the knowledge based article?
A. Yes. So rather than put the actual thing in they actually refer to knowledge base, yes.
Q. Okay. Then after the brackets where he says "HAS ANYONE SEEN THIS" in capitals, he says:
"Asked irate staff to pass call up as I was not

57
a happy bunny, was told she was not going to do this, only after I asked to speak to contracts manager or somebody from POL press office with regards to speaking to press about my loss was I given a number for Chesterfield."

Is that acceptable?
A. No.
Q. Is it typical?
A. No. I mean you would get the odd, you know, bad experience, but that is not typical in my experience of helpline staff.
Q. "So spoke to POCA lady at Chesterfield who after pressing a few buttons was able to find transaction ..."

So it is clear that Post Office had access to information that the SPM couldn't access; that's correct, isn't it?
A. Would be having, yes. Yes.
Q. "She couldn't promise anything but will see if it she can get a credit TC after she has spoken to Fujitsu ????? She took my [number] and promised to call back after speaking to Fujitsu, being very non-committal about the possible loss."

If you go over the page $\{\mathrm{F} / 1257.1 / 2\}$ he is asking about what course of action and so forth.

Now, pausing there, it's clear that he faced
a pretty serious headwind, didn't he, in trying to sort that out?
A. From the response from the helpline, yes.
Q. Can we just look at page 6 please $\{F / 1257.1 / 6\}$. The second entry down:
"When I balanced on 17th ..."
This is not him, this is a different user on the same forum:
"When I balanced on 17th September I had an unexplained loss of $£ 176.74$. I paid it in rather than go through to the stress of the hell line. It has not come to light."

Had you referred to the helpline as being called the hell line? Had you heard of that?
A. I have heard of it, yes, I have.
Q. You have heard of it?
A. Yes.
Q. And you can understand why people faced with that sort of response might take that view?
A. Well, given that I said it wasn't typical, I think for £176 I would always ring, personally.
Q. So that tends to suggest that the person there had had some pretty bad experiences if they weren't prepared to follow that up, because it's quite a lot of money?
A. Well, yes, if they were happy to put $£ 176$ when they

59
could have sought help with it ...
Q. Okay. Let's have a look very quickly please at the helpline log at $\{\mathrm{F} / 1286.1\}$. Because as well as the forum post we just looked at and his description of what he did the very next day, we have what the helpline recorded from his call at row 120. I'm sorry, on the remedy tab, Ms Mackenzie has very helpfully reminded me. Row 120.

Can we just go across please to the detailed description:
"Called this morning about a Horizon failure yesterday, branch completed a withdrawal and the 195.04 failed recovery receipt time ... recovery code ... card account withdrawal limit."

Just go across to the right please. You see "Priority : low" in the incident log, do you see that?
A. Yes.
Q. Do you think that should be a low priority?
A. That's the classification on the remedy system, it doesn't actually apply to that particular call, it's just a hangover from the old system.
Q. What is that recording if not the priority to be afforded to that incident?
A. So that would -- so my understanding of that is if it was a robbery incident it would come as a high. It
doesn't mean they're not taking that call seriously at all.
Q. At the very lowest, we can see the detailed description doesn't exactly reflect the conversation that took place, does it, putting it mildly?
A. No, it's quite specific to the actual issue itself.
Q. It doesn't capture what helpline told him, what he had to do to insist on trying to get a number for Chesterfield, it doesn't capture any of that?
A. No, it has the detail of the failed recovery.

MR JUSTICE FRASER: Have you finished with this document?
MR GREEN: My Lord, yes.
MR JUSTICE FRASER: Can we just scroll to the left so I can see the first row again please. Thank you.
MR GREEN: Can we now look please at the Horizon Online quick reference guide that you have referred to at paragraph 78 of your witness statement. It is at \{F/1365\}. This is actually the 30 July 2015 one, but this is the guide you would expect an SPM to look at, yes.
A. Yes.
Q. And can you see the red box at the bottom?
A. Yes.
Q. "Total due to customer", yes?
A. Yes.

## 61

Q. And it actually positively says:
"You must take care to only settle with the customer for the amount specified on the receipt which is clearly stated as the ' total due to/from customer'."
A. Yes.
Q. Where do we find there or at all a statement that "We know there's a design fault recognised within Horizon which may leave you puzzled when you give a customer cash as you have been told to do in this paragraph but actually the transaction has disappeared, please call the helpline"? Where do we find something or anything remotely about that?
A. It doesn't say here.
Q. It is not in there anywhere, is it?
A. No.

MR JUSTICE FRASER: I dare say that wasn't the most difficult question that Mrs van den Bogerd had to answer. That's really straying into ...
MR GREEN: My Lord, I'm sorry.
It had been a known issue since February 2010 at the latest.
A. Okay.
Q. Let's move now if we may please, just going at some speed, just in relation to the label transaction issues that Mr Tank experienced. His evidence was that he
couldn't use a spoiled label process because the guide told him that he couldn't do so unless the label was on hand.
A. Okay.
Q. And if it has not been printed out it's not going to be on hand, is it?
A. No, but you can print a receipt, that's part of the process, and claim on the receipt.
Q. Well, he had suffered repeated losses, become very frustrated and if we look at $\{\mathrm{F} / 1399.1\}$, this is the transcript of a meeting which he has with Mr Bridges and when we go please to page 14 of that \{F/1399.1/14\}, he explained openly about his use of official postage, he said it was just a form of protest to get this meeting and he is asked "So how many forms of protest do you need to get a meeting?", "Well apparently it took all of this, and however many years ..."

You were familiar, weren't you, with SPMs who got very frustrated over issues they felt were not being faced up to, getting frustrated they couldn't get face-to-face meetings with people? He was not alone in that, was he?
A. Well, I don't have great knowledge of it, but there would be some instances where face-to-face would have, in my view, resolved the situation much quicker. As in

63
here he said it only took one call and they had the meeting.
Q. Well, I haven't got time to deal with the long run-up to that.

Let's look at page 16 \{ $F / 1399.1 / 16\}$. If you look halfway down he says:
"I need some acknowledgement of the fact that there is an issue. I received a letter back from KB saying that there is, he has investigated it and there is nothing to report. Could I see the results of your investigation. I would like to see the screenshots of the conversation that I had with various postmasters and the business analyst from Post Office Limited on Subspace."

Subspace was an area people could share their concerns?
A. Yes.
Q. And Post Office withdrew it?
A. Yes.
Q. "So this is a known fault and when I see Paula Reynolds ..."

It must be Vennells, because I think in the other transcript we have it is Vennells.
A. Yes.
Q. "... when I see Paula [Vennells] standing in front of

[^0]65
Q. If we look at -- there was a request for cash declarations made on 4 February 2019 which is at $\{H / 186\}$. I won't take you to it. And your solicitors wrote back and said, on 11 February at $\{\mathrm{H} / 196\}$, that they would be provided.

What we get at $\{F / 1514.1\}$, if we can look at that, wasn't disclosed until 7 March. Did you know about any of those requests for documents that related to your evidence in the background or not?
A. No, I haven't been involved in that.
Q. Could we just go into the properties of that document please, "File" at the top. We see this document was created on 1 March 2019 by somebody called Andrew Keighley.
MR JUSTICE FRASER: "Properties" I think. You are being asked to look at "Related dates" under "Properties" on the right-hand side. Do you see? Have you got the common screen?
A. Oh, sorry. Right, yes, sorry.

MR JUSTICE FRASER: It is an information block that is attached to the file and it says "Properties" in the right-hand corner. Do you see that?
A. Sorry, I was expecting a spreadsheet, sorry. Yes. MR GREEN: Do you see it is created on 1 March 2019?
A. Yes.
Q. And the author is somebody called Andrew Keighley. Who is he?
A. He works in the cash management part of the supply chain.
Q. And Shirley Hailstones is someone who helped you with your witness statement in November?
A. She is, yes, in my team, yes.
Q. So did you have this document, if we go back, or a different document when you were looking at the Patnys' situation?
A. I don't recall which date it was but certainly when I looked at it I looked at the transaction log and the event logs for this, but not all of this.
Q. I'm going to take -- Mrs van den Bogerd, you will understand I'm just going to take this a bit more speedily.
A. Yes.
Q. When you were dealing with the analysis of the Patnys' situation in paragraph $66\{\mathrm{E} 2 / 5 / 18\}$ and so forth -A. Yes.
Q. -- you didn't mention stamps anywhere?
A. No.
Q. And you didn't mention calls to the NBSC?
A. No.
Q. Was there in he reason for that? They are pretty

67
prominent features of the case?
A. No, other than I said this was at a time where I put this together, then I didn't have a huge amount of time to put this together, but ...
Q. Okay. What we see in the call logs -- and I'm talking about the logs we have I think already seen but they are at $\{F / 1509.1\}$ if we could just look at those. You were in court I think when you heard a positive allegation of dishonesty being put to Mr Aakash Patny, weren't you?
A. Yes, I was.
Q. That he was inflating the stamps to conceal cash deficit?
A. Yes, I was here, yes.
Q. But that's not an allegation that you suggested in your witness statement?
A. No, I haven't.
Q. And the reason for that is you don't believe that's necessarily what he was doing?
A. I didn't offer an opinion at all. What I was in this looking to do was to try and look at what he said had happened and look at what we could see from the data. Now, what we can see is that the stamps are overdeclared and that has a corresponding cash entry and there was a loss beforehand, but I haven't gone further with any other suggestion on this .

69
look at the top you can see that -- if we go to the "Resolution" column which is to the right, and you look at line 140, if you go to "Emailed ESG", just click on that. Above can you see:
"Emailed ESG Thursday 26/05/2016 ... requesting Credence report. Please see attached documents. Advised office of Credence info office adamant stamps are declaring themselves and overriding [his] figure. Referred to IT if believes system issue."

So at that date it looks as if a Credence report should have been requested, doesn't it?
A. Yes.
Q. And the Credence report would have shown the keystrokes?
A. Yes.
Q. And if Mr Patny had been dishonest, it would provide powerful evidence of his dishonesty, wouldn't it, the precise keystrokes entered?
A. Potentially, yes.
Q. And it is Mr Patny we see chasing up and repeatedly requesting the Credence report in these logs?
A. Yes.
Q. It doesn't make any sense if he thinks he has been dishonest, does it?
A. Well, he wants to see the information. I mean that's what he is after, isn't he?
Q. Do you know why a Credence report would not be produced in a situation like this?
A. So the Credence -- I mean it's actually not Credence in here that's -- so there is some -- so, sorry, the NBSC don't use Credence, they use Horace, which gives a -Credence only goes back three months, Horace goes back six months, which is better --
Q. But this is within --
A. So we don't normally produce either Credence or Horace information for branches themselves because it would be difficult for them to interpret the data, as you found out looking at the different lines. But in terms of if he has requested and we said we would produce then we should have produced.
Q. If we look at row -- well, I need not take you to more of it.

My Lord, I think I can deal with some of the transaction issues in the spreadsheets in closings without putting them to this witness.

Let's turn now to the MoneyGram issue, if we may, paragraph 71 of your witness statement $\{\mathrm{E} 2 / 5 / 19\}$. Again the POL reference was to event data not to transaction data. If we go to the correct document which is \{F/1436.1\} please, just trace this through if we may, can we look at the sheet 1 and go please to row 1066 .

## 71

Do you see that?
A. Yes.
Q. Do you know what those codes are?
A. Not off the top of my head, no. Other than " 1 " being cash.
Q. So it appears when we compare this with the session data we can see what they are, but can I just invite you to look at those five lines from 1066.
A. So it's the MoneyGram for 3,100 , yes, I see that.
Q. Yes, $3,100,3,100$. And if we look now -- you see how many lines there are there that relate to -- appear to relate to the MoneyGram transaction?
A. Yes.
Q. So we've got five transactions there in that run. 40170
is MoneyGram repeat send, just to get your eye in.
MR JUSTICE FRASER: Code 40170 is MoneyGram ..?
MR GREEN: Repeat send.
MR JUSTICE FRASER: Yes.
MR GREEN: And if we look down you can see 40173 is MoneyGram cancel. So you've got five lines there from 40170 down to 40173.

Can we look at the session data now please to match that up, it's $\{\mathrm{F} / 1437.1\}$. If we go to row 4449 please. 23 February, if we just go across to the right very slightly you will see here that we can now see from the

```
    session data the item alongside the code: 40170. If we
    click on the MoneyGram I think we can see above
    "MoneyGram repeat send", and we come down one, we've got
    "MoneyGram send classic" and then we've got underneath
    it "Visa debit payment", underneath that we've got
    "Cash" and then underneath that we've got "MoneyGram
    cancel".
        So we've got two transactions at 12.37 recorded, one
        at 12.42 and two at 12.49. Do you see those?
A. Yes.
Q. How many session receipts would you expect to find in
    the event data and for which entries?
A. I'm not sure.
Q. Let's look at the event data, {F/1435}. It is on the
    sheet 1, sorry. And if we look at row 429, we have only
    got four session receipts.
A. Okay.
Q. And if we just look at the time there, the first two are
    the two transactions at 12.49, but there doesn't seem to
    be a session receipt between 12.13, which is up above at
    line 422, and 12.49. Do you know why there don't seem
    to be any session receipts for the two lines we saw at
    12.37 or the one we saw at 1.42?
A. Sorry, I don't know the answer.
Q. So paragraph 72 of your witness statement, if we go back
```

73
to that please, it is $\{\mathrm{E} 2 / 5 / 19\}$, you have now amended that paragraph, essentially deleting all the words after -- well, from and including "Mr Patny says" in the third line.
A. Yes.
Q. And the reason for that is because that's precisely what we see when we look at the helpline advice, that he was told to settle to cash and reverse and what he did was settle to cash and not reverse at the time, but he says he did so later at just after 7 o'clock in the evening, yes?
A. He was told to cancel and reverse, yes.
Q. Has any of the evidence that I have taken you through yesterday about the fact that this is in the week with the PEAK latency --
A. Right.
Q. -- in relation to MoneyGram -- that massive spike in latency, do you remember?
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. And the fact that your account of what people were told to do in terms of calling NBSC didn't actually apply to Mr Patny because it came afterwards -- do you remember yesterday?
A. The instruction you mean? Yes.
Q. Yes.
A. Yes.
Q. The instruction was not to call NBSC at the time he did it, was it?
A. No -- well, yes, just after it came out, yes.
Q. So it took place in the week with PEAK latency problems. Duplication of transactions was a known issue in relation to MoneyGram in that specific week. He did precisely what the helpline told him in terms of settling to cash and that's why he did it and Mr Patny appeared to be worried about the polling time being after 7 o'clock, in circumstances when we saw that Post Office's internal documents didn't pick up the disconnect and correct it between polling time for MoneyGram and Post Office until more than a year after this.

Now, does any of that cause you to reconsider your view of what may have happened in Mr Patny's case with his difficulties with an apparent duplication of $£ 3,100$ ?
A. Sorry, looking at the information that I have seen on this, he did ring the helpline, so he did ring anyway. Whether he had had the instruction or not, but he knew he had a problem so he rang. I can see no evidence of reversal there, which is why we issued the TC.
Q. And are you aware that reversals don't sometimes show up in the data that's recorded by Post Office?

75
A. So on -- well, we have issued a TC because he hadn't reversed, which is why we have issued the TC. Had he reversed and we had issued a TC, he would have had a positive variance from that TC.
Q. Short point to you: I'm just asking you, he made the point that he was actually doing his reversal that he had forgotten to do at the time, he accepted that was not right.
A. Yes.
Q. He makes the point that he attempted to do a reversal at 7.04 in the evening but that was after polling time.
A. Okay.
Q. You have seen that at the very time he encountered what he believed was a doubling problem, internal documents show that that was a recognised feature of the latency issues which were at their peak in that very week.
A. Okay.
Q. Does that cause you to reappraise the likelihood of him being at fault in the way you have suggested?
A. Well, I think at the time if we were aware of that we should have looked into that for him when he has rung into the helpline, if we were aware of that at the time.
Q. No one told him, "Mr Patny, in fairness to you this is a system-wide problem which is peaking this week", did they?

```
A. No.
Q. It's fair to say that Post Office is not very forthcoming about the problems that are being experienced more widely when SPMs ring up the helpline?
A. Had -- so when there is a problem the helpline clearly
are aware there's a problem because they get inundated with calls, so they are aware when there's a problem and usually what happens is that if there's a problem they will say "We are aware of it and we will come back to you" which is some of the evidence we have heard around some of the -- so the issue we had on 9 May for instance, we heard about that. So they were aware of it and they will say. So at the time if there was an issue, it should have been -- that should have been taken into account, yes.
Q. Do you accept that Post Office suffers from user error bias in the way that it meets concerns raised by SPMs?
A. In some instances, yes, I do.
Q. Can we look please at an example at \(\{F / 1687.1\}\). This is Mrs Burke, who we now accept was not at fault for causing the problem that she experienced, yes?
A. Yes.
Q. Can you look please at row 5. You will see there's a TC issued. Can we click in the text for that please. What she is told is:
```

77
"To correct communications failure on 9.5.16 for in pounds 150 ... so credit to office. Financial services enquiry team ..."

See what's said at the end there:
"Please be careful when entering transactions."
A. Yes.
Q. Does that reflect a fair assessment of the cause of that problem that she encountered?
A. No, that's referring to the TC I think there. It was when you put the TC through.
Q. She receives that as a description of the TC correcting what's gone wrong, which is nothing to do with her.
A. Okay, right.
Q. And it says at the end of it "Please be careful when entering transactions".
A. Which is just a standard line on TCs I think. It's not referring -- what I'm reading from that it's not referring to Mrs Burke that she needs to be careful.
Q. I'm grateful.

My Lord, unless your Lordship has any questions, I have no further --
MR JUSTICE FRASER: Mr De Garr Robinson might have some re-examination. I've got a couple of questions but I will leave --
MR DE GARR ROBINSON: My Lord, I have a number of questions.

## MR JUSTICE FRASER: I thought you might. Re-examination by MR DE GARR ROBINSON <br> MR DE GARR ROBINSON: Mrs van den Bogerd, I would like to talk about MoneyGram first because my learned friend has just put to you that the very week that this MoneyGram problem arose there was a known issue about duplicated MoneyGram transactions and it was put to you on the basis that what was being experienced in branch reflected the known problem and I would like to investigate that with you if I may. <br> If we could go please to $\{\mathrm{F} / 1555\}$. You were shown this by Mr Green yesterday. Do you recall seeing it? <br> A. Yes. <br> Q. And could you just describe what this document is? <br> A. So it's a change request -- well, a pricing document for work to make a change request. <br> Q. So some work is being done and it is to sort out a problem, isn't it? <br> A. Yes. <br> Q. And if I could ask you to go just about halfway down the page underneath "Background" -- I will read it out to you: <br> "MoneyGram summary. <br> "For the last several months Post Office has experienced a live operational issue with MoneyGram

## 79

transactions across the branch network. In the event of a transaction timing out at the counter, a system error message is displayed to the user (error code 84) and the transaction is aborted. This leaves no record of the transaction at the counter and the transaction and funds may or may not have been committed to the MoneyGram domain."

If this problem arose in a particular branch, what impact would the MoneyGram transaction have had in the branch's accounts?
A. It depends what stage of the transaction it would be. So if it had committed and it left no transaction record then it would be having a discrepancy.
Q. So -- let me just see if it ... well, let me just --
A. It depends. If the transaction is aborted before it is actually registered then it would have no impact at all.
Q. Thank you.
A. It depends on, as I say, what stage of the transaction it would be at.
Q. But the description -- I'm just asking you about the effect of the description that's here, I'm not asking you about anything else.
A. Okay.
Q. And it says that the problem involves the transaction being aborted.

[^1]accounts?
A. So that would align with Post Office but there's back-end reconciliation not the front end.
Q. I'm sorry, but could you just focus on my question.
A. Sorry, okay.
Q. We've got the branch's accounts setting out what the branch's position is by reference to its transactions and then we've got MoneyGram's account setting out what their position is by reference to the transactions they are aware of.
A. Yes.
Q. Now, in the scenario that's described here, where funds have been committed in the MoneyGram domain, what would the MoneyGram accounts be showing?
A. If it has been committed they would be saying it has actually been transacted.
Q. Okay, so the MoneyGram accounts would show a transaction --
A. Yes.
Q. -- involving the branch.
A. Yes.
Q. But going back to the branch accounts, would the branch accounts show that transaction?
A. From reading this then no.
Q. Right. So there would be a discrepancy, there would be

## 83

```
A. Yes.
Q. Now, what does "MG systems" mean?
A. That's MoneyGram.
Q. So could you explain what's actually happening in this
when these transactions are being duplicated?
A. So that's registered in MoneyGram as if they have been transacted.
Q. So in whose system is the duplicate transaction being created?
A. In MoneyGram's.
Q. Is there any description, any suggestion that there's a duplicate transaction being created in a branch's account?
A. Not from this, no.
Q. Thank you.
Mr Green this morning mentioned two bugs, Dalmellington and Callendar Square, and that's in the context -- do you remember which witness this was in the context of? I'm afraid I don't.
A. It was the transfers . It was Latif.
Q. It is Mr Latif, I'm so sorry. I'm being rather scatty.
My learned friend put to you that you should have borne in mind -- he asked you whether you had and I think sought to suggest that you should have borne in mind two particular bugs, the Dalmellington bug and the
```


## 85

Callendar Square bug. I would like to ask you about the Dalmellington bug first . Could I ask you to go to \{F/1426\}. This is a document which I suspect you have never seen before, but -- why don't I ask you to read the document. It is a KEL, it's a Fujitsu KEL relating to the Dalmellington bug. Might you have seen this before?
A. Not in this format, no.
Q. Okay, well, then I will give you a few minutes to read it.

## (Pause).

A. Okay.
Q. Now, when you were asked about Dalmellington I think Mr Green suggested to you that this should have been in your mind as a possible explanation for what was experienced by Mr Latif and you answered him by saying "Well, no this related to an outreach branch". Did Mr Latif's branch involve any outreach element?
A. No.
Q. So was this a bug that in fact could have affected Mr Latif's branch?
A. No, no. So this refers to rem in and out process. We were talking about -- Mr Latif was transfers in and out which is within branch, so this -- so my understanding of this is this is an outreach only issue, not other
branches.
Q. So in your view does it have any relevance --
A. No.
Q. -- to the problem that was experienced by Mr Latif?
A. No, it has no relevance at all.
Q. And let's just talk about the symptoms as well. Do you recall what the symptom is, the problem that was created by the Dalmellington bug, if we can call it that?
A. So this was when it was booked out from the core and been booked in by the outreach and there would be -- it was to do with a button press, they were able to enter the button again and that was doubling it.
Q. So what's happening is that we have money coming out from the main branch stock unit and going into the outreach stock unit.
A. Yes.
Q. And what you're suggesting is that the result of the Dalmellington bug was that too much would go into the stock unit --
A. Yes.
Q. -- the outreach stock unit, is that right?
A. Yes.
Q. In your view does that bear any similarity to the problem that Mr Latif says he experienced in relation to not being able to transfer money into --

87
A. No.
Q. -- the stock unit?
A. Mr Latif said that when he transferred from one to the other the transfer in wasn't displaying at all and therefore he reversed, is what he said, so this is very different to this.
Q. It's very different. So in your view is the Dalmellington bug something that should have been borne actively in mind when you were addressing Mr Latif's data and what happened in his branch?
A. No.
Q. Thank you.

Now, Callendar Square, it was also put to you that you should have borne Callendar Square in mind. Are you familiar with the Callendar Square bug?
A. I have forgotten the details exactly of Callendar Square actually.
Q. Let me remind you. If we could go to D2 tab 4 please, page 20 \{D2/4/20\}. This is Mr Coyne's report and I would just like you to read paragraph 3.34 of his report please, Mrs van den Bogerd.

## (Pause).

A. Okay.
Q. You will see the year of the bug, it was in 2005 and fixed in March 2006.
A. Yes.
Q. Do you recall the year that Mr Latif suffered his problem?
A. Exactly no, but it was later than that. Sorry, I would have to refer to my statement.
Q. Yes, why don't we. Your statement doesn't actually --
the months you look at are June, July and August 2015.
A. That's right, yes. Sorry.
Q. So this is a bug that happened beforehand and Mr Coyne says that it occurred in Legacy Horizon and he refers to a data communication error in Riposte. Now, when Mr Latif suffered his problem was he using Legacy Horizon?
A. No.
Q. And this may be beyond your expertise and if it is please tell me, but as far as you are aware does Horizon Online, the system that Mr Latif was using, use the Riposte system?
A. I don't think it does, but that would be beyond me.
Q. Very good. But bearing in mind the year and the system on which this bug occurred, do you feel that you should have actively borne in mind the possibility that Mr Latif's problem was caused by the Callendar Square bug?
A. No.
Q. Thank you.

Now, you were asked some questions about Mr Tank and in particular on a number of occasions you said Mr Tank should have kept the disconnected session receipt. Do you remember that?
A. Yes.
Q. Now, why -- I'm not criticising Mr Green here but why do you think that's significant? What difference would it have made if Mr Tank had had the receipt?
A. Because that -- 1, it tells the postmaster what to do in that particular situation, whether to give cash to or take cash from, and that helps him identify then -- so for instance in this situation if the transaction is missing then he would be able to use that receipt to be able to identify that as well, so he's got much better position of what's happened in his branch.
Q. And with the benefit of that receipt, when a postmaster phones into the helpline with a problem with his accounts, does that assist the process --
A. Yes.
Q. -- the fact that there is a receipt? Perhaps you could explain why that is so?
A. So ringing into the helpline to say that "I have an issue, I have a disconnected receipt, a recovery receipt ", whatever the situation is, that's very
different to saying "I have a discrepancy of £200" -195 in this instance -- "and I don't know what it is ", it's a very different scenario and the helpline will respond differently to that.
Q. Very good, thank you.

Now I would like to ask you about quite a lengthy correction regarding the Helen Rose report. Do you remember the Helen Rose report?
A. Yes, I do, yes.
Q. The report is at $\{\mathrm{F} / 1082\}$. If we could look at page 1 of that report $\{\mathrm{F} / 1082 / 2\}$, at the bottom of the page you will see that -- well, from halfway down it is headed "Questions asked and extracts from various emails in response". It is worth remembering that this was sent on 12 June and so what is contained below that heading -- perhaps I can ask you: what do you think -the text in blue -- the text in black and the text in blue, what do you think that represents?
A. That was the response from Gareth Jenkins to the -- so I think what Helen has done is just cut and pasted that into this document.
Q. I see. So it would have been various emails that were written -- exchanges of emails that were written leading up to 12 June, is that right?
A. Yes, and you can see that she has referenced the email

## 91

at the bottom there. 30 January 2013.
Q. So it's quite a long time, that's quite an early email, isn't it, it's six months before this report was written?
A. Yes.
Q. And if we look at that paragraph -- well, if we look at the previous paragraph, this is Mr Jenkins, he says about halfway down:
"The fact that there is no indication of such a receipt in the events table suggests the counter may have been rebooted and so perhaps may have crashed in which case the clerk may not have been told exactly what to do."

So there he appears to be suggesting that there was no receipt?
A. Yes.
Q. And it was put to you that there was no receipt and you resisted that suggestion?
A. Yes.
Q. But it was put to you on the basis of this document that there was no receipt. Could we just go to the second page of this document -- it is the third page, isn't it, I see $\{F / 1082 / 3\}$. In the second paragraph down it says:
"The files ... are part of the standard ARQ returned. Rows 141 to 143 ... clearly show a reversal.

Also row 70 ... shows that session 537803 ... has been recovered and this event has the same time stamp as the reversal session. Also row 71 of events ... shows that a receipt was generated from the session 537805 (not explicitly, but it was the only session at that time )."

So you didn't have an opportunity to look at this in the context of what was being suggested by my learned friend --
A. Yes.
Q. -- but now that you have seen this email, or the quote from this email which I apprehend is a later email, what would your reaction be to the suggestion that this document indicates that no receipt was actually produced?
A. That does say that receipt was produced.
Q. Thank you.

MR JUSTICE FRASER: Do you want to stop and revisit it at 2 o'clock?
MR DE GARR ROBINSON: My Lord, yes please.
MR JUSTICE FRASER: I'm afraid you're going to have to come back. We will stop until 2.

Now, Mr De Garr Robinson, as you will have noted from my approach to Mr Green last week in terms of re-examination, it has to be kept within a narrow compass. I know Mrs van den Bogerd is a very important

93
witness so I'm not cutting you short on your re-examination, but just bear that in mind.
MR DE GARR ROBINSON: I will endeavour to ensure it is not lengthy, my Lord.
MR JUSTICE FRASER: 2 o'clock. Thank you very much.
( 1.00 pm )
(The luncheon adjournment)
( 2.00 pm )
MR DE GARR ROBINSON: Mrs van den Bogerd, we were looking at the Helen Rose report and I just have a few more questions about that. The reference is $\{F / 1082\}$. If we could look at -- it may be the second page but it is the first page of the text $\{F / 1082 / 2\}$. At the bottom of the page you will see there are these three paragraphs which are pale blue which are copied and pasted from some earlier Gareth Jenkins email. He says in the first paragraph that:
"This shows that session 537803 was successfully saved to the BRDB, but when the user JAR001 logged on again recovery reversed the session in session 537805."

And in relation to that it was put to you and you
fairly accepted when you were being examined by Mr Green
that it was Horizon that caused the reversal of the session.

Could you explain what's meant by recovery reversed
the session; could you explain what that means? That's a slightly open question but I have to ask you open questions.
A. It means that the recovery process itself, what's triggered as a result of the loss of connectivity here then actually reversed that transaction and that was triggered by the postmaster logging on after the system had come back up.
Q. So it was the postmaster logging on --
A. Yes.
Q. -- that was the start of the process but it was then recovery which when faced with the postmaster logging on caused the transaction to be reversed, is that right?
A. That's right.
Q. Then in the third paragraph down:
"The reversal was due to recovery ... so this was not a explicit reversal by the clerk."

It may be that you don't, but do you know what Mr Jenkins means when he says "explicit reversal by the clerk"?
A. What he means is that the, it would be the postmaster in this instance, didn't actually go in and do a reversal himself, so he didn't actually go and look for the session number to do the reversal.
Q. I see. Now, when you were asked some questions about

## 95

this document you referred to an email.
A. Yes.
Q. And it might be that I know the email you were referring to. Could I ask you to go please to $\{F / 1095.1\}$. I will just give you a minute or two just to familiarise yourself with that document.
A. That's right, yes.
(Pause).
Yes, I do recall the email.
Q. Right. If one goes halfway down this page you will see it is an email chain but there's an email there from John Armstrong to Ron Warmington. Can you tell me John Armstrong was?
A. He is the postmaster at Lepton.
Q. And who is Ron Warmington?
A. He is one of the directors at Second Sight.
Q. If we could go now to page 6 of that document \{F/1095.1/6\}, this is an email from Mr Warmington to Mr Armstrong and it is dated 25 June, so this is nearly two weeks after the Helen Rose report, just so we can locate ourselves in the chronology, and Mr Warmington from Second Sight says:
"John, as I mentioned we are including your incident in our interim report to be delivered to MPs on July 8. It's one of only four spot reviews that we are at this


## Next:

"When the transactions failed again, the SPMR opted to cancel the transactions.
"Horizon then automatically disconnected and printed a 'disconnect' receipt that showed the transactions that had been automatically reversed."

## Next:

"A standard customer receipt was not produced and POL asserts that this should have told the SPMR that the full transaction had not proceeded."

And:
"Following the disconnect the SPMR was required to log back on to Horizon and duly did so."

And:
"Following the log on, and as part of the standard recovery process, Horizon printed a 'recovery' receipt which again showed the transactions that had been reversed and those that had been recovered."

Now, does that refresh your memory as to why you said you had separate knowledge as to whether or not Mr Armstrong received a ..?
A. Yes.
Q. I see. Let's move back to page $6\{F / 1095.1 / 6\}$. This is the beginning of the same email we looked at and we read the first big paragraph of the email. I would like to

## 99

read the second paragraph now:
"Ian and I ..."
I take it that's Mr Henderson?
A. That's correct.
Q. "... are particularly interested to know whether you received the printed disconnect and recovery ' receipts' that POL refers to in its response ..."

So there's the question that Mr Warmington asks
Mr Armstrong and Mr Armstrong's reply is at page 4
\{F/1095.1/4\} and can I ask you please,
Mrs van den Bogerd, just to read the email of Tuesday 25 June from the middle of the page downwards and then when you've got to the bottom tell us and I will ask you to read half of the next page.

## (Pause).

A. Yes, I have read that.
(Pause).
Yes.
Q. Let me know when you are done?
A. Sorry, I'm done.
Q. You're done?
A. Yes.
Q. Now, first of all -- I hope this is uncontroversial -what Mr Armstrong seems to be saying there is that he did receive some disconnected session receipts .
A. Yes.
Q. What would the fact of receiving these disconnected session receipts have told him?
A. It would have told him that the BT bill hadn't actually been processed.
Q. So we now have more information than Mr Jenkins had in the emails that are attached or rather quoted in the Helen Rose report. If we could go to page 3 of this document please $\{F / 1095.1 / 3\}$, this is the second page of an email from Mr Baker from the Post Office, Simon Baker. Do you know who Simon Baker is?
A. He was a project manager at the time.
Q. I see. You will see at the top of the page it says "Regards, Simon" so it is the end of his email but we have Gareth's comments below, that's Mr Jenkins' comments. There's a reference to GMT and British Summer Time, this is because the logs used GMT even though BST is in fact in force.
Could I ask you please to read paragraphs 1 through to 9 .
(Pause).
A. Yes, I have finished.
Q. You will see at the bottom in paragraph 9 Mr Jenkins says:
"Therefore a message asking for a retry or cancel
would have been shown at about 09.36.25. At this point 'cancel' must have been selected thus producing the disconnected session receipt. This fits in with the time of 10.36 in the email below."

Would you care to comment? Does that accord with your understanding, or do you have a different understanding?
A. No, that's my understanding.
Q. That's your understanding?
A. Yes.
Q. So having gone through those documents can I ask you now to go back to your witness statement please to paragraph 154 \{E2/5/35\} and this is where you say -- I'm going to ask you what you meant by this now. You say in paragraph 154:
"At paragraph 5.175 of his report, Mr Coyne has referred to a report prepared by Helen Rose ... in the context of failed reversals. The extracts taken from the report by Helen Rose referred to by Mr Coyne are taken out of context and mistakenly claim that the relevant reversal was issued in error by Horizon not the subpostmaster."

I just want to give you an opportunity -- Mr Green was pressing you to accept that actually what you had said in that sentence was wrong. I would like to give
you an opportunity to explain to the court what you actually meant.
A. What I meant was that the actual reversal was part of that recovery and it had actually taken place as it should have taken place, which is what I meant in that. So it wasn't a failed reversal because it actually had happened as it should have happened, but I accepted in there that the -- it wasn't obvious to the postmaster at the time that what had happened -- that he hadn't -because it didn't show that he had actually -- it showed that he had done it and he knew he hadn't done what we referred to earlier was an explicit reversal. That's what I meant in that.
Q. I won't take any more time up on that question.

Just two more small matters, Mrs van den Bogerd. First of all, it was put to you by Mr Green on page 80 of yesterday's transcript \{Day5/80:16\} that Mrs Mather's statement shows that Credence contains a log of every key that's pressed --
A. Yes.
Q. -- on the counter and I would like to take you to Mrs Mather's statement, if I may. That's E2, tab 8 and I would like to go to page 2 of that statement please, paragraph 9 \{E2/8/2\}. You will see what Mrs Mather actually says in the first sentence.

103
A. Yes.
Q. Now, the reason why I'm putting this to you is because Mr Green put to you that Credence shows every single keystroke that's pressed by the postmaster and you accepted what he said and he put it to you on the basis that this is what Mrs Mather said. Could I ask you this question: is it the case that Credence gives an account of every single key that's pressed by the postmaster in branch?
A. That's not my understanding, not every single stroke.
Q. I'm grateful.

Then one small final question. It is based upon the document at $\{F / 555\}$. You were taken to this document by Mr Green and it was suggested to you that Horizon Online was about reducing operating costs . Do you remember that?
A. Yes.
Q. I would like to explore that very briefly with you. Could we go to page 6 of that document $\{F / 555 / 6\}$. It is "Purpose of the HNG programme":
"To deliver a significant reduction in the total annual cost of ownership of Horizon, whilst ensuring the system remains fit for purpose in the 21st Century ... in a dynamic and changing environment."

If we go down to the second half of the page:
"Recognising that HNG is not operating in a silo life goes on in the business - initiatives like Rural Strategy, Network Strategy, Packet Strategy, Re-org all have potential to bring around change ... to the programme.
"HNG should also enable the business to reduce the time to market for major developments; should be a simpler system that is easier to change and service manage; should be capable of supporting segments and zones.
"The programme is about developing the current Horizon system to meet business drivers, and is a balancing act between reducing cost and building a system fit for our needs we will cover this in a little more detail in next few slides."

What I'm going to be asking you, Mrs van den Bogerd, is whether the introduction of Horizon Online was just about saving cost or whether it was about other things as well, but perhaps I can ask you that question now. A. Yes.
Q. Having read that page --
A. It wasn't just about saving costs. There were other benefits for us too as an organisation.
Q. Could you tell the court what those other benefits or some of those other benefits were?

105
A. So 1, it took it to an online system, where it hadn't previously been and it did enable us to make changes a bit more quicker to the system itself. I think we did look at some screen changes as well, I think. But it was really about a better system going forward, that's what it was about. So there were clear advantages to being able to get changes through the system and get products changes done more quickly.
Q. If we go to page $8\{\mathrm{~F} / 555 / 8\}$-- well, my Lord, I see the time. The document says what it says. I do believe I have no further questions for this witness.
MR JUSTICE FRASER: All right.

## Questions from MR JUSTICE FRASER

MR JUSTICE FRASER: I just have a couple of questions.
A couple of times this morning when you were being asked about the detail of your witness statement and incorrect references to various documents, et cetera, you said you didn't have a lot of time or you didn't have a huge -- one of your exact answers was that you didn't have a huge amount of time to put this together.
A. Yes.

MR JUSTICE FRASER: Was there a time limit on you preparing your witness statement?
A. In as much as getting the information to investigate the issues, that was what I meant.

## MR JUSTICE FRASER: And what sort of time limit or pressure was that?

A. To pull the information and to be able to look into the detail of what the claimants' issues were. It was that.
MR JUSTICE FRASER: And is there anything else you would
like to tell me about that, about time pressure?
A. It's just it was -- getting the team to put together the information. So because there were a number of issues that needed to be investigated, which was why I needed to use the team -- I would ordinarily have used the team anyway to do that -- it was then me being able to get into the detail to be able to meet the court deadline to get the witness statement submitted.
MR DE GARR ROBINSON: Does your Lordship want to ask this witness about deadlines for producing the evidence?
MR JUSTICE FRASER: No, not particularly. I'm going to give you an open opportunity to ask any questions arising out of my questions.

Another phrase that pops up in different documents and you may not necessarily know what it is, but I just thought you were the best person to ask. What's "operational risk"? What does that mean when the Post Office uses it in internal documents?
A. It means something -- operational risk would mean perhaps losing power across the whole of the Horizon

107
system, so if we did have a failure in terms of connectivity, that would cause us operational risk.
It's about us being able to maintain service, so key systems going down, for instance, would not allow us to be able to operate: the back office systems, POLSAP or Horizon clearly for the front offices as well.
MR JUSTICE FRASER: So it is a risk to the way the Post Office business is operated --
A. Yes.

MR JUSTICE FRASER: -- is that how I should read it?
A. Yes.

MR JUSTICE FRASER: You mentioned in that first answer
losing power across the network. Losing power to an individual branch, or an interruption of power at an individual branch, would that be an operational risk or not?
A. Yes, it would be.

MR JUSTICE FRASER: That would be?
A. Yes, we would class that as operational risk as well.

MR JUSTICE FRASER: Right. And then you were asked about the list of people who had helped you with your witness statement and you said I think there were about nine or ten and then you gave us a list from memory. Was there any reason that you didn't list those people in your witness statement?
A. I didn't think it was necessary.

MR JUSTICE FRASER: All right.
Then can we call up a document please, $\{\mathrm{F} / 1449\}$, which is a document we looked at yesterday. Do you remember Mr Green asked you some questions about this document?
A. Yes.

MR JUSTICE FRASER: And it shows two different approaches depending on whether the amount of the miskey was greater than $£ 150$ or not?
A. Yes.

MR JUSTICE FRASER: Now, I'm a bit confused about the document which is just why I wanted to ask you. Let's say the miskey is $£ 200$, am I right you would go down the right-hand branch as we look at it and the branch would be told that if the discrepancy, which in my example is $£ 200$, was still apparent when they were balancing they must make the amount good?
A. That's what it says on here.

MR JUSTICE FRASER: And I recall from the common issues trial that means they would, for example, have to pay the $£ 200$ in, is that right?
A. Yes.

MR JUSTICE FRASER: Right. If we look at the left branch, which is for less than 150 , so let's say that that's

$$
109
$$

£50, there seems to be a little bit more to it, which includes the possibility of a transaction correction.
A. Yes.

MR JUSTICE FRASER: Have I read that correctly?
A. Yes. This is a bit confusing on -- I haven't seen this before. Because to me the significance of 150 is the amount that you can settle centrally or not and therefore in reading it that way, which is how I would interpret that -- so if you said it was over 150, what should be in that box is when it says "Must make good" the option in there should be to settle centrally because it's over the 150 .
MR JUSTICE FRASER: Well, let's say we read it in that way, so that includes settling centrally.
A. Yes.

MR JUSTICE FRASER: Go back to the left -hand box, that seems to include within it the possibility of a transaction correction being sent out later, because it says that in the last four lines.
A. Yes.

MR JUSTICE FRASER: That entry is not on the right-hand side, so am I correct in reading this chart that if it is above 150 , that option is not potentially available, but if it's below 150, a transaction correction might be sent out in the future?
A. It might be sent out if it is over 150 as well.

MR JUSTICE FRASER: Well, that then takes me to my next question: but it doesn't say that on the right-hand side.
A. No.

MR JUSTICE FRASER: Can you think of any reason why that might not be in the box on the right-hand side?
A. The only reason I can think of that is that this is an incomplete document and, as I say, I've never -- I can't recall ever seeing this, but that wouldn't make sense to me reading that as currently presented.
MR JUSTICE FRASER: All right. Thank you very much. That's very useful.

Now, any questions arising out of that?
MR DE GARR ROBINSON: Just about timing.
Further re-examination by MR DE GARR ROBINSON
MR DE GARR ROBINSON: Mrs van den Bogerd, when you made your witness statement do you recall that it was in response to some witness statements made by the claimants?
A. Yes.
Q. And were those witness statements expected?
A. No.
Q. Did you expect to be dealing with that kind of evidence when it came?
A. No. No, I didn't at the time.

## 111

Q. So these witness statements came in. Do you recall how much time you had to prepare the witness statement in response?
A. I don't remember exactly but it would have been from memory about three weeks or so. I can't remember exactly.
Q. And you say three weeks, but before you could properly start work on that responsive evidence did some steps have to be taken to --
A. Yes.
Q. -- obtain the information?
A. Yes, we needed to get the information, the transaction data and NBSC logs, everything that we would normally get.
Q. And do you recall how long that took?
A. Well, transaction -- if we get our files they can take about a fortnight to come, just to get -- so it would take --
Q. I see. Is your evidence then that after that time had been taken up you then had about three weeks to actually prepare a witness statement?
A. I don't even think it was that long actually, if I remember. So ordinarily we would get the information and then we would have time to do that properly. This was quite pressurised because of those statements coming
in unexpectedly and then having to get that, so it was under pressure.
Q. Thank you very much.

MR JUSTICE FRASER: Thank you very much. You are now free both to leave the witness box and obviously to discuss the case again if you want.
A. Thank you.

MR JUSTICE FRASER: Right, Mr De Garr Robinson.
MR DE GARR ROBINSON: My Lord, I call Ms Dawn Phillips. MS DAWN PHILLIPS (affirmed)
MR JUSTICE FRASER: Would you like to have a seat.
A. Thank you.

Examination-in-chief by MR DE GARR ROBINSON
MR DE GARR ROBINSON: Ms Phillips, there should be a bundle of documents to hand. If I can ask you to go to tab 3 of that document $\{E 2 / 3 / 1\}$, I believe the first page of that document should describe itself as a witness statement of Dawn Louise Phillips, do you see that?
A. Yes.
Q. Is that your name and address there at the front?
A. Yes, it is .
Q. If you go to page 3 of the statement, is that your signature at the end?
A. It is.
Q. And is this witness statement true to the best of your
knowledge, recollection and belief?
A. Yes, it is .
Q. Ms Donnelly will have some questions for you. Thank you very much.

Cross-examination by MS DONNELLY
MS DONNELLY: Good afternoon, is it Ms or Mrs Phillips?
A. Ms.
Q. Ms Phillips, in your witness statement you say you are team leader for agent accounting and Santander banking?
A. Yes.
Q. So I will deal with those separately if I may, taking agent accounting first. Can I understand from your paragraph 4 \{E2/3/2\}, you say:
"... I oversee the process of recovering the losses that postmasters have declared in branches."

Are you the team leader for agent accounting?
A. Yes.
Q. And when you are referring to "recovering the losses ", are you referring there to the amount that they have settled centrally?
A. Yes.
Q. If you look at paragraph 7 of your witness statement which is at $\{\mathrm{E} 2 / 3 / 2\}$, do you see three lines down there you refer to "chosen to settle shortfalls centrally"?
A. Why he.
Q. You fairly recognise, don't you, at paragraph 9 that there's no option for the postmaster to dispute the discrepancies on Horizon, or record that they have raised a dispute on Horizon?
A. They chose to settle centrally rather than make good is what I meant.
Q. Yes, settle centrally rather than put the cash in straight away?
A. Yes.
Q. And that system remains the case today -- your witness statement is September.
A. Yes.
Q. And that remains the system.

Where you describe the agent accounting team, in the common issues trial back in November of last year we heard reference to the current agent debt team --
A. That's the old name.
Q. Does the substance of what you do remain the same?
A. Yes.
Q. So there's really been a semantic change from "debt" to "accounting"?
A. (Nods).
Q. And has the same thing happened with former agent debt?
A. Yes, it 's former agent accounting.
Q. But what that team is doing is debt recovery from

## 115

subpostmasters who have left or been terminated?
A. Not just debt recovery, there are gains settled centrally as well that we also deal with.
Q. The real substance of your statement is the dispute process as it now is.
A. Yes.
Q. And looking at your paragraphs 7 and $8\{\mathrm{E} 2 / 3 / 2\}$ we see you refer the court to two letters, one at the end of paragraph 7 and one at the end of paragraph 8.1. Now, those versions that you are referring to there, do you know when they were introduced?
A. 1 September 2014.
Q. And are they still the current versions?
A. Yes.
Q. So if we could look please at $\{F / 1832\}$. Do we see there the first of the letters that would be sent?
A. Yes.
Q. Just from looking at the first four paragraphs we see:
"Please find the attached statement that confirms the amount you owe to Post Office Limited. The statement provides a breakdown of how you have incurred the total owed amount.
"There are a number of ways you can repay the money to us; you will find all the details of the different methods of payments on the reverse of this letter.

[^2]A. Yes.
Q. If we go then to $\{F / 1833\}$, this is the second letter that you have exhibited.
A. Yes.
Q. "We wrote to you previously requesting payment of the amount you owe to Post Office Limited.
"We are concerned that you have not contacted us to arrange payment.
"Payment is now overview due and needs to be made within 7 days of this letter.
"As previously mentioned, there are a number of ways you can repay the money to us. These are listed on the reverse of this letter ."

So we have all the same language again, haven't we, that this is a debt?
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. Then the next paragraph:
"We have to advise you that if we do not receive payment or your instructions within this timescale, this may be escalated to your contracts advisor for further action."

So what's that supposed to mean?
A. If they don't make a payment or raise a dispute with us then we could send it to the contracts advisor for further action.

119
Q. And in your answer you have referred to " raise a dispute", but again there's no mention of dispute, is there, in this letter?
A. Well, in both letters it mentions that if they have any enquiries they can contact us.
Q. It's a bit different, isn't it, to say "If you have any queries regarding the content of this letter" -- it's a bit different writing that to "If you want to raise a dispute about this amount then please find enclosed the dispute process"?
A. Yes.
Q. Are these two letters usually successful in getting money in?
A. Sometimes it is resolved even before the second letter goes out. It varies.
Q. But by the time this second letter is sent, normally the subpostmaster has paid?
A. Yes.
Q. If we look at your witness statement again, so $\{\mathrm{E} 2 / 3 / 2\}$, paragraph 9 , in the second sentence there you say that postmasters are able to call the NBSC helpline or your team and raise a dispute.
A. Yes.
Q. The letters we just looked at don't refer to calling the helpline, do they?

```
A. No.
Q. But it is possible, isn't it, that a subpostmaster might have raised a dispute on the helpline before you send your first letter?
A. If they have raised a dispute on the helpline before we have sent our letter then it is before they have actually settled it centrally.
Q. Well, you don't send the letter the second they settle centrally, do you?
A. We send it on the Monday after, so unless they actually made the error on the last day of their trading period then it's likely that they made the error in the previous few weeks.
Q. So they could have identified that they've got an unexplained discrepancy say two weeks before the end of their trading period.
A. Yes.
Q. And they call the helpline at that point and say "I want to dispute this, this is going to affect myaccounts, I'm not responsible for this, it is a system error" and two weeks later, nothing has been resolved, they have to settle centrally, you then send them the letter on the Monday?
A. Yes.
Q. So what you don't do is go and check the helpline logs
```

121
to see if they have actually already raised a dispute?
A. We do actually, every Friday we run a report to see who has settled something centrally and although we can't check every amount we do try and check the majority of the larger ones.
Q. Sorry, I think you answered by reference to whether you check who has settled centrally --
A. Yes.
Q. -- and I was asking whether you routinely check the helpline logs?
A. Yes, I do. Yes we do, as a team.
Q. For the larger ones you check the helpline logs?
A. Yes. Unfortunately there are too many to check every single one, but we do check the larger amounts.
Q. So your team has access to the helpline logs?
A. Yes.
Q. As I understand it, it depends on somebody in your team going to check the helpline logs rather than there being an automatic process from the helpline to notify your team?
A. If the branch have already settled centrally and tell NBSC that they want to dispute that, then they would let us know.
Q. But I was speaking about if a subpostmaster was raising a dispute in advance of settling centrally?
A. Then no, until he has actually settled it centrally then I wouldn't know about it.
Q. So subpostmaster could call up the helpline and say "I'm going to have a problem, I know this is going to affect my accounts, I'm not responsible for this amount, I want to dispute it" and then you still end up sending your letter out on the Monday following the settled centrally?
A. I can't speak for any calls that have happened like that. I've never seen one.
Q. Well, you also don't look, do you?
A. Well, we do regularly check. We check every week.
Q. But aren't you looking for when they have settled centrally calls?
A. Yes.
Q. You're not looking back and saying "Has there been any calls before that"?
A. They don't make -- we look for any call in the previous month that could relate to the loss that they have settled. We don't specifically search for settled centrally calls.
Q. And so this is an ad hoc process, is it?
A. No, it's a weekly standard process.
Q. But which ones you decide to look at, or is there a specific amount?

123
A. We try and do everything above 5,000 .
Q. Above 5,000?
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. Right. So you wouldn't bother checking the helpline log for $£ 2,000$ ?
A. It's not a case of not bothering, it's a case of how many have settled centrally and how many are large.
MR JUSTICE FRASER: I wonder if you could start again with the sequence, because I'm slightly puzzled.
MS DONNELLY: My Lord, I do apologise: the sequence from if a subpostmaster has raised a dispute prior to settling centrally?
MR JUSTICE FRASER: And what's checked and when.
MS DONNELLY: So if mid-way through trading period a subpostmaster contacts the helpline and says "I have a $£ 2,000$ discrepancy in my accounts that I know if it is not resolved is going to have to be settled centrally and I want to dispute that now", as I understand your evidence, after they in fact settle centrally, on the Monday morning your team will send them letter 1 because you wouldn't check the helpline logs for an amount less than $£ 5,000$ ?
A. I'm not saying it's always $£ 5,000$.
Q. But that's generally what would happen?
A. Yes.

MR JUSTICE FRASER: So if it is not always $£ 5,000$ what other figure limit would it be?
A. It depends. We can sometimes check them all. It depends how many fresh items have been settled centrally in that week.
MR JUSTICE FRASER: And do you get a list of these?
A. I can pull them from our finance system.

MR JUSTICE FRASER: Filtered by an amount that you decide that day?
A. No, we pull everything that's been settled that month.

MS DONNELLY: Do you get any transcripts of those helpline calls?
A. No, we have to search for them.
Q. There will be a call log, but those helpline calls are also recorded, aren't they?
A. Yes.
Q. Do you listen to the recording, or do you just look at how it's --
A. We just look at the log on the screen, not a recording.
Q. So the completeness and accuracy of what appears on the helpline log would be very important to your team?
A. Yes. But if we were unsure we would pick up the phone and speak to the branch.
Q. Do you send to the subpostmaster the copy of the helpline log that you are looking at so they know what 125
you've got?
A. No. They made the call, we would assume they would know what it was.
Q. Well, what the subpostmaster doesn't know is how it has been recorded by the helpline?
A. Well, we'd discuss that -- if there was an issue and we had to call them we would discuss that with them.
Q. Is there any auditing of the process that you have just described being carried out by your team?
A. Yes, we have controls in place that we have to report and measure every month.
Q. So what are they?
A. So we've got an external firm called Traction that we have to report to and attach evidence that we have followed that process every week or month, whatever the actual process is supposed to be done to.
Q. So do you report -- sorry, did you say it is an external company?
A. PwC I do -- I can't remember the name of it but we have an external company that we have to load all our evidence onto.
Q. Do you report to them which value you have decided to look at the helpline logs for --
A. No.
Q. -- that week?
A. No
Q. So that detail isn't recorded?
A. No.
Q. If we just look at paragraph 10 of your witness statement which is \{E2/3/2\}, you say there that:
" If a postmaster calls my team after receiving our request for payment and explains they are raising a dispute, we will place a block on their account on the system until the dispute is resolved. If they do this within 7 days we will not send the second letter referred to in 8.1 above, but a postmaster can dispute a shortfall at any stage in the process (not just after the first letter )."

And then you go on at paragraph 11:
"When a postmaster disputes a shortfall with my team we gather as much information as possible from the branch about why they are disputing it. We also send them a branch dispute form to complete ..."

Just pausing there, is that right, that you gather as much information as possible and also send them a branch dispute form?
A. Not necessarily. If it is something like a miskey which is just a simple case of the branch recording it with helpline, we check with helpline that it has been received and gone to the appropriate team, no need for 127
a dispute form, that's a simple one. We only send the dispute forms when it is more in-depth and we have to pass the information on for someone else to investigate, so it is better coming from the postmaster in their own words, so that's when the form is sent.
Q. So say it is a more complicated one when you are going to require a branch dispute form.
A. Yes.
Q. Do you first get all the information from them and then send a branch dispute form for them to provide it all again?
A. No. It would probably start it with a discussion on the phone. If it looked like it was going to be a complicated one we would stop it there and say "We're going to send you a form out", we put a block on the debt immediately so all the process was halted and then send them a form and let them fill it in and send it back.
Q. So your paragraph 11 isn't quite right, if it's the branch dispute form --
A. No, we don't do both. It's not required for all of them.
Q. You don't necessarily do both and you don't always send a branch dispute form?
A. Only if it is difficult .
Q. Since it was introduced -- I think you later tell us it was introduced at the beginning of 2018 ?
A. Yes.
Q. How many have you sent?
A. Sorry, I don't have that number with me.
Q. Broadly?
A. I wouldn't like to guess.

MR JUSTICE FRASER: Well, thousands, two?
A. No, probably at least five a month.

MR JUSTICE FRASER: Five a month?
A. Yes. But bear in mind they are not just the dispute -they can just send us an email, it doesn't have to be the dispute form -- or a letter .
MS DONNELLY: Because your witness statement reads as if this is some sea change in approach. If you look, for example, at paragraph 12 \{E2/3/3\}:
"The branch dispute form was introduced to capture the key areas of information we would collect from a branch about a dispute. Whilst the branch dispute form was only recently introduced at the beginning of 2018, the process of collecting this key information from the branch has been in place since November 2016 ..."

And it goes on. It reads as if this was something new and improved and was happening all the time but --

129
A. It is improved.
Q. -- it's actually quite rare that you send it?
A. No, it is improved.

MR JUSTICE FRASER: Can you not overspeak each other. It is both of you I think. You put your question and then you give your answer.
MS DONNELLY: I do apologise, my Lord and Ms Phillips .
It is actually quite rare, five a month or so, that you actually send out the branch dispute form, it's not quite the impression that you're giving in your witness statement, is it?
A. No, maybe not, but it still helps both us and the branch. It has got simple things on there like who are we speaking to at the branch, because we have absentee postmasters but their name is on the account. If it is somebody else running the branch we need to know who it is and their name and who to speak to.
Q. And without the branch dispute form you might not get that right?
A. Well, we send letters to the branch to the postmaster.
Q. Is there a financial limit that applies to your process of sending out the branch dispute form?
A. No.
Q. You are describing it as essentially something positive for subpostmasters, but if you look at paragraph 11 at
the top of $\{\mathrm{E} 2 / 3 / 3\}$ :
"Branches are given seven days to return the completed form, otherwise we unblock the shortfall and send them another letter requesting payment."

I mean in some ways a subpostmaster who receives a branch dispute form is in a worse place than if they didn't because now they're up against the clock to complete it in seven days or you unblock, is that right?
A. If they didn't send a dispute at all it would never be blocked and they would be up against the clock anyway as you put it.
Q. No, but in order for them to be sent a branch dispute form they have to dispute with your team in the first place?
A. Yes.
Q. So that's happened. Then some, about five a month, get a branch dispute form sent to them and those ones now have to return it within seven days otherwise the amount is unblocked, even though they have already told you there's a dispute.
A. Again, it's seven extra days. If they rang up and described the dispute to us there and then it would be blocked immediately and dispute -- and the dispute would take place, but if they can't explain it to us then they need to send the form in.

131
Q. Could we have a look at the form. It is at $\{F / 1831\}$. So who decided to introduce the form?
A. It was a joint between my team, my senior manager and the contracts advisor team.
Q. Who is your senior ..?
A. Alison Bolsover.
Q. Do you know was any part of this branch support programme related at all to what had gone before?
A. It came in a discussion between myself, Alison and the contracts advisors that we should all be working from the same book basically, so they use the form as well.
Q. If we have a look under "Dispute details", it says:
"Please provide details of your challenge, evidence to support this should be included (do not send original paperwork). All information requested below must be provided to enable an investigation."

And then we've got the reference to debt recovery being on hold for seven days.

If we look at what's required below: date of discrepancy, product, NBSC ref number, et cetera. It is quite possible, isn't it, that somebody when they have come to settle centrally doesn't exactly know the date of the discrepancy or the product?
A. So if they don't know -- if they have settled an unknown branch discrepancy, we would immediately redirect them
to NBSC. We wouldn't -- we cannot pass the dispute on to a team to investigate if we don't have a team to pass it on to.
Q. So if somebody writes here "£2,000 short, must have happened over these three days, don't know exactly why", you can't deal with that?
A. No.
Q. And so is the debt unblocked?
A. We would call the branch back, or reply via email and tell them to ring NBSC for guidance on how -- to see if they can find the loss.
Q. But is the debt unblocked? Is debt recovery --
A. It depends. We're waiting for them to call NBSC and get a reference number, we then check the reference number at a later date and see what NBSC have advised.
Q. And if ultimately the person is not able to provide a specific date and product, will the debt be unblocked? A. Yes, I'm afraid so.
Q. And why is an NBSC reference number required on the branch dispute form?
A. If they have one, we need it.
Q. It doesn't quite say that though, does it? It suggests that it is a requirement that you have an NBSC reference number?
A. Well, if they've got an issue and they've got a loss,

133
I would have expected them to ring NBSC prior.
Q. Even if they have settled it on the Friday, you sent your letter on the Monday ...?
A. Like I say, they still need to -- if they don't know what it's for they still need to ring NBSC.
Q. And what does your team do now you've got this collection of branch dispute forms? You have told us it is about five a month. Is there any analysis, or do you group them together, look for themes?
A. We don't deal with the actual dispute. We pass them on to the relevant team. That's why we need a product or something to pass on so we know which team to pass it on to deal with. We're not experts on the transactions, but we will pass it on and get a response.
Q. And do you then track how they are resolved?
A. Yes.
Q. So do you know of the branch dispute forms that came in last year how many ultimately ended up in the subpostmaster repaying?
A. Not off the top of my --
Q. You don't track that?
A. No.
Q. Sorry, I spoke too quickly.
A. No, we don't track it. Once the debt is cleared it is off the system and it's not part of the measures any

## more.

Q. But you appreciate it might ultimately never have been a debt?
A. Yes, and if something arises -- if they have paid and a transaction correction comes through after, they are welcome to keep the transaction correction that relates to the debt that they have already paid.
Q. So if there's a need to obtain transaction data or make an ALQ request, anything like that, that's not dealt with by your team?
A. No.
Q. Could we look please at $\{\mathrm{H} / 173 / 5\}$. This is part of a letter sent by the claimants' solicitor to Post Office's solicitors on 22 January of this year. Do you see at point 9 at the top it says the claimants' solicitors identified 11 to 12 in your witness statement and said:
"Please disclose documents relating to Post Office's procedures in its use of the branch dispute form, including recording internal actions taken on receipt."

Were you told about that request?
A. I think I was asked if there was any formal dispute -any process relating specifically to the dispute form, but it falls in with the rest of the dispute, it's just a process that we follow. There's no formal policy or

135
process in place.
Q. No formal policy or process in place ..?
A. Specifically to the branch dispute form. It's generic to any dispute.
Q. So if we go just quickly to $\{\mathrm{H} / 227 / 3\}$, this is the response we see from 27 February 2019. Do you see at point 9 again:
"Post Office has confirmed that there is not a specific document which relates ..."

Do you see that?
A. Yes.
Q. That's effectively what you have just described now?
A. Yes.
Q. And then it says:
"A flowchart of the dispute process is at ..."
And there is a specific number given. Do you know what that flowchart is?
A. Not without looking at it, no.
Q. Can we go to $\{F / 1276\}$. Do you recognise that flowchart?
A. Not the title.
Q. There are two pages to this document, if you want to just glance quickly at page 2?
A. Not just yet, thank you.
Q. No.
(Pause).

```
A. Okay, page 2 please {F/1276/2}.
Q. Just so you can see page 2.
A. That is a very old one.
MR JUSTICE FRASER: Very old did you say?
A. Yes. It refers to a relationship manager which we do no
    longer ...
MR JUSTICE FRASER: Do you recall when you stopped having
        that?
A. 2015 I think. I can't be sure -- I'm not entirely sure
    when they left.
Q. Go back to page 1 please {F/1276/1}. Do you see in the
    bottom half of the page there is a rectangle, "Issue
    passed to branch support team". Does that still exist?
A. We've got a support services team.
Q. Not a branch support team?
A. That's not a name I would recognise them by: support
services resolution team.
Q. So this is obviously not the current process, is it?
A. No, I just said it's not.
Q. If you go back over to page 2 please {F/1276/2}, who was
the relationship manager?
A. Andy Winn.
Q. How long did he hold that position?
A. I don't know.
Q. And previously the process would be that it was
```

137

Andy Winn who was essentially dealing with the resolution of disputes?
A. I can't answer to what the process was. I know he dealt with disputes but I don't know at what point they went to him.
Q. Just on the face of this document it appears that he is the start of the dispute resolution process. If you go back to page 1 --
MR JUSTICE FRASER: Ms Donnelly, I'm not sure that is really a question for the witness. She said it is an old document, she said who the person was and she doesn't know. Beyond that it is probably submission, isn't it, for me?
MS DONNELLY: Yes, thank you, my Lord.
MR JUSTICE FRASER: So back to you.
MS DONNELLY: Is there currently an appeal process?
A. In what respect?
Q. So you receive a branch dispute form. You say it is sent off to the relevant team to look at and you say you track that.
A. Yes.
Q. If a subpostmaster is not satisfied with how that team resolved their dispute, is there an appeal?
A. They can come back to us and request and we will go to support services for assistance.
Q. That doesn't sound like an appeal process. There's not another level?
A. For us, no, it's not. Support services provide extra assistance for us.
Q. You are also the team leader for Santander banking. Just a few questions if I may in relation to some figures which appear in Mr Smith's witness statement.

If we could go please to $\{\mathrm{E} 2 / 9 / 4\}$. We see here this is part of the witness statement from Mr Smith that was made on 16 November of last year and do you see just at the top of the page it is actually the second part of paragraph 16 which starts on the previous page. He says:
"However, I have spoken to various team leaders within the business in order to gain a sense of proportion of TCs that have been challenged in their departments historically and what proportion of those challenges were successful (ie leading to a change in the TC before eventually being accepted or a compensating TC being issued). The following sections of this witness statement are based on information provided to me by the team leaders identified in the headings ..."

Then if we go to page 5 of the document $\{E 2 / 9 / 5\}$ you see at the bottom of the page "Agent accounting team",

139

Dawn Phillips, that's you?
A. Yes.
Q. "Santander manual deposits" and we see he says:
"In relation to Santander manual deposits Post Office received the following number of disputes in the 2016/17 financial year."

And we can see the figures that appear there: errors received from Santander, 19,000-odd; disputes received from branch, et cetera and then it goes on.
A. Can I just say not all those disputes were from branch. They were not issued as transaction corrections. A dispute could have been sent on the basis of evidence received from the branch relating to a letter.
Q. If we just take it one step at a time for now. Is it right that you provided those figures to Mr Smith?
A. Yes.
Q. And did you know the reason he wanted them?
A. Yes.
Q. So you knew that he wanted to give a sense of proportion of TCs that had been challenged?
A. Yes.
Q. And where did you get this information from?
A. From spreadsheets that we maintained on the team.
Q. So you had an existing spreadsheet with this information in?
A. Yes.
Q. Because how this document was read and understood by both experts acting in this case is that the first column was TCs issued by Post Office to branch?
A. No.
Q. And the second column is TCs disputed by branch to Post Office?
A. No.
Q. That's completely wrong?
A. Yes -- well, no, your perception is wrong I'm afraid.
It does say errors received from Santander, it does not say TCs issued to branch.
Q. But you might not know that both experts read it in that way given the purpose that Mr Smith had set out earlier : that's what he said he was going to provide and this is what then appeared?
A. That is errors received from Santander, that is not transaction corrections issued to branch.
Q. And we see if we go to $\{E 2 / 15\}$ that Mr Smith provided a further witness statement. We received this on the claimants' side at 17.48 on Friday 8 March and he says there that he has rereviewed his witness statement, do you see that within paragraph 3 ?
A. Yes.
Q. So he spoke to you again, did he?

## 141

A. Yes.
Q. When did you first find out that there was an issue with the figures you had provided that were in Mr Smith's witness statement?
A. It's not an issue with the figures, the figures remained the same, I think it is an explanation of what the headers actually mean.
Q. When did you first become aware that some further explanation might be required?
A. Because someone assumed that they were transaction corrections issued to branch and it was queried.
Q. Sorry, when did you become aware that this --
A. Not long ago.
Q. Because if you had provided this evidence rather than Mr Smith you might have been able to explain it a little bit more clearly, do you think?
A. Yes.
Q. And if we could go over the page please $\{\mathrm{E} 2 / 15 / 2\}$, at paragraph 5 he says:
"The figures in my first statement of 2,890
'disputes received from branch' represents the number of disputes between Post Office and Santander ..."
A. Yes.
Q. And then paragraph 6:
"I understand from my colleague Dawn Phillips that
the Santander manual deposits team issued 3,968 transaction corrections during the financial year 2016-2017."

So if someone had misread Mr Smith's first witness statement, we've got about a fivefold difference from about 19,500 , it's actually only around 4,000 ?
A. That were issued.
Q. Now, what he hasn't told us, or isn't clear from his witness statement, perhaps you can just clarify, is how many of the 3,968 transaction corrections that were issued were disputed?
A. I can't answer that. I have already been asked that question and it's not something we recorded as to whether Post Office disputed it with Santander on the postmaster's behalf with evidence from the branch, or it was an actual transaction correction dispute.
Q. Had Mr Smith specifically asked you that?
A. Yes.
Q. And you told him it's not something that --
A. It's not something we recorded.
Q. Could we just go back please to $\{\mathrm{E} 2 / 9 / 5\}$. Could you just help us understand if about 19,500 errors are received by Post Office from Santander and Post Office actually issue only around 4,000 , what has happened to the rest?

143
A. So Santander do a manual match of figures to Horizon to the actual paperwork that they receive. If it doesn't match, they sent us an error notice. They were all in different categories, so several of the categories we know it was a timing issue and if we just waited a week they would send us another compensating error to clear it . A lot, I would say $50 \%$ of what they sent us could be cleared with a letter to branch requesting copies of their paperwork which we could then send back to Santander.
Q. So it's quite a lot more complicated than the way it is presented perhaps in Mr Smith's first or second statement?
A. Well, maybe. We issued a lot less than Santander gave us.
Q. So you are doing some sort of internal --
A. Yes.
Q. -- reconciliation yourself?
A. Prior to --
Q. That's a manual process, is it?
A. Yes.

MS DONNELLY: I don't have any further questions, my Lord.
MR JUSTICE FRASER: Thank you very much.
Mr De Garr Robinson, any re-examination?
Re-examination by MR DE GARR ROBINSON
144

MR DE GARR ROBINSON: I have only one question, Ms Phillips. You were asked about the dispute process and you were asked what happened if the subpostmaster was not satisfied with a decision that was made at the end of that process, was there an appeal, and you indicated that you would then call in support services for assistance. Could you explain what support services would do?
A. They are capable of doing a more in-depth investigation than perhaps we could in FSC, so they would be able to provide more information and a breakdown of what happened in branch.
Q. And how detailed would their investigation be?
A. Extremely detailed.
Q. Thank you, Ms Phillips .

My Lord, I have no further questions. Questions from MR JUSTICE FRASER
MR JUSTICE FRASER: Just a couple of questions on the table -- could we go back to it please \{E2/9/5\}. We've got $\mathrm{E} 2 / 9 / 5$ on the screen which you have been asked some questions about. The first column I think you say the number is correct but the description is wrong; is that fair?
A. No, the errors are received from Santander, but they are not transaction corrections issued to branch.

145
MR JUSTICE FRASER: Should I reading the heading to column 2 differently?
A. Yes, as in Paul's second statement--

MR JUSTICE FRASER: Well, I' $m$ rather asking you because you provided the figures.
A. So they are just disputes sent to Santander from Paul. They can be disputes where we have sent a letter to branch requesting evidence and not issued a transaction correction, we have just asked for the evidence and it has been provided, or they can be transaction correction disputes.
MR JUSTICE FRASER: And as far as you know are the headings to the other three headings correct?
A. Yes.

MR JUSTICE FRASER: They are.
One question Ms Donnelly asked you in respect of this and the total which I think is from Mr Smith's second statement is 3,968 in terms of transaction corrections. She asked how many of those 3,968 transaction corrections that were issued were disputed and you said you can't answer that, you have already been asked that question and it's not something you record.
A. No.

MR JUSTICE FRASER: When were you asked that question?
A. In recent weeks.

MR JUSTICE FRASER: In recent weeks leading up to this trial?
A. Yes.

MR JUSTICE FRASER: You weren't asked it at the time in respect of these figures?
A. Not the first statement. That's how the second statement came around because we were asked to -- we were asked that question: how many of those TCs were actually disputed by branch, and I can't answer it.
MR JUSTICE FRASER: Understood.
I assume nothing arising out of that?
Thank you very much for coming. You have a much
shorter stint in the witness box than
Mrs van den Bogerd.
MR DE GARR ROBINSON: My Lord, I wonder whether this would be a convenient moment for a break.
MR JUSTICE FRASER: I think it would. Who is your next witness?
MR DE GARR ROBINSON: It is Mrs Mather. I hope I'm pronouncing her name correctly. It is one of the things I want to check.
MR JUSTICE FRASER: Let's ask her right at the beginning.
And is there a fighting chance, Mr Green, of finishing her evidence today or is she going to go into tomorrow?

147

MR GREEN: My Lord, we're hoping to finish her and Mr Smith if we can.
MR JUSTICE FRASER: Excellent.
MR GREEN: Definitely her.
MR JUSTICE FRASER: None of this is binding it is just to give me a general outline.
MR GREEN: Of course.
MR JUSTICE FRASER: Okay, we will come back in at 20 past.
( 3.10 pm )

## (Short Break)

( 3.20 pm )
MR DE GARR ROBINSON: My Lord, I call Tracy Mather -- that's how one actually pronounces her name.

## MRS TRACY MATHER (sworn)

MR JUSTICE FRASER: Thank you, Mrs Mather. Do have a seat.
Examination-in-chief by MR DE GARR ROBINSON
MR DE GARR ROBINSON: Now, Mrs Mather, in front of you there should be a file of documents. I would like you to go to tab 8 of the file please $\{\mathrm{E} 2 / 8\}$. Do you see -I think there's a sheet of corrections, but after that sheet of corrections do you see a witness statement of "Tracy Jane Wendy Mather"?
A. Yes.
Q. Is that your name and address on the first page?
A. It is.
Q. If you go to the back of the document, is that your signature?
A. It is.
Q. And do you also see a document with three corrections to your witness statement at the front of that file?
A. I do.
Q. And now, Mrs Mather, I have to ask a question which is born out of sheepishness on my part. Everyone else in court will understand why, but you won't. I would like to ask you about paragraph 12 of your statement please \{E2/8/3\}. Here you are describing Credence and you say:
"Credence is used as an information tool. It is designed to work alongside other applications. It is used to help understand what has happened in a branch as it records all keystroke activity performed in that branch by the user ID, date and time."

Could I ask you to explain what you mean by the phrase "It records all keystroke activity "?
A. What I actually meant was the transactional data as in sales and non-sales.
Q. I see, thank you.

Subject to the three corrections you have identified and your clarification of paragraph 12, do you confirm that this witness statement is true to the best of your knowledge, recollection and belief?

149
A. It is.
Q. Thank you, if you could wait there please.

Cross-examination by MR GREEN
MR GREEN: Now, Mrs Mather, at paragraph 1 of your witness statement, if we look please $\{E 2 / 8 / 1\}$, you say you are the FSC team leader, so are you the team leader for FSC?
A. No, sorry, for my team. It's just a generic team leader role in FSC.
Q. You are a team leader within FSC?
A. Yes.
Q. And which is your team? Have you got a special team name?
A. For the last year and a half I have had MoneyGram and cheques I have had for two years, just over two years. Before that I was on payout, postal orders.
Q. Different things?
A. Yes.
Q. And how many people work in FSC overall?
A. I would be guessing.
Q. Roughly?
A. 60 ?
Q. And do you have any special training when you move to a new product you are dealing with?
A. Not training of such. You tend to -- because the team leaders might move on to another team, so you would
spend time with that team leader and then when they move into a new area you can always go back if there was something you were unsure of.
Q. And when you join FSC in the first place do you sort of pick it up on the job, how does it work?
A. FSC -- I have always been part of that kind of group since I joined.
Q. Did they give you any special is training when you joined, or did you ..?
A. We're going back a long time, but my special training of such was when I was a PA so I was machining so yes, they would give me special training.
Q. The purpose of your statement I think, as you explain at paragraph $8\{E 2 / 8 / 2\}$, is to explain how Post Office uses Credence to investigate discrepancies.
A. Yes.
Q. "... since the introduction of Horizon and why". And at paragraph 9 you have explained that:
"Credence is a system that shows all sales transactions, log on and log off events and all remittances in and out of Horizon."

## Yes?

A. Yes.
Q. And we have seen already that paragraph 12 of your witness statement $\{E 2 / 8 / 3\}$ says it is used to help -- if

## 151

you look at the second line, that Mr De Garr Robinson just took you to:
"It is used to help understand what has happened in a branch as it records all keystroke activity performed in that branch by the user ID, date and time."

Now, you have said that what you meant by that in fact was sales and things like that?
A. Transactional data, yes.
Q. What information does it give above and beyond the ARQ data that we have seen?
A. We -- for my team, which is the cheques team, where we usually use Credence, is years ago we would have had to ask a postmaster to send his cheque list in for us, if we've got an open item to investigate. With Credence we can save not going out to the postmaster, we can actually have a look to see how postmasters finish transactions off.
Q. And what he has typed in in the cheque list at the branch and how it shows up or --
A. No, we actually look at all sales to see what transactions he has finished off to cheques.
Q. So you don't have access to what we have seen is the ARQ data that's being pulled from Fujitsu?
A. $\mathrm{Mm}-\mathrm{hm}$.

MR JUSTICE FRASER: Is that correct, you don't have access
to that?
A. Not through Credence, no. We're just at the transactional level.
MR GREEN: So can you explain to the court -- give the court some understanding of what you can and cannot see. If you're investigating, for example, a MoneyGram issue, can you see exactly what the SPM has done in branch on the screen in Credence?
A. With MoneyGram we have two sources of information and that is MoneyGram's file and we use Horizon, we don't actually use Credence for MoneyGram.
Q. Okay. What do you use Credence for?
A. Mainly cheques, part of my team.
Q. Now, Credence only holds information for a short period, I think currently three months; that's right, isn't it?
A. That's right.
Q. And are you aware of discussions that have been had about extending the period for which Credence holds information to a longer period? Are you aware of any discussions about extending the period that Credence holds information for?
A. We know that we can view Credence up to three months. There's also a system called Horace. So we can -- one of my team members has access to Horace, so we would look on there.
Q. Okay. Let's look if we may at $\{F / 1092\}$ please. Now, this is a document from June 2013. You will see as at 2013 the branch data available as at that date was available for 61 days. Is that the same today as far as you know? Branch data available to you on Horizon? Do you see at the top?
A. Yes, I thought ours was 90 days, Credence.
Q. Well, Credence is immediately underneath, Credence data 90 days.
A. Yes. But when you say branch data I'm not too sure --
Q. On Horizon.
A. Yes.
Q. How long is the data available to you on Horizon for?
A. On Horizon, if we have an open item it's there until we investigate it.
Q. It can just stay on there for a long time?
A. Yes.
Q. And next to that it says:
"All transactional data including non-sales eg adjustments."

So it's right, isn't it, that Credence doesn't just show sales information, it also includes non-sales information like any adjustments that somebody has made?
A. Yes.
Q. And so that gives a fuller picture --
A. Yes.
Q. -- than just seeing the sales information?
A. Yes.
Q. And that's why in your statement you have explained that
it helps to see what's happened in the branch?
A. That's it.
Q. And can you see that the -- under -- you can see what's being considered there in bold. Do you see about quarter of a way down from the top in bold:
"Consider the benefits of a repository of data for 24 months. Note: this is open for discussion but 24 months is the initial gambit."

Do you see that?
A. Yes.
Q. Would it be more helpful to you to have Credence data available for longer?
A. We have -- there are some reports that we can still see information for 24 months on Credence.
Q. Are there now?
A. Yes.
Q. Do you know when that was extended up to 24 months?
A. I don't, no, because I wasn't on these particular teams at that time, because in 2003 I weren't on my job.
Q. You don't have to know the answers to the questions, it's fine, but if you do it is helpful for the court to

155
know what the answer is.
Under "Business benefits" it says:
"The business, in particular the security and P\&BA departments suffer from the inability to interrogate its data due to the short periods of retention."

Now, P\&BA, what is P\&BA now called?
A. It is now FSC.
Q. So that's your department that you work in?
A. Yes.
Q. And we can see that what's suggested there is "the following areas should benefit", "POCA claims and disputes". Can you tell the court what POCA is?
A. I don't know.
Q. If we go down and look at "Fraud and conformance investigations ", do you see that?
A. Yes.
Q. Is that something you have ever been involved in or not?
A. No.
Q. And then "SPMR contract advisors - re non-conformance suspension hearings". Have you ever been involved in anything like that?
A. No.
Q. And then if we go down, just underneath "Financial benefits" you will see:
"ARQ (audit retrieval process) costs at least 384 k
recurring annually. This is subsumed without breakdown in the Fujitsu security management costs. 720 requests @ £450 unit cost."

I think you said earlier you don't generally get the ARQ data, is that right?
A. No.
Q. Have you ever worked in a team where someone has sought the ARQ data?
A. I would imagine it's when it's the fraud team or the security team.
Q. Something like that?
A. And they need more data.
Q. So we know that at least some reports on Credence are now available for 24 months?
A. (Nods).
Q. Can you just give the court an indication of some examples of those?
A. It's usually regarding the automated payment, bill payments.
Q. Automated bill payments?
A. Yes.
Q. So those reports are available for longer?
A. Yes.
Q. Are there any others that you can think of?
A. Not off the top of my head.

157
Q. Don't worry. It's not Mastermind.

Now, can I ask you please to be shown $\{F / 1120\}$.
This is a PEAK document about the Horizon computer system. Do you ever see these in the course of your work or not?
A. Me, no.
Q. Does anyone in your team ever have cause to look at a PEAK?
A. No.
Q. No? Can I just ask you then -- I will take it quite quickly, but if we look at the bottom of that first page you will see the bottom paragraph underneath the word "Details ":
"The customer visited Kinglassie post office ... on 13 December 2012 ... to deposit $1,444.20$ which didn't credit their account. We can see from TESQA."

```
What's TESQA?
```

A. I've never worked on this team, but I'm aware that it's another system that people -- there's more details on that.
Q. As well?
A. Which is more restricted obviously for data protection so it is only certain people that have access to that data.
Q. And that's a separate system to Credence?
A. Yes.
Q. "We can see from TESQA that the transaction failed at the confirmation stage due to 'transaction abandoned by clerk : I've had numerous conversations with the office and also sent out a letter and evidence but the office has now requested a transaction log. With it being so long ago they can't provide an explanation as to why the transaction didn't complete (but state they didn't have a surplus at the time of the transaction ). If we could ascertain what buttons were pressed by the clerk we could go back with an explanation as to what the clerk did with this transaction and hopefully get a conclusion to this enquiry."

## Do you see that?

A. Yes.
Q. Now, it would be helpful, wouldn't it, when you have those sorts of issues if you could identify as much information about exactly what had happened in branch as possible?
A. I can't answer for that particular enquiry. On cheques we have the information that we require to investigate.
Q. You do?
A. Yes.
Q. Even if it is a long time afterwards? If someone raises it say 102 days later for the first time?

159
A. If we issued a transaction correction to the office, we put our details on there and if they had an enquiry or dispute something they would phone the duty (inaudible) up for more information.
Q. But I think what has happened here, on the face of it -and this is not a cheque case, but what appears to have happened here is that it has been raised -- can you see that the incident is raised on 30 August 2013?
A. Yes.
Q. And it relates to a visit on 13 December 2012, do you see that?
A. Yes.
Q. So we can see that more than 90 days has elapsed from the visit of the customer to the time when the issue has arisen and if you looked on Credence you wouldn't be able to see the details of the original visit, would you, after longer than 90 days?
A. No.
Q. Do you know how long you can see the details on TESQA for?
A. No.
Q. You don't. Okay.

Now, if you just go over the page at $\{F / 1120 / 2\}$, you see at the top of the page:
"We need sight of the actual transaction retrieving
from the archives (this is required to disprove any future claim against Horizon integrity via the clerk )."

Was it your experience at all that there was any defensiveness about the Horizon system when it was challenged by SPMs?
A. If a postmaster challenged in the area that I worked in, we always took them seriously --
Q. You did?
A. -- and we always looked at what they were actually saying and then we would go back to our evidence of issuing the TC.
Q. Okay. Can we look at your paragraph 13 please $\{E 2 / 8 / 3\}$. You can see there, third line:
"For example, a subpostmaster might telephone FSC and/or the helpline and allege to Post Office that he/she has done a reversal."

Yes?
A. Yes.
Q. That's an SPM claiming to have done something. The way that is expressed suggests some doubt a little bit, doesn't it, about the truth of what they're saying?
A. I think what I was trying to get across in this particular statement was if a postmaster had a query, he could always phone us and we would try and help, whatever his query was. That's what I was trying to

## 161

explain in this.
Q. Okay. Let's look if we may at paragraph 14. You say there:
"In relation to Mr Coyne querying whether Credence could contain errors that result in false TCs being issued to branches which they cannot effectively challenge, as I am an end user of Credence I cannot really comment on this. However I've never heard of a bug in Credence in my time at Post Office."

So that's not something you are in a position to comment on?
A. No.
Q. Okay. Let's move forward if we may please. Let's look please at $\{F / 869\}$. This is an Ernst $\mathcal{E}$ Young management letter for the year ended 27 March 2011 and I expect you may not have seen that before, is that fair?
A. That's fair.
Q. Can we go to page 4 please $\{F / 869 / 4\}$ and just to show you the layout of the table, the first column has a number in it, the second column says "Issue", although it is a bit strangely laid out, do you see?
A. Yes.
Q. "Location", "Background", "Recommendation", "Management comment" and then the right-hand column is "Current year update", do you see that?
A. Yes.
Q. And let's look at page 12 at point 12 please $\{F / 869 / 12\}$.

Point 12 says "Credence (back-end) change process" and you can see there it says:
"During our walkthrough and testing of the change control procedures for the Credence application we became aware of the following issues:
"1. Developers at Logica, the third party provider of application development and support for Credence, had access rights to the production environment and the database that would permit developers to move their own changes into the production environment.
"2. Documentation to approve fixes and patches that are applied to Credence outside of the release process does not always exist. We were advised by Logica personnel that for a sample of four changes selected evidence of approval to move into production did not exist and that it would not be possible to link the changes to problem tickets to record the original request for the fix ..."

Then:
"Developers have access to move their own changes into production and [if ] documentation is not retained to substantiate those changes there is a risk of loss of data and application integrity due to either

163
unauthorised, erroneous or inappropriate changing made to the production environment."

I'm not suggesting somebody read anything as complicated as that out to you, but were you aware at all in or around 2011 or thereafter of any concerns about the integrity of the information on Credence?
A. No.
Q. Okay. Let's look at page 14, point 13 \{F/869/14\}. This is "Credence (front end) change process" and we can see some issues identified in the column where there is a number 137 and in fact over on the right-hand side it says:
"Application not in audit scope for [ financial year 11]. Therefore we are not able to comment on whether management has fully addressed our comment as raised in the prior year."

You didn't see any particular changes in Credence around 2011 or soon thereafter?
A. To be honest, I wasn't working in this area in 2011.
Q. What area were you -- were you using Credence at all at that time?
A. Not at that particular time, no.
Q. You weren't, okay.

Before reading Mr Coyne's report were you aware that there is a time discrepancy between the Credence and the

## Fujitsu data?

A. What do you mean?
Q. One is GMT and one is British Summer Time for half the year. Did you know about that?
A. No.
Q. No. Fair enough.

Let's look at the use and content of Credence data.
If we look at $\{F / 935\}$, and you can see that that document is called "Driving business benefits through the consolidation of data review" and dated 18 May 2012.

Can I just ask you at what date did you move into a role where you started using Credence yourself?
A. Probably 2016.
Q. Okay, so this is --
A. '17, yes.
Q. -- before your time as well, okay.

So I will leave that.
Paragraph 15 of your witness statement $\{E 2 / 8 / 3\}$ says:
"Looking at the Helen Rose report referred to in paragraph 5.49 of Mr Coyne's report, Post Office was able to use Credence to identify that the subpostmaster had reversed a transaction but had also taken £76.09 payment from the customer."

And you have I think made an amendment to that and 165
if we look at $\mathrm{E} 2 / 16$ and we go forward one page $\{\mathrm{E} 2 / 16 / 2\}$ you can see that paragraph 15 now reads -- "Post Office was able to use Credence" should now be "Post Office initially used Credence". And then there is the addition of a sentence at the end that says:
"However, page 2 of the Helen Rose report shows that the reversal 'was not an explicit reversal by the clerk '."

Now, first of all, you are talking about the Helen Rose report; is that something that you actually knew about yourself?
A. No. In this particular incident though when there was not an error in the core finance, why this came about was because the customer contacted the helpline because the bill was unpaid.
Q. Yes. And if we look at how your paragraph 15 naturally reads $\{E 2 / 8 / 3\}$, if we look at the last sentence there, do you see it says:
"In reversing the transaction, the subpostmaster had effectively removed the payment to British Telecom, making the bill unpaid."
A. Yes and it was the system that removed it, not the postmaster, yes.
Q. It wasn't the subpostmaster. You hadn't appreciated that from the Helen Rose report --

## A. No.

Q. -- because the Helen Rose report wasn't really something you knew about?
A. No. But it was the recovery process that reversed --
Q. Could have done it?
A. Yes.
Q. So that amendment has now been made to reflect that?
A. Yes. And the transaction correction was issued because the customer's money was still in the branch, so by issuing the transaction correction the AP team was able to then repay the customer's bill .
Q. And at paragraph 18 \{E2/8/4\}, somehow ARQ requests has come into your witness statement.
A. Yes.
Q. It's not really your thing, is it?
A. No.
Q. Not really. I want to be fair to you about how I ask it. It says there:
"I understand that Mr Coyne has alleged that Post Office staff were deterred from making ARQ requests because of fees or penalties."

## Yes?

A. Yes.
Q. Did someone point that out to you in Mr Coyne's report, or did they just tell you that that's what he had said?

## 167

A. I have been always aware that Post Office Limited teams can ask for this information, because many years ago we didn't have Credence and we would ask for these, but I've never been aware of anybody being deterred from making requests.
Q. But no one in your team actually does that?
A. No, because we have the information at hand that we require.
Q. And you can see things on Credence that the SPM can't see and so you try and deal with their queries?
A. We can see the same information. Ours is probably more easily readable.
Q. In a spreadsheet form?
A. In a spreadsheet format.
Q. Not on a till roll?
A. Not on a till roll.
Q. And you say that you have spoken to Mr Godeseth. He is actually giving evidence, isn't he?
A. As I have put "I understand from a witness statement", I didn't actually speak to him.
Q. I'm so sorry, you are right, you say "I understand the witness statement contains details".
A. Yes.
Q. Then you say -- the reason I thought you might have spoken to him is three lines from the bottom, "He is not
aware of any fees or penalties having been paid". Is that just from his witness statement --
A. That's it, yes.
Q. -- you haven't spoken to him?

Can we look please at $\{F / 728\}$. This is an email chain in relation to the Barkham Post Office, which was Pam Stubbs' Post Office, and if we go please to page 11 $\{F / 728 / 11\}$, you can see there:
" If we can encourage Mark Dinsdale to authorise the audit trail, I feel it would be beneficial given the current interest in Horizon from media and MPs."

If we go to page 9 \{F/728/9\}, we get:
"Nigel, no probs with requesting data from Fujitsu but it will take around 3 weeks. Has Jason agreed to take this case on, because we don't hand over Horizon logs to an SPMR. It needs an expert to understand what it says, and usually this requires one of the investigators.
"I'll give Jason a call in the morning, then I will raise an ARQ from Fujitsu.
"Is this for our benefit, as there is a cost attached to ARQ requests, we do get a supply free of charge as part of the contract but we usually don't have enough, therefore we usually charge the defence lawyers."

169
Now, does that chime with anything that you have experienced?
A. No.
Q. Let's have a look, if we may -- well, I may not need to take you to it, but you're not aware of the charging regime at all yourself, are you?
A. I was aware Post Office had a certain amount and then they could be chargeable.
Q. So you were aware they had a certain amount after which they would be charged?
A. Yes.
Q. But you didn't know yourself what that amount was?
A. The charge? I have no idea, no.
Q. And you didn't know how many requests they could make before they were charged?
A. No. If we needed to make a request, I knew we could. Q. I'm grateful.

My Lord, I have no further questions.
MR JUSTICE FRASER: Mr De Garr Robinson?

## Re-examination by MR DE GARR ROBINSON

MR DE GARR ROBINSON: Mrs Mather, I just have a question about paragraph 19 then. It is a potential for confusion that you might be able to clear up. Paragraph 19 of your witness statement $\{\mathrm{E} 2 / 8 / 4\}$. Mr Green asked you about information you had obtained
from Mr Godeseth and you said you had just read his statement.
A. Yes.
Q. And then you referred to some information at the end of that paragraph where it says:
"He is not aware of any fees or penalties having been paid by Post Office, nor anyone being deterred from making ARQ requests ..."

In that sentence who is "he"?
A. I think it's Christopher Knight.
Q. So it's not Mr Godeseth?
A. No.
Q. And is that information as a result of your having spoken to Mr Knight?
A. Yes.
Q. Thank you.

My Lord, I have no further questions.

## Questions from MR JUSTICE FRASER

MR JUSTICE FRASER: I just have a couple of questions.
The one that you have just been asked by counsel about Mr Christopher Knight, is there any reason of which you are aware why you are telling us what Mr Christopher Knight believes rather than Mr Knight himself giving a witness statement?
A. I have no idea.

171

## MR JUSTICE FRASER: You don't know.

Then if we could go back please to your paragraph -well, it's really your experience of Credence altogether.

How often do you use Credence?
A. My team use it every day.

MR JUSTICE FRASER: And how often do you use it?
A. Perhaps once a week. I know my way round Credence.

MR JUSTICE FRASER: You know your way round it.
A. Yes.

MR JUSTICE FRASER: And what is keystroke activity?
A. I didn't realise that keystroke activity actually refers to these ARQ reports where we do the transactional data on Credence; that's what we're looking at, the sales and the non-sales. So I meant transactional data.
MR JUSTICE FRASER: So your understanding of keystroke activity when you did your statement was what?
A. Transactional data, sales and non-sales. So for every transaction that a postmaster -- for example somebody paid their bill, we would see that level of detail and how the transaction was finished, either to cash, cheque, debit card. So it's the transactional data over the Horizon counter.
MR JUSTICE FRASER: Right, so if I look at your paragraph 12 $\{\mathrm{E} 2 / 8 / 3\}$-- do you have that?
A. Yes.

MR JUSTICE FRASER: You see the sentence that you have been asked about a couple of times --
A. Yes.

MR JUSTICE FRASER: -- firstly by Mr De Garr Robinson and then by Mr Green. Just so that I can understand what your evidence is, that second sentence that begins "It is used to help understand ...", I understand I should cross out " all keystroke activity ", is that right?
A. Yes.

MR JUSTICE FRASER: And what term should I put in there instead?
A. What we use Credence for is we have also got -- for cheques is all cheques are processed at a processing centre which they then create a file . So for example if we had ten cheques processed we would look on Credence for ten transactions that were finished off to cheques, so ten versus ten and then if we've got a mismatch that's what we would be looking for. For example one could be finished off to cash accidently and we would try and identify that.
MR JUSTICE FRASER: But going back to my question, what term should I put in instead of "all keystroke activity "? Is there a handy or useful form of words that would correct that sentence to reflect what you meant?

173
A. Records all transactional data performed in that branch.

MR JUSTICE FRASER: All transactional data performed in that branch. Okay.

And then the next question, which is more or less on the same topic, in the next paragraph you have a sentence that begins at the end of line 4 which says:
"We can take an initial look on Credence to see whether that is correct or whether, for example, the subpostmaster has in fact done an adjustment."

Do you see that?
A. Yes.

MR JUSTICE FRASER: Can you just explain to me how you would do that?
A. For example, if one of -- a postmaster phoned one of my team, they might think that they have done a reversal, but by the duty (inaudible) they would be able to go on to Credence, download the information and look on non-sales and they might have actually done an adjustment.

MR JUSTICE FRASER: And is that something that you would be involved in looking at, or would it be someone in your team?
A. It would be my team members.

MR JUSTICE FRASER: And could you do that if you wanted?
A. If I wanted to, I could, yes.

## MR JUSTICE FRASER: And what would it show? What would you expect to see in your example? <br> A. That's where -- for an adjustment it's when they can adjust cash to cheque or cheque to cash. <br> MR JUSTICE FRASER: Right. That's very useful. Thank you very much. <br> Any questions arising out of that? No. <br> Thank you very much for coming, Mrs Mather, that's the end of your evidence. <br> MR DE GARR ROBINSON: My Lord, I call Paul Smith. <br> MR JUSTICE FRASER: Yes. <br> MR PAUL SMITH (affirmed) <br> MR JUSTICE FRASER: Thank you very much, Mr Smith. Do have a seat please. <br> A. Thank you, my Lord. <br> Examination-in-chief by MR DE GARR ROBINSON <br> MR DE GARR ROBINSON: Mr Smith, there should be a bundle of documents in front of you. If I could ask you to open that bundle and go to divider 9 please \{E2/9\}. There should be one sheet with a correction in it and after that sheet there should be a document describing itself as a "Witness statement of Paul Ian Michael Smith", do you see that? <br> A. Yes. <br> Q. And is that your name and address on the first page of

## 175

the witness statement?
A. It is.
Q. And at the end of the witness statement -- it is page 7 $\{\mathrm{E} 2 / 9 / 7\}$-- is that your signature?
A. It is.
Q. And then if I could ask you to move on in the bundle to what I hope is tab $15-$ - is there a tab 15 in that bundle? \{E2/15\}
A. There is .
Q. And another witness statement with your name and address on the first page and on the second page is that your signature? \{E2/15/2\}.
A. It is.
Q. Subject to the correction on the first sheet relating to the first witness statement, do you confirm that the witness statements are true to the best of your knowledge, recollection and belief?
A. They are.
Q. If you would wait there, thank you. Cross-examination by MR GREEN
MR GREEN: Mr Smith, we have heard how you discussed the information about transaction corrections with various colleagues and one of them was Dawn Phillips.
A. It was.
Q. And can I just take you please to your witness statement

```
at \(\{\mathrm{E} 2 / 9 / 3\}\) at paragraph 13. So you have introduced TCs at paragraph 12.
A. \(\mathrm{Mm}-\mathrm{hm}\).
Q. And it says:
"TCs are issued by FSC. I understand from
Post Office's solicitors that the processes by which FSC determines whether a TC is required is outside the scope of the Horizon issues trial."
A. Okay.
Q. That's what you were told?
A. Yes.
Q. And then you said:
"Broadly, it involves FSC comparing data entered onto Horizon by branch staff with data received from other sources and resolving any discrepancies between them."
Now, pausing there, there are -- I think as we have already heard -- separate teams for different potential discrepancies?
A. Agreed.
Q. And you have explained at paragraph 14 that:
"FSC is divided into distinct teams that are responsible for accounts relating to specific products."
A. They are.
Q. So one team might be dealing with Santander
```

177
discrepancies, for example?
A. Indeed.
Q. Another team might be dealing with lottery and so forth?
A. Absolutely.
Q. And you say that:
"Although each team have their own responsibilities, there is interaction between teams to reach a final resolution on any discrepancy."
A. There is .
Q. When would that typically occur?
A. That would occur when there is evidence within the investigation that there could be a further activity that's needed. As an example, we have already heard about cheques. It could be that the impact of a cheque discrepancy could also impact on another product, so if you have a miskey it could be that that miskey transaction has been settled to cheque with higher than what it should be value, but then there's also going to be the bill payment or the actual transaction itself that's also been at a higher value. So working together you can put together all the pieces of the puzzle, get the right answer and also mitigate or minimise the impact on the branch by making sure that any corrections that are done are done at the same time to ensure that the financial impact is either mitigated or reduced.
Q. Yes. It is obviously ideal if both sides can be done at the same time.
A. Absolutely.
Q. And the subpostmaster is not hit with a TC going one way and then another way.
A. Why he.
Q. But that does happen sometimes?
A. I cannot give you an example --
Q. Okay.
A. -- but I can't deny it either.
Q. At paragraph 16 you say:
"Post Office introduced a case management system that records each individual challenge to a TC ..."

## Yes?

A. It records some challenges to TCs. It is still something that's in roll-out. It was introduced on that date. There are a number of teams that are on there and challenges to TCs are recorded in there, yes.
Q. So taking it in stages, it was introduced in September 2018?
A. Agreed.
Q. And when is roll-out of that system due to be complete across all teams?
A. I can't give you a date. I don't know a date.
Q. Okay. And how many teams are there in total? Roughly?

179
A. Roughly I would say eight.
Q. Eight. And do you know how many teams are using that system at the moment?
A. I know that there are two teams which are high volume users that are fully integrated in there and there are a number of teams which have maybe part of their processes in there. As I explained previously, teams have distinct areas of responsibility. It could be that a product is integrated but the whole team isn't.
Q. Okay. Which are the two teams that are high volume users?
A. The automated payments team and the team that deals with debit cards, lottery and ATM.
Q. And do you know whether they are using it to record all challenges or just some challenges?
A. As far as I'm aware, all challenges.
Q. Okay. And do you know whether that case management system actually tracks any trends or if there's any analysis of the figures?
A. The case management system itself doesn't because it 's a case management system, it's there to record. However, there are reports being developed that are showing some trends. I do know that the lottery, ATM and debit card team leader has requested a number of reports and is using them to get to the bottom of what
may have happened.
Q. So there are actually reports you can use now?A. There are reports written for those specific products.
Q. For those products --
A. Yes.
Q. -- that exist now --
A. Yes.
Q. -- and are being used?
A. As far as I'm aware, yes.
Q. Did you think it might be useful to have a look at
those, or did you not look at them because of what you
were told by the solicitors, that how it was done wasn't
in scope?
A. Neither is accurate. These reports were generated very recently. As I say, this is a system that has been developed, it is in place, but the actual uptake by teams is being done on a step-by-step basis and as improvements are made, reports are written. It's running quite well but organically .
Q. It is fair to say that your most recent witness statement is pretty recent as well, isn't it?
A. It is.
Q. 8 March.
A. It is.
Q. So you could have captured information in that witness

181
statement about the trends and --
A. That witness statement was to address specific comments within there that following understanding from looking at Mr Coyne's report, relooking at my statement, which is the right thing to do, it indicated that -- as per Dawn Phillips' testimony earlier that there was information in there that wasn't fully explained regarding notices.
Q. Two things, Mr Smith. I know what's in the witness statement. I was just pointing out that first of all it 's not quite things that weren't fully explained.
There was something in there that was wrong that you had to correct. Can we be clear about that?
A. Terminology, I will agree, was wrong.
Q. It was wrong?
A. Yes. The facts and the figures I would dispute were wrong.
Q. Right. Well --

MR JUSTICE FRASER: Sorry, so you are saying the facts are correct and the figures are correct?
A. My Lord, as per Dawn's previous testimony she did say that the information that she provided, the information on error notices, the volumes that she provided, were accurate and that's all that I can work on.
MR JUSTICE FRASER: But if the description of what those
figures is is incorrect then you are maintaining that the content of the statement is correct, are you?
A. The statement wasn't -- it wasn't correct, my Lord. It was referring to error notices not transaction corrections.
MR JUSTICE FRASER: Right, Mr Green.
MR GREEN: I'm grateful.
And in fact the heading in the second box, if we look at paragraph 23 on page 5 \{E2/9/5\}, the heading "Disputes received from branch" was specifically wrong, wasn't it?
A. It was, yes.
Q. Because it was actually "Disputes received by Santander from PO"?
A. It was, yes.
Q. So that the question I was originally asking you was you said that you didn't include anything about the transaction correction system or any analysis about TCs and so forth from the system because the reports were quite recent. I showed you the date of your statement which was the Friday before this trial started and I suggested that was recent. I'm just going to suggest again that would have been an opportunity for you to put something in about how those were working. Was there a reason why you didn't?

## 183

A. There wasn't.
Q. Okay. And there aren't any underlying documents produced or exhibited with your statement to support these tables, are there?
A. There isn't I'm afraid.
Q. So just to get a feel for how this was done, if we look at paragraph 17 which is $\{E 2 / 9 / 4\}$, "Cash bureau and personal banking team", the people that you spoke to or contacted were Sarah Parkes and Gillian Hoyland, is that right?
A. It was.
Q. What did you do, did you email them, did you talk to them, did you call them, did you meet them; what happened?
A. There was an email that was quite explicit as to the information I required and I did do follow up emails and on occasion I would speak to people.
Q. On occasion you would speak to people?
A. Yes.
Q. Did you speak to Sarah Parkes?
A. I didn't speak to Sarah Parkes, no.
Q. Did you speak to Gillian Hoyland?
A. From memory, I did, yes.
Q. And which aspect did you speak to her about?
A. Just to request that the information was provided, to
explain what the information was needed for and that it was time critical because I was still awaiting the data at the time.
Q. And you've got these average numbers. Was there a reason why the period was different between the cash and the bureau figures?
A. That's not something I'm aware of.
Q. You don't know?
A. I don't know.
Q. And it suggests there that there are 680 disputes, paragraph 18, 40 upheld. And you understand that the disputes tend to relate to alleged shortages in pouches received by branches and they are dealt with at the cash centre as opposed to FSC?
A. That's right.
Q. Who did you gain that understanding from? Was that something that Gillian Hoyland told you?
A. That would have come from an email and I cannot remember who sent me the email at this stage.
Q. Okay. Let's look at personal banking for a moment, if we may. TCs by the personal banking team are rarely disputed, we see there.
A. $\mathrm{Mm}-\mathrm{hm}$.
Q. "This is because they run a report in Horace to determine whether a surplus is evident (ie if the cash 185
physically counted is more than the amount that appears on Horizon or vice versa) before issuing a TC."

Where has that come from?
A. That information is likely from Sarah Parkes but, as I have suggested earlier, I cannot $100 \%$ say which one of them provided that detail by email.
Q. Okay. Camelot, debit card and ATM team, Andrea Green. \{E2/9/5\}:
"The Camelot, debit card and ATM team had the following number of TCs disputed and issued the following number of compensating TCs in the 2017 financial year."

We have a table there. Again, there is no underlying document provided?
A. No.
Q. How did Andrea Green give you this information?
A. Andrea Green will have sent this as an email which I will have forwarded on to our solicitors.
Q. And it just says -- under "BOI retracts" and "Lottery" the number of TCs issued for those two is very different, isn't it: 4,174 and lottery is 24,139 ?
A. It is.
Q. But the number of disputed TCs apparently is estimated to be the same?
A. It appears so, yes.
Q. And the number of compensating TCs is also estimated to be identical?
A. It appears so, yes.
Q. Do you have any feel at all from your own knowledge as to whether those figures are even remotely reliable?
A. The number of issued TCs I would suggest are very accurate. The number of TCs disputed is not something that I can comment on at this stage. I do know that prior to having our case management system in there was no consistent method of recording the method of disputes.
Q. You say in paragraph 21 what your colleague Andrea Green has told you. So just working out the information flow --
A. Yes.
Q. -- it's you got it from Andrea and she got it from various experienced team leaders?
A. Team members.
Q. Team members. Did she tell you who they were at all?
A. She didn't.
Q. Okay. So it's hop over to Andrea Green and then another hop over to some other team members who are not identified?
A. Yes.

MR JUSTICE FRASER: That's really a point for me, Mr Green.
187
MR GREEN: I'm grateful, my Lord.
So do you think there was scope for other misunderstandings between you and the people you have asked of the same sort as that which has emerged with Dawn Phillips?
A. It is unlikely. I cannot say categorically no, but the contract and the way that we work with Santander is significantly different to how we work on the other products. Many of the other products are very, very similar in how they are administered, there's just different methods of investigation and additional different types of data available.
Q. Okay. Can we just go over the page please to page 6 in your witness statement $\{\mathrm{E} 2 / 9 / 6\}$. DVLA:
"Jacqueline has explained to me that TCs are very rare in this team. During the past year the team have only issued four and none of them have been disputed."

Now, you understand that this trial concerns the operation of the system over a long period?
A. Yes.
Q. Could we look at $\{F / 1889\}$ please. Sorry, I hope I've got the right reference. We can come back to that reference in a minute, if we can just check it. It is the spreadsheet of TCs issued by branch. We can come back to that in a second.

If we can just go in the meanwhile to paragraph 30 of your witness statement $\{E 2 / 9 / 6\}$ we see a reference to paragraph 6.66 of a report by Mr Coyne in which he refers to two TCs of $£ 810,000$ in a Post Office Limited disclosed document and suggests they might have been made in error. You say:
"This is not correct. Two TCs were required in this instance because the method of payment used was cheque."

Then:
"TCs to the value of 810,00 are directly linked and relate to a Bank of Ireland Post Office Savings Account deposit on 24 August 2012."

Let's quickly look at that. It seems to be right. If we look at $\{F / 1195\}$ please. You had a look at that Excel spreadsheet anyway to look at the two --
A. I did.
Q. There's an 810 and 810 at the top and the bottom, isn't there?
A. There is .
Q. And they cancel each other out. What I wanted to ask you about is -- while that downloads -- it might download in the background if we go to another document. Shall we just look at \{D3/1/205\} please. Let's get the spreadsheet, thank you very much.

Can we go to the original data $\{\mathrm{F} / 1195\}$ and there

## 189

we've got a long list of individual TCs issued in 2012, with the date they are issued, going into 2013, the early part of 2013, so it looks like the 2012/2013-year, is that what you understood?
A. I haven't seen the full detail of this report, but it does appear that way.
Q. And if we go to the pivot table, the pivot report tab at the bottom we can see there are 84,217 transaction corrections recorded there, yes?
A. Yes.
Q. Could we please go to $\{\mathrm{D} 3 / 1 / 205\}$. Now, this is Dr Worden's report, who is the expert for Post Office, and he has reproduced a table which was produced by Post Office in accordance with an order that the court made for provision of this information. When we look at the volume of TCs in 2012 it says 124,374 and when we look in 2013 it says 105,876 and we can see that the moving average in that period is a lot higher than the figure that we saw in the financial year 2012/2013. Are you aware of any reason why the numbers in what appear to be a calendar year might be very significantly different, other than the fact that the financial year starts and ends at a different time?
A. I know of no other difference other than it would be significantly different based on that premise.
Q. Can I ask you whether you have seen this document before please?
A. I don't recognise it, no.
Q. Have a look at page $\{\mathrm{H} / 58\}$. This is the document as originally presented and sent through. If we look at \{H/57\}, you can see what's said about this. Just come down to the third paragraph:
"Post Office does not hold historic aggregated TC data in a single searchable database, in Horizon or otherwise."

We have seen that 2012 spreadsheet of all those transaction corrections individually and for what it's worth I have checked that there are 87,000 of them.
Have you seen other spreadsheets of transaction
corrections similar to that for different years?
A. Similar to that, no.
Q. The one we looked at which had the 810 and the 810 that you specifically looked at to check what Mr Coyne was saying?
A. Not in that layout, no, but Post Office do hold a -I will loosely call it a database, it's a SharePoint site, with Excel spreadsheets on that have been created to hold transaction corrections, which our -- one of the teams within Post Office appends to daily to create that list.

191
Q. Which department is in charge of that list? Who is the owner of it? I see it is on a SharePoint site, but who would be the natural person to talk about that list if they were asked?
MR JUSTICE FRASER: You have asked five questions, one after the other.
MR GREEN: I'm sorry.
MR JUSTICE FRASER: Do you want to maybe put it as one question.
MR GREEN: Who would be the natural person to speak to that list and explain it?
A. It will be somebody in the systems management team.
Q. Okay. Can I ask you whether you had any involvement in or about May 2018 in looking at any of those sorts of documents to compile a table of how many transaction corrections there had been?
A. It's possible. I cannot explicitly remember, but I could have.
Q. You can't remember?
A. No, not at this stage.
Q. Can we just look at $\{F / 889\}$, which is my missed note. Can we look please at the "Branch type volume" tab please and you can see there's an analysis of transaction corrections by branch type, yes?
A. Yes.
Q. And then if we go to the "Summary by period" tab please.
You can see there -- if we just take DVLA as an example,
where your evidence of the present number of TCs is
there is about a handful, if you go up to the top to see
the headings there, can you see "2010/2011 outturn",
that's an annual figure, that's 2,717 , do you see that?
A. I do.
Q. So that's not very recognisable from what you have said
in your witness statement. Is that because that's gone
down radically?
A. It will have gone down radically, yes. I don't believe
we actually transact that type of transaction with the
DVLA any more. The transactions that we're dealing with
where there are very few is we now have a corporate
relationship with the DVLA where we have fleet companies
such as Arval or Hitachi Finance who tax their cars with
us on a bulk basis and they pay us a significant amount
of money maybe two days prior to when they are actually
going to tax their cars and we request that the
branches -- or we task the branches in calling us before
they do these transactions to make sure that the funds
are available to actually pay for these transactions.
Q. Okay. Mr Smith, looking at the figures for DVLA in
those earlier years that we have seen, it doesn't
surprise you that they are of that order? 193
A. I don't have enough knowledge to know whether they are right or wrong I'm afraid.
Q. So you wouldn't have been able to assess very well what the other people you were getting information from were telling you?
A. No, I wouldn't.
Q. I'm grateful.

My Lord, I have no further questions.
MR JUSTICE FRASER: Mr De Garr Robinson?
MR DE GARR ROBINSON: I have no further questions.
Questions from MR JUSTICE FRASER
MR JUSTICE FRASER: I have two.
Can we go to your statement please, which is at \{E2/9/3\} and your paragraph 16 where you explain about this case management system. Do you see the first line of your paragraph 16 ?
A. Yes, my Lord.

MR JUSTICE FRASER: What is it called?
A. It is called -- you will have to excuse me, nerves. It is dynamics, my Lord.
MR JUSTICE FRASER: Dynamics.
A. Dynamics, my Lord, yes.

MR JUSTICE FRASER: I know this is quite new because you say it has not been fully rolled out and it only started in September 2018, is that right?
A. It did for the FSC, my Lord, yes.

MR JUSTICE FRASER: And then you also referred to reports which you said had been generated very recently .
A. Yes, my Lord.

MR JUSTICE FRASER: Do you recall Mr Green was asking you about those?
A. I do.

MR JUSTICE FRASER: What are they called?
A. I don't think they have a specific name, my Lord, I think they are just reports that have been set up within the Dynamics system to allow the team leader to easily access, such as a dashboard to be able to see graphically volumes and information behind that.
MR JUSTICE FRASER: Per month or -- because it has not yet been going a whole year -- or quarterly or what?
A. I believe it gives the data daily and monthly, but I'm going on a conversation as opposed to something I can give you concretely.
MR JUSTICE FRASER: That's all right. It certainly can't be annually, can it?
A. No, absolutely not. It could be set up to be annually, but it wouldn't give you -- it would just give you up to now, yes.
MR JUSTICE FRASER: At the moment it won't be an annual one. A. Yes.

## 195

## MR JUSTICE FRASER: That's very useful.

Then the second question, if we can go forward please to $\{E 2 / 9 / 6\}$, which will be your paragraph 27. Do you see that?
A. Yes, my Lord.

MR JUSTICE FRASER: Now, the only reason I'm going to be a bit precise about this is because of the slight difficulty with headings in your tables earlier in your statement. When you say "MoneyGram receive one or two disputes a month", is that MoneyGram the company receiving disputes from the Post Office, is that MoneyGram the team receiving disputes back from branches about TCs, or is it something else? What does it mean?
A. My Lord, I believe this is MoneyGram as the team within the FSC.
MR JUSTICE FRASER: The MoneyGram team.
A. Yes, my Lord.

MR JUSTICE FRASER: Receiving one or two disputes a month from ..?
A. Branches.

MR JUSTICE FRASER: From the branches. And is your understanding that they are disputes in respect of transaction corrections issued by the team, or in respect of something else?
A. My assumption based on what I put in paragraph 16, which
is that this is the information that I have gained from team leaders, it would be disputes regarding transaction corrections that have been received by branch.
MR JUSTICE FRASER: But your paragraph 16 is talking about the sense of proportion of TCs that have been challenged and what challenges were successful.
A. I'm specifically --

MR JUSTICE FRASER: So the one or two disputes a month are back in respect of TCs that have been issued, is that right?
A. That is my assumption, yes, my Lord.

MR JUSTICE FRASER: And that would be as a proportion of what higher number, or any idea, or you can't remember, or you were never told?
A. I'm unaware of the number, my Lord.

MR JUSTICE FRASER: Unaware. All right, that's very helpful, thank you.

Mr De Garr Robinson, anything? No.
MR DE GARR ROBINSON: My Lord, no questions.
MR JUSTICE FRASER: Mr Smith, that's your evidence done so
thank you very much. You don't have to come back tomorrow. Obviously you are welcome to but you don't have to come back to give evidence. Thank you very much.

Anything that needs dealing with?
197

Can I just raise a polite reminder about experts' reports cross-referenced to the Opus -- when I mentioned it last week it wasn't urgent. It is still not urgent but I would broadly like them by the end of the week if possible.

And then I was also going to have a file of PEAKs and KELs.
MR GREEN: My Lord, do you want us to give it to you as we go along?
MR JUSTICE FRASER: I think so, yes please.
MR DE GARR ROBINSON: It would be helpful if all parties could have the same file.
MR JUSTICE FRASER: I agree, but I don't suppose the claimants necessarily know which ones you are going to use when you are cross-examining Mr Coyne.
MR DE GARR ROBINSON: No, no, absolutely.
MR JUSTICE FRASER: I would have thought the task of providing one by the end of the week for the evidence of fact is probably going to be fairly straightforward, because we haven't been using very many.
MR GREEN: My Lord, yes.
MR JUSTICE FRASER: And then after that it can be updated every couple of days. And it doesn't have to be updated before they are asked questions, it can be updated afterwards. It's just to give me a useful working file.

Right, anything else?
MR DE GARR ROBINSON: My Lord, no.
MR JUSTICE FRASER: No. 10.30 tomorrow. Thank you very much.
( 4.36 pm )
(The court adjourned until 10.30 am on Wednesday, 20 March 2019)

199

```
1
```ousekeeping
MS ANGELA VAN DEN BOGERD (continued)

\(\qquad\)
 .. 5
Cross-examination by MR GREEN (continued) .....  .5
Re-examination by MR DE GARR ROBINSON .....  79
Questions from MR JUSTICE FRASER ..... 106
Further re-examination by MR DE GARR ..... 111
ROBINSON10MS DAWN PHILLIPS (affirmed) 113
Examination-in-chief by ..... 113
MR DE GARR ROBINSONCross-examination by MS DONNELLY 114
Re-examination by MR DE GARR ROBINSON ..... 145
Questions from MR JUSTICE FRASER ..... 145
MRS TRACY MATHER (sworn) ..... 148
Examination-in-chief by .....  148
MR DE GARR ROBINSON
Cross-examination by MR GREEN ..... 150
Re-examination by MR DE GARR ROBINSON ..... 171
Questions from MR JUSTICE FRASER ..... 172
21
MR PAUL SMITH (affirmed) ..... 175
22
Examination-in-chief by MR DE GARR ..... 175
ROBINSONCross-examination by MR GREEN177
Questions from MR JUSTICE FRASER ..... 194

a3 (1) \(53: 5\)
aa (5) \(25: 12\) 26:14,22
27:15 29:7
aakash (1) 68:9
abandoned (2) 54:20 159:3
able (29) 1:20,23 11:7
13:6 16:18 58:13 87:11,25 90:14,15 106:7 107:3,11,12 108:3,5 120:21 133:16 142:15 145:10 160:16 164:14 165:22 166:3 167:10 170:23 174:16 194:3 195:12
aborted (5) 80:4,15,25 81:17 82:11
above (10) 31:11 49:12 70:4 73:2,20 110:23 124:1,2 127:11 152:9
absentee (1) 130:14
absolute (1) 30:25
absolutely (6) 10:18 55:9 178:4 179:3 195:21 198:16
absurd (1) 28:14 accept (4) 46:9 77:16,20 102:24 acceptable (1) 58:6 accepted (6) 15:18 76:7 94:22 103:7 104:5 139:19
accepts (1) 46:19
access (12) 14:14 56:24 58:14,15 122:15 152:22,25 153:24 158:23 163:10,22 195:12
accessible (1) 8:24
accident (1) 3:3 accidently (1) 173:20
accord (1) 102:5
accordance (4) 49:22 51:8 82:3 190:14 account (13) 25:22 26:16 53:17 60:14 74:20 77:15 83:8 85:13 104:7 127:8 130:15 158:16 189:11
accounting (8) 11:20 114:9,12,16 115:14,21,24 139:25
accounts (19) 33:19 80:10 81:6 82:2,8,18,20,22 83:1,6,14,17,22,23 90:19 121:19 123:5 124:16 177:23 accuracy (1) \(125: 20\) accurate (3) 181:14 182:24 187:7
acknowledgement (1) 64:7
acknowledgements (1) 38:7
acronym (1) 51:18 across (12) 7:15 17:16 33:18 60:9,15 69:25 72:24 80:1 107:25
108:13 161:22 179:23
acting (1) 141:3
action (3) 58:24 119:21,25 actions (1) 135:20 activate (1) 44:6 activated (2) 44:3,13 actively (2) 88:9 89:22 activity (9) \(149: 15,18\) 152:4 172:11,12,17
173:9,23 178:12 actual (11) 55:11 57:21 61:6 103:3 126:16 134:10 143:16 144:2 160:25 178:19 181:16
actually (97) \(8: 13\) 9:2,19 10:16 13:8,10,16 17:24 18:3 20:3 26:17 28:19 29:22 31:5 36:7,15 39:22,23 40:2,13,21 41:1,9,10 44:8,9 45:1,2,3,5 46:13 47:7,15 50:13,18,19 51:15,25 57:22 60:20 61:18 62:1,10 65:10 69:6 71:3 74:21 76:6 80:16 83:16 85:4 88:17 89:6 93:13 95:6,22,23 101:4 102:24
103:2,4,6,10,25 112:20,22 121:7,10 122:1,2 123:1 130:2,8,9 139:11 142:7 143:6,24 147:10 148:13 149:19 152:16,20 153:11 161:9 166:10 168:6,18,20 172:12 174:18 180:18 181:2 183:13 193:12,18,22 ad (1) 123:22 adamant (1) 70:7 added (1) 65:18 adding (2) 26:12 27:13 addition (1) 166:5 additional (4) 20:7,8 42:21 188:11 address (5) 113:20 148:24 175:25 176:10 182:2
addressed (1) 164:15 addressing (1) 88:9 adjourned (1) 199:6 adjournment (1) 94:7 adjust (1) 175:4 adjustment (3) 174:9,19 175:3

\section*{adjustments (2)} 154:20,23 administered (1) 188:10 adopt (2) 3:17,19 adopting (1) 2:23 advance (1) 122:25 advantages (1) 106:6 adverse (1) 4:20 advice (1) \(74: 7\) advicehelp (1) 55:22 advise (1) 119:18 advised (3) 70:7 133:15 163:15 advisor (3) 119:20,24 132:4 advisors (2) 132:10

156:19
affect (2) 121:19 123:4 affected (2) 10:9 86:20 affirmed (4) 113:10 175:12 200:10,21 afforded (1) 60:23 afraid (6) 85:19 93:20 133:18 141:10 184:5 194:2
after (29) 7:12 14:8 26:7 57:23 58:2,12,19,20 70:25 74:3,10 75:4,11,14 76:11 95:7 96:20 112:19 121:10 124:19 127:6,12 135:5 148:20 160:17 170:9 175:20 192:5 198:22
afternoon (1) 114:6 afterwards (3) 74:22 159:24 198:25 again (26) 35:9 36:20 39:4,15 47:11 50:6 54:24 61:14 71:21 87:12 94:20 99:2,17 113:6 117:17 118:11 119:14 120:2,19 124:8 128:11 131:21 136:7 141:25 183:23 186:13
against (4) 5:21
131:7,10 161:2
agent (9) 6:4
114:9,12,16 115:14,16,23,24 139:25
agentsaccountingteampostoffineeduly 54:6
(1) \(117: 12\)
aggregated (3) 8:11,25 191:8
ago (4) 142:13 152:12 159:7 168:2
agree (8) 27:20
28:13,15 41:3,13 42:4 182:14 198:13 agreeable (1) \(30: 9\) agreed (4) 37:5 169:14 177:20 179:21 alexander (1) 12:9
align (1) \(83: 2\)
alison (2) 132:6,9
allegation (2) 68:8,14
allegations (1) 11:21
allege (1) 161:15
alleged (2) 167:19 185:12
allow (2) 108:4 195:11
almost (2) 81:18,22
alone (1) 63:21
along (1) 198:9 alongside (2) 73:1 149:13
alq (1) \(135: 9\)
already (14) 3:22 41:24 65:20 68:6 81:20 122:1,21 131:19 135:7 143:12 146:21 151:24 177:18 178:13
also (28) 15:15 19:3
24:19 26:10 56:4 88:13 93:1,3 105:6 116:3 123:11 125:15 127:17,20 139:5 149:4 153:23 154:22 159:5

165:23 173:13 178:15,18,20,22 187:1 195:2 198:6
although (3) 122:3 162:20 178:6
altogether (1) 172:4
always (12) 8:13 59:21 124:23 125:1 128:23 151:2,6 161:7,9,24 163:15 168:1
amend (1) \(25: 22\) amended (2) 49:24 74:1 amendment (2) 165:25 167:7
amount (29) 17:15 41:10 62:3 68:3 106:20 109:9,18 110:7 114:19 116:20,22 117:6,22 118:7,9,12 119:6 120:9 122:4 123:5,25 124:21 125:8 131:18 170:7,9,12 186:1 193:17
amounts (1) 122:14 analysis (6) 25:8 67:18 134:8 180:19 183:18 192:23
analyst (1) 64:13 andor (2) 117:25 161:15 andrea (6) 186:7,16,17 187:12,16,21 andrew (2) 66:14 67:1 andy (2) 137:22 138:1 angela (3) 5:5 14:13 200:5
annexed (1) 33:11 annual (3) 104:22 193:6 195:24
annually (3) 157:1 195:20,21
annuals (1) 6:6 another (14) 10:16 57:17 107:19 131:4 139:2 144:6 150:25 158:19 176:10 178:3,15 179:5 187:21 189:22
answer (17) 8:16 9:25 21:20 40:9,10 62:18 73:24 108:12 120:1 130:6 138:3 143:12 146:21 147:10 156:1 159:20 178:22
answered (6) 9:11,12,14,19 86:16 122:6
answers (2) 106:19 155:24
anticipate (1) 19:5
anybody (2) 12:13 168:4
anyone (11) 20:20 34:2,12,21,25 39:16,20 54:4 57:23 158:7 171:7
anything (19) 2:12 17:3 50:11,21 52:17,24 58:18 62:11 80:22 97:8 107:5 135:9 156:21 164:3 170:1 183:17 197:18,25 199:1
anyway (9) \(35: 7\) 47:24 52:18 55:17 57:11 75:20 107:11 131:10 189:15
anywhere (2) 62:14 67:21
ap (3) 32:8,14 167:10 apart (2) \(32: 24\) 55:25 apologise (3) 65:24 124:10 130:7 apparent (2) 75:18 109:17
apparently (2) 63:16 186:23 appeal (4) 138:16,23 139:1 145:5 appear (7) 2:3 30:15 72:11 139:7 140:7 190:6,20 appeared (2) 75:10 141:16 appears (14) 8:7 31:14 37:25 38:18 49:23 72:6 92:14 118:8 125:20 138:6 160:6 186:1,25 187:3 appends (1) 191:24 application (4) 163:6,9,25 164:13 applications (1) 149:13 applied (1) 163:14 applies (1) 130:21 apply (2) 60:20 74:21 appreciate (1) 135:2 appreciated (1) 166:24 apprehend (1) 93:11 approach (7) 2:10,19,24 52:6,9 93:23 129:15 approaches (1) 109:8 appropriate (1) 127:25 approval (1) 163:17 approve (1) 163:13 approximately (1) 56:12 archives (1) 161:1 area (5) 64:15 151:2 161:6 164:19,20 areas (4) 7:16 129:18 156:11 180:8 arent (13) 17:4 24:13,16 25:2 32:24 37:2,17 40:14 118:20,21 123:13 125:15 184:2 arisen (1) \(160: 15\) arises (1) 135:4 arising (5) 21:3 107:17 111:14 147:12 175:7 armstrong (6) 96:12,13,19 99:21 100:9,24 armstrongs (1) 100:9 arose (2) 79:6 80:8 around (9) 35:19 77:10 105:4 143:6,24 147:8 164:5,18 169:14 arq (17) 13:25 15:15 18:25 19:17,19 92:24 152:9,22 156:25 157:5,8 167:12,20 169:20,22 171:8 172:13
arrange (2) 117:5 119:8 article (2) 57:15,20
artificially (1) 42:24 arval (1) 193:16 ascertain (1) 159:10 aside (1) 15:19 ask (36) 79:20 86:1,2,4 91:6,16 95:2 96:4 100:10,13 101:19 102:11,14 104:6 105:19 107:14,17,21 109:13 113:15 147:23 149:7,10,17 152:13 158:2,10 165:11 167:17 168:2,3 175:18 176:6 189:20 191:1 192:13
asked (38) 3:24 18:14 19:22 39:21 57:25 58:2 63:15 66:16 85:23 86:13 90:2 91:13 95:25 98:23 106:16 108:20 109:5
became (1) 163:7
become (3) 63:9
142:8,12
before (34) 8:25
16:2,4,5 21:19 23:16
39:17,19 44:5 52:1
80:15 86:4,7 92:3
110:6 112:7 120:14 121:3,5,6,15 123:17 132:8 139:19 150:15 162:16 164:24 165:16 170:15 183:21 186:2 191:1 193:20 198:24
beforehand (2) \(68: 24\) 89:9
begin (1) 31:14
beginning (7) 18:14 23:10 40:5 99:24 129:2,20 147:23
begins (3) 3:8 173:7 174:6
behalf (1) \(143: 15\) behind (1) 195:13
being (52) 3:9 7:14 18:13 27:1 29:17 30:9 33:7 34:10 35:3 41:21 45:20 46:13 58:21 59:13 63:19 66:15 68:9 72:4 75:10 76:19 77:3 79:8,17 80:25 81:2 82:15
85:5,8,12,21 87:25 93:7 94:22 106:7,15 107:11 108:3 110:18 122:18 126:9 132:18 139:19,20 152:23 155:8 159:6 162:5 168:4 171:7 180:22 181:8,17
belief (4) 15:9 114:1 149:25 176:17
believe (8) 1:8,11 68:17 106:10 113:16 193:11 195:16 196:14
believed (1) 76:14 believes (2) 70:9 171:23 below (9) 29:14 32:23 91:15 97:12 101:15 102:4 110:24 132:15,19
beneficial (1) 169:10
benefit (4) 13:25 90:17 156:11 169:21
benefits (7)
105:23,24,25 155:10 156:2,24 165:9 best (5) 107:21 113:25 117:13 149:24 176:16 better (4) 71:7 90:15 106:5 128:4
between (24) 9:13 15:24 16:2,7 20:19
21:4,21 26:1,6 34:19 35:1 41:20 73:20 75:13 84:5 105:13 132:3,9 142:22 164:25 177:15 178:7 185:5 188:3
beyond (4) 89:15,19 138:12 152:9
bias (2) 51:22 77:17
big (1) 99:25
bill (8) 101:4 157:18,20

166:15,21 167:11
172:20 178:19 binding (1) 148:5 bit (16) 17:16 31:5,8 49:20 51:6 67:15 106:3 109:12 110:1,5 120:6,8 142:16 161:20 162:21 196:7
black (1) 91:17
blame (1) 51:24 block (3) 66:20 127:8 128:15
blocked (2) 131:10,23 blue (3) 91:17,18 94:15 bogerd (19) 5:5,7 18:25
19:3 48:13,19 62:17 67:14 79:3 82:1 88:21 93:25 94:9 100:11 103:15 105:16 111:17 147:15 200:5
bogerds (1) 47:22 boi (1) 186:19 bold (2) 155:8,9 bolsover (1) 132:6 book (1) 132:11 booked (6) 37:16 46:14,15 47:5 87:9,10 books (1) 24:24 born (1) 149:8 borne (5) 85:23,24 88:8,14 89:22 both (16) 21:2 25:13 26:10 29:9,10 37:19 41:20 113:5 120:4 128:21,23 130:5,12 141:3,13 179:1 bother (1) 124:4 bothering (1) 124:6 bottom (22) 5:17 18:24 19:18 61:22 84:17 91:11 92:1 94:13 97:14,16,18,22 100:13 101:23 137:12 139:25 158:11,12 168:25 180:25 189:17 190:8 box (10) 4:6,17 53:4 61:22 110:10,16 111:7 113:5 147:14 183:8 brackets (1) 57:23 branch (122) 6:23 7:18
10:24,25 11:8,18 15:11 19:20 21:17 32:8,14 33:18,21 35:6 36:3 40:25 41:24 47:13,17 49:25 50:18 51:9 53:18 60:12 69:11 79:8 80:1,8 82:2,11,20 83:20,22,22 84:5 86:17,18,21,24 87:14 88:10 90:16 98:16 104:9 108:14,15 109:15,15,24 117:23 118:8 122:21 125:23 127:17,18,21,23 128:7,10,20,24 129:17,19,19,22 130:9,13,14,16,18,20,22 131:6,12,17 132:7,25 133:9,20 134:7,17 135:19 136:3 137:13,15 138:18 140:9,10,13

141:4,6,12,18 142:11,21 143:15 144:8 145:12,25 146:8 147:10 149:14,16 152:4,5,19 153:7 154:3,5,10 155:5 159:18 167:9 174:1,3 177:14 178:23 183:10 188:24 192:22,24 197:3
branches (14) 7:14 11:7,20 71:10 87:1 114:15 131:2 162:6 185:13 193:20,20 196:12,20,21
branchs (5) 80:10 81:6 83:6,7 85:12
brdb (1) 94:19
break (5) 48:3,14,17 147:17 148:10
breakdown (4) 116:21 117:20 145:11 157:1
bridges (1) 63:11
briefly (3) 5:7 18:22
104:18
bring (1) 105:4
bringing (1) 13:2
brings (1) 3:14
british (3) 101:16 165:3 166:20
broadly (3) \(129: 6\) 177:13 198:4 brought (1) 27:9 bst (1) \(101: 17\)
bt (1) 101:4
budget (2) 10:23 11:1
bug (21) 21:2,3,21,22
33:8 34:12,13 85:25
86:1,2,6,20 87:8,18
88:8,15,24 89:9,21,24 162:9
bugs (5) 20:18,24 \(34: 19\) 85:16,25
building (1) 105:13
bulk (1) 193:17
bullet (1) 5:12
bundle (5) 113:14
175:17,19 176:6,8
bunny (1) 58:1
burden (1) 3:23
bureau (2) 184:7 185:6 burke (3) 14:13 77:20 78:18
burkes (2) 55:7,14 business (14) 3:2 4:21 7:16 13:7,9 64:13 105:2,6,12 108:8 139:15 156:2,3 165:9 busy (1) 4:21 button (2) 87:11,12 buttons (2) 58:13 159:10
buy (1) 44:14
c (1) 9:11
calendar (1) 190:21 call (43) 7:20 8:9,19,25 9:19,19 10:15 \(14: 3,8,16,19,23,25\) 45:7 47:20 49:3 57:25 58:20 60:6,20 61:1 62:10 64:1 68:5 75:2
categorically (1) 188:6 categories (2) 144:4,4 causative (3) 50:23,24 51:3
cause (8) 35:9 46:10
75:16 76:18 78:7
98:10 108:2 158:7
caused (6) 33:20 43:23
45:20 89:23 94:23
95:13
causing (1) 77:21
cawd (1) 56:4
cctv (1) \(4: 17\)
centrally (27)
110:7,11,14 114:20,24 115:5,7 116:3 117:22 118:7 121:7,9,22 122:3,7,21,25 123:1,8,14,21 124:7,12,17,19 125:4 132:22
centre (4) 98:6,23
173:15 185:14
century (1) 104:23 certain (3) 158:23 170:7,9
cetera (4) 56:6 106:17
132:20 140:9
chain (3) 67:4 96:11
169:6
challenge (3) 132:13
162:7 179:13
challenged (5) 139:16 140:20 161:5,6 197:5
challenges (7) 139:18
179:15,18
180:15,15,16 197:6
chambers (1) 54:6
chance (1) 147:24
change (11) 79:15,16 97:10 105:4,8 115:20 129:15 139:18 163:3,5 164:9
changed (3) 8:15 26:11 53:7
changes (10)
106:2,4,7,8
163:12,16,19,22,24
164:17
changing (2) 104:24 164:1
charge (4) 169:23,24
170:13 192:1
chargeable (1) 170:8 charged (3) 45:16 170:10,15

\section*{charging (1) 170:5}
chart (1) 110:22
chasing (1) 70:19
check (18) 121:25
122:4,4,7,9,12,13,14,18 123:12,12 124:21 125:3 127:24 133:14 147:22 188:23 191:18 checked (2) 124:13 191:13
checking (2) 19:10 124:4
checks (1) 17:21
cheque (9) 152:13,18 160:6 172:22 175:4,4
178:14,17 189:8
cheques (10) 150:14

152:11,21 153:13 159:20
173:14,14,16,17 178:14
chesterfield (5) 58:5,12 61:9 69:7,8 chime (1) 170:1 choose (1) 3:11 chose (1) 115:5 chosen (1) 114:24 christmas (1) 24:24 christopher (3) 171:10,21,23
chronology (1) 96:21 circumstances (2) 3:10 75:11
claimants (6) 107:4 111:19 135:13,15 141:21 198:14 claimed (1) 98:12
claiming (1) 161:19 claims (2) 11:19 156:11 clarification (1) 149:23 clarify (1) \(143: 9\) class (1) 108:19 classic (1) 73:4 classification (1) 60:19 clean (1) \(1: 9\) clear (10) 3:22 16:6 27:11 58:14,25 106:6 143:8 144:6 170:23 182:13
cleared (2) 134:24 144:8
clearly (8) 47:13
57:6,10 62:3 77:5
92:25 108:6 142:16
clerk (8) 92:12 95:17,20 159:4,10,11 161:2 166:8
click (4) 23:4 70:3 73:2
77:24
clock (2) 131:7,10
close (2) 4:21 24:7
closer (1) 40:15
closings (1) 71:18
code (13) 24:4,5 29:22 38:14,19 39:8,10 56:3 60:13 72:16 73:1 80:3 81:15
codes (4) 24:8 25:1
37:21 72:3
cohone (1) 12:10
colleague (3) 8:1
142:25 187:12
colleagues (1) 176:23 collect (1) 129:18 collecting (1) 129:21 collection (1) \(134: 7\) column (14)

22:21,22,24 23:1,1
70:2 141:4,6 145:21
146:1 162:19,20,24 164:10
columns (1) 9:9 come (24) 6:18 13:1 25:4 40:14 48:14 56:12 59:12 60:25 73:3 77:9 93:20 95:8 112:17 132:22 138:24 148:8 167:13 185:18 186:3 188:22,24 191:6 197:21,23
comes (5) 10:13 19:24 45:5 50:17 135:5 comfortable (1) 47:19 coming (7) 7:16 47:7
87:13 112:25 128:4
147:13 175:8
comment (7) 102:5
162:8,11,24 164:14,15 187:8
comments (4) 33:17
101:15,16 182:2
committed (10) 80:6,12 81:13,20 82:6,9,15,24 83:13,15
common (4) 52:5 66:18 109:20 115:15 communication (1) 89:11
communications (1)
78:1
companies (1) 193:15
consider (1) 155:10 considered (2) 19:6 155:8
consistent (1) 187:10 consolidation (1) 165:10
constantly (1) 51:24
consulted (3)
4:15,17,19
contact (3) 49:8 117:11 120:5
contacted (5) 49:2,7 119:7 166:14 184:9 contacts (1) \(124: 15\) contain (1) 162:5 contained (1) 91:15 contains (2) 103:18 168:22
content (4) 117:10 120:7 165:7 183:2 context (5) \(85: 18,19\) 93:7 102:18,20
continue (1) 10:12 continued (4) 5:5,6 200:5,6
continuing (1) 48:1 contract (3) 156:19 169:23 188:7 contracts (5) 58:2 119:20,24 132:4,10 control (2) 25:3 163:6 controls (1) 126:10 convenient (2) 48:3 147:17
conversation (3) 61:4 64:12 195:17
conversations (1) 159:4 copied (1) 94:15 copies (1) 144:8 copy (7) \(1: 10 \quad 5: 1\) 32:12,15,16 49:23 125:24
core (2) 87:9 166:13 corner (1) 66:22 corporate (1) 193:14 correct (42) 1:11 10:18 11:10 14:12 19:15 26:24 27:19,21 36:10 38:9 39:25 43:25 45:6 46:18,19 47:18 49:21,24 51:7,11 53:12,18,20 58:16 65:15,17 71:23 75:13 78:1 100:4 110:22 145:22 146:13 152:25 173:24 174:8 182:13,20,20 183:2,3 189:7
corrected (5) 28:12 55:4 65:14,16 97:9 correcting (1) 78:11 correction (23) 4:8 26:16,19 27:3,8,24 43:7,20 91:7 110:2,18,24 135:5,6 143:16 146:9,10 160:1 167:8,10 175:20 176:14 183:18 corrections (29) 28:6 30:20 31:4,6 65:14 117:25 140:11 141:18 142:11 143:2,10 145:25 146:19,20

148:20,21 149:4,22 176:22 178:23 183:5 190:9 191:12,15,23 192:16,24 196:23 197:3
correctly (3) 14:10 110:4 147:21 corresponding (8) 15:14 17:15 18:7 24:2 27:7
29:14 39:12 68:23
correspondingly (1) 43:17
cost (9) 6:2,11,17,21
104:22 105:13,18
157:3 169:21
costs (4) 104:15 105:22
156:25 157:2
couldnt (10) 7:1 11:4,9 44:22 52:17 58:15,18 63:1,2,20
counsel (1) 171:20
counted (1) 186:1 counter (8) 54:17
80:2,5 81:3 82:13 92:10 103:21 172:23 countermeasure (3) 27:25 28:4,10 countermeasures (1) 28:7
couple (8) 47:12 78:23 106:14,15 145:18 171:19 173:3 198:23 course (8) 3:17,19 4:20 13:7 27:23 58:24
148:7 158:4
cover (1) 105:14 covered (1) 65:19 coyne (9) 33:17 89:9 102:16,19 162:4 167:19 189:3 191:18 198:15
coynes (6) 33:16 88:19 164:24 165:21 167:24 182:4
crashed (1) 92:11 create (2) 173:15 191:24
created (8) 66:13,24 84:18,24 85:9,12 87:7 191:22
credence (68) 11:9 69:10,16,18 70:6,7,10,13,20 71:1,3,3,5,6,9 103:18 104:3,7 149:11,12 151:15,19 152:12,14 153:2,8,11,12,14,18,20,22 154:7,8,8,21 155:15,18 157:13 158:25 160:15 162:4,7,9 163:3,6,9,14 164:6,9,17,20,25 165:7,12,22 166:3,4 168:3,9 172:3,5,8,14 173:13,16 174:7,17 credit (3) 58:19 78:2 158:16
critical (1) 185:2 criticising (1) 90:7 criticism (1) 1:22 cross (1) 173:9 crossexamination (8) 5:6 114:5 150:3

176:20 200:6,13,18,24 crossexamined (1) 29:17

\section*{crossexamining (1)} 198:15
crossreferenced (1) 198:2
current (6) 105:11 115:16 116:13 137:18 162:24 169:11 currently (3) 111:11 138:16 153:15
customer (18) 10:13,14 50:5,7 52:15 53:17 56:5,10 57:3 61:24 62:2,4,8 99:8 158:14 160:14 165:24 166:14 customers (3) 53:17 167:9,11
cut (1) 91:20
cutting (1) 94:1
d (1) 9:12
d2 (1) \(88: 18\)
d2420 (1) 88:19
d31205 (2) 189:23 190:11
daily (2) 191:24 195:16
dalmellington (18) 21:3,5,7,21 33:8 34:5,12,13 35:5,8 85:17,25 86:2,6,13 87:8,18 88:8
dare (1) 62:16
dashboard (1) 195:12
data (122) 8:9,20,25
11:6,9 14:1,13
\(15: 10,15,20,21,21,22\) 16:4,7,7,8,9,12,13,23,23 17:4,11,13,13 \(18: 4,7,8,20,25\) 19:4,5,10,17,19,20,23,23 20:2,15 21:13,13 23:8,19,19,20 24:1 28:16 31:7,7 32:5 33:4 35:15,16,17,20 36:2,3,6,7,9,10,12,13,14 40:24 68:21 71:11,22,23 72:6,22 73:1,12,14 75:25 88:10 89:11 98:6,23 112:13 135:8 149:19 152:8,10,23
154:3,5,8,10,13,19 155:10,15 156:5 157:5,8,12 158:22,24 163:25 165:1,7,10 169:13
172:13,15,18,22 174:1,2 177:13,14 185:2 188:12 189:25 191:9 195:16
database (3) 163:11 191:9,21

\section*{date (24) 1:20 8:25}

9:10 19:8 22:12,13
23:9 54:5 67:11 70:10 118:9 132:19,22 133:15,17 149:16 152:5 154:3 165:11 179:17,24,24 183:20 190:2
dated (2) 96:19 165:10 dates (1) 66:16
dawn (9) 113:9,10,18
140:1 142:25 176:23 182:6 188:5 200:10
dawns (1) 182:21
day (5) 29:18 60:5
121:11 125:9 172:6
day2631 (1) 29:19
day58016 (1) 103:17
days (18) 117:5 118:16 119:10 127:10 131:2,8,18,21 132:18 133:5 154:4,7,9 159:25 160:13,17 193:18 198:23 de (55) 1:4,6,16 2:1,14,25 3:16 4:2 78:22,25 79:2,3 81:25 93:19,22 94:3,9 107:14 111:15,16,17 113:8,9,13,14 144:24,25 145:1 147:16,20 148:12,16,17 152:1 170:19,20,21 173:5 175:10,16,17 194:9,10 197:18,19 198:11,16 199:2
200:7,9,12,14,17,19,22 deadline (1) 107:12 deadlines (1) 107:15 deal (11) 3:19 6:20 11:12 64:3 71:17 114:11 116:3 133:6 134:10,13 168:10
dealing (9) 21:23 67:18 111:23 138:1 150:23 177:25 178:3 193:13 197:25
4deals (1) 180:12 dealt (3) 135:9 138:3 185:13
dean (1) \(8: 1\)
debit (7) 24:19 73:5 172:22 180:13,24 186:7,9
debitcredit (1) 117:2 5dêt (17) 6:4 115:16,20,23,25 116:2 117:7 119:15 128:16 132:17 133:8,12,12,17 134:24 135:3,7 december (3) 49:1 158:15 160:10 decide (4) 3:12 10:12 123:24 125:8 decided (3) 54:22 126:22 132:2 decipher (1) 28:22 decision (1) 145:4 declarations (1) 66:2 declared (1) 114:15 declaring (1) 70:8 decreased (4) 38:7 39:23 40:21 47:10 deep (1) 97:3 defensiveness (1) 161:4 deficit (1) 68:12 definitely (1) 148:4 degree (1) 47:20 deleting (1) 74:2 deliver (1) 104:21
delivered (1) 96:24 demonstrate (1) 98:2 den (20) 5:5,7 18:25 19:3 47:22 48:13,19 62:17 67:14 79:3 82:1 88:21 93:25 94:9
100:11 103:15 105:16 111:17 147:15 200:5
deny (1) 179:10 department (2) 156:8 192:1
departments (2) 139:17 156:4
depending (1) 109:9 depends (7)
80:11,15,18 122:17 125:3,4 133:13 deposit (2) 158:15 189:12
deposits (3) 140:3,4 143:1
derb (1) 12:10
describe (3) 79:14 113:17 115:14 described (7) 11:25 49:12,18 83:12 126:9 131:22 136:12
describing (3) 130:24 149:11 175:21
description (10) 60:4,10 61:3 78:11 80:20,21 82:3 85:11 145:22 182:25
design (2) 31:25 62:7
designed (6) 32:1 54:21
55:2,17,18 149:13
desk (1) 65:11 detail (13) 16:15 24:7 30:25 35:17 61:10 105:15 106:16 107:4,12 127:2 172:20 186:6 190:5
detailed (4) 60:9 61:3
145:13,14
details (11) 49:8 88:16 116:24 132:12,13 158:13,19 160:2,16,19 168:22
determine (1) 185:25 determines (1) 177:7
deterred (3) 167:20 168:4 171:7
developed (2) 180:22 181:16
developers (3)
163:8,11,22
developing (1) 105:11 development (1) 163:9 developments (1) 105:7 devote (1) 13:6
didnt (56) 1:14 18:10 20:10,11 21:4,9,25 22:5 26:18 28:18,21 29:22 34:16 35:5 36:9 44:8 46:14 47:3 50:8,11 52:13,21 55:15 59:1 65:24 67:21,23 68:3,19 74:21 75:12 93:6 95:22,23 103:10 106:18,18,20 108:24 109:1 111:25 131:7,9 158:15 159:8,8 164:17

168:3,20 170:12,14 172:12 183:17,25 184:21 187:20 difference (12) 9:13 15:24 16:2,7 41:21 42:20 44:11,12 46:16 90:8 143:5 190:24 different (37) 2:10,19,23 15:20 22:9 24:16 35:6 41:19 52:10,11 57:11 59:7 65:12 67:9 71:12 88:6,7 91:1,3 102:6 107:19 109:8 116:24 120:6,8 144:4 150:16 177:18 185:5 186:21 188:8,11,12 190:22,23,25 191:15 differently (2) 91:4 146:2

151:5 152:9 158:7 163:15 168:6 170:1 179:7 190:6 191:8 196:13
doesnt (30) 30:5 31:19 35:20 47:21 56:23,25 60:20 61:1,4,7,9 62:13 70:11,22 73:19 89:6 111:3 118:11 126:4 129:12 132:22 133:22 138:11 139:1 144:2 154:21 161:21 180:20 193:24 198:23
doing (8) 13:10 29:10 42:2 68:18 76:6 115:25 144:16 145:9 domain (7) 80:7 81:14 82:7,9,16,25 83:13
done (35) 1:21 13:24 22:14 26:19 27:8 29:2 36:17 44:21 52:17 55:10 69:21 79:17 82:11 91:20 100:19,20,21 103:11,11 106:8 126:16 153:7 161:16,19 167:5 174:9,15,18 178:24,24 179:1 181:12,17 184:6 197:20
donnelly (14) 114:3,5,6 124:10,14 125:11 129:14 130:7 138:9,14,16 144:22 146:16 200:13
dont (83) 1:17 3:5,22 4:25 9:20,21 10:12,16,25,25 14:8,9 20:15 24:23 25:4 29:19 31:2 40:11 57:8 63:23 65:23 67:11 68:17 69:6 71:5,9 73:21,24 75:24 82:18 85:19 86:4 89:6,19 91:2 95:18 98:7 112:4,22 115:1 119:23 120:24 121:8,25 123:11,18,20 128:21,23,23 129:5 132:24 133:2,5 134:4,10,21,24 137:24 138:4 144:22 152:22,25 153:10 155:22,24 156:13 157:4 158:1 160:22 169:15,23 172:1 179:24 185:8,9 191:3 193:11 194:1 195:9 197:21,22 198:13 double (1) 47:6
doubling (2) 76:14 87:12
doubt (1) 161:20 down (28) 24:3 43:15 47:11 53:4 54:13 59:5 64:6 72:19,21 73:3 79:20 84:17 91:12 92:8,23 95:15 96:10 97:12 104:25 108:4 109:14 114:23 155:9 156:14,23 191:7 193:10,11
download (2) 174:17

189:22 downloading (1) 7:23 downloads (1) 189:21 downwards (1) 100:12 dr (3) 28:2,6 190:12 driven (1) 6:21 drivers (1) 105:12 driving (1) 165:9 drop (2) 10:6 117:11 dropoffs (1) 10:8 due (11) 43:6 56:5,10 61:24 62:4 95:16 119:9 156:5 159:3 163:25 179:22 duly (1) 99:13 duplicate (9) 33:13 35:2 45:24 46:3 84:18,20,24 85:8,12 duplicated (2) 79:6 85:5 duplication (2) 75:6,18 during (5) 3:23 55:23
143:2 163:5 188:16
duty (2) 160:3 174:16 dvla (5) 188:14
193:2,13,15,23 dynamic (1) 104:24 dynamics (4)
194:20,21,22 195:11
e (2) 9:13 54:15
e2 (1) 103:22 e21126 (1) 33:10 e215 (2) 141:19 176:8 e2152 (2) 142:18 176:12
e216 (1) 166:1
e2162 (1) 166:1
e231 (1) 113:16
e232 (6) 114:13,23
116:7 118:14 120:19 127:5
e233 (2) 129:16 131:1 e2511 (1) 11:13 e2518 (2) 65:9 67:19 e2519 (2) 71:21 74:1 e2520 (1) 48:20 e2523 (4) 15:8 18:3 20:6 25:7 e2524 (1) 35:25 e2535 (1) 102:13 e2542 (1) 7:22 e2543 (1) 8:17 e28 (1) 148:19 e281 (1) 150:5 e282 (2) 103:24 151:14 e283 (6) 149:11 151:25 161:12 165:18 166:17 172:25
e284 (2) 167:12 170:24
e29 (1) 175:19 e293 (2) 177:1 194:14 e294 (2) 139:8 184:7 e295 (6) 139:24 143:21 145:19,20 183:9 186:8 e296 (3) 188:14 189:2 196:3
e297 (1) 176:4 earlier (9) 30:12 94:16 103:12 141:14 157:4 182:6 186:5 193:24 196:8
early (2) 92:2 190:3

68:23 84:17 110:21 environment (4) 104:24 163:10,12 164:2 ernst (1) 162:14 erroneous (1) 164:1 error (27)

50:1,4,8,12,22,24
51:2,3,22 52:15 54:23,24 77:16 80:2,3 81:15 89:11 102:21 121:11,12,20 144:3,6 166:13 182:23 183:4 189:6
errors (9) 2:3 6:19,20
140:7 141:11,17
143:22 145:24 162:5 escalated (1) 119:20 esg (2) \(70: 3,5\)
especially (1) \(37: 3\) essentially (3) 74:2 130:24 138:1 established (1) 34:17 estimated (2) 186:23 187:1
et (4) 56:6 106:17 132:20 140:9 even (7) 101:17 112:22 120:14 131:19 134:2 159:24 187:5
evening (3) 56:12 74:10 76:11
event (23) 15:21 16:7,9,23 17:3,11 18:7 19:23 23:19,20 24:1 31:7 32:5 33:4 36:6 43:14 67:13 69:8 71:22 73:12,14 80:1 93:2
events (6) 15:10 16:19 18:4 92:10 93:3 151:20
eventually (1) 139:19 ever (7) 51:20 111:10 156:17,20 157:7 158:4,7
every (17) 13:23 14:25 15:14 17:14 103:18 104:3,8,10 122:2,4,13 123:12 126:11,15 172:6,18 198:23
everyone (1) 149:8 everything (5) 13:22 16:8 112:13 124:1 125:10
evidence (45) 1:25 3:23 4:5 9:5 11:12,15 12:22,23 42:1 47:21 55:7,14 62:25 66:9 69:1,5 70:16 74:13 75:22 77:10 107:15 111:23 112:8,19 124:19 126:14,21 132:13 140:12 142:14 143:15 146:8,9 147:25 159:5 161:10 163:17 168:18 173:7 175:9 178:11 193:3 197:20,23 198:18 evident (1) 185:25 exact (1) 106:19 exactly (14) 33:9 40:19 52:16 61:4 69:21 88:16 89:4 92:12

112:4,6 132:22 133:5 153:7 159:18 examination (1) 10:22 examinationinchief (6) 113:13 148:16 175:16 200:11,17,22
examined (1) 94:22
example (20) 3:3 17:8
24:19 77:19 109:16,21 118:1 129:16 153:6 161:14 172:19 173:15,19 174:8,14 175:2 178:1,13 179:8 193:2
examples (2) 42:6

> 157:17
excel (2) 189:15 191:22 excellent (1) \(148: 3\) exchanges (1) 91:23 excuse (1) 194:19
exercise (4) 4:1 7:13 16:3 23:16
exhibit (4) 19:1,18,20 28:19
exhibited (3) 117:19
119:3 184:3
exhibits (1) 19:3
exist (4) 137:13
163:15,18 181:6
existing (1) \(140: 24\) expanded (1) 27:10 expect (6) 3:5 61:19 73:11 111:23 162:15 175:2
expected (3) 48:10 111:21 134:1
expecting (2) 1:21 66:23
experience (6) 13:10 57:4 58:10,10 161:3 172:3
experienced (10) 62:25 77:4,21 79:8,25 86:16 87:4,24 170:2 187:17 experiences (1) 59:23 expert (2) 169:16 190:12
expertise (1) 89:15 experts (4) 134:13 141:3,13 198:1 explain (23) 9:6 11:14 31:5 44:2 52:8 85:4 90:22 94:25 95:1 97:2 103:1 131:24 142:15 145:7 149:17
151:13,14 153:4 162:1 174:12 185:1 192:11 194:14
explained (9) 63:13 69:2 151:18 155:4 177:21 180:7 182:7,11 188:15
explaining (1) 47:4 explains (1) 127:7 explanation (6) 26:18 86:15 142:6,9 159:7,11
explicit (5) 95:17,19 103:12 166:7 184:15 explicitly (2) 93:5 192:17
explore (3) 48:5 81:25 104:18
expressed (1) 161:20 expressly (1) \(33: 5\) extended (1) 155:21 extending (2) 153:18,20 external (3)

126:13,17,20
extra (2) 131:21 139:3
extract (1) 97:13 extracts (2) 91:13 102:18
extremely (2) 3:2 145:14
eye (1) \(72: 15\)
f1082 (2) 91:10 94:11 f10822 (2) 91:11 94:13 f10823 (1) 92:23 f1092 (1) 154:1 f10951 (1) 96:4 f109513 (1) 101:9 f109514 (1) 100:10 f109516 (2) 96:18 99:23 f109517 (1) 97:15 f109518 (1) 98:20 f1120 (1) \(158: 2\) f11202 (1) 160:23 f1195 (2) 189:14,25 f1225 (1) \(1: 9\) f12571 (1) 55:20 f125712 (1) 58:23 f125716 (1) 59:4 f12572 (1) \(118: 1\) f125723 (1) 118:4 f1276 (1) 136:19 f12761 (1) 137:11 f12762 (2) 137:1,20 f12861 (1) 60:3 f12922 (1) \(24: 12\) f1330 (3) 7:19 8:8 9:8 f13531 (1) 20:8 f1354 (2) 17:8 32:5 f1365 (1) 61:18 f13651 (3) 20:8 22:3 28:17
f13711 (1) 20:8 f13991 (1) 63:10 f1399114 (1) 63:12 f1399116 (1) 64:5 f1426 (1) \(86: 3\) f1435 (1) 73:14 f14361 (1) 71:24 f14371 (1) 72:23 f1449 (1) 109:3 f1502 (1) 84:10 f150229 (1) 84:15 f15091 (1) 68:7 f15141 (1) \(66: 6\) f1549 (1) \(1: 12\) f1555 (1) 79:11 f16871 (1) 77:19 f1700 (1) \(54: 4\) f17611 (1) 36:20 f1831 (1) 132:1 f1832 (1) 116:15 f1833 (1) 119:2 f18341 (1) \(45: 7\) f1889 (1) 188:21 f555 (1) 104:13 f5556 (1) 104:19 f5558 (1) 106:9 f708 (1) \(1: 12\)
f72811 (1) 169:8 f7289 (1) 169:12 f869 (1) 162:14 f86912 (1) 163:2 f86914 (1) 164:8 f8694 (1) 162:18 f870 (1) \(53: 2\) f8702 (1) \(53: 3\) f8712 (1) 53:25 f889 (1) 192:21 f935 (1) 165:8 face (2) \(138: 6 \quad 160: 5\) faced (4) 58:25 59:18 63:20 95:12 facetoface (2) 63:21,24 failed (12) 50:12,15
52:18 54:1,25 60:13 61:10 98:21 99:2
102:18 103:6 159:2
failing (1) 98:2
failure (9) 49:15
55:23,24 56:16 60:11
78:1 84:3 98:11 108:1
fair (12) 6:10 11:23
fill (1) \(128: 17\) filter (3) 23:23,25 24:2
filtered (4) 22:13 23:9,11 125:8
final (2) 104:12 178:7
finance (3) 125:7
166:13 193:16
financial (11) 33:18 78:2 130:21 140:6 143:2 156:23 164:13 178:25 186:12 190:19,22
find (13) 17:2 20:12
28:11 58:13 62:6,11
73:11 116:19,24
117:17 120:9 133:11
142:2
fine (1) \(155: 25\)
finessing (1) 26:20
finish (2) 148:1 152:16
finished (8) 1:21 10:22 61:11 101:22 152:21
172:21 173:17,20
finishing (1) 147:24
firm (1) \(126: 13\)
first (51) 26:20 29:13,13 37:10 40:1,3 45:2 61:14 73:18 79:4 81:15 82:1 86:2 94:13,16 98:15,21 99:25 100:23 103:16,25 108:12 113:16 114:12 116:16,18 117:17 121:4 127:13 128:9 131:13 141:3 142:2,8,20 143:4 144:12 145:21 147:7 148:24 151:4 158:11 159:25 162:19 166:9 175:25 176:11,14,15 182:10 194:15
firstly (1) 173:5
fit (2) 104:23 105:14
fits (1) 102:3
five (12) \(24: 18,20\) 26:12
72:8,14,20 129:9,10
130:8 131:16 134:8
192:5
fivefold (1) 143:5
fix (1) \(163: 20\)
fixed (1) \(88: 25\)
fixes (1) \(163: 13\)
flag (1) \(34: 2\)
fleet (1) 193:15
flow (1) 187:14
flowchart (3)
136:15,17,19
flowing (1) 40:25
flows (1) \(40: 19\)
focus (2) 11:2 83:4
follow (10) 36:11 38:5
47:17 49:14 52:23
59:24 69:21 98:11
135:25 184:16
followed (5) 39:2 49:16,22 51:8 126:15
following (12) 5:22 49:6 99:12,15 123:7 139:20 140:5 156:11 163:7 182:3 186:10,11
follows (1) 97:13
force (1) 101:18
 168:14
former (3) 11:17 115:23,24 forms (4) 63:15 128:2 134:7,17
forth (4) \(58: 24\) 67:19 178:3 183:19 forthcoming (1) 77:3 fortnight (1) 112:17 forum (3) 55:19 59:8 60:4
forward (5) 106:5 117:4
162:13 166:1 196:2
forwarded (1) 186:18
found (6) 1:8 2:2 28:25
30:15 39:7 71:11
four (10) 24:23 26:11 37:7,10 73:16 96:25 110:19 116:18 163:16 188:17
fox (1) \(12: 10\)
fraser (160) 1:5,14,17
2:9,17 3:8,18 4:24
5:4,9 9:21 10:19 12:17
17:18 21:19,25 26:3,5
32:18 38:13 41:25
42:4,10,16 47:19,25
48:5,8,13 61:11,13 62:16 66:15,20 72:16,18 78:22 79:1 81:9,12,19,24 93:17,20 94:5 106:12,13,14,22 107:1,5,16 108:7,10,12,18,20 109:2,8,12,20,24 110:4,13,16,21 111:2,6,12 113:4,8,11 124:8,13 125:1,6,8 129:8,10 130:4 137:4,7 138:9,15 144:23 145:17,18 146:1,4,12,15,25 147:2,5,11,18,23 148:3,5,8,15 152:25 170:19 171:18,19 172:1,7,9,11,16,24 173:2,5,11,22 174:2,12,20,24 175:1,5,11,13 182:19,25 183:6 187:25 192:5,8 194:9,11,12,18,21,23 195:2,5,8,14,19,24 196:1,6,16,18,21 197:4,8,12,16,20 198:10,13,17,22 199:3
get (51) 9:21 10:16 11:5 14:8,16,18 39:12 44:7 48:9 54:21,23 58:9,19 61:8 63:14,16,20 66:6 69:14 72:15 77:6 97:15,18 98:22 106:7,7 107:11,13 112:12,14,16,17,23 113:1 125:6,11 128:9 130:18 131:16 133:13 134:14 140:22 157:4 159:12 161:22 169:12,22 178:21 180:25 184:6 189:23 gets (1) \(65: 2\)
getting (10) 9:15,17 16:15,19 27:20 63:20 106:24 107:7 120:12 194:4
gillian (3) 184:9,22 185:17
give (36) 1:6,18,19 3:21,25 9:5 15:12 34:3 36:2 40:10 50:11 62:8 86:9 90:11 96:5 102:23,25 107:16 130:6 140:19 148:6 151:8,12 152:9 153:4 157:16 169:19
179:8,24 186:16 195:18,22,22 197:23 198:8,25
given (10) 3:4 26:17 36:6 58:4 59:20 98:12 131:2 136:16 141:14 169:10
gives (4) 71:5 104:7 154:25 195:16 giving (4) 52:14 130:10 168:18 171:24 glance (1) 136:22 glaring (1) 2:3 gmt (3) 101:16,17 165:3
goat (1) 65:2
godeseth (3) 168:17 171:1,11
goes (9) 71:6,6 81:12 96:10 105:2 117:3 120:15 129:24 140:9 going (59) 2:17 10:19 19:24 20:19 23:25 41:9,11,13,19 42:16,17 47:10,23 48:9,10,14 50:20 52:23 54:10 58:1 62:23 63:5 65:6 67:14,15 83:22 87:14 93:20 97:12 102:14 105:16 106:5 107:16 108:4 118:14 121:19 122:18 123:4,4 124:17 128:6,13,15 141:15 147:25 151:10 152:15 173:22 178:18 179:4 183:22 190:2 193:19 195:15,17 196:6 198:6,14,19
gone (8) 23:9 68:24 78:12 102:11 127:25 132:8 193:9,11
good (8) 4:2 11:24 89:20 91:5 109:18

110:10 114:6 115:5 graphically (1) 195:13 grateful (9) 4:25 47:23 48:2 78:19 104:11 170:17 183:7 188:1 194:7 great (1) 63:23 greater (1) 109:10 greatly (1) 7:8 green (71) 4:25 5:6,7,10 9:23 10:19,21 12:20 17:20 21:20 22:1,2 26:4,6 32:19 38:15 42:1,20 47:19,23 48:2,7,11,19 61:12,15 62:19 66:24 72:17,19 79:12 84:11,16 85:16 86:14 90:7 93:23 94:22 102:23 103:16 104:3,14 109:5 147:24 148:1,4,7 150:3,4 153:4 170:25 173:6 176:20,21 183:6,7 186:7,16,17 187:12,21,25 188:1 192:7,10 195:5 198:8,21 200:6,18,24 grounds (6)
2:11,12,14,16,18,22 group (3) 11:22 134:9 151:6
guess (1) 129:7 guessing (1) 150:19 guidance (1) 133:10 guide (5) 49:23 51:9 61:16,19 63:1
h1735 (1) 135:12 h186 (1) 66:3 h1862 (1) 18:22 h1863 (1) 19:9 h196 (1) 66:4 h19618 (1) 19:16 h2273 (1) 136:5 h57 (1) 191:6 h58 (1) 191:4 hadnt (8) \(21: 7\) 45:4 76:1 101:4 103:9,11 106:1 166:24 hailstones (2) 12:9 67:5 half (5) 100:14 104:25 137:12 150:13 165:3 halfway (5) 64:6 79:20 91:12 92:8 96:10 halted (1) 128:16 hand (5) 63:3,6 113:15 168:7 169:15 handful (1) 193:4
hands (1) 53:7 handson (1) 11:18 handy (1) 173:24 hanging (1) 9:16 hangover (1) 60:21 happen (6) 41:1 50:18,19 82:8 124:24 179:7
happened (31) 23:22 40:25 45:21 47:14 50:10,15 51:16 68:21 75:17 84:20 88:10 89:9 90:16 103:7,7,9 115:23 123:9 131:16

133:5 143:24 145:3,12 149:14 152:3 155:5 159:18 160:5,7 181:1 184:14
happening (3) 85:4 87:13 129:25
happens (8) 29:16 40:2 50:21,22 77:8 82:1,2,25
happy (2) 58:1 59:25 hasnt (5) 15:5,6 41:15 53:19 143:8
havent (15) 1:23 8:22
12:19 25:23 52:1,2 64:3 66:10 68:16,24 110:5 119:14 169:4 190:5 198:20
having (15) 29:2 30:15 42:13 46:3 49:1 58:17 80:13 102:11 105:21 113:1 137:7 169:1 171:6,13 187:9 head (3) 24:10 72:4 157:25
headed (3) 84:15,22 91:12
headers (1) 142:7
heading (5) 7:23 91:16 146:1 183:8,9
headings (6) 9:9 139:23 146:12,13 193:5 196:8 headwind (1) 59:1
hear (1) 2:25
heard (16) 21:7 51:20 52:1,2 59:14,15,16 68:8 69:2 77:10,12 115:16 162:8 176:21 177:18 178:13
hearing (1) 117:4
hearings (1) 156:20 held (1) 52:15
helen (13) 91:7,8,20 94:10 96:20 101:8 102:17,19 165:20 166:6,10,25 167:2
hell (2) 59:11,14 help (12) 4:1 11:20 34:3 37:25 60:1 117:13 143:22 149:14 151:25 152:3 161:24 173:8
helped (2) \(67: 5\) 108:21 helpful (6) 36:25 155:15,25 159:16 197:17 198:11 helpfully (1) 60:7 helpline (56) 7:25 10:3,17,23 14:3,5,19 45:11 57:1,12,19 58:11 59:3,13 60:3,5 61:7 62:11 65:11,11 69:3,7 74:7 75:8,20 76:22 77:4,5 90:18,23 91:3 120:21,25 121:3,5,18,25 122:10,12,15,18,19 123:3 124:4,15,21 125:11,14,21,25 126:5,23 127:24,24 161:15 166:14 helps (3) 90:12 130:12 155:5
henderson (1) 100:3 here (28) 28:11 40:14

42:11 50:3,15,18 62:13 64:1 68:13 71:4 72:25 80:21 82:3,18 83:12 90:7 95:5 97:7,8,13 109:19 118:1,7 133:4 139:8 149:11 160:5,7 hes (5) 41:15 44:21 45:24 47:12 90:15 heshe (1) 161:16 hi (1) \(55: 21\) high (4) \(36: 17\) 60:25 180:4,10
higher (5) 31:9
178:17,20 190:18 197:13
highlighted (1) 32:20 highpowered (2) 13:2,5 himself (4) \(35: 20\) 43:6
95:23 171:24
historic (1) 191:8
historically (1) 139:17 history (1) 46:3
hit (1) 179:4
hitachi (1) 193:16 hng (3) 104:20 105:1,6 hoc (1) 123:22 hol (2) 55:23 56:16 hold (9) 8:20,24
14:16,23 132:18
137:23 191:8,20,23
holds (3) 153:14,18,21 honed (1) 11:19 honest (1) 164:19 hop (2) \(187: 21,22\) hope (4) 100:23 147:20
id (8) 14:18 24:11,13,15 27:11 28:20 149:16 152:5
idea (3) 170:13 171:25 197:13
ideal (1) \(179: 1\)
identical (2) 56:1 187:2
identified (8) 19:6 49:1 121:14 135:16 139:22
149:22 164:10 187:23
identify (9) 2:17 19:1
33:22 69:16 90:12,15
159:17 165:22 173:21
ids (2) \(24: 8\) 31:1
ie (2) \(139: 18\) 185:25
ill (2) 97:10 169:19
im (77) 1:21 2:10,19
3:13 4:25 8:13
12:12,18 24:7 38:15
40:1 41:18 42:17
47:4,23 48:2 50:20 52:4,23 55:13 60:6 62:19 65:6 67:14,15 68:5 73:13 76:5 78:17,19 80:20,21 81:25 83:4
85:19,21,21 90:7 93:20 94:1 100:20 102:13 104:2,11 105:16 107:16 109:12 121:20 123:3,5 124:9,23 133:18 137:9 138:9 141:10 146:4 147:20 154:10 158:18 164:3 168:21 170:17 180:16 181:9 183:7,22 184:5 185:7 188:1 192:7 194:2,7 195:16 196:6 197:7,15
imagine (2) 15:1 157:9 immediately (4) 128:16 131:23 132:25 154:8 impact (10) 33:18 80:9,16 81:5,8,17 178:14,15,23,25
important (7) 20:23 27:21 29:25 49:20 51:6 93:25 125:21
impose (1) 3:23 impression (1) 130:10 impressive (1) 11:22
improper (1) 3:18 improved (4) 97:9 129:25 130:1,3 improvement (1) 7:12 improvements (1) 181:18
inability (1) \(156: 4\) inappropriate (1) 164:1 inaudible (2) 160:3 174:16
inbetween (1) 118:22
incident (9) 19:8
60:16,23,25 96:23 97:8 98:17 160:8 166:12
include (2) 110:17 183:17
included (4) 3:6 18:19 117:18 132:14
includes (4) 8:9
110:2,14 154:22
including (8) 7:16 35:19
\[
1
\] 135:20 154:19 incomplete (1) 111:9 incorrect (2) 106:17 183:1
incorrectly (1) 15:10
increase (4) 10:23 11:1
43:20 46:19
increased (4) 7:8 38:8
40:22 43:22
increasing (2) 39:24 47:9
incurred (1) 116:21
indepth (2) 128:2 145:9
index (1) 200:2
indicated (2) 145:5 182:5
indicates (1) 93:13
indication (3) 92:9 118:11 157:16
indicators (4) 5:20,22 6:1 35:2
individual (5) 108:14,15
117:22 179:13 190:1 individually (1) 191:12 inflated (1) 42:24 inflating (1) 68:11 info (1) 70:7 information (73) 11:5 13:21,24 16:11,18 20:12 21:15 40:18 44:20 50:8 54:21 57:18 58:15 65:23 66:20 70:24 71:10 75:19 101:6 106:24 107:3,8 112:11,12,23 117:20 127:16,20 128:3,9 129:18,21 132:15 139:21 140:22,24 145:11 149:12 152:9 153:9,14,19,21 154:22,23 155:2,18 159:18,21 160:4 164:6 168:2,7,11 170:25 171:4,13 174:17 176:22 181:25 182:7,22,22 184:16,25 185:1 186:4,16 187:13 190:15 194:4 195:13 197:1
informed (1) 4:23 initial (2) 155:12 174:7 initially (1) 166:4 initiatives (1) 105:2 ins (1) \(16: 10\) insist (1) 61:8 instance (9) 23:24 77:12 81:7,9 90:13 91:2 95:22 108:4 189:8
instances (3) 63:24 65:5 77:18 instead (14) 26:1,6,7,11 33:1,7 40:22 41:10 42:12 47:5,9,10 173:12,23 instructing (2) 2:5 4:12 instruction (3) 74:24 75:2,21
instructions (2) 98:11 119:19 integrated (2) 180:5,9
integrity (3) 161:2 163:25 164:6 intend (2) 1:14 52:13 intended (4) 3:25 7:13 19:2 48:6
interaction (1) \(178: 7\)
interest (1) 169:11 interested (1) 100:5 interim (1) 96:24 internal (5) 75:12 76:14 107:23 135:20 144:16 internally (1) 56:20 interpret (2) 71:11 110:9
interrogate (1) 156:4 interrogated (1) 40:18 interruption (1) 108:14 into (31) 6:7 11:6 13:22 16:15 25:19 26:14 30:24 55:2 62:18 66:11 76:21,22 77:15 87:14,18,25 90:18,23 91:21 97:4 107:3,12 147:25 151:2 163:12,17,23 165:11 167:13 177:22 190:2 introduce (1) 132:2
introduced (10) 5:17
116:11 129:1,2,17,20
177:1 179:12,16,19 introduction (3) 6:14 105:17 151:17
inundated (1) 77:6 investigate (9) 11:20 79:10 106:24 128:3 133:2 151:15 152:14 154:15 159:21 investigated (3) 64:9 97:5 107:9
investigating (2) 11:19 153:6
investigation (7) 49:6 64:11 132:16 145:9,13 178:12 188:11 investigations (1) 156:15
investigative (1) 11:18 investigators (1) 169:18
invite (1) 72:7
invoice (1) 117:25
involve (1) 86:18 involved (4) 66:10 156:17,20 174:21 involvement (1) 192:13 involves (2) 80:24 177:13
involving (1) 83:20
irate (3) 57:1,10,25
ireland (1) 189:11
irrelevance (2) 2:15,18
irrelevant (5) 2:6,20 3:5,10,12
isnt (34) 6:10 9:15 13:3 26:20 27:2 28:14 29:23 41:9,22 43:25 46:22 54:18 55:5 58:16 65:4 70:25 79:18 92:3,22 120:6 121:2 127:2 128:19 132:21 138:12 143:8 153:15 154:21 168:18 180:9 181:21 184:5 186:21 189:17
issued (32) 75:23 76:1,2,3 77:24 102:21 139:20 140:11 141:4,12,18 142:11 143:1,7,11 144:14 145:25 146:8,20 160:1 162:6 167:8 177:5 186:10,20 187:6 188:17,24 190:1,2 196:23 197:9
issues (19) 3:7 10:20 11:20 35:1 52:6 62:24 63:19 71:18 76:16 98:16 106:25 107:4,8 109:20 115:15 159:17 163:7 164:10 177:8 issuing (3) 161:11 167:10 186:2 item (3) 73:1 152:14 154:14
items (1) 125:4 its (101) 2:20 3:18 6:10 17:13,13 27:1,1,4 29:11 31:24 35:7 41:21 44:25 46:18 47:11 48:24,24,25 52:11 53:25 55:20 57:7 58:25 59:24 60:20 61:6 63:5 71:3 72:9,23 77:2 78:16,17 79:15 83:7 86:5 88:7 91:3 92:2,3 96:25 98:9 100:7 107:7 108:3 110:12,24 115:24 120:6,7 121:12 123:23 124:6,6,23 125:18 128:19,21 130:2,9 131:21 134:5,25 135:19,24 136:3 137:19 139:3 142:5 143:6,13,19,20 144:11 146:22 150:7 154:14,21 155:25 156:4 157:9,9,18 158:1,18 167:15 171:10,11 172:3,22 175:3 180:20,21 181:18 182:11 187:16,21 191:12,21 192:17 198:25 itself (8) 28:17 61:6 95:4 106:3 113:17 175:21 178:19 180:20 ive (10) 16:15 57:9 78:23 111:9 123:10 158:18 159:4 162:8 168:4 188:21
ivr (1) 9:24

\section*{j (1) 23:1}
jacqueline (1) 188:15 jane (1) 148:22 january (12) 4:9 36:4,13 38:16,17 39:3 41:2 45:8,23 46:5 92:1 135:14 jar001 (1) 94:19 jason (2) 169:14,19 jenkins (7) 91:19 92:7 94:16 95:19 101:6,15,23
job (2) 151:5 155:23
john (3) 96:12,13,23 join (1) 151:4 joined (2) 151:7,9 joint (1) 132:3 july (11) 22:21
\[
23: 4,9,10,11,2425: 25
\] 28:17 61:18 89:7 96:24
june (9) 15:13 19:4 23:24 89:7 91:15,24 96:19 100:12 154:2

\section*{k (1) 23:1}
karen (1) 12:10
kashmir (1) 20:4
kath (1) 12:9
kb (1) 64:8
kba (1) \(57: 13\)
keep (5) 4:22 17:18
44:19 54:22 135:6
keighley (2) 66:14 67:1 keith (1) 12:11
kel (5) 54:4,5,9 86:5,5 kels (1) 198:7
kept (3) 55:11 90:4 93:24
key (9) 5:20,22,25 6:10 103:19 104:8 108:3 129:18,21
keystroke (9) 104:4 149:15,18 152:4 172:11,12,16 173:9,23 keystrokes (5)
69:11,15,19 70:13,17 kind (4) 3:7 84:20 111:23 151:6
kindly (1) 7:19 kinglassie (1) 158:14 knew (10) 21:5 34:13,15 75:21 98:13 103:11 140:19 166:11 167:3 170:16 knight (5)

171:10,14,21,23,23
know (98) 3:5 4:25 15:3 16:2,14 20:10,11,22 24:4,5,9 25:4 29:10 30:2,10,11,18 37:21 40:8,11,13,16 42:1 47:12 51:16,17 54:9 58:9 62:7 65:19,20 66:7 71:1 72:3
73:21,24 91:2 93:25 95:18 96:3 97:10 100:5,19 101:11 107:20 116:11 122:23 123:2,4 124:16 125:25 126:2,4 130:16 132:7,22,24 133:5 134:4,12,17 136:16 137:24 138:3,4,12 140:17 141:13 144:5 146:12 153:22 154:5 155:21,24 156:1,13 157:13 160:19 165:4 170:12,14 172:1,8,9 179:24 180:2,4,14,17,23 182:9 185:8,9 187:8 190:24 194:1,23 198:14
knowledge (12) 11:18
16:21 57:15,20,22

63:23 99:20 114:1 149:25 176:17 187:4 194:1
known (10) 10:2,7,9
35:2 62:20 64:20 65:1
75:6 79:6,9
kpis (1) 6:11
-
I
I (3) 22:21,22,24 label (4) 24:18 62:24 63:1,2
lady (1) 58:12
laid (1) 162:21
language (1) 119:14
large (1) 124:7
larger (3) 122:5,12,14
last (16) 4:5 21:20 35:19 65:16,20 79:24 93:23 110:19 115:15
litigation (1) 2:21
little (5) 31:8 105:15
110:1 142:15 161:20
live (1) 79:25
load (1) 126:20
loading (1) 28:18
locate (1) 96:21
location (1) 162:23
\(\log (18)\) 24:1 47:20
55:16 56:15 60:3,16 67:12 99:13,15 103:18 124:4 125:14,19,21,25 151:20,20 159:6
logged (2) 49:9 94:19
logging (3) 95:7,9,12
logica (2) 163:8,15
logs (23) 4:14 7:20 14:3,5 19:23 33:22 45:7 65:11,11 67:13 68:5,6 70:20 101:17 112:13 121:25 122:10,12,15,18 124:21 126:23 169:16 long (15) 1:16 64:3 92:2 112:15,22 137:23 142:13 151:10 154:13,16 159:7,24 160:19 188:19 190:1 longer (5) 137:6 153:19 155:16 157:22 160:17 look (165) 3:11,11 5:11 8:16,17 9:2,8
11:6,9,13 13:16 15:8 16:18 17:1,7,7 18:6,7,9,14 19:16 20:15 21:18 22:3,4 23:10 24:11 25:6 26:21 28:16,17 29:8 31:8 32:8 33:10 35:13,17,18,22,24 36:15,20 37:6,8,22 38:5,12,24 40:6,24 41:1,5 45:7,8,8,19 46:8 48:19 52:4 53:2,3 54:4,14 55:19 59:4 60:2 61:15,19 63:10 64:5,5 66:1,6,16 68:7,20,21 70:1,2 71:15,25 72:8,10,19,22 73:14,15,18 74:7 77:19,23 84:22 89:7 91:10 92:6,6 93:6 94:12 95:23 106:4 107:3 109:15,24 114:22 116:15 117:4,17 120:19 123:11,18,24 125:17,19 126:23 127:4 129:15 130:25 132:1,12,19 134:9 135:12 138:19 150:5 152:1,16,20 153:25 154:1 156:14 158:7,11 161:12 162:2,13 163:2 164:8 165:7,8 166:1,16,17 169:5 170:4 172:24 173:16 174:7,17 181:10,11 183:9 184:6 185:20 188:21
189:13,14,14,15,23 190:15,17 191:4,5

192:21,22 looked (24) 5:7 13:13,22 18:6 21:12 23:24 30:25 35:16,16 36:9,14 44:23 60:4 67:12,12 76:21 99:24 109:4 120:24 128:13 160:15 161:9 191:17,18 looking (27) 1:7 10:5 22:7,12 23:6,19,25 40:1 67:9 68:20 71:12 75:19 94:9 116:7,18 118:2 123:13,16 125:25 136:18 165:20 172:14 173:19 174:21 182:3 192:14 193:23 looks (2) 70:10 190:3 loosely (1) 191:21 lordship (11) 1:6
3:1,5,17 4:4,12,22 5:2
41:3 78:20 107:14
losing (3) 107:25 108:13,13 loss (12) 15:3 56:13 57:2 58:4,22 59:10 68:24 95:5 123:19 133:11,25 163:24 losses (5) 6:7 7:6 63:9 114:14,18 lost (1) 32:17 lot (9) 44:18 45:21 57:12 59:24 106:18 144:7,11,14 190:18 lots (2) 40:20 46:20 lottery (8) 45:20,24 46:4 178:3 180:13,23 186:19,21 louise (1) 113:18 low (2) 60:16,18 lowest (1) 61:3 luncheon (1) 94:7
M
machining (1) 151:11 mackenzie (1) 60:7 mail (1) 24:18
main (1) 87:14 mainly (1) \(153: 13\) maintain (1) 108:3 maintained (1) 140:23 maintaining (1) 183:1 major (1) 105:7 majority (1) 122:4 makes (1) 76:10 making (7) 4:13 50:2 166:21 167:20 168:5 171:8 178:23 manage (1) 105:9 management (14) 8:4,5 67:3 157:2 162:14,23 164:15 179:12 180:17,20,21 187:9 192:12 194:15 manager (7) 8:2,5 58:2 101:12 132:3 137:5,21 manual (5) 140:3,4 143:1 144:1,20 many (25) 12:2,12 32:21 54:23 63:15,17 72:11 73:11 122:13 124:7,7 125:4 129:4 134:18 143:10 146:19

147:9 150:18 168:2 170:14 179:25 180:2 188:9 192:15 198:20 march (14) 1:1 4:9 8:10,12,21 36:7 66:7,13,24 88:25 141:21 162:15 181:23 199:7
mark (2) 54:25 169:9 market (1) 105:7 massive (2) 3:2 74:17 mastermind (1) 158:1 match (5) 47:21 65:17 72:22 144:1,3 mather (13) 103:24 104:6 147:20 148:12,14,15,17,22 149:7 150:4 170:21 175:8 200:16 mathers (2) 103:17,22 matt (1) 12:11 matters (1) 103:15 maybe (5) 130:12 144:14 180:6 192:8 193:18
mean (24) 23:7 41:23
50:19 52:14,17 57:8
58:9 61:1 65:23 70:24 71:3 74:24 81:9,10 85:2 97:17 107:22,24 119:22 131:5 142:7 149:17 165:2 196:13 means (11) 16:14 30:5,7 45:3 84:5 95:1,4,19,21 107:24 109:21
meant (12) 94:25
102:14 103:2,3,5,13 106:25 115:6 149:19 152:6 172:15 173:25 meanwhile (1) 189:1
measure (1) 126:11 measures (2) 7:3 134:25 media (1) 169:11 mediation (1) 7:17 meet (3) 105:12 107:12 184:13
meeting (4) 63:11,14,16 64:2
meetings (1) 63:21
meets (1) 77:17
member (2) 57:1,10 members (5) 153:24 174:23 187:18,19,22 memory (4) 99:19 108:23 112:5 184:23 mention (5) 4:4 67:21,23 117:14 120:2 mentioned (8) 17:3 19:21 31:21 85:16 96:23 108:12 119:11 198:2
mentions (2) 50:23 120:4
message (4) 9:24 10:2 80:3 101:25
method (3) 187:10,10 189:8
methods (2) 116:25 188:11
mg (2) \(84: 2485: 2\)
michael (1) 175:22
michelle (1) 12:10
midair (1) \(81: 18\) middle (2) 1:24 100:12 midtransaction (1) 54:19
midway (1) 124:14 might (37) 1:20 3:11,18 4:1 10:6,7,8,13 13:6 42:4 59:19 78:22 79:1 86:6 96:3 110:24 111:1,7 118:21 121:2 130:18 135:2 141:13 142:9,15 150:25 161:14 168:24 170:23 174:15,18 177:25 178:3 181:10 189:5,21 190:21
mildly (1) 61:5 million (2) 6:2,4 mind (14) 7:3 21:9,22 34:17 37:12 85:23,25 86:15 88:9,14 89:20,22 94:2 129:11 mine (1) \(57: 2\) minimise (1) 178:22 minus (14) 23:5 38:21 39:2,4,16 41:8,14,17 42:12 44:9,25 46:15 47:6 56:4
minute (2) 96:5 188:23 minutes (1) 86:9 mirrors (1) 6:13 miscount (1) 56:13 miskey (5) 109:9,14 127:22 178:16,16 mismatch (1) 173:18 misread (1) 143:4 misremembered (1) 19:8
missed (1) 192:21
missing (2) 90:14 117:14
mistake (1) 18:20 mistaken (1) 1:9 mistakenly (1) 102:20 misunderstandings (1) 188:3
mitigate (1) 178:22 mitigated (1) 178:25 mmhm (9) 35:23 39:14 46:2 74:19 119:16 124:3 152:24 177:3 185:23
models (2) 6:9 7:9
moment (6) 30:13 48:3 147:17 180:3 185:20 195:24
monday (5) 121:10,23 123:7 124:20 134:3 money (10) 53:7 59:24 87:13,25 116:23 117:1 119:12 120:13 167:9 193:18
moneygram (43) 71:20 72:9,12,15,16,20 73:2,3,4,6 74:17 75:7,14 79:4,5,7,23,25 80:6,9
82:3,7,8,9,15,22,25,25 83:13,14,17 \(84: 7\) 85:3,6 150:13 153:6,9,11 196:9,10,12,14,16 moneygrams (3) 83:8

85:10 153:10 month (14) 117:24 123:19 125:10 126:11,15 129:9,10 130:8 131:16 134:8 195:14 196:10,18 197:8
monthly (1) 195:16 months (12) 71:6,7 79:24 89:7 92:3 153:15,22 155:11,12,18,21 157:14
more (43) 1:13,23 7:6 11:2 12:16,25 13:5 27:11 30:20 31:5 36:17 48:9 52:25 65:7 67:15 71:15 75:14 77:4 94:10 101:6 103:14,15 105:15 106:3,8 110:1 128:2,6 135:1 142:16 144:11 145:9,11 155:15 157:12 158:19,22 160:4,13 168:11 174:4 186:1 193:13 morning (12) 1:19 38:21,24 39:4 45:15 56:14,15 60:11 85:16 106:15 124:20 169:19 most (4) 42:5 47:23 62:16 181:20 move (15) 11:11 47:23 62:23 65:6 84:14 99:23 150:22,25 151:1 162:13 163:11,17,22 165:11 176:6
moving (3) 29:11,12 190:18
mps (2) 96:24 169:11 ms (27) 5:5 60:7

113:9,10,14 114:3,5,6,6,7,8 124:10,14 125:11 129:14 130:7,7 138:9,14,16 144:22 145:1,15 146:16 200:5,10,13 much (28) 5:4 10:22 22:2 30:18 48:15 63:25 87:18 90:15 94:5 106:24 111:12 112:2 113:3,4 114:4 127:16,20 144:23 147:13,13 159:17 175:6,8,13 189:24 197:21,24 199:4
must (9) 19:7 56:13
62:2 64:22 102:2 109:18 110:10 132:15 133:4
myself (2) 65:24 132:9
name (15) 33:12,14
113:20 115:17 126:19 130:15,17 137:16 147:21 148:13,24 150:12 175:25 176:10 195:9
narrow (2) 24:3 93:24 natural (2) 192:3,10 naturally (1) 166:16
nature (1) 2:13
nbsc (24) 6:7 7:23,25 8:9 9:11,12 14:3 49:2 67:23 71:4 74:21 75:2 112:13 120:21 122:22 132:20
133:1,10,13,15,19,23 134:1,5
nearly (1) 96:19
necessarily (5) 68:18 107:20 127:22 128:23 198:14
necessary (2) \(28: 22\) 109:1
need (34) 1:13,18 2:17 6:20 20:15 24:6,10,11 29:19,22 30:2,11,12 31:2,5 49:14 52:25 53:24 63:16 64:7 71:15 97:11 98:7 127:25 130:16 131:25 133:21 134:4,5,11 135:8 157:12 160:25

37:25 38:5 41:25 42:15 44:12 45:13 52:1 53:1 55:25 57:23 60:2 62:22 63:4 68:5 73:17 76:12,17 78:13 80:23 81:8 83:5,17 86:9,12 88:23 97:22,23 137:1 148:8 153:12 154:1 160:22 161:12 162:2,13 164:8,23 165:14,16 174:3 177:9 179:9,25 180:10,17 184:2 185:20 186:7 187:21 188:13 192:13 193:23 old (5) 60:21 115:17 137:3,4 138:10 once (2) 134:24 172:8 onerous (1) 15:1 ones (10) 2:18 29:8
37:12 38:4,10
122:5,12 123:24 131:17 198:14 online (12) 6:9,14 7:8 49:17,22 51:9 55:23 61:15 89:17 104:14 105:17 106:1
onto (3) 52:15 126:21 177:14
open (7) 95:2,2 107:17 152:14 154:14 155:11 175:18
openly (1) \(63: 13\)
operate (1) 108:5
operated (1) 108:8
operating (3) 6:1
104:15 105:1
operation (1) 188:19
operational (6) 79:25
107:22,24 108:2,15,19
operator (1) \(69: 11\)
opinion (1) \(68: 19\)
opportunity (5) 93:6 102:23 103:1 107:17 183:23
opposed (2) 185:14 195:17
opposite (1) 46:13
opted (2) 98:25 99:2 option (3) 110:11,23 115:2
opus (2) 65:18 198:2
order (5) 14:18 131:12
139:15 190:14 193:25 orders (1) 150:15
ordinarily (2) 107:10 112:23
organically (1) 181:19 organisation (1) 105:23 original (6) 31:25 32:6 132:14 160:16 163:19 189:25
originally (2) 183:16 191:5
others (2) 1:12 157:24 otherwise (3) 131:3,18 191:10
ours (2) 154:7 168:11
ourselves (1) 96:21
outage (1) 49:15
outline (1) 148:6
outlined (1) 47:2
outreach (10) 21:6,6

33:21 35:
86:17,18,25
87:10,15,21
outreaches (1) \(34: 14\)
outset (1) 32:2 outside (3) 19:5 163:14 177:7
outturn (1) 193:5 over (21) 6:8 12:20 19:9 58:23 63:19 98:20 110:9,12 111:1 133:5 137:20 142:18 150:14 160:23 164:11 169:15 172:22 187:21,22 188:13,19 overall (2) 42:7 150:18 overdeclared (1) \(68: 22\) overlap (2) 21:9,21 overnight (1) 1:7 overriding (1) 70:8 oversee (1) 114:14 overshoot (2) 43:23,24 overshot (1) 47:1 overspeak (1) 130:4 overview (1) 119:9 owe (2) 116:20 119:6 owed (1) 116:22 own (8) 2:7 14:16,19 128:4 163:11,22 178:6 187:4 owner (1) 192:2 ownership (1) 104:22
pa (1) 151:11 packet (1) 105:3 packs (1) 47:8 pages (2) 1:16 136:21 paid (10) 45:4 56:10 59:10 81:23 120:17 135:4,7 169:1 171:7 172:20
pale (1) 94:15
pam (1) 169:7 paper (2) 22:16 32:3 paperwork (3) 132:15 144:2,9
paragraph (103) 5:17
7:22,24 11:13 15:8 17:9 18:2,24 19:1,3,10,13,18 20:6 25:7 26:3 31:21 35:24 48:20 49:12,13 54:14 61:17 62:9 65:8,16 67:19 71:21 73:25 74:2 88:20 92:6,7,23 94:17 95:15 97:6,12,22 98:8,8 99:25 100:1 101:23 102:13,15,16 103:24 114:13,22 115:1 116:9,9 117:9,17 118:15 119:17 120:20 127:4,14 128:19 129:16 130:25 139:12 141:23 142:19,24 149:10,23 150:4 151:14,18,24 158:12 161:12 162:2 165:18,21 166:2,16 167:12 170:22,24 171:5 172:2,24 174:5 177:1,2,21 179:11

183:9 184:7 185:11 187:12 189:1,3 191:7 194:14,16 196:3,25 197:4
paragraphs (4) 94:14
101:19 116:7,18
parenthetically (2)
14:21 28:18
parkers (1) 33:11
parkes (4) 184:9,20,21 186:4
part (20) 6:12 28:3
29:25 51:5 63:7 67:3 92:24 99:15 103:3 132:7 134:25 135:12 139:9,11 149:8 151:6 153:13 169:23 180:6 190:3
particular (23) 6:17
10:4 13:14 15:2 22:5
23:7,18,23 49:5 60:20 80:8 81:11 84:21
85:25 90:3,11 155:22 156:3 159:20 161:23 164:17,22 166:12 particularly (4) 27:9 47:17 100:5 107:16 parties (2) 25:2 198:11 partly (1) 6:15 parts (1) 3:9 party (1) \(163: 8\) pass (8) 57:25 128:3 133:1,2
134:10,12,12,14
passages (1) 2:4 passed (1) 137:13 past (2) 148:8 188:16 pasted (2) 91:20 94:15 patches (1) 163:13 path (1) \(54: 24\) paths (1) \(54: 23\) patny (8) 68:9 69:15 70:15,19 74:3,22 75:9 76:23
patnys (4) 65:6
67:10,18 75:17 pattern (1) 39:17 paul (6) 12:11 146:6
175:10,12,22 200:21 paula (2) \(64: 21,25\) pauls (1) 146:3 pause (11) 5:3 23:15 53:21 86:11 88:22 96:8 97:21 100:15,17 101:21 136:25
pausing (5) 20:17 58:25 69:1 127:19 177:17 pay (6) 14:18 52:19,22 109:21 193:17,22 payment (16) 24:19 52:22 73:5 117:5 119:5,8,9,19,23 127:7 131:4 157:18 165:24 166:20 178:19 189:8 payments (4) 116:25
157:19,20 180:12 payout (1) 150:15 pba (3) 156:3,6,6 pc0214226 (1) 49:6 peak (10) 49:6 53:2,24 54:2 56:8 74:15 75:5
76:16 158:3,8
peaking (1) 76:24
peaks (1) 198:6 penalties (3) 167:21 169:1 171:6 people (24) 9:14 10:9 11:16,23 12:2,4 37:1 40:14 44:18 51:24 59:18 63:21 64:15 74:20 108:21,24 150:18 158:19,23 184:8,17,18 188:3 194:4
per (4) \(6: 6\) 182:5,21 195:14
perception (1) 141:10 perfectly (1) \(40: 9\) performance (4)
5:20,21,22,25
performed (4) 149:15 152:4 174:1,2 perhaps (10) 13:5 90:21 91:16 92:11 105:19 107:25 143:9 144:12 145:10 172:8 period (15) 8:19 15:13 56:16 117:23 121:11,16 124:14 153:14,18,19,20 185:5 188:19 190:18 193:1
periods (1) 156:5
permit (1) 163:11 persisting (1) 20:18 person (7) 9:22 59:22 107:21 133:16 138:11 192:3,10
personal (3) 184:8 185:20,21
personally (1) 59:21 personnel (1) 163:16 peter (1) 12:11 phillips (15) 113:9,10,14,18 114:6,8 130:7 140:1 142:25 145:1,15 176:23 182:6 188:5 200:10
phone (9) 9:25 10:14 118:20,20,21 125:22 128:13 160:3 161:24
phoned (2) 57:1 174:14
phones (1) 90:18
phrase (2) 107:19 149:18
physically (1) 186:1 pick (4) 9:25 75:12 125:22 151:5 picked (1) 50:16 picture (3) 16:20 34:3 154:25
piece (2) 13:23 32:3
pieces (1) 178:21 ping (1) \(44: 6\) pivot (2) 190:7,7 place (18) 8:24 25:23 32:3 45:2 61:5 75:5 103:4,5 126:10 127:8 129:22 131:6,14,24 136:1,2 151:4 181:16 plan (1) 84:16 planning (1) 48:11 please (110) 9:8 11:11,13 15:8 17:8,10,18 19:1,9 22:3,4,20 25:6 28:16

29:2,2 32:5,8,18 33:10 36:20 37:6 38:12,16 48:19 53:3 54:5,13 55:19 59:4 60:2,9,15 61:14,15 62:10,23 63:12 65:6 66:12 70:6 71:24,25 72:22,23 74:1 77:19,23,24 78:5,14 79:11 84:10 88:18,21 89:16 93:19 96:4 97:9,20 100:10 101:9,19 102:12 103:23 109:3 116:15,19 117:11,17 120:9 132:13
135:12,18 137:1,11,20 139:8 142:18 143:21 145:19 148:19 149:10 150:2,5 154:1 158:2 161:12 162:13,14,18 163:2 169:5,7 172:2 175:14,19 176:25 188:13,21 189:14,23 190:11 191:2 192:22,23 193:1
194:13 196:3 198:10 plus (4) 38:25 39:2,7,16 pm (6) 45:15 94:6,8 148:9,11 199:5 po (1) \(183: 14\) poca (4) 55:24 58:12
156:11,12 pointed (3) 35:3 39:16,20
pointing (2) 41:18 182:10 points (2) 4:13 5:12 pol (20) 15:12 16:21 17:9 18:1,12 19:15 20:9 22:9 32:6 36:2,6 49:23 58:3 65:9,15
71:22 98:9,12 99:9 100:7
policy (2) 135:25 136:2
polite (1) 198:1
politicians (1) 65:1
polling (3) 75:10,13 76:11
pols (2) 97:23,25 polsap (1) 108:5 pops (1) 107:19 position (5) 83:7,9 90:16 137:23 162:10 positive (8) 37:19 39:13 41:5,15 42:7 68:8 76:4 130:24
positively (1) 62:1
possibility (3) 89:22 110:2,17
possible (12) 49:7 58:22
86:15 118:12 121:2 127:16,20 132:21 159:19 163:18 192:17 198:5
post (65) 3:2 8:20
11:16 12:4 19:6,7 25:3 44:14 49:4 50:17,23 52:5 55:19 58:14 60:4 64:13,18 75:12,14,25 77:2,16 79:24 83:2 84:5,25 101:10 107:23 108:8 116:20 117:7 119:6 135:14,18 136:8

140:5 141:4,7 142:22 143:14,23,23 151:14 158:14 161:15 162:9 165:21 166:2,3 167:20 168:1 169:6,7 170:7 171:7 177:6 179:12 189:4,11 190:12,14 191:8,20,24 196:11 postage (1) 63:13 postal (1) 150:15 postmaster (23) 90:10,17 95:7,9,12,21 96:14 103:8 104:4,8 115:2 127:6,11,15 128:4 130:20 152:13,15 161:6,23 166:23 172:19 174:14 postmasters (6) 64:12 114:15 120:21 130:15 143:15 152:16 potential (3) 105:4 170:22 177:18
project (1) 101:12 prominent (1) 68:1 promise (1) \(58: 18\) promised (1) 58:20 pronounces (1) 148:13 pronouncing (1) 147:21 properly (5) 49:22 51:8 98:4 112:7,24 properties (4) 66:11,15,16,21 proportion (5) 139:16,17 140:19 197:5,12
protection (1) 158:22 protest (2) \(63: 14,15\) provide (10) 14:25 15:4 70:15 128:10 132:13 133:16 139:3 141:15 145:11 159:7
provided (17) 1:10 14:7 25:2 66:5 132:16 139:22 140:15 141:19 142:3,14 146:5,10 182:22,23 184:25 186:6,14
provider (1) 163:8 provides (2) 116:21 117:20
providing (3) 14:24 49:16 198:18
provision (1) 190:15 pull (4) 30:23 107:3 125:7,10
pulled (1) 152:23
pun (1) \(7: 13\)
purpose (5) 4:15
104:20,23 141:14 151:13
putting (7) 6:23 21:10 42:5,10 61:5 71:19 104:2
puzzle (1) 178:21
puzzled (2) 62:8 124:9
pwc (1) 126:19
\begin{tabular}{c}
\hline \(\mathbf{Q}\) \\
\(\mathbf{q}(774) 5: 14,17,20,25\)
\end{tabular} 6:4,13,16,23
7:3,6,8,11,19 8:5,16,24 9:2,5,8,17,19 10:7,16 11:8,11,25
12:2,4,6,8,14,16 13:2,5,10,13,20,25 14:3,5,8,10,13,16,18,21 15:5,7,24 16:2,6,12,14,17,21,25 17:7,13,24 18:1,12,18,22 19:13,15 20:3,6,12,15,17,22 21:2,9,18 22:12,14,16,18,20,24 23:1,4,9,13,15 24:4,11,15,18,23 25:1,5,11,16,22,25 26:10,16,20,24 27:1,4,13,18,20,24 28:2,6,9,14,16,22,25 29:2,6,8,10,12,15,17,25 30:2,5,7,9,13,15,18 31:7,11,14,17,21,24 32:5,11,14,21,24
\(33: 1,4,7,10,16\)
\(34 \cdot 2,7,10,15,19,25\) 34:2,7,10,15,19,25 35:9,14,22,24 36:2,6,11,15,20,25 37:3,6,10,12,15,17,19,21 38:3,5,10,12,21,24 39:2,6,15,20
40:1,5,8,13,16 41:1,8,15,17 42:24 43:2,4,6,10,12,14,17,19, \&2 44:11 45:7,14,19,23 46:1,3,17,24 47:1 48:24 49:12 50:6,14,19 51:2,5,13,17,20,22,24 52:2,4,11,21,23 53:2,10,13,15,21,24 54:4,9,12,20 55:10,17,19 56:8,10,20,23 57:1,7,12,15,17,19,23 58:8,12,18 59:4,16,18,22 60:2,18,22 61:3,7,22,24 62:1,6,14,23 63:5,9 64:3,18,20,25 65:6,14 66:1,11 67:1,5,8,14,18,21,23,25 68:5,11,14,17 69:1,8,14,19,21,24 70:13,15,19,22 71:1,8,15 72:3,6,10,14 73:11,14,18,25 74:6,13,17,20,25 75:2,5,24 76:5,10,13,18,23 77:2,16,19,23 78:7,11,14,19 79:14,17,20 80:14,17,20,24 81:2,5,8 82:5,11,13,15,18,20,22,24 83:4,6,12,17,20,22,25 84:3,5,7,9,14 85:2,4,8,11,15,21 86:9,13,20 87:2,4,6,13,17,21,23 88:2,7,12,18,24 89:2,6,9,15,20 90:1,7,17,21 91:5,10,22 92:2,6,17,20 93:10,16 95:9,11,15,25 96:3,10,15,17 97:6,18,23 98:20 99:23 100:5,19,21,23 101:2,6,13,23 102:9,11 103:14,21 104:2,11,18 105:21,24 106:9 111:21,23 112:1,7,11,15,19 113:3,20,22,25 114:3,8,11,18,22 115:1,7,10,13,18,20,23,2 116:4,7,13,15,18 117:9,17 118:1,7,11,14,19,24 119:2,5,17 120:1,6,12,16,19,24 121:2,8,14,18,25 122:6,9,12,15,17,24 123:3,11,13,16,22,24

\title{
12
12
\(12: 4\)
1
1
1
1
1
1
1
1
1
1
} 125:14,17,20,24 126:4,8,12,17,22,25 127:2,4 128:6,9,19,23 129:1,4,6 130:2,18,21,24 131:12,16 132:1,5,7,12 133:4,8,12,16,19,22 134:2,6,15,17,21,23 135:2,8,12 136:2,5,12,14,19,21,24 137:2,11,15,18,20,23,25 138:6,18,22 139:1,5 140:3,14,17,19,22,24 141:2,6,9,13,19,25 142:2,8,12,14,18,24 143:8,17,19,21 144:11,16,18,20 145:13,15 148:24 149:1,4,7,21 150:2,9,11,16,18,20,22 151:4,8,13,17,24 152:9,18,22 153:12,14,17 154:1,8,11,13,16,18,25 155:2,4,7,15,19,21,24 156:8,10,14,17,19,23 157:7,11,13,16,20,22,24 158:1,7,10,21,25 159:2,16,22,24 160:5,10,13,19,22 161:8,12,19 162:2,13,18,23 163:2 164:8,20,23 165:3,6,14,16 166:16,24 167:2,5,7,12,15,17,24 168:6,9,13,15,17,21,24 169:4
170:4,9,12,14,17 171:4,11,13,16 175:25 176:3,6,10,14,19,25 177:4,10,12,21,25 178:3,5,10 179:1,4,7,9,11,19,22,25 180:2,10,14,17 181:2,4,6,8,10,20,23,25 182:9,15,18 183:13,16 184:2,6,12,18,20,22,24 185:4,8,10,16,20,24 186:7,16,19,23 187:1,4,12,16,19,21 188:13,21 189:17,20 190:7,11 191:1,4,17 192:1,13,19,21 193:1,8,23 194:3,7 quantity (1) \(23: 1\) quarter (1) 155:9 quarterly (1) 195:15 queried (1) 142:11 queries (3) 117:10 120:7 168:10 query (3) \(13: 7\) 161:23,25 querying (1) 162:4 question (32) 27:1,4 34:21 42:6,16 62:17 81:5 83:4 95:2 98:17,21 100:8 103:14 104:7,12 105:19 111:3 130:5 138:10 143:13 145:1 146:16,22,25

147:9 149:7 170:21 173:22 174:4 183:16 192:9 196:2
questions (40) 40:11 42:17 78:20,23,25 90:2 91:13 94:11 95:3,25 106:11,13,14 107:17,18 109:5 111:14 114:3 139:6 144:22
145:16,17,18,21 155:24 170:18 171:17,18,19 175:7 192:5 194:8,10,11 197:19 198:24 200:8,15,20,25 quick (3) 49:23 51:9 61:16
quicker (3) \(39: 8\) 63:25 106:3
quickly (9) 21:18 22:22 60:2 106:8 134:23 136:5,22 158:11 189:13
quite (24) \(15: 1\)
20:18,23 44:18 45:21
59:24 61:6 91:6 92:2,2 112:25 128:19 130:2,8,10 132:21 133:22 144:11 158:10 181:19 182:11 183:20 184:15 194:23 quote (1) 93:10 quoted (1) 101:7
R
radically (2) 193:10,11
raise (6) 119:23
120:1,8,22 169:20 198:1
raised (17) 11:21 13:7 27:22 48:21,22 52:6 54:6 77:17 97:4 115:4 121:3,5 122:1 124:11 160:7,8 164:16 raises (1) 159:24 raising (3) 46:4 122:24 127:7
random (1) 48:24 rang (2) 75:22 131:21 range (1) 19:5
rare (3) 130:2,8 188:16 rarely (1) 185:21 rather (20) 2:11 10:14 17:10 22:4 39:23 41:12 43:7 45:23 48:22 57:21 59:10 69:7 85:21 101:7 115:5,7 122:18 142:14 146:4 171:23
re (1) 156:19 reach (1) 178:7 reaction (1) 93:12 read (23) 7:21 17:1 25:25 57:13 79:21 86:4,9 88:20 97:13 99:24 100:1,11,14,16 101:19 105:21 108:10 110:4,13 141:2,13 164:3 171:1 readable (1) \(168: 12\) readily (1) \(8: 24\)
reading (8) 78:17 81:15 83:24 110:8,22 111:11 146:1 164:24 reads (4) 129:14,24 166:2,17 real (3) 13:11 43:2 116:4
realise (1) 172:12 really (13) \(16: 6,14\) 37:13 62:18 106:5 115:20 138:9 162:8 167:2,15,17 172:3 187:25
reanne (1) 12:10 reappraise (1) 76:18 reason (16) 9:21,23 67:25 68:17 74:6 104:2 108:24 111:6,8 140:17 168:24 171:21 183:25 185:5 190:20 196:6
reasonable (1) \(40: 9\) reasonably (1) 52:24 reasons (1) 47:1 rebooted (1) 92:11 recall (18) 4:5 11:1 13:23 33:9 37:23 67:11 79:12 84:16 87:7 89:2 96:9 109:20 111:10,18 112:1,15 137:7 195:5 recalled (1) 15:9 receipt (32) 31:17,18 32:9,14 53:6,11 55:11 57:9 60:13 62:3 63:7,8 73:20
90:4,9,14,17,21,24,25 92:10,15,17,21 93:4,13,15 99:5,8,16 102:3 135:20 receipts (24) 17:20 33:7,23 50:5,7,11 51:14,15 52:14,18,21 53:16 55:6,7 56:1,2,4,10 73:11,16,22 100:6,25 101:3
receive (7) 100:25 118:16,24 119:18 138:18 144:2 196:9 received (28) 4:22 8:21 36:4 45:10,15 46:6,9,18 53:5 64:8 99:21 100:6 127:25 140:5,8,8,13 141:11,17,20 142:21 143:23 145:24 177:14 183:10,13 185:13 197:3
receives (2) 78:11 131:5 receiving (5) 101:2 127:6 196:11,12,18 recent (7) 42:6 147:1,2 181:20,21 183:20,22 recently (3) 129:20 181:15 195:3 recognisable (1) 193:8 recognise (7) 19:7 50:25 57:8 115:1 136:19 137:16 191:3 recognised (2) 62:7
76:15
recognising (1) 105:1
recognition (1) 7:11 recollection (3) 114:1 149:25 176:17 recommendation (1) 162:23
reconcile (1) 84:3
reconciliation (4) 83:3 84:17,22 144:18 reconsider (1) 75:16 record (14) 14:8 16:10 23:20 41:12 56:16 80:4,12 81:2 82:13 115:3 146:23 163:19 180:14,21
recorded (14) 8:14 14:10 53:19 56:20 60:6 73:8 75:25 125:15 126:5 127:2 143:13,20 179:18 190:9
recording (7) 41:10 60:22 125:17,19
remember (24) 12:6,16 22:9 37:13 69:1,4,5 74:18,22 84:11,11 85:18 90:5 91:8 104:15 109:5 112:4,5,23 126:19 185:18 192:17,19 197:13
remembering (1) 91:14 remind (1) 88:18 reminded (1) 60:7 reminder (1) 198:1 remittances (1) 151:21
remmed (1) 40:23
remotely (2) 62:12 187:5
removed (2) 166:20,22
reorg (1) 105:3
repaid (2) 49:10 117:7 repay (4) 116:23 117:1 119:12 167:11
repaying (1) \(134: 19\) repeat (5) 28:5 72:15,17 73:3 82:10 repeated (1) 63:9
repeatedly (1) 70:19 reply (2) 100:9 133:9
report (46) 29:16 56:23
64:10 69:10,16,18
70:6,10,13,20 71:1 88:19,21 91:7,8,10,11 92:3 94:10 96:20,24 97:7,13 101:8
102:16,17,19 122:2
126:10,14,17,22 164:24 165:20,21 166:6,10,25 167:2,24 182:4 185:24 189:3 190:5,7,12
reports (14) 155:17 157:13,22 172:13 180:22,25

181:2,3,14,18 183:19 195:2,10 198:2
repository (1) \(155: 10\) represents (2) 91:18 142:21
reproduced (1) 190:13
reput (1) 42:16
request (13) 14:14
54:16 66:1 79:15,16
127:7 135:9,21 138:24 163:20 170:16 184:25 193:19
requested (5) 70:11 71:13 132:15 159:6 180:24
requesting (7) 70:5,20
119:5 131:4 144:8 146:8 169:13
requests (8) 66:8 157:2 167:12,20 168:5 169:22 170:14 171:8 require (3) \(128: 7\) 159:21 168:8 required (11) 40:10 55:22 99:12 128:21 132:19 133:19 142:9 161:1 177:7 184:16 189:7
requirement (1) 133:23
requires (1) 169:17
reread (1) \(51: 5\)
rereviewed (1) 141:22 resisted (1) 92:18 resolution (6) 70:2 84:16 137:17 138:2,7 178:8
resolved (8) 49:5 63:25 120:14 121:21 124:17 127:9 134:15 138:23 resolving (3) 10:20 27:21 177:15 resources (2) 13:3,5 respect (6) 138:17 146:16 147:6 196:22,24 197:9 respond (2) 14:22 91:4 responding (2) 12:22 57:19
response (24) 4:20,22 19:17 33:17 57:5,6,11,13 59:3,19 91:14,19 97:24,25 98:9,22,24 100:7 111:18 112:3 118:16,24 134:14 136:6
responsibilities (1) 178:6
responsibility (1) 180:8 responsible (3) 121:20 123:5 177:23 responsive (1) 112:8 rest (2) 135:24 143:25 restricted (1) 158:22 restructured (1) 11:2 result (8) 6:5,25 49:10 84:25 87:17 95:5 162:5 171:13 results (1) 64:10 retail (3) 44:15 45:4 47:15
retained (1) 163:23 retention (1) 156:5 retracts (1) 186:19 retrieval (1) 156:25 retrieving (1) 160:25 retry (3) 98:24,25 101:25
return (2) 131:2,18
returned (1) 92:25 revealed (1) 4:8 reversal (19) 75:23 76:6,10 92:25 93:3 94:23
95:16,17,19,22,24
102:21 103:3,6,12
161:16 166:7,7 174:15
reversals (4) 17:21
75:24 98:5 102:18 reverse (5) 74:8,9,12
116:25 119:13 reversed (15) 45:1
47:16 76:2,3 81:21 88:5 94:20,25 95:6,13 98:14 99:6,18 165:23 167:4
reverses (1) 43:14 reversing (1) 166:19 review (5) 3:3 97:2,5 98:1 165:10 reviewed (3) 3:20 13:21 30:24
reviews (1) 96:25 revisit (1) 93:17
\begin{tabular}{l|l} 
reynolds (1) 64:21 & same (22) 17:15 \(31: 3\)
\end{tabular} ridiculous (1) 28:9 righthand (8) 66:17,22 109:15 110:21 111:3,7 162:24 164:11
rights (1) 163:10
ring (8) 10:11 59:21 75:20,20 77:4 133:10 134:1,5
ringing (3) 10:1,3 90:23 riposte (2) 89:11,18 risk (7) 107:22,24

108:2,7,15,19 163:24
robbery (1) 60:25
robinson (55) 1:4,6,16
2:1,14,25 3:16 4:2
78:22,25 79:2,3 81:25 93:19,22 94:3,9
107:14 111:15,16,17 113:8,9,13,14 144:24,25 145:1 147:16,20
148:12,16,17 152:1 170:19,20,21 173:5 175:10,16,17 194:9,10 197:18,19 198:11,16 199:2
200:7,9,12,14,17,19,23
robustness (2) 28:7,10
role (3) 13:8 150:8
165:12
roll (2) 168:15,16
rolled (1) 194:24
rollout (2) 179:16,22
rollover (1) 45:19
ron (2) 96:12,15
root (1) 98:9 rose (12) 91:7,8 94:10 96:20 101:8 102:17,19 165:20 166:6,10,25 167:2
roughly (4) 22:9 150:20 179:25 180:1
round (3) 44:8 172:8,9 routinely (3) 14:7,25 122:9
row (37) 17:2 22:5,20
23:7 29:2,3,3 31:9
32:8,18 \(37: 6\)
38:13,17,24
39:3,6,9,15 41:5
45:8,8,14,19,23 46:5 60:6,8 61:14 69:24 71:15,25 72:23 73:15 77:23 84:22 93:1,3 rows (2) 22:5 92:25 royal (1) \(24: 18\) run (3) 72:14 122:2 185:24
rung (3) 14:11 57:8 76:21
running (2) 130:16 181:19
runs (1) \(52: 5\)
runup (2) 64:3 98:17 rural (1) 105:2
sale (4) 22:24 44:16,20 45:1
sales (8) 149:20 151:19 152:7,20 154:22 155:2 172:14,18

38:19 41:21 50:23 59:8 93:2 99:24 115:18,23 118:2 119:14 132:11 142:6 154:4 168:11 174:5 178:24 179:2 186:24 188:4 198:12
sample (1) 163:16 santander (19) 114:9 139:5 140:3,4,8 141:11,17 142:22 143:1,14,23 144:1,10,14 145:24 146:6 177:25 183:13 188:7
sarah (4) 184:9,20,21 186:4
satisfaction (3) 2:8 6:8 7:8
satisfactory (1) \(14: 21\) satisfied (2) 138:22 145:4
save (1) 152:15 saved (1) 94:19 saving (4) 6:11,21 105:18,22
savings (1) 189:11 saw (6) 6:13 7:17 73:22,23 75:11 190:19 saying (21) 4:5,7 13:18 17:2 18:16 26:8 36:23 55:13 64:8 65:1 83:15 84:19 86:16 91:1 100:24 123:16 124:23 161:10,21 182:19 191:19
scanning (1) 7:13 scatty (1) 85:21 scenario (4) 35:6 82:24 83:12 91:3
scheme (1) 7:17 scope (5) 7:12 164:13 177:7 181:13 188:2 scott (1) 12:11 scratchcard (2) 44:25 46:6
scratchcards (12) 37:24 38:1,3,3 40:20 41:24 44:4,6,14 45:3 46:20 47:8
screen (6) 66:18 98:11 106:4 125:19 145:20 153:8
screenshots (1) 64:11 script (1) \(57: 17\) scroll (1) 61:13
sea (1) 129:15
search (2) 123:20 125:13
searchable (1) 191:9 searched (1) 4:7 searching (2) \(39: 8,10\) seat (3) 113:11 148:15 175:14
second (38) 17:8 24:24 29:14 31:8 32:6 53:4 54:20 59:5 92:21,23 94:12 96:16,22 97:3 98:20 100:1 101:9 104:25 118:17 119:2 120:14,16,20 121:8 127:10 139:11 141:6

144:12 146:3,18 147:7 152:1 162:20 173:7 176:11 183:8 188:25 196:2
secondly (1) 82:2 seconds (1) 32:24 section (2) 11:11 13:14 sections (1) 139:20 security (3) \(156: 3\) 157:2,10 see (205) 5:12,15,25 6:23 8:8 9:2 13:16,22 14:10,13 16:20 17:14,17,24 18:9,15 19:11 20:6
21:13,14,15 22:22,24 23:2 24:11 28:13 31:9,15 32:8,12,19,21 33:12,13 34:1 36:20,25 37:6 38:21,25 39:3,6,15 40:2,18,18,19,24 41:6 44:24 45:9,17 46:1,5 47:20 50:19 53:2,4,15 54:5 55:20 57:12 58:18 60:15,16 61:3,14,22 64:10,11,20,25 66:12,17,22,24 68:5,21,22 69:24,25 70:1,4,6,19,24 72:1,7,9,10,19,25,25 73:2,9 74:7 75:22 77:23 78:4 80:14 84:15 88:24 91:12,22,25 92:23 94:14 95:25 96:10 97:6,8 98:18 99:23 101:13,13,23 103:24 106:9 112:19 113:18 114:23 116:7,15,18 118:1 122:1,2 133:10,15 135:15 136:6,6,10 137:2,11 139:8,10,25 140:3,7 141:19,23 148:19,21 149:4,21 152:16,20 153:5,7 154:2,6 155:5,7,7,8,13,17 156:10,15,24
158:4,12,16 159:2,14 160:7,11,13,16,19,24 161:13 162:21,25 163:4 164:9,17 165:8 166:2,18 168:9,10,11 169:8 172:20 173:2 174:7,10 175:2,23 185:22 189:2 190:8,17 191:6 192:2,23 193:2,4,5,6 194:15 195:12 196:4 seeing (4) 79:12 84:12 111:10 155:2 seeking (3) 4:14 48:11 81:25 seem (3) 2:6 73:19,21 seemed (1) 55:25 seems (4) 100:24 110:1,16 189:13 seen (26) 5:14 8:22 15:5 16:4 39:21 41:17 52:16 56:8 57:24 68:6 75:19 76:13 86:4,6

93:10 110:5 123:10 151:24 152:10,22 162:16 190:5 191:1,11,14 193:24 segments (1) 105:9 selected (2) 102:2
163:16 sell (1) \(44: 15\) sells (1) 47:15 semantic (1) 115:20 send (32) 72:15,17 73:3,4 118:17 119:24 121:3,8,10,22 124:20 125:24 127:10,17,20 128:1,10,15,17,17,23 129:12 130:2,9,20 131:4,9,25 132:14 144:6,9 152:13
sending (2) 123:6 130:22
senior (2) 132:3,5 sense (7) 48:24 52:11 70:22 111:10 139:15

166:6
side (8) 24:6 29:20 66:17 110:22 111:4,7 141:21 164:11 sides (1) 179:1
sight (4) 96:16,22 97:3 160:25
sign (2) 32:3 41:21
signage (1) \(39: 22\)
signature (4) 113:23 149:2 176:4,12
signed (2) 21:22 30:18
significance (1) 110:6
significant (3) 90:8 104:21 193:17
significantly (3) \(188: 8\)
190:21,25
silo (1) \(105: 1\)
similar (3) 188:10 191:15,16
similarity (1) \(87: 23\)
simon (3) 101:11,11,14 simple (5) 34:21 54:22 127:23 128:1 130:13 simpler (1) \(105: 8\) since (9) 30:20 36:17 39:20 54:10 62:20 129:1,23 151:7,17 single (6) 13:23 104:3,8,10 122:14 191:9
site (2) 191:22 192:2
situation (17) 21:11 35:10 50:10 51:1,12,14,16 52:10 55:3 57:5 63:25 67:10,19 71:2 90:11,13,25
six (3) 5:12 71:7 92:3
sj1 (2) \(15: 16,19\)
skills (2) \(11: 18,23\)
skimming (1) 2:2
skin (1) 16:20
slides (1) \(105: 15\)
slight (1) 196:7
slightly (10) 2:9,23 26:20 48:24 52:10,11 65:7 72:25 95:2 124:9
slip (5) \(32: 11,15,15\) 33:1 35:3
slips (4) \(32: 21\) 34:6,7,22 slow (1) 2:1
slower (1) 48:10
small (8) 1:8 10:21 11:16 12:2 19:7 34:2 103:15 104:12 smith (18) 12:11 139:9 140:15 141:14,19 142:15 143:17 148:1 175:10,12,13,17,22 176:21 182:9 193:23 197:20 200:21
smiths (5) 139:7 142:3 143:4 144:12 146:17 sold (1) \(45: 2\) solicitor (1) 135:13 solicitors (10) 2:5 4:13 18:5 49:4 66:3 135:14,16 177:6 181:12 186:18 somebody (13) 10:17 58:3 66:13 67:1 69:7 122:17 130:16 132:21

133:4 154:23 164:3
172:19 192:12 somehow (1) 167:12 someone (10) 10:6 13:6 67:5 128:3 142:10 143:4 157:7 159:24 167:24 174:21
something (44) 3:11
12:20 15:4 30:9,19 31:1,3 35:12 40:8,13 41:2 57:20 62:11 65:2 88:8 107:24 122:3 127:22 129:24 130:24 134:12 135:4 143:13,19,20 146:22 151:3 156:17 157:11 160:3 161:19 162:10 166:10 167:2 174:20 179:16 182:12 183:24 185:7,17 187:7 195:17
196:13,24
sometimes (6) 9:24 10:11 75:24 120:14
125:3 179:7 soon (3) 10:5 44:13 164:18
sort (14) 7:12 54:24,25 56:14 57:2,4 59:1,18 69:4 79:17 107:1
144:16 151:4 188:4 sorts (2) 159:17 192:14 sought (4) 4:20 60:1
85:24 157:7
sound (1) 139:1
sounds (1) 11:22
sources (2) 153:9
177:15
sp1 (8) 15:17,19 22:20 25:13,19 26:22 27:15 29:7
speak (13) 2:4 58:2
123:9 125:23 130:17 168:20
184:17,18,20,21,22,24 192:10
speaking (4) 58:3,21
122:24 130:14
special (5) \(150: 11,22\) 151:8,10,12
specific (17) 16:25 18:1 34:13 37:3 39:9 61:6 69:11 75:7 81:10 123:25 133:17 136:9,16 177:23 181:3 182:2 195:9
specifically (13) 19:22
21:1,24 23:7 46:17
48:25 123:20 135:23
136:3 143:17 183:10 191:18 197:7
specified (1) \(62: 3\) speed (2) 41:25 62:24 speedily (3) \(52: 24\) 65:7 67:16
spend (1) 151:1
spike (1) \(74: 17\)
spm (9) 14:6 27:22
50:22 55:3 58:15
61:19 153:7 161:19
168:9

\section*{spmr (10)}

98:4,10,13,23,25 99:2,9,12 156:19
\begin{tabular}{|l|l|} 
169:16 & 170:24 171:2,24
\end{tabular}

197:6
successfully (3) \(25: 19\)
26:14 94:18
suffer (1) 156:4
suffered (4) 63:9 89:2,12 98:10
suffering (1) 98:16
suffers (1) 77:16
suggest (8) 28:9 41:2
50:20 52:13 59:22
85:24 183:22 187:6
suggested (12) 28:2
29:20 30:20 52:12
68:14 76:19 86:14
93:7 104:14 156:10
183:22 186:5
suggesting (5) \(28: 2\)
52:4 87:17 92:14
164:3
suggestion (6) 28:14
52:7 68:25 85:11 92:18 93:12
suggests (6) 50:24
92:10 133:22 161:20 185:10 189:5
summary (7) 17:10 22:4
33:16 53:4 79:23
97:23 193:1
summer (2) 101:16 165:3
supply (2) \(67: 3\) 169:22 support (23) 6:23 7:18 10:24,25 11:3,8 13:17,17 15:2 18:15 21:13 132:7,14 137:13,14,15,16 138:25 139:3 145:6,7 163:9 184:3
supporting (1) 105:9
supports (1) 13:23
suppose (1) 198:13
supposed (2) 119:22 126:16
sure (8) \(8: 13\) 73:13
137:9,9 138:9 154:10 178:23 193:21
surplus (2) 159:9 185:25 surprise (1) 193:25 suspect (1) \(86: 3\) suspension (1) 156:20 suspensions (3) 6:5,25 7:4
sustained (2) 49:25 51:10
sworn (2) 148:14 200:16
symptom (1) \(87: 7\) symptoms (1) 87:6 system (50) 20:23 27:25 28:3 49:15 55:2 60:19,21 70:9 80:2 84:5 85:8 89:17,18,20 95:7 104:23
105:8,12,14
106:1,3,5,7 108:1 115:10,13 121:20 125:7 127:9 134:25 151:19 153:23 158:4,19,25 161:4 166:22 179:12,22 180:3,18,20,21 181:15 183:18,19 187:9
188:19 194:15 195:11
systems (5) 84:24 85:2

108:4,5 192:12
systemwide (1) 76:24
\(\qquad\)
t2 (1) 11:5
ta (3) \(40: 6,23\) 46:11
tab (10) \(60: 7\) 88:18
103:22 113:15 148:19
176:7,7 190:7 192:22
193:1
table (8) 33:11 92:10
145:19 162:19 186:13
190:7,13 192:15
tables (2) 184:4 196:8
taken (13) 18:4 69:9
74:13 77:15 102:18,20
103:4,5 104:13
112:9,20 135:20 165:23
takes (1) 111:2
taking (8) 2:9,19 42:2 47:5 61:1 84:16 114:11 179:19 talk (4) 79:4 87:6 184:12 192:3 talking (7) 3:7 37:4 68:5 84:21 86:23 166:9 197:4
tank (17) 4:5,10,16,18 48:22 49:7,18 50:1,4,10 51:2,15 62:25 90:2,3,9 118:3 tas (5) 36:4 39:21 45:10,15,20 task (3) 15:1 193:20 198:17
\(\boldsymbol{\operatorname { t a x }}(2)\) 193:16,19
tc (28) 39:24 43:22
45:5,24 46:6,9,18,23
47:18 50:17 58:19 75:23 76:1,2,3,4 77:23 78:9,10,11 139:19,20 161:11 177:7 179:4,13 186:2 191:8
tcs (33) 36:3 78:16 139:16 140:20 141:4,6,12 147:9 162:5 177:1,5 179:15,18 183:18 185:21
186:10,11,20,23
187:1,6,7 188:15,24
189:4,7,10 190:1,16
193:3 196:13 197:5,9
tcta (1) \(35: 24\)
team (103) 11:16 12:2
19:7 24:9 30:23 31:3
34:2 40:15,17 49:7
67:7 78:3 107:7,10,10 114:9,16 115:14,16,25 117:11 118:25 120:22 122:11,15,17,20 124:20 125:21 126:9 127:6,15,25 131:13 132:3,4 133:2,2 134:6,11,12 135:10 137:13,14,15,17 138:19,22
139:5,14,22,25 140:23
143:1
150:6,6,7,7,9,11,11,24,25
151:1 152:11,11

153:13,24 157:7,9,10 158:7,18 167:10 168:6 172:6 174:15,22,23 177:25 178:3,6 180:9,12,12,24 184:8 185:21 186:7,9 187:17,18,19,22 188:16,16 192:12 195:11
196:12,14,16,23 197:2 teams (15) 155:22
168:1 177:18,22 178:7 179:17,23,25
180:2,4,6,7,10 181:17 191:24
telecom (1) 166:20
telephone (1) 161:14 telephony (2) 8:1,5 telling (2) 171:22 194:5 tells (3) 37:3 55:11 90:10
ten (7) 12:3,4 108:23
173:16,17,18,18
tend (2) 150:24 185:12 tends (1) 59:22
term (2) 173:11,22
termed (1) 97:5
terminated (1) 116:1
terminology (2) 97:3
182:14
terms (11) 7:25 8:19
16:15 18:20 35:15
71:12 74:21 75:8
93:23 108:1 146:18
tesqa (4) \(158: 16,17\)
159:2 160:19
testimony (2) 182:6,21
testing (1) 163:5
text (6) 77:24
91:17,17,17 94:13 97:11
thank (39) 4:24 5:4
7:19 22:2 48:15 61:14 80:17 84:9 85:15 88:12 90:1 91:5 93:16 94:5 111:12
113:3,4,7,12 114:3 136:23 138:14 144:23 145:15 147:13 148:15 149:21 150:2 171:16 175:5,8,13,15 176:19 189:24 197:17,21,23 199:3
thats (148) 1:9 2:22
3:10 6:21 7:23 9:14 10:18 11:10 12:20,24 13:2,8,24 14:12,21 18:20 21:5 23:4 24:18 25:20 26:15,20 27:19 28:14 29:13,24,25 31:4,11 32:1 36:12 38:9 39:3,24 40:9 42:18 43:25 44:1,17,18 45:11 46:20 47:14 50:1 51:11 53:10,12,20 55:4,17 56:20,22 57:6,15 58:15 60:19 62:18 63:7 65:14 68:14,17 70:24 71:4 74:6 75:9,25 78:9 80:21 81:24 83:12 84:8,19 85:3,6,17 89:8

90:8,25 92:2 95:1,14 96:7 100:3,4 101:15 102:8,9 103:12,19,22 104:4,8,10 106:5 109:19,25 111:12 115:17 117:18 124:24 125:10 128:1,5 131:16 134:11 135:9 136:12 137:16 140:1 141:9,15 144:20 147:7 148:12 152:23 153:15,16 155:4,6 156:8 158:25 161:19,25 162:10,17 167:25 169:3 172:14 173:19 175:3,5,8 177:10 178:13,20 179:16 182:24 185:7,15 187:25 193:6,6,8,9 195:19 196:1 197:16,20
theme (1) \(52: 5\)
themes (1) \(134: 9\)
themselves (3) 14:6 70:8 71:10
theory (1) \(37: 1\)
thereafter (2) 164:5,18 therefore (12) \(10: 14\) 40:22 41:13 43:24

44:4 49:19 51:7 88:5 101:25 110:8 164:14 169:24
theres (44) 1:18 3:3 5:1 9:24 12:9 17:2 19:9,16 24:7 32:23 36:21 39:15 45:4 46:3 50:9 52:24 53:24 54:14 62:7 77:6,7,8,23 83:2 85:11 96:11 97:11 100:8 101:16 115:2,20 120:2 131:20 135:8,25 139:1 148:20 153:23 158:19 178:18 180:18 188:10 189:17 192:23
theyre (4) 2:6 61:1
131:7 161:21
theyve (5) 13:10 44:24 121:14 133:25,25 thing (5) 2:22 57:21
115:23 167:15 182:5 thinks (1) 70:22 third (7) 25:2 74:4 92:22 95:15 161:13 163:8 191:7
though (7) 3:22 41:14 47:3 101:17 131:19 133:22 166:12
thought (7) 56:13 69:6 79:1 107:21 154:7 168:24 198:17
thousands (1) 129:8
three (22) 1:24 3:20 4:10 15:12 16:21,25 18:1 19:23 20:7 71:6 94:14 112:5,7,20 114:23 133:5 146:13 149:4,22 153:15,22 168:25
through (30) 7:16 9:15,17,20,22 10:16 16:19 17:7 33:22 38:5 39:10 40:5,25 42:2 52:5,23 55:25 59:11 69:3 71:24 74:13

78:10 101:19 102:11 106:7 124:14 135:5 153:2 165:9 191:5 thrust (1) \(6: 18\) thrusts (1) 6:11 thursday (6) \(1: 19,22\) 3:21,24 65:16 70:5 thus (2) \(15: 5\) 102:2 tickets (1) 163:19 tier (3) 11:2,6,9 till (3) 56:12 168:15,16 time (71) 1:13 3:20,23 13:5 20:21 30:23 36:16 48:9 50:23 52:25 56:13 60:13 64:3 65:20 68:2,3 73:18 74:9 75:2,10,13 76:7,11,13,20,22 77:13 92:2 93:2,5 101:12,17 102:4 103:9,14 105:7 106:10,18,20,22 107:1,6 111:25 112:2,19,24 120:16 129:25 140:14 147:5 149:16 151:1,10 152:5 154:16 155:23 159:9,24,25 160:14 162:9 164:21,22,25 165:3,16 178:24 179:2 185:2,3 190:23 timeframe (1) 3:25 timeouts (1) 84:25 times (4) 24:2 54:16 106:15 173:3 timescale (1) 119:19 timing (4) 54:18 80:2
111:15 144:5 timings (1) 48:6 title (1) 136:20 today (3) 115:10 147:25 154:4 todd (1) 12:11 tofrom (1) 62:4 together (13) 6:24 16:20 21:10,12 30:23,24 68:3,4 106:20 107:7 134:9 178:20,21
told (29) 2:10 52:19,21
57:1 58:1 61:7 62:9 63:2 74:8,12,20 75:8 76:23 77:25 92:12 99:9 101:3,4 109:16 131:19 134:7 135:21 143:8,19 177:10 181:12 185:17 187:13 197:14
tomorrow (3) 147:25 197:22 199:3
too (6) 54:22 87:18 105:23 122:13 134:23 154:10
took (15) 25:23 44:9 47:6,11 58:20 61:4 63:16 64:1 69:3 75:5 84:11 106:1 112:15 152:2 161:7 tool (1) 149:12 topic (1) 174:5 total (8) 26:12 56:5 61:24 62:4 104:21 116:22 146:17 179:25

\section*{tot
tra}
totality (1) 42:1
trace
\(71: 24\)
tracing (1) 39:10
track (5) 5:21
134:15,21,24 138:20
tracked (1) 8:12
tracks (1) 180:18
traction (1) 126:13
tracy (4) 148:12,14,22 200:16
trading (4) 117:23 121:11,16 124:14
trail (1) 169:10
trainers (1) 11:17
training (7) 6:9 7:8
150:22,24 151:8,10,12
transact (1) 193:12
transacted (2) 83:16 85:7
transaction (120) 4:8,14 15:10,21 16:7,8,23,24 17:13 18:8,19 19:19,23 20:2,15 23:19 24:1 27:24 28:6,16 29:25 31:7 33:22,24 36:2,12 38:6 40:5 43:6,14,19 47:16 49:17,18,19 53:5 55:16,25 56:15,16,21 58:13 62:10,24 67:12 71:18,22 72:12 80:2,4,5,5,9,11,12,15,18,24type (3) 192:22,24 81:2,16,20 82:11,13 83:18,23 84:20 85:8,12 90:13 95:6,13 99:10 110:2,17,24 112:12,16 117:25 135:5,6,8 140:11 141:18 142:10 143:2,10,16 145:25 146:8,10,18,20 159:2,3,6,8,9,12 160:1,25 165:23 166:19 167:8,10 172:19,21 176:22 178:17,19 183:4,18 190:8 191:12,14,23 192:15,24 193:12 196:23 197:2 transactional (12) 19:4 81:13 149:19 152:8 153:3 154:19 172:13,15,18,22 174:1,2

\section*{transactions (37) 16:9}

17:5 25:23 27:6 29:20 40:2 54:1 72:14 73:8,19 75:6 78:5,15 79:7 80:1 83:7,9 84:18,24 85:5 98:5,13,21,24,25 99:2,3,5,17 134:13 151:20 152:17,21 173:17 193:13,21,22 transcript (7)
14:16,19,23 29:18 63:11 64:23 103:17 transcripts (1) 125:11 transfer (20) 15:14,15 16:10 17:14,15 30:5,7 31:11,18,18
\(32: 11,15,15,2133: 1\)
\(34: 7,2235: 787: 25\) 34:7,22 35:7 87:25 88:4
transferred (5) 21:16,17 25:19 26:14 88:3
transfers (24) 18:8 20:13,19,25 21:4,16 23:20,21,21,22 25:12,17 26:1,12,21 27:7,15 29:6,7 34:19 35:1,18 85:20 86:23 trends (3) 180:18,23 182:1
trial (10) 8:22 28:3,9 30:21 109:21 115:15 147:3 177:8 183:21 188:18
tried (1) 52:8
trigger (2) 57:10,11
triggered (2) 95:5,7
trouble (2) 12:18,20 true (3) 113:25 149:24 176:16
truth (2) 69:14 161:21 try (11) 17:1 28:22 41:25 56:14 68:20 69:4 122:4 124:1 161:24 168:10 173:21 trying (6) 12:12 42:18 59:1 61:8 161:22,25 tuesday (2) 1:1 100:11 turn (3) 15:7 71:20 97:20 193:12
typed (1) 152:18 types (2) 15:20 188:12 typical (6) 57:4,7 58:8,10 59:20 65:3 typically (1) 178:10 typo (1) 15:19
\(\bar{U}\)
u (1) \(51: 19\) ueb (2) \(51: 17,20\) ultimately (3) 133:16 134:18 135:2 unable (1) 98:6 unauthorised (1) 164:1 unaware (2) 197:15,16 unblock (2) 131:3,8 unblocked (4) 131:19 133:8,12,17 uncontroversial (2) 31:24 100:23 underlying (3) 40:2 184:2 186:14 underneath (10) 20:7 23:5 54:14 73:4,5,6 79:21 154:8 156:23 158:12
understand (33) 2:5 8:11 15:20,24 21:20 27:13 34:15 35:14 37:1 40:9 49:4 59:18 67:15 84:19 114:12 118:19 122:17 124:18 142:25 143:22 149:9,14 152:3 167:19 168:19,21 169:16 173:6,8,8 177:5 185:11 188:18


4:10 16:6 35:22 47:22 60:24 81:16 86:24 102:6,7,8,9 104:10 153:5 172:16 182:3 185:16 196:22
understood (9) 3:1 17:5
18:19 20:2 81:19,24
141:2 147:11 190:4
unexpectedly (1) 113:1 unexplained (3) 33:12
59:10 121:15
unfortunately (1)
122:13
unit (17) \(15: 16,17\)
18:10 20:24 22:17 24:2 25:13,13,19 26:7,14
87:14,15,19,21 88:2 157:3
units (4) 20:19 21:4 34:20 35:1
unknown (1) 132:24 unless (5) 57:2 63:2 78:20 81:20 121:10 unlikely (1) \(188: 6\) unpaid (2) \(166: 15,21\) unredacted (1) 5:1 unsure (2) 125:22 151:3 until (8) \(1: 18\) 66:7 75:14 93:21 123:1 127:9 154:14 199:6 unusual (1) 3:17 update (5) 1:6,18 3:21 10:5 162:25

\section*{updated (3)}

198:22,23,24 upheld (1) 185:11 upon (1) 104:12 uptake (1) 181:16 urgent (2) 198:3,3 used (15) 16:4 65:23 69:18 97:3 101:17 107:10 117:6 149:12,14 151:25 152:3 166:4 173:8 181:8 189:8 useful (6) 111:13 173:24 175:5 181:10 196:1 198:25 user (18) 24:3 50:1,4,12,22,24 51:2,22,24 52:15 54:23 59:7 77:16 80:3 94:19 149:16 152:5 162:7
users (2) 180:5,11 uses (2) 107:23 151:14 using (9) 23:18 89:12,17 164:20 165:12 180:2,14,25 198:20
usual (2) 7:17 13:9 usually (7) 77:8 120:12 152:12 157:18 169:17,23,24
- V
value (10) 20:12
22:15,23,24 23:11
46:23 126:22
178:18,20 189:10 values (1) 18:9
van (20) 5:5,7 18:25 19:3 47:22 48:13,19 62:17 67:14 79:3 82:1 88:21 93:25 94:9 100:11 103:15 105:16 111:17 147:15 200:5 variance (2) 17:21 76:4 varies (1) 120:15 various (7) 64:12
91:13,22 106:17
139:14 176:22 187:17 vary (2) \(24: 23 \quad 25: 1\)
vennells (3) 64:22,23,25 versa (1) 186:2 version (1) 117:19 versions (2) 116:10,13 versus (1) 173:18 via (2) 133:9 161:2 vice (1) 186:2 visa (2) 24:19 73:5
\begin{tabular}{|c|c|c|c|c|c|}
\hline 181:20,25 182:2,9
188.14 189.2 193:9 & youre (13) \(2: 1710: 1,3\)
40.1048 .950 .287 .17 & 12983 (4) 37:6,9,10 & 20102011 (1) 193:5 & \[
35341 \text { (6) 37:25 }
\] & 7 \\
\hline witnesses (1) 4:18 & 93:20 100:21 123:16 & 13 (6) 45:14 158:15 & 164:5,18,19 & 384k (1) 156:25 & \\
\hline wonder (2) 124:8 & 130:10 153:6 170:5 & 160:10 161:12 164:8 & 2012 (7) 158:15 160:10 & 3968 (4) 143:1,10 & \[
\begin{aligned}
& 7 \text { (13) 66:7 74:10 75:11 } \\
& 97: 14,19 \text { 114:22 }
\end{aligned}
\] \\
\hline 147:16 & yourself (8) \(36: 15\) 40:13 & 177:1 & 165:10 189:12 & 146:18,19 & 97:14,19 114:22 \\
\hline wont (6) 6:20 17:17 & 96:6 144:18 165:12 & 131604 (1) 22:21 & 0:1,16 191:11 & 3rd (1) 25:18 &  \\
\hline 66:3 103:14 149:9 & 166:11 170:6,12 & 135217 (1) 31:14 & 20122013 (1) 190:19 & &  \\
\hline 195:24 & youve (10) \(38: 21\) & 1354 (1) 29:13 & 20122013year (1) 190:3 & 4 & 70 (1) 93:1 \\
\hline worden (2) 28:2,6 & 39:2,4,4,7 72:20 & 137 (1) 164:11 & 2013 (7) 92:1 154:2,3 & & 04 (1) \(76: 11\) \\
\hline wordens (1) 190:12 & 100:13 126:1 134:6 & 13th (1) 49:3 & 160:8 190:2,3,17 & 4 (16) 5:11,18 18:23 & 71 (2) 71:21 93:3 \\
\hline wording (1) 117:6 & 185:4 & 14 (6) 29:18 45:19 & 2014 (1) 116:12 & 22:21 23:4,9 25:17 & \[
25
\] \\
\hline work (15) 24:10 32:1 & & 63:12 162:2 164:8 & 2015 (14) 8:10,12,21 & 32:24 38:16,17 66:2 & (1) \(157: 2\) \\
\hline 36:17 38:18 79:16,17 & Z & 177:21 & :4 22:21 25:18,25 & 88:18 100:9 114:13 & 7609 (1) 165:23 \\
\hline 112:8 149:13 150:18 & & 140 (2) 69:24 70:3 & 45:9,12,14,19 61:18 & 162:18 174:6 & 77 (1) 48:20 \\
\hline 151:5 156:8 158:5 & zero (7) 41:12 & 141 (1) 92:25 & 89:7 137:9 & 40 (1) 185:11 & 78 (1) 61:17 \\
\hline 182:24 188:7,8 & 8,13,22 44:9 & 142 (1) 73:23 & 2016 (3) 45:23 129:23 & 4000 (2) 143:6,24 & 79 (1) 200:7 \\
\hline worked (3) 157:7 & 47:6,10 & 143 (1) 92:25 & 165:13 & 40170 (4) 72:14,16,21 & \\
\hline 158:18 161:6 & zones (1) 105:10 & 144420 (1) 158:15 & 201617 (1) 140:6 & 73:1 & 8 \\
\hline workforce (2) 8:4,5 & & 145 (2) 200:14,15 & 20162017 (1) 143:3 & 40173 (2) 72:19,21 & \\
\hline working (10) 40:17,17 & 0 & 148 (2) 200:16,17 & 2017 (1) 186:11 & 4174 (1) 186:21 & 8 (9) 18:24 96:24 \\
\hline 53:21 54:24 132:10 & & 15 (5) 165:18 166:2,16 & 2018 (12) 4:9 8:10 & 422 (1) 73:21 & 103:22 106:9 116:7 \\
\hline 164:19 178:20 183:24 & 05114278 (1) 65:15 & 176:7,7 & 36:4,7,13 45:23 46:5 & 429 (1) 73:15 & 41:21 148:19 151:14 \\
\hline 87:13 198:25 & 093625 (1) 102:1 & 150 (10) 78:2 109:10,25 & 9:2,21 179:20 & 436 (1) 199:5 & 181:23 \\
\hline works (1) 67:3 & & 0:6,9,12,23,24 & 192:14 194:25 & 4449 (1) 72:23 & 80 (1) 103:16 \\
\hline worried (1) 75:10 & 1 & 1:1 200:18 & 2019 (7) 1:1 18:23 & 450 (1) 157:3 & 81 (3) 116:9 118:15 \\
\hline worry (3) 29:22 35:11 & & 154 (2) 102:13,15 & 66:2,13,24 136:6 & 48 (2) 45:8,8 & 127:11 \\
\hline 158:1 & 1 (23) 5:18 6:4 17:10 & 16 (8) \(64: 5\) 139:10,12 & 199:7 & 4910 (1) 24:4 & 810 (4) 189:17,17 \\
\hline worse (1) 131:6 & 22:4 29:18,22 31:11 & 179:11 194:14,16 & 21 (4) 20:3 28:17 51:6 & 492 (1) 54:1 & 191:17,17 \\
\hline worth (3) 44:3 91:14 & 66:13,24 71:25 72:4 & 196:25 197:4 & 7:12 & & 81000 (1) 189:10 \\
\hline 191:13 & 73:15 90:10 91:10 & 17 (2) 165:15 184:7 & 21st (1) 104:23 & 5 & 810000 (1) 189:4 \\
\hline wouldnt (16) 30:3 47:17 & 101:19 106:1 116:12 & 17000 (1) 69:25 & 22 (1) 135:14 & & 84 (1) 80:3 \\
\hline 53:11 69:12 70:16 & 124:20 137:11 138:8 & 171 (2) 46:5 200:19 & 2237 (2) 38:17,17 & 5 (8) 38:3 45:10 77:23 & 84217 (1) 190:8 \\
\hline 111:10 123:2 124:4,21 & 150:4 163:8 200:4 & 172 (1) 200:20 & 23 (3) 18:2 72:24 183:9 & 139:24 142:19 183:9 & 8528 (1) 32:8 \\
\hline 129:7 133:1 159:16 & 10 (9) 37:25 38:4 40:20 & 1748 (1) 141:21 & 2309 (1) 38:24 & 200:5,6 & 8534 (2) 32:19,19 \\
\hline 160:15 194:3,6 195:22 & 43:24 45:9 46:6,20 & 175 (2) 200:21,22 & 24 (6) 155:11,12,18,21 & 50 (26) 6:8 & 854 (1) 38:24 \\
\hline writes (1) 133:4 & 8 127:4 & 176 (2) 59:21,25 & 157:14 189:12 & 41:9,12,13,19,21,23 & 87 (1) 49:12 \\
\hline writing (1) 120:8 & 100 (7) 43:23 & 17674 (1) 59:10 & 24139 (1) 186:21 & 42:14,21 & 87000 (1) 191:13 \\
\hline written (5) 91:23,23 & 46:6,19,20 52:9 94:6 & 177 (1) 200:24 & 25 (19) 6:7 37:14 38:11 & 43:2,4,7,9,14,15,17,20,2 & ,248 (1) 31:21 \\
\hline 92:4 181:3,18 & 186:5 & 17th (2) 59:6,9 & 39:4,7,16,16 & 6:9,11,18 47:8,8 & \\
\hline wrong (24) 27:2,4,14,15 & 1000 (6) 44:9 45:5 & 18 (5) 36:4 41:2 165:10 & 41:8,18,21 42:7,7,12 & 110:1 144:7 & 9 \\
\hline 28:11 39:22 40:21 & 46:14,16,23 47:11 & 167:12 185:11 & 45:8,23 46:5 47:8 & 500 (13) 43:24 & \\
\hline 44:8 45:10,21 57:6,7 & 10000 (1) 7:6 & 18352 (1) 31:9 & 96:19 100:12 & 44:3,8,10,11,16 45:1 & 9 (12) 39:3 77:11 \\
\hline 65:22 78:12 102:25 & 102 (1) 159:25 & 18358 (1) 29:2 & 25plus (1) 41:18 & 46:13,15,15,22 & 101:20,23 103:24 \\
\hline 141:9,10 145:22 & 10202 (1) 39:15 & 184 (2) 7:22,24 & 25s (9) 37:16,17,19 & 47:1,10 & 115:1 120:20 135:15 \\
\hline 182:12,14,15,17 & 1030 (3) 1:2 199:3,6 & 1855 (1) 8:17 & 41:5,8,15,20 42:13 & 5000 (5) 124:1,2,22,23 & 136:7 151:18 169:12 \\
\hline 183:10 194:2 & 10331 (1) 39:16 & 19 (4) 1:1 20:4 & 44:3 & 125:1 & 175:19 \\
\hline wrote (3) 4:13 66:4 & 1036 (1) 102:4 & 170:22,24 & 26052016 (1) 70:5 & 5175 (1) 102:16 & 90 (11) 15:8 18:2 \\
\hline 119:5 & 105876 (1) 190:17 & 19000odd (1) 140:8 & 263 (1) 29:18 & 53 (1) 49:13 & 19:1,3,18 \(20: 6\) 26:3 \\
\hline & 106 (1) 200:8 & 194 (1) 200:25 & 26th (1) \(25: 18\) & 537803 (2) 93:194:18 & 154:7,9 160:13,17 \\
\hline X & 1066 (2) 71:25 72:8 & 195 (1) 91:2 & 27 (3) 136:6 162:15 & 537805 (2) 93:4 94:20 & 912 (5) 25:7,25 26:4,5 \\
\hline & 109 (1) 1:16 & 19500 (2) 143:6,22 & 196:3 & 5473 (1) 38:3 & 27:14 \\
\hline x (1) 46.6 & 10k (1) 6:7 & 19504 (4) 53:17 56:4,16 & 2717 (1) 193:6 & 549 (1) 165:21 & 913 (2) 26:10 27:9 \\
\hline \(x(1) 46.6\) & 10page (1) 97:25 & 60:12 & 28 (1) 54:7 & 56 (1) 45:14 & 915 (1) 39:6 \\
\hline & 11 (10) 8:10 19:13,17 & 1st (1) \(25: 18\) & 28890 (1) 22:5 & 56134 (1) 32:14 & 95 (1) 6:9 \\
\hline Y & 66:4 127:14 128:19 & & 2890 (1) 142:20 & 57 (1) 45:19 & 9516 (1) 78:1 \\
\hline & 130:25 135:16 164:14 & 2 & 29 (1) 84:14 & 5th (1) 25:18 & 98 (2) 19:10 35:24 \\
\hline year (25) 3:4 6:2,6 & 169:7 & & & & 99 (1) 52:9 \\
\hline 75:14 88:24 89:2,20 & 111 (1) 200:9 & 2 (16) 5:11 11:2,6,9 & & 6 & \\
\hline 115:15 134:18 135:14 & 113 (2) 200:10,11 & 53:3 93:18,21 94:5 & 3 & & \\
\hline 139:10 140:6 143:2 & 114 (1) 200:13 & 6:22 & & 6 (6) 59:4 96:17 99:23 & \\
\hline 150:13 162:15,24 & 1145 (1) 48:16 & 137:1,2,20 146:1 & 3 (10) 6:2 26:13 38:3 & 104:19 142:24 188:13 & \\
\hline 164:14,16 165:4 & 1153 (1) 48:15 & 163:13 166:6 & 56:1 101:8 113:15,22 & 60 (2) 6:6 150:21 & \\
\hline 186:12 188:16 & 1154 (1) 48:18 & 20 (7) 38:21,25 39:2,2 & 118:3 141:23 169:14 & 6046 (1) 39:3 & \\
\hline 190:19,21,22 195:15 & 12 (12) 91:15,24 129:16 & 88:19 148:8 199:7 & 30 (7) 8:10,21 11:13 & 61 (1) 154:4 & \\
\hline years (8) 11:19 63:17 & 135:16 149:10,23 & 200 (6) 56:13 91:1 94:8 & 61:18 92:1 160:8 & 611 (1) 39:3 & \\
\hline 150:14,14 152:12 & 151:24 163:2,2,3 & 109:14,17,22 & 189:1 & 62 (1) 65:8 & \\
\hline 168:2 191:15 193:24 & 172:24 177:2 & 2000 (11) 22:21 & 310 (1) 148:9 & 6213 (1) 39:6 & \\
\hline yesterday (11) 4:215:8 & 120 (2) 60:6,8 & 23:4,5,11 25:12,17 & 3100 (4) 72:9,10,10 & 6276 (1) 30:5 & \\
\hline 6:13 7:15 55:23 60:12 & 1213 (1) 73:20 & 26:1 27:8 124:5,16 & 75:18 & 6277 (3) 30:7 31:9,11 & \\
\hline 74:14,23 79:12 84:12 & 1225 (2) 5:9,10 & 133:4 & 320 (1) 148:11 & 63 (1) 65:16 & \\
\hline 109:4 & 1237 (2) 73:8,23 & 2003 (1) 155:23 & 32072 (1) 24:18 & 655 (2) 38:18,21 & \\
\hline yesterdays (1) 103:17 & 1242 (1) 73:9 & 2005 (1) 88:24 & 33327 (1) 38:3 & 66 (1) 67:19 & \\
\hline yet (2) 136:23 195:14 & 124374 (1) 190:16 & 2006 (1) 88:25 & 334 (1) 88:20 & 666 (1) 189:3 & \\
\hline young (1) 162:14 & 1249 (3) 73:9,19,21 & 2010 (3) 54:7,10 62:20 & 3478 (2) 22:20 23:4 & 680 (1) 185:10 & \\
\hline
\end{tabular}```


[^0]:    politicians saying there is no known fault with Horizon, something gets my goat."

    This is typical of the frustration that you have encountered from SPMs, isn't it?
    A. In some instances, yes.
    Q. Can we move on now please to the Patnys and I'm going to have to take this slightly more speedily.

    In relation to paragraph 62 of your witness statement $\{E 2 / 5 / 18\}$, the POL reference there, the document that actually was referenced, was not the helpline logs, it was the helpline service desk logs, yes, which is a different document?
    A. Yes.
    Q. That's now been corrected in your corrections to the correct POL reference 05114278. Indeed the document at paragraph 63 has been corrected on Thursday of last week to the correct number so that they match the documents to which hyperlinks had been added on Opus.

    Do you know how it was -- we have covered this already at the last time of asking, but do you know how it was that all these document references were to the wrong things?
    A. Sorry, I don't. I mean I had the information I used and I didn't do the referencing myself, so I just apologise for that.

[^1]:    A. Yes.
    Q. And there being no record of the transaction at the counter.
    A. Yes.
    Q. And my question to you is what impact does that have on the branch's accounts?
    A. In this instance it should have none at all.
    Q. No impact, okay.

    MR JUSTICE FRASER: When you mean "this instance" do you mean this specific one--
    A. Because this is a particular -- sorry.

    MR JUSTICE FRASER: Well, it goes on to say "the transactional funds may or may not have been committed in the domain".
    A. Yes, and the point is -- reading the first error code my understanding of this is -- and that transaction is aborted, it would have no impact at all because it would have been cancelled mid-air almost.

    MR JUSTICE FRASER: Understood.
    A. If a transaction had already been committed then unless it was cancelled and reversed, as we have been discussing, then it would almost have been as if it had been paid out, so that would have been an issue.
    MR JUSTICE FRASER: That's what I understood the case to be.
    MR DE GARR ROBINSON: Well, what I'm seeking to explore with
    81
    you, Mrs van den Bogerd, is first of all what happens with the branch accounts and secondly what happens with MoneyGram in accordance with the description here.
    A. Yes.
    Q. It says:
    "... funds may or may not have been committed in the MoneyGram domain."

    So what would happen to the MoneyGram accounts if
    funds had been committed to the MoneyGram domain?
    A. Sorry, can you repeat that?
    Q. We have a transaction done at branch which is aborted.
    A. Yes.
    Q. And we have no record of the transaction at the counter.
    A. Yes.
    Q. But we have funds being committed in the MoneyGram domain.
    A. Right.
    Q. So we have two sets of accounts here, don't we?
    A. Yes.
    Q. We have the branch accounts?
    A. Yes.
    Q. And we have the MoneyGram accounts?
    A. Yes.
    Q. In the scenario where funds have been committed in the

    MoneyGram domain, what happens to the MoneyGram

[^2]:    " If you would like to repay the money by debit/credit card ..."

    Then it goes on:
    "We look forward to hearing from you within the next 7 days to arrange payment."

    The wording used in this letter is as if the amount is a debt to Post Office that needs to be repaid?
    A. Yes.
    Q. And the last paragraph says:
    " If you have any queries regarding the content of this letter, please contact one of my team or drop us an email at agents.accounting.team@postoffice.co.uk and we will do our best to help you."

    Now, what's missing from that letter is any mention of a dispute process there?
    A. Yes.
    Q. If you look at the first paragraph again, "Please find the attached statement", that's not included with the letter that you have exhibited which is this version, but it says it provides a breakdown, so what information would be shown on that statement?
    A. It would be each individual amount settled centrally in the previous trading period, so it could be one branch discrepancy settled at the end of the month, several transaction corrections and/or an invoice.

    117
    Q. So if we go to $\{F / 1257.2\}$, we see here an example I think of the same letter that we were just looking at which was sent to Mr Tank. If we go to page 3 $\{F / 1257.2 / 3\}$, is that the statement, the form of the statement that would be attached?
    A. Yes.
    Q. So here there has been one amount settled centrally and it appears like this, "branch discrepancy" and then the date and the amount.
    A. Yes.
    Q. Again, this statement doesn't have any indication that it is possible to dispute this amount, does it?
    A. No.
    Q. Going back to your witness statement at $\{\mathrm{E} 2 / 3 / 2\}$, you say at paragraph 8.1:
    "If we do not receive a response within 7 days we send a second letter."
    A. Yes.
    Q. And as I understand from your witness statement there aren't any phone -- later on you refer to some phone calls might be made, but there aren't any phone calls in-between this stage, are there?
    A. No.
    Q. And when you say "if we do not receive a response", is that your team?

