BEFORE THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, et al., .
. Case Number 20-cv-3010
Plaintiffs, .
.
vs. .
. Washington, D.C.
GOOGLE LLC, . October 24, 2023
. 9:37 a.m.
Defendant. .
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TRANSCRIPT OF BENCH TRIAL, DAY 26
(MORNING SESSION)
BEFORE THE HONORABLE AMIT P. MEHTA
UNITED STATES DISTRICT JUDGE

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C O N T E N T S

TESTIMONY

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EXHIBITS RECEIVED

PSX1206..... 6783
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P R O C E E D I N G S

(Call to order of the court.)

COURTROOM DEPUTY: Good morning, Your Honor. This is Civil Action 20-3010, United States of America, et al., versus Google LLC.

Kenneth Dintzer for the DOJ. Jonathan Sallet and William Cavanaugh for Plaintiff States. John Schmidtlein on behalf of Google.

THE COURT: All right. Good morning, everyone. I hope everyone had a nice four days. It's good to be back with all of you.

Anything preliminarily before we get started?

MR. DINTZER: Nothing on behalf of the DOJ.

MR. SCHMIDTLEIN: No, Your Honor.

MR. CAVANAUGH: No, Your Honor.

THE COURT: We will talk later in the day about the proposed order and the response on *The Times*, but why don't we just get started now.

Mr. Cavanaugh?

MR. CAVANAUGH: Thank you, Your Honor. Plaintiff states call Jason Krueger.

JASON KRUEGER, WITNESS FOR THE PLAINTIFFS, SWORN

THE COURT: Mr. Krueger, welcome.

THE WITNESS: Good morning. Thank you.

MR. CAVANAUGH: May I approach, Your Honor?

THE COURT: You may.

DIRECT EXAMINATION

BY MR. CAVANAUGH:

Q. Good morning, Mr. Krueger.

A. Good morning.

Q. My name is Bill Cavanaugh. We haven't met before. But I have met your brother.

Mr. Krueger, you work at Google?

A. Yes.

Q. Okay. You've worked at Google since 2013?

A. I believe it's 2011.

Q. Your current title is project manager?

A. Product manager.

Q. You work on Google's SA360 product?

A. Currently, I work on the Google Ads product. Previously, I worked on Google's Search Ads 360 product.

Q. When did you stop working on the SA360 product?

A. Approximately April of 2022.

Q. Okay. And prior to that, from -- you had worked your entire time on the SA360 product?

A. Yes, in various roles.

Q. Now, one of your responsibilities during that period was to manage the integration of Google Ads into SA360?

A. One specific featured area of Google Ads we did an integration with, yes.

Q. And was that the auction-time bidding feature?
A. Yes, it was the Google Ads auction-time bidding feature integrated into Search Ads 360.
Q. Okay. Is it fair to say Google views SA360 as an umbrella product that's able to have a viewpoint into search engines that an advertiser uses?
A. I think the way that I would frame it is that Search Ads 360 is a search engine management platform that allows advertisers to manage and view and optimize across any of the search engines that they care to utilize.
Q. Okay. SA360 essentially acts as an agent on the advertiser's behalf in adjusting ad auction bids to achieve predefined objectives?
A. Search Ads 360 offers many features for the --
Q. Is that one of them?
A. The bidding features specifically do serve as an agent on behalf of the advertiser to adjust bids against their business goals.
Q. Okay. I've handed you a binder of documents I may refer to today. If I could ask you to turn to PSX460 in the binder, which I believe is already admitted, Your Honor.
A. I'm only seeing one tab. So I'm just trying to find it.
Q. I'm sorry. My fault. I gave you the wrong binder. Sorry about that.
A. No problem.

Q. Are you with me on 460?
A. Yes. I haven't reviewed the document that is in front of me yet, though. Should I take a few minutes to look through it now?
Q. Well, why don't I refer you to certain pages, and maybe that will help you familiarize yourself with the document.
Did there come a time in -- at Google when they were preparing a new business pitch document for prospective customers on SA360?
A. So our sales teams, our new business sales teams would frequently put together slide decks like this as a means to convey to a prospect advertiser, in some cases existing advertisers, the SA360 product, its value proposition, and deliver these in conversations to prospect advertisers.
Q. Right. And if you could turn to Bates page 3896. It's in the bottom right-hand corner, the Bates number.
A. 3896. I see it.
Q. And so what would happen is the prospect's name would be inserted into this document, and then this is essentially the document that would be used with a -- in a business pitch?
A. That seems right. I personally was not participating in those pitches, but I have seen these before and similar. So that would be a reasonable assumption.
Q. Okay. Could you turn to Bates 3898, two pages.
A. Sure.

Q. I would ask you to just look at those -- the bottom two paragraphs and ask you if you agree with the statements there.
A. Sure. I will just take a minute to look through this, if that's okay.
Q. Sure.
A. Okay.
Q. My question was simply, do you agree with the statements that are in there as to the purpose of SA360?
A. Is there a particular statement, or just in general?
Q. In general.
A. I think there's a lot of high-level points that I would agree with. I think some of this is what I kind of call sales or marketing speak that wouldn't be exactly how I would frame the features.
Q. Okay. But this is -- Google felt comfortable providing this to prospects regarding the benefits of SA360; correct?
A. I think in particular, certain sales teams would have positioned it this way.
Q. Okay. Let me ask you to turn to PSX419.
A. I'm sorry. The number was?
Q. 419.
A. 419.
Q. Mr. Krueger, this is a document you prepared as a part of management review of your work for possible promotion; correct?
A. Slight difference of promotion. At the time that I

produced this artifact, this document, I was what's called a rotating product manager. So I was actually in a different role doing some of the tasks of a product manager.

And the goal of this document was to a hiring committee of sorts, to hopefully be accepted and what we call lateral transferred to become a product manager, so not quite a promotion.

Q. Okay. Thank you.

Now, you wrote this document to describe how Google benefited from the features you were working on; correct?

A. I wrote this document to represent the scope of the projects that I was assigned to, and to some extent, I attempted to convey the significance of those projects and why they were meaningful and had the scope that was representative of a product manager.

Q. All right. And you sought to be accurate in this document; correct?

A. Yes, to the best of my ability at the time.

Q. Okay. Now, what time period were you describing?

A. So at the top of this document, the time frame was first quarter of 2018 through the first quarter of 2019.

Q. All right. And if we stay on the first page, 4237, one of the subjects you address in here is "auction-time bidding (Myx)"; correct?

A. Yes.

Q. All right. And Project Myx was the effort to integrate auction-time bidding in Google Ads with SA360; correct?
A. So more or less. The project was to integrate the platform of Search Ads 360's automated bidding to in part utilize Google Ads's auction-time bidding technology as an integration.
Q. Okay. And without auction-time bidding, automated campaigns on SA360 would instead use intraday bidding; correct?
A. Yes. So intraday bidding is how we would describe the nonauction-time automated bidding portion of Search Ads 360.
Q. Okay. Intraday bidding is a more traditional automated bidding system that only adjusts keyword bids several times each day; right?
A. So intraday bidding may adjust bids up to a few times per day, correct.
Q. And auction-time bidding, in contrast, adjusts keyword bids in response to every user query?
A. More or less, auction-time bidding refers to in this case Google's capability to adjust a bid as that system sees fit per auction or per query.
Q. So auction-time bidding makes many orders of magnitude more adjustments to keyword bids compared to intraday bidding?
A. So I don't know if the frequency of adjustment is necessarily how we typically think about it. But I think the way that I think about it is that a bid is served slightly differently, in some cases significantly, in some cases less

significantly, at the time of an auction.
Q. But in fact, there are more adjustments made?
A. It's hard to say a frequency, because it doesn't really work that way, at least in my mind.
Q. Okay. And one of your roles on Project Myx was to evaluate how advertisers were using the Google Ads auction-time bidding feature; correct?
A. My role in particular was, as part of the Myx project launch, to validate the quality of that integration, which included facilitating a series of advertiser-driven tests or evaluations of the Search Ads 360 integration with auction-time bidding compared to the legacy intraday capability.
Q. Could you look at Bates page 4238.
A. I'll just take a minute to read through it.
Q. Sure. I will draw your attention to the section entitled "context," where you wrote, "Search Ads 360 and Google Ads bidding have historically been built on different technology stacks with unique features available for end users. Merging them resolves longstanding product inconsistencies that made it challenging for sales teams to drive adoption, and it has provided an X increase in advertiser ROI."
That's what you wrote; correct?
A. Correct.
Q. All right. I should advise you, your employer has asked that certain numbers be redacted. So they should be highlighted

in the document I've given you. So I would ask you not to reference those numbers. Okay?

A. Understood. Thanks.

Q. Thank you.

And if we could go down to "impact," in this section, you were seeking to describe the impact of the work you and your colleagues had done on Project Myx; correct?

A. Here, I was -- as again, the objective of this document was to indicate the scope of my work as a hopeful product manager and give a sense of what that project's significance was. These are very challenging sometimes to convey. So this was my attempt to convey that project's significance.

Q. Fine. And in this section under "impact," the first bullet point, you talk about the number of customers that were involved in -- does "A/B" reference alpha beta testing?

A. A/B refers to a comparison of two things. So apples and oranges, for example.

Q. Oh, I see. And that testing demonstrated an improvement in conversions and an improvement in spend; correct?

A. So this summarizes the aggregate results of the customers that were participating in our beta, and the median uplift across those tests is what is represented here.

Q. And that median spend, that positive number refers to advertisers spending more on Google Ads; correct?

A. That's correct.

Q. And in the next bullet point, you provide a projection as to what you anticipate the benefit will be from this integration of auction-time bidding with SA360; correct?

A. That is correct.

Q. All right. And the number you came up with was in the billions; correct?

A. So the number that I came up with here was a very rough estimate based off of no statistics or, you know, extrapolation. The intention was to sort of say that this project was significant.

Subsequently, I have worked on many launches, and these types of impact evaluations require teams of data scientists. So I personally would not put a lot of weight into these estimates. It was me saying to a committee the project had some importance.

Q. Okay. And when you provided that projection, you thought those numbers would be achieved within two years of launch; correct?

A. At the time that I wrote this, there were maybe several dozen advertisers, and my, let's say, optimistic hope was that many advertisers would adopt the feature, and that is the basis for that estimate.

Q. Okay. And Google has an objective of having 100 percent adoption of auction-time bidding; correct?

A. I'd say aspirationally, both Search 360 and Google Ads,

both that build the automated bidding products, aspire to build products that advertisers find value in, and in an aspirational objective, we would hope that all of our advertisers would utilize those features.

Q. And towards that aspirational goal, when you were deposed on November 10th, 2021, at that point, about 80 percent of the total Google ad spend on SA360 was being run with auction-time bidding; correct?

A. That's correct.

Q. I believe you said you stayed with SA360 through April of 2022; is that right?

A. Correct.

Q. Did that number continue to increase?

A. I believe it slightly increased. I don't recall the exact adoption number at the time.

Q. Okay. I would ask you to turn to PSX909. This is a -- this is a blog you authored in connection with the introduction of auction-time bidding -- the integration of auction-time bidding into SA360; correct?

A. Sorry. Just give me a second.

Q. Sure.

A. Just give me a minute to read it, if that's okay.

Okay. I've read it.

Q. All right. And in this, you were trying to describe in this public document the benefits of SA360 and -- with the

utilization of auction-time bidding; correct?
A. Yes. I would consider this a marketing publication to promote and try to build some excitement around the project that we had just launched.
Q. Okay. And at this time, Project Myx was still in beta testing; right?
A. So there was several stages of the launch. I want to say at this time, we had launched one component out of beta, which would be for search campaigns, while there were other components of the Myx project that were still in beta.
Q. All right. And if we could look at that first page and -- with the sentence starting "by activating," the point you were trying to make here is that advertisers could utilize auction-time bidding on Google Search while still maintaining cross-channel bidding strategies powered by SA360; correct?
A. Correct. I was in this statement explaining that one of the options that was maintained was the cross-channel capability, which basically means across search on Google and search on other engines, for example, while utilizing natively auction-time bidding.
Q. So you could use auction-time bidding for ads on Google Search while at the same time using bidding strategies that apply across multiple search engines; correct?
A. Yes.
Q. Okay. And you viewed that as one of the primary benefits

of the integration; correct?
A. I would say that was definitely one of the main benefits of the integration, yes.
Q. If we could go to the second page of the document. Actually, let's go back to the first page and just go to the bottom.
You're reporting here that the advertisers that had participated in your beta testing were seeing an average lift in conversions of 15 to 30 percent at the same or better ROI.
So essentially, advertisers utilizing auction-time bidding were seeing a higher level of conversion, but it wasn't costing them any more; correct?
A. So in the previous document that we were looking at, my rotation promotional document, we discussed the advertiser testing. This is our public statement on those aggregated results. And what we were promoting here is that advertisers in that testing on average saw additional value, more conversions against their previous goals, which would have been similar or better return on investment.
Q. Okay. You got better returns at the same or lower cost?
A. The individual results certainly varied, but I definitely would say the main attempt of this statement is to indicate that advertisers saw additional lift in conversions, 15 to 30 percent additional at the same objectives that they had set.
Q. And at the same or lower cost?

A. Like I said, the individual results varied significantly. So I don't think this is indicating costs here.
Q. Well, what is "ROI" referring to?
A. It's return on investment, right.
Q. And so for the same or lower investment, they were getting better conversions; right?
A. On average, that's what we saw.
Q. And on the next page, you call out one customer, Vodafone, in particular; right?
A. Yes.
Q. All right. And they saw -- they were able to lower their cost per conversion by 15 percent; right?
A. Correct.
Q. So let me ask you a few questions about how auction-time bidding works with SA360. And I would like to try to think of it in three steps.

The first step is, an advertiser selects an SA360 bid strategy; right?
A. Yes.
Q. Okay. And a bid strategy is the objective or goal that the advertiser wants to achieve?
A. So a bid strategy is a few things. It is a collection of campaigns, one, could be many. It has an objective type. So it could be conversions. And then it has typically an efficiency return on investment. Those would be the main components of a

bidding strategy.
Q. Okay. So a bid campaign objective might be to maximize conversions or clicks within a set budget?
A. That would be one objective type.
Q. Or achieve the most conversions at a set cost per action?
A. Yes, though both are sort of best effort, meaning there's no guarantees we will hit those efficiency targets, but the system aims and aspires to achieve those targets.
Q. And as I think you mentioned a moment ago, the SA360 bid strategies can be used to optimize ad spend to achieve those objectives across multiple search engines?
A. The campaigns that are added to a bid strategy could be within one account from one engine. It could be with many accounts that are across engines. The advertiser has the ability to decide their configuration of what we call a portfolio.
Q. Okay. And in -- as opposed to -- strike that.
Are there also bid strategies within native tools?
A. Can you define "native tools," just so I'm on the same page?
Q. Google Ads, Microsoft Ads.
A. The search engines themselves do offer their own versions of bidding strategies, correct.
Q. But those bidding strategies can't be used across multiple search engines?

A. Correct.
Q. Now, in 2020, the SA360 bid strategies were eCPC bidding, standard bid strategies, and portfolio bid strategies; correct?
A. So you're asking about the bidding strategy types that were supported in SA360?
Q. Yes -- no, in -- yes, in Search Ads 360, yes.
A. And sorry. The time frame was?
Q. 2020.
A. I think -- so what we call a standard bid strategy is an integration with -- it's sort of a campaign level, and that includes eCPC, maximized conversions, target CPA, target ROAS, and target impression share, I believe.
Q. So those were the bid strategies in SA360 --
A. Those are just the standard types, and I believe all of those except for eCPC were available as the SA360 portfolio strategy type as well.
Q. Okay. Now, these bid strategies are distinct from intraday bidding or auction-time bidding; correct?
A. Not quite. I would say those strategies are supported for both intraday bidding or auction-time bidding, basically.
Q. So let me phrase it a little bit differently.
The bid strategy you've just been referencing is the objective, while intraday or auction-time bidding is the frequency at which data signals are updated to achieve that objective?

A. I'd say the way to describe it is a bid strategy is a way for an advertiser to say these are the portfolio campaigns that I would like an objective to be set upon, and intraday bidding or auction-time bidding would be a mechanism of how the bids are optimized.

Q. And Google's experience is that auction-time bidding rather than intraday bidding is quite a bit better at achieving a bid strategy objective?

A. So speaking specifically about the A/B testing from our beta, we observed improved performance on average for the advertisers that participated in those A/B tests, comparing auction-time bidding compared to intraday bidding. We did not make evaluations outside of that beta of the performance differences between those products.

Q. But you felt sufficiently comfortable, based on the return, based on the results of your beta testing, to tell your advertising customers at large that auction-time bidding could provide real benefits to them; correct?

A. One of our main objectives was to make sure that feature that advertisers were using, aspired to use, that they could utilize those features through SA360 in a way that we felt comfortable would achieve their performance goals, with the promotion that they should, as always, evaluate those features to ensure that it worked for their business.

That's typically how we would frame it.

Q. Okay. So I said I would try to break this down into three separate steps. The first step is, we've talked about, advertiser selects a bidding strategy in SA360.

After they do that, the advertiser would select whether it wants to run that strategy with intraday bidding or auction-time bidding; right?

A. That would be a setting within the bid strategy, correct.

Q. Okay. Now, if the user -- if an advertiser instead selects an auction-time bidding approach, that can only be done in the native tool; correct?

A. Is the question are advertisers only able to turn on auction-time bidding in Search Ads 360?

Q. That -- where does the auction-time bidding tool reside? Is it in the native tool?

A. So we're on the same page, when you say "native tool," you mean a Google Ads --

Q. Yes.

A. Okay. Just making sure.

Sorry. Just to make sure I'm following, could you repeat the question, please.

Q. Sure. We just talked about advertiser selects a bidding strategy. Now the advertiser is going to decide what mechanism to use to achieve that bidding strategy, intraday bidding or auction-time bidding.

If they choose auction-time bidding, that resides in the

native tool; correct?
A. The auction-time bidding mechanism would operate within Google Ads in this particular case. It's configured -- for advertisers that come to Search Ads 360, they would say to Search Ads 360, please activate auction-time bidding, and then Search Ads 360 would, through the Google Ads API in this case, enable that campaign, which is a setting of the campaign, to utilize auction-time bidding.
Q. So that was the purpose of the integration, correct, to allow that to happen?
A. That's right. The purpose was to facilitate that action on behalf of advertisers that were operating in our product, Search Ads 360.
Q. But the auction-time bidding tool can only be used in connection with the ads to be run on Google, not on other search engines; correct?
A. So through this integration of Search Ads 360's auction-time bidding, Google Ad's auction-time bidding, at the time of this blog post, 2021, that would only be supported for the Google Ads product.
Q. Now, a third step in this process is a concept of floodlight conversion data.
You're familiar with that; correct?
A. Yes.
Q. Floodlight conversion data is the data source that assists

in utilizing auction-time bidding; correct?

A. So auction-time bidding specifically requires two broad dimensions of data. The first dimension is the data that the search engines themselves own, which would include the cost and the clicks and the impressions of an ad.

And the second would be some conversion source that could include floodlight conversions, which are processed by Search Ads 360. That could also include conversions from an engine themselves. Google offers their own conversion tracking.

And both Google and Search Ads 360 have what we call a bring your own conversion data product, where advertisers can upload their own data, which could be processed by either Google directly or Search Ads 360.

Q. And that's shared in real-time to help set bids to achieve the bid strategy objective; right?

A. I think while we promote this idea of real-time in marketing materials, there is a cadence in which conversions are exported to the engine. During different periods of time, that cadence might be faster or slower. But the objective is to send conversions reliably, in this case floodlight conversions, from Search Ads 360 to the Google engine.

But it is not real-time, to my knowledge, in the sense that it happens instantaneously.

Q. All right. Can you turn to PSX571, which is in evidence, Your Honor.

A. I will just take one minute, please.
Q. Sure. I'm only going to ask you about the first paragraph.
A. Okay.
Q. All right. And so Search Ads -- as your brother writes, "Search Ads 360 will require sharing of all floodlight and other conversions to Google Ads for advertisers that are using Search Ads 360 auction-time bidding."

That's a correct statement?

A. This e-mail is summarizing an update that we would be making several months after this e-mail on the extent of the conversions that would be shared from Search Ads 360 to Google Ads for existing advertisers that have been utilizing the integration of auction-time bidding.
Q. All right. And advertisers were then effectively authorizing Search Ads 360 to export floodlight conversions to Google Ads; right?
A. So it's important to emphasize that all the advertisers we're referring to here had already agreed for floodlight conversions to share their conversion data, specifically the conversions that they had targeted in a bidding strategy.

And this was an update that was sharing other conversions that the advertiser had in their Search Ads 360 account to Google Ads for reporting purposes.
Q. You would need the advertiser's consent; correct?
A. We had already had the advertiser's consent to share. And

since we were changing an element of what the scope of those conversions were, we were helping advertisers understand that that scope was changing, to give them an option to continue using and accept that change or opt out if they were not comfortable.

Q. Okay. So securing advertiser consent was a regular course of practice at Google; correct?

A. I can only speak to the features I worked on.

Q. Yes.

A. This was the only feature that I was involved in that required advertisers' consent to share conversion data.

Q. Okay. Could you turn to PSX655. Is this a document you authored?

A. I contributed to some of the contents in this document, and I believe I presented this on occasion during a marketing conference.

Q. If we could turn to Bates 32401. Actually, Peter, if we could go to 401 first.

If you could turn to page 401 in yours, that's your name that appears there, is it not?

A. Yes.

Q. I don't know why that's redacted.

If you could turn to page 406. Now, could you explain to us, these are the signals that are within auction-time bidding; correct?

A. So the -- if everyone can see the screen, the green circle on the outside represents signals that -- some of the signals that Google Ads auction-time bidding utilized, at least at the time of this document.

Q. And the blue, what does the blue refer to?

A. The blue would refer to some of the signals at the time of this document that Search Ads 360's intraday bidding system would utilize to set bids.

Q. Okay. And "conversion path," what is that -- within the green, what is that referencing?

A. My interpretation of this is Google's signal would consider how a user behaved with queries as they continue their search journey prior to a conversion. That's my understanding of what a conversion path would be.

Q. And around the green, we see various -- these are all different signals that are utilized to essentially make auction-time bidding work; right?

A. So I believe these were signals that Google Ads had made publicly available in our help center. And the objective of this slide was to showcase some of the signals that were provided by Google Ads to serve auction-time bids.

Q. All right. And if you could turn to 407. Now, this is showing essentially the integration of Search Ads 360 and Google Ads; correct?

A. The entire objective of this presentation was to help

advertisers understand and build some excitement around a new product that we had just launched, and this particular slide is more or less just summarizing that this is now available.

Q. All right. What are the -- do you see the blue, red, and yellow boxes? What are those?

A. I think they're somewhat hidden. Is that the ones you're referring to?

Q. Yes.

A. I'm just trying to see if they were unhidden earlier.

So I believe this slide was written by my colleague, Ryan Fitzgibbon. I believe he wrote this. And as background, it was attempting to explain an evolution of bidding technology in general, including how Search Ads 360 offered various features.

Q. Okay. Can you turn to page 410. Is this describing the process of the integration of Search Ads 360 and Google Ads that we've been talking about this morning?

A. This is, I would say, a highly oversimplified diagram of what the integration looks like. The actual mechanisms are much more nuanced than this diagram. But for an audience that was trying to understand what signals would be available, I think the main goal of this, again, which Ryan, I believe, wrote, was to emphasize some additional signals, which were also presented on one of the previous slides.

Q. Okay. If you could turn to page 413.

THE COURT: Sorry. Could we go back to that for a

moment? A quick question, Mr. Krueger.

So on the right side there, it identifies signals and then new unique signals.

Can you just distinguish those two columns for me?

THE WITNESS: Your Honor, I believe what we had shown on the previous slide with the concentric circles was the intraday bidding -- some of the intraday bidding signals and to contrast some of the additional signals that intraday bidding did not offer but auction-time did.

THE COURT: Okay.

THE WITNESS: And this is conveying something similar. I wouldn't put too much into like the left side/right side. There's nothing about each row. It's just a list of some of the signals that were different in auction-time bidding.

THE COURT: Okay. Thank you. I appreciate the explanation.

BY MR. CAVANAUGH:

Q. If you could turn to 413, the reference to the first item, is that referring to using SA360 bid strategy?

A. Yes. This was referring to a portfolio bid strategy, which is the term we typically use, with the ability to put multiple engines, which could be multiple Google, multiple Microsoft, for example, multiple Yahoo, within the same portfolio.

Q. The second reference to floodlight, is that referring to floodlight as being capable of being used across multiple search

engines?
A. Yes.
Q. And how would floodlight be used across multiple search engines?
A. Well, with intraday bidding, typically as floodlight of the conversion source, that information would be used by the Search Ads 360 bidding system to make a decision about changing a bid on whatever engine intraday bidding was supported on.
Q. But it couldn't be used for auction-time bidding in other search engines, correct, in non-Google search engines?
A. Through the particular integration of Search Ads 360 with Google Ads, the integration of shared floodlight conversions to Google Ads, there are -- advertisers own their own data, and there are many mechanisms for advertisers, if they chose, to send their conversion data anywhere they would like, which could include to other engines.

So just to clarify, this is just speaking about the integration that we have, but it doesn't prohibit advertisers from moving floodlight conversions anywhere they wish.
Q. They would have to import that data out of SA360; correct?
A. One way that an advertiser can get their floodlight data is to download that data and upload it to another search engine. And I'm aware of many advertisers that would write a script for this process and upload it accordingly. That's sort of how it would be done.

Q. But that requires an additional step as opposed to simply SA360 working with a -- another search engine to provide that floodlight data directly to the native tool.

A. One of the offerings of the integration with Google Ads auction-time bidding was Search Ads 360 doing the exporting of the conversion data to Google Ads, that's correct.

Q. Okay. Let me take you to a different topic.

You're aware that in 2019, Microsoft asked for Google to support auction-time bidding for advertisers seeking to utilize Microsoft Ads?

A. I was not, I believe, first party to these asks, but I do believe I had heard of Microsoft requesting several features, which did include their auction-time bidding, to be integrated with Search Ads 360.

Q. Okay. And as we -- we've talked about this morning, the way auction-time bidding for Google works is that the advertiser selects an SA360 bidding strategy. Auction-time bidding then occurs in Google Ads. And the floodlight data is sent from SA360 to Google Ads. Right?

A. Correct. I think that is a fair summary of the Google Ads auction-time bidding integration through Search Ads 360.

Q. Okay. And as of 2019, if an advertiser utilizing SA360 wanted to place an ad on Bing using Microsoft Ads auction-time bidding feature, the advertiser would have to download the conversion data from SA360 and then provide that data to

Microsoft Ads; correct?

A. That is one way that they can utilize Microsoft Ads auction-time bidding, especially if they wanted to use floodlight conversions.

It's important to mention that Microsoft Ads offers a version of conversion tracking, as does Google. And so it would not be required to utilize floodlight conversions in order to utilize Microsoft's auction-time bidding. With a simple setup of Microsoft's conversions, they can just turn it on in Microsoft without downloading --

Q. But then you wouldn't be working through the SA360 tool across search engines; right?

A. In that case, the portfolio would -- well, technically, a portfolio that was serving intraday bids for Microsoft Ads that suddenly had this feature of auction-time bidding turned on for Microsoft Ads would still be in a portfolio and would still -- and would now get the benefit of Microsoft's auction-time bidding. But it would be the advertiser that would have had to turn that on themselves.

Q. So let me ask the question a little differently.

If an advertiser utilizing SA360 wanted to place an ad on Bing using Microsoft Ads auction-time bidding feature, the advertiser could not use the SA360 bidding strategies for that Bing ad; correct?

A. So there's a bit of nuance I can unpack.

They would be able to utilize that, and the performance of that Microsoft campaign or those Microsoft campaigns would still be included in the portfolio and the portfolio's decisions and reporting capabilities.

Q. But the bidding strategy feature in SA360 couldn't be used as to those Bing ads; correct?

A. The SA360 system would not be making any changes or configuration adjustments to the Bing ads portion. But that Bing ads portion's performance would be included in other decisions of that bidding strategy.

Q. And when you say they're not able to make any changes, can you explain what you mean by that?

A. Simply what I meant is, both for Google Ads' bidding strategies or Microsoft's bidding strategies, the auction-time bidding strategy, let's say, supersedes an intraday bidding system.

So if the intraday bidding system made a bid adjustment for a Microsoft Ads campaign, let's say from $1 to a $2 bid, but that campaign was using a Microsoft Ads auction-time strategy, that change would effectively be not used because Microsoft instead is making the bid changes themselves.

That's sort of what I meant.

Q. So the advertiser can't take advantage of the SA360 bidding strategy which is to be utilized across search engines in that situation?

A. I think it's semantics of what we mean by "utilize." So if we mean the performance of that Microsoft Ads campaign, its spend and its return on investment, for example, that information would be included into the portfolio and the portfolio's decisions.

However, if you mean would the bidding system be making changes to Microsoft Ads, we would not. And similarly, we wouldn't be making changes, for the most part, to the Google Ads portion, as Google Ads owns those as well.

Q. Let me ask you to turn to PSX645.

THE COURT: Before we do that, if I can just make sure I understand where we are here. Can we just back up for a moment.

The floodlight conversion data, can you define that for me one more time? As I -- can you define that for me and what that is.

THE WITNESS: Search Ads 360 is a part of what we call the Google Marketing Platform, which has an array of products.

Search Ads 360 is one of them. Display & Video 360 would be another. Across those products, there's a branded conversion type which we call floodlight. And so those would be the conversions that Search Ads 360 would consider sort of first party to its technology.

THE COURT: And that data consists of what? These are -- this is conversions. In other words, purchases or some

other objective that an advertiser has established to associate an ad with something they deem a successful objective?

THE WITNESS: Precisely, Your Honor.

So I typically would say that a floodlight conversion action itself -- what I previously described was sort of the whole of the product capability and how we would position it.

A specific floodlight conversion would typically be as you described, a meaningful action upon an advertiser's website, filling out a form, for example, or when a purchase of a retail product, e-commerce, a tag will fire. In this case, that would be a floodlight tag.

Many technologies on Google and Microsoft counts conversion -- and other SEM tools would also count conversions as well. So it's an event.

THE COURT: And is it the advertiser that needs to -- pardon my simplicity here -- upload the fact of the conversion into the advertising platform to essentially connect the ad to the conversion, or does Google's -- or SA360, does it have the capability essentially of following the user who clicks on an ad through to the website and determine whether the conversion is accomplished or not?

THE WITNESS: That's a good question.

So this -- the mechanism of tracking has changed over time. At the time of 2021, I'm pretty sure it was using cookies. So if a user were to click on an ad, a cookie would be placed on

their browser, and that cookie would essentially match to a conversion pixel that was firing. So you can attribute within privacy constraints what the user had clicked on, like the time that the ad was served, for example, and then subsequently the conversion action.

So it's a way to connect those two, the ad and the user's action.

THE COURT: Okay. And that's something that can be done without the advertiser then having to actually, as I've sort of described it, connect up? That's automatic?

THE WITNESS: They would, for lack of a better description, implement the pixel, a floodlight, on the pages or buttons on their site that they care about. The same process would be for another SEM tool or a Google Ads conversion tracker.

And once that was implemented, as users clicked, as some of them completed that action, Search Ads 360 would immediately acquire an understanding of that propagation. So 100 clicks happened to hit this particular conversion, and so you can essentially report on that.

THE COURT: Okay.

THE WITNESS: It's worth noting that advertisers also have the ability to upload manually to Search Ads 360 or directly to an engine, and quite a few of our advertisers would actually do both for various reasons. So they would both get

the automatic tracking, and they would have their own internal trackers, business intelligence systems, and they might do some processing and send that data either to Google directly or Search Ads 360 or both.

THE COURT: And what you've just described, this process -- sorry, Mr. Cavanaugh.

MR. CAVANAUGH: That's fine.

THE COURT: The floodlight data, this conversion tracking, that was available both for -- to an advertiser who was placing on Google Ads as well as Microsoft Ads; is that right?

THE WITNESS: Precisely, Your Honor. So that would be one of the main reporting benefits, let's say, of using Search Ads 360 or a SEM tool, or if an advertiser had their own trackers that they decided to build, it would allow them to track clicks and subsequent conversions across different search channels, like Google and Microsoft.

Whereas, Microsoft or Google's system natively, those conversion trackers would tend to only be utilized within that channel specifically.

THE COURT: Gotcha. And so then during the period of time that SA360 offered auction-time bidding for Google Ads but not Microsoft Ads, what could an advertiser do with respect to Google Ads that they could not do with respect to Microsoft Ads within the SA360 platform?

THE WITNESS: I would say they could achieve the exact same outcome. If their intention was to use floodlight conversions and they wanted to use those floodlight conversions in Microsoft, they would be able to download that data and upload it, a relatively straightforward script, which would achieve Microsoft Ads having that floodlight conversion data.

It's also really important to emphasize that if your objective as an advertiser is simply to evaluate, let's say, Microsoft's auction-time bidding, you can do that without floodlight data. It's quite trivial to set up -- especially if you've already set up a floodlight conversion tracker, you can add on to that same action multiple trackers. This was a very common practice.

So a floodlight conversion would fire, a Google Ads pixel would fire, and a Microsoft pixel would fire. Many or even most of our advertisers would have all these pixels and more at the same time firing without any additional significant latency.

So if an advertiser simply wanted to use Microsoft's bidding, it would be as easy as turning it on in Microsoft. Of course, if they did want to use floodlight, there would be an additional step.

However, most of those conversions --

THE COURT: I'm sorry. And that's the key distinction, as I understand it. So the floodlight data would seamlessly be available for use for auction-time bidding

through -- for Google Ads. However, there would be some number of additional steps required to use that floodlight data to use auction-time bidding for Microsoft, because you would have to essentially, again lack of a better term, essentially import the floodlight data into the Microsoft tool; correct?

THE WITNESS: That's right. If you wanted to use floodlight, that would be the mechanism.

Maybe two key details would be how different is floodlight compared to these Microsoft pixels, for example. In many cases, they were extraordinarily similar.

And another key detail -- where was I going with this? Oh -- sorry, I lost my train of thought.

THE COURT: That's okay.

THE WITNESS: Sorry. This is important.

Microsoft did not support the ability to have both imported at the same time. So if you were using Microsoft's pixel and you wanted to add floodlight, my understanding, having looked through the documentation, is it would sort of override the Microsoft pixel.

And so the reason why this is important is advertisers didn't have a very easy way to use one data source or the other, where Google, I believe, made it quite easy to send lots of data and pick and choose which one you want. My understanding at the time that I was looking at this is that Microsoft limited to just one type of conversion and then adds some complexity for

the advertiser.

And I can explain that more if that's helpful.

THE COURT: That's okay. Thank you for the explanation.

Mr. Cavanaugh?

MR. CAVANAUGH: Sure.

BY MR. CAVANAUGH:

Q. Just to follow up on one or two questions the judge asked you, for an advertiser utilizing SA360, that floodlight conversion data resided in SA360; correct?

A. Can you define what you mean by "resided"?

Q. Well, it didn't reside with the advertiser. The advertiser would have to download that information from SA360 if they wanted to import it someplace else.

A. The way I would describe it is Search Ads 360 sort of processes and owns that data. The downloads could be scheduled, dumped to a drive for an advertiser on a scheduled, regular basis if they wished. But the processing of that data originated with Search Ads 360.

Q. Okay. Thank you.

If you could turn to PSX645, this is an e-mail -- this is in evidence, Your Honor -- from Ryan Krueger to a number of individuals, including yourself, on October 16, 2019.

And this relates to the floodlight conversion sharing test that Microsoft and Google were discussing; correct?

A. Let me just take one minute to read, please.
Q. Sure.
A. Okay, I've read it.
Q. Okay. My question was, this refers to the floodlight conversion sharing test that Microsoft and Google were discussing at the time?
A. While I was on cc, I believe, yes, I was not in direct communication with the Microsoft team on this.
Reading this e-mail, it seems that a Microsoft representative was sending a proposal to Search Ads 360 on how they would like the conversions of floodlight to be shared to Microsoft.
Q. And if you could turn to 646, which is in evidence, Your Honor, and I will represent to you that this is the -- this is the one-page summary referenced in PSX645.
Would you have reviewed that at the time?
A. It's possible that I've reviewed this document. I don't actually recall ever personally reviewing a Microsoft proposal. I believe other representatives from Search Ads 360 were fielding this particular request at the time.
Q. Okay. But did you understand that the testing was intended to be a step towards the integration of SA360 and Microsoft Ads auction-time bidding?
A. Let me just take a minute to look at this document.
Q. Sure.

A. I don't actually think I've seen this before.
Q. Mr. Krueger, why don't I just refer you to a specific line. If you think you need to look at more of the document to answer my question.
A. Sure.
Q. Okay. So on the first page of the document in the fourth paragraph, why don't you just read that paragraph, and then let me ask you a question.
A. Do you mean the one that starts with "in order to help"?
Q. Yes.
A. "In order to help advertisers balance these" -- sorry.
Q. They've asked for it to be redacted. So just read it to yourself.
A. Sorry. I misinterpreted.
Okay.
Q. Did you come to understand that essentially what Microsoft was seeking was to have parity with Google Ads so that advertisers could evaluate performance under similar conditions?
A. The statements here, as written by Microsoft, seems to indicate parity, as you've described.
Q. Okay. Now, Google uses, in connection with SA360, road maps to lay out which features will be prioritized for testing and evaluation over six-month periods; right?
A. Correct. Search Ads 360 would typically have a road map where features were decided and built in roughly six-month

periods of time.

Q. And you're generally aware that there's an internal approval process for those road maps?

A. Yes. There's several stages in which the product and engineering leadership team would make decisions of road map items.

Q. Okay. If you could turn to 1206.

Your Honor, this is not in evidence. I don't know if there's an objection.

MS. WASZMER: Your Honor, we're just reviewing it. I shouldn't have an objection, but give me a minute.

No objection.

THE COURT: PSX1206 will be admitted.

(Exhibit PSX1206 received into evidence.)

BY MR. CAVANAUGH:

Q. If you look at the bottom of this e-mail, there's essentially a timeline for meetings in connection with the road map process for the first half of 2020. I would ask you to just look at that.

Are you familiar with that type of timeline that would exist for the various process reviews?

THE COURT: Sorry. Is this something that can be up on the screen?

MR. CAVANAUGH: Your Honor, we just provided it to them yesterday. So we treated it as confidential.

THE COURT: Take a quick look at it, Ms. Waszmer.

MS. WASZMER: If Mr. Cavanaugh is seeking to put the first part on, I think that's fine. I think the second part may have a schematic that's confidential.

MR. CAVANAUGH: That's fine.

THE COURT: Okay. Why don't we put the first page up, please. Thank you.

MR. CAVANAUGH: I didn't have them load it. Sorry, Your Honor.

THE COURT: That's all right.

BY MR. CAVANAUGH:

Q. So does that provide various dates for the process of preparing the road map?

A. I don't believe I've seen this before. I have seen tables that have timelines of how features were discussed and eventually prioritized, and these were typically done by our program manager.

Q. Okay. And you see, for example, on this one, on 11/11/2019, there was a planned meeting for -- to deal with painful cuts?

A. I see that listed here.

Q. And then subsequent to that, there would be a meeting with sales and business leaders?

A. Yes.

Q. All right. As well as planning executive review?

A. Correct.
Q. With a final meeting on December 3rd, 2019, of the gathering?
A. That is all stated here.
Q. And the gathering was, what, the final meeting to decide on the road map for the next six-month period?
A. Typically, the gathering is what we would refer to as various what we call cross-functional representatives, sales and marketing, support operations, product and engineering, invited to recap the previous year and discuss goals for the next year.
And in part, that gathering would showcase the new road map for the upcoming six months.
Q. Okay. And if you could turn to 1205, please.
THE COURT: Mr. Cavanaugh, why don't we take our morning break before we turn to our next exhibit, and maybe with the benefit of the break, if it's possible to get some of these -- I don't know if it's possible to get your remaining exhibits uploaded.
MR. CAVANAUGH: I think there were two or three others, Your Honor. I'll see if I can get that done.
THE COURT: All right. Terrific. We will see everybody at 11:15. Thank you.
Mr. Krueger, I just ask you not to discuss your testimony during the break, sir.
THE WITNESS: Sure.

(Recess taken from 10:58 a.m. to 11:17 a.m.)

(Call to order of the court.)

THE COURT: Mr. Cavanaugh, ready when you are.

MR. CAVANAUGH: Your Honor, why don't we -- we've been able to load them. We've been able to resolve any issues.

THE COURT: Thank you.

MR. CAVANAUGH: Why don't I, so that we get as much publicly available as possible, let's just go back to PSX1206.

Peter, if you could just pull up the timeline at the bottom.

BY MR. CAVANAUGH:

Q. Mr. Krueger, we were talking about the preparation for the first half of 2020 road map, and this indicates that there would be a final meeting called "the gathering" on December 3rd, 2019; correct?

A. That seems to be the timeline presented here, yes.

Q. And there's a number of meetings that lead up to that to talk about what should be in it, what should be taken out of it; correct?

A. Yes.

Q. Okay. And if you could turn -- now, the second page of this document has a more-detailed timeline, and if you turn to 1205, we've tried to blow that up and make it a little more readable.

Let me draw your attention to, on November 4th and

November 8th, there were planned to be -- those are called "cut sessions"; right?

A. Yes.

Q. Okay. And that's when projects or tests would be cut from the road map; correct?

A. I think the way we typically would frame it is there's a list of projects for consideration. Some of them had been previously prioritized, some new. And these would be typically meetings where decisions would be made to continue or, let's say, cut a proposed new project, for example.

Q. And then there would be a sales review and an executive review, all which would precede the gathering meeting; correct?

A. Correct. I think the sales reviews tend to be with sales leadership, I believe, versus the gathering, which would be like the entire or wider sales organization that supported SA360.

Q. All right. And you attended the gathering meeting that year, did you not?

A. Yes, I believe I attended that gathering.

Q. You received an award at that?

A. I do believe so.

Q. Okay. And would Mr. Varia be involved in this as well, in these -- some of these meetings that preceded the gathering?

A. Typically, he would have attended those. I don't recall specifically if I was in attendance and I wouldn't have knowledge, but at the time, I believe Amit Varia was our product

lead and should have attended those.

Q. If you could turn to PSX1110.

Your Honor, this is in evidence already. This is a November 26, 2019, e-mail to Mr. Varia is the first one, but then there's an e-mail from Mr. Varia talking about the, quote, most painful cuts.

Do you see that?

A. I'm looking through it. One second.

I see the statement. Yes, I see that statement, "What are the most painful cuts?"

Q. Okay. And then he goes on to note under "Bing RSA and Bing LIA," "The good news is we did bring in other high priority requests," and one of those is Bing auction-time bidding testing; correct?

A. That seems to be the statement by Amit Varia here.

Q. And if you could turn to page 157, there's a reference to "in lieu of a formal meeting, we ask Anthony and Shibani to please review our proposal here and provide e-mail feedback."

Were they -- would they be providing the executive review at that time point?

A. I would have to speculate. I was not involved in those decisions. I know that Anthony and Shibani were our product and engineering leaders respectively, but I'm not sure if I can comment on if they were in those meetings and what they reviewed, but they were definitely our engineering and product

leaders.

Q. Okay. If you could turn to PSX285, which is in evidence.

THE COURT: What was the number again, Mr. Cavanaugh?

MR. CAVANAUGH: 285, Your Honor.

THE WITNESS: I think it's in the front.

BY MR. CAVANAUGH:

Q. This is an e-mail dated December 18, 2019.

Who is it from?

A. It was from Jean Chateaubriand.

Q. And what were her responsibilities?

A. Jean was our what we call program manager of Search Ads 360.

Q. Under hot topics, "H1 2020 planning completed. Fermium road map set with 26 total features."

Did I read that correctly?

A. That's correct.

Q. And Fermium was the project name for the H1 2020 road map; correct?

A. That sounds right. There's been a lot of names for a lot of road map cycles. I don't remember specifically, but it sound correct that this was the H1 2020. I have no reason to believe it wasn't.

Q. If you could turn to Bates page 610, there's a reference to Project Byx.

That's the auction-time testing for Microsoft Ads that

we've been talking about; correct?
A. Correct. Byx would have been the project name for Microsoft Ads' auction-time bidding integration with Search Ads 360.
Q. And so as of December 18, 2019, the test was still on the road map after going through the painful cut meetings, the executive review, the sales review; correct?
A. I could only go by what's in this document, which appears to be from December 2019. And on that document, as you've mentioned, there is a row for Byx, with a clause of "experiments only."
Q. And that would have -- and this is occurring after the process we've talked about, correct, all those meetings that lead up to the gathering meeting in early December?
You can go back to 1205 if you want to check.
A. This timeline, I believe, is after the gathering, correct.
Q. Let me ask you to turn to PSX462.
This is already in evidence, Your Honor.
This is a January 8, 2020, e-mail from Mr. LaForce at Microsoft to your brother, Ryan Krueger.
And your brother forwarded this e-mail to you and Mr. Varia, did he not?
A. I'm just reading this. One moment, please.
Q. Sure.
A. Okay. I've read it.

Q. Mr. LaForce's e-mail was sent to you by your brother; correct?
A. That's correct.
Q. All right. And he asks you, "@ Jason Krueger let's get that one-sheeter POV for Byx created this week, and we can meet back with Legal and Bashaar early next week."
Correct?
A. Correct.
Q. What's a POV?
A. Point of view.
Q. Okay. And you had created a point of view earlier that week on Project Byx?
A. I know some time in January of 2020, I wrote what we kind of call a one-pager or one-sheeter. I'm not sure if that was before or after this. I'd have to see the timelines. I do know it was around January when I wrote that POV.
Q. He does say, "Let's get that one-sheeter for POV for Byx created this week." So at least your brother thought it had been created before his e-mail to you.
A. My interpretation at this moment is that he is asking me to create a one-pager. So it was a request at that time to create one.
Q. Okay. I understand. And then he proposed meeting back with Legal.
In your view, it was unusual for legal counsel to be

consulted with regard to a product prior to a road map decision?

MS. WASZMER: Objection, Your Honor. I believe that this is a question they've asked the witness at a deposition, which I consented to. But any further questions about legal advice, I'm objecting to.

THE COURT: That objection is overruled. It's not touching on anything about legal advice, per se. If he asks any more detail, then I can take that up.

THE WITNESS: Sorry. What's the question, please?

BY MR. CAVANAUGH:

Q. Is it unusual for legal counsel to be consulted with regard to a product prior to a road map decision?

A. At the time, I had been involved in few projects, and I do not recall having consulted product counsel at the pre-requirements stage.

At this stage, I think I had been a product manager officially for under one year. So I didn't have a lot of experience at the time.

Q. Let me ask you to -- Mr. Krueger, did you give a deposition in this matter?

A. Yes.

Q. And you understood you were under oath?

A. Yes.

Q. Okay. And I ask you to turn to page 231. Starting at the last line, there's a question, "Is it unusual for legal counsel

to be consulted with regard to a product prior to a road map decision?"

And then there's some additional colloquy -- no, then you simply answer "yes."

Correct?

A. That's correct. That was my statement.

Q. Thank you.

Your Honor, we do also move into evidence 1205 and --

THE COURT: All right. Just 1205, Mr. Cavanaugh?

MR. CAVANAUGH: I think I had moved in 1206 already, and actually, let me go back and do 1207.

BY MR. CAVANAUGH:

Q. Could you just turn to 1207. It's titled "SA360 Fermium planning summit, October 29, 2019."

A. I see it.

Q. Would you have attended this meeting?

A. It's possible. I do not recall if I was in attendance for this meeting.

Q. And if you turn to Bates 5607, does that identify the agenda for that meeting?

A. It appears to, yes.

MR. CAVANAUGH: Your Honor, we move 1207 into evidence.

MS. WASZMER: No objection, and no objection to 1205 either.

THE COURT: Okay. Those will be admitted.

(Exhibits PSX1205 and PSX1207 received into evidence.)

BY MR. CAVANAUGH:

Q. Now, around November 2019, did your team analyze changes in SA360 ad spend on Google and Bing?

A. So the automated bidding team provided -- or completed an analysis of, I believe, a subset of customers that were involved in the Myx A/B test, with the intention to, in part, assess the performance. Spend in particular, sliced across Google's traffic compared to Microsoft's traffic.

Q. And if you could turn to PSX537, which is already admitted, Your Honor, is that the test?

A. This appears to be the analysis that we were just describing, yes.

Q. Okay. And this is based on one month of data?

A. It looks like slightly longer than one month of data was used for this analysis.

Q. Just so we're clear, it started on October 10th, and when did it end?

A. The chart shows November 14th.

Q. Okay. And this was only one month after you announced the integration of auction-time bidding from Google Ads with SA360; correct?

A. So I can only comment on the analysis end date. When the analysis was completed, I do not specifically recall. It's

probably maybe a month or two after this, but I don't remember exactly.

Q. Okay. I'm sorry. Perhaps I wasn't clear.

The data that you were relying upon, starting on October 10th of 2019, that was only actually probably a few weeks after you had made your announcement about the integration of auction-time bidding from Google Ads into SA360; correct?

A. Correct. It seems the start date of this performance analysis, October 10th, was somewhere around a month from the publishing of that marketing announcement and e-mail announcements, I believe.

Q. Okay. And before that September time period, there had just been beta testing with 50 advertisers; correct?

A. No, that's not correct. We had a beta test period. Frankly, I can't recall the exact dates of those, and it did range over a period of months. But we had other advertisers, I believe, that were utilizing the feature outside of that 50 A/B tests. For various reasons, we earlier on had customers required to use A/B testing. At some point, we were allowing advertisers to use the feature without participating in the A/B evaluation.

Just to be clear, I suspect there were quite a few more customers using it beyond the 50.

Q. So if you could turn to -- well, let me ask this: The data that appears here, that's total spend; correct?

A. My recollection from discussions with engineering, and my memory isn't perfect, is that around this time we were looking at advertisers that had recently adopted this integration.

So for example, if an advertiser had started using the feature in the week or two weeks prior to the start date, October 10th, that group would have been included. There might have been other advertisers that had adopted the feature months earlier that were not included in this analysis.

So we can get a sense of the shifts in the period following activation of the feature of auction-time bidding.

Q. Can you turn to PSX426.

A. I will just take a minute to review.

Q. Sure.

THE COURT: Mr. Cavanaugh, if you can direct the witness to a particular portion, that might be helpful to move things along.

MR. CAVANAUGH: Sure.

BY MR. CAVANAUGH:

Q. Mr. Krueger, if I could take you to the middle of the first page of the e-mail, where you say, "SA360 engineering did a detailed analysis of the SA portfolio enabled for auction-time bidding with Google Ads and Microsoft Ads campaigns. For these portfolios, we are seeing growth in Microsoft Ads spend. Therefore, we do not see any evidence that Microsoft Ads spend is being negatively impacted as a result of the adoption of

auction-time bidding."

That was the conclusion you drew from that testing; correct?

A. I'm just going to read it one more time, please.

This was the statement that I provided to Ryan, who was leading the discussions with the Microsoft team, on how we should represent the analysis of our internal advertiser data.

Q. Okay. If you could go to the second page, there's an e-mail from Mr. Liu.

A. Yes.

Q. And Mr. Liu states, "It looks like Bing spend is stable and a little increased, while total spend is growing faster than Bing"; correct?

A. I'm trying to find that.

Q. It's on the second page.

A. I see it now. I see his statement.

Q. Okay. And then in -- if you go back to the first page, in response to your e-mail, there's a subsequent e-mail by Mr. Fitzgibbon, and he states, "Would it be valuable to add the detail that the percentage of overall spend decreases for Microsoft even though spend grows overall? The transparency might help acknowledge that Myx is better for Google narrative they are running with, but also highlight that they benefit too while in the same portfolio."

What information was transmitted to Microsoft?

A. My recollection, typically, either Ryan Krueger or Ryan Fitzgibbon -- as you can see, I provided a statement from Search Ads 360 that could be shared. My assumption was that that was the statement that was shared, but I'm not sure if I actually was on that e-mail, but I don't recall what was transmitted beyond that at this time.

Q. Okay. Now, are you aware that there's currently a project at Google to integrate to some degree support for auction-time bidding for Microsoft Ads?

A. I have some knowledge that that project at least is underway to some extent. I'm not very familiar with the status of that project, though.

Q. Okay. If you could turn to PSX446.

A. Okay.

Q. This is a -- is this a document you prepared in -- that you prepared in February of 2021?

A. This appears to be a document that I prepared in February 2021, and if I recall, there was a previous version of this document roughly one year earlier that we had referenced in our discussions.

Q. Okay. And the purpose of this document was to convey the background and requirements to develop Microsoft Ads auction-time bidding features?

A. More or less. Product managers like myself, at various stages, would be asked to write requirements summary. In this

case, this is a -- what's called a one-pager. So it doesn't have every detail, but some of the key components of requirements that would be needed. It also lists some background information and additional information as well.

Q. And had you drafted a proposed press release in connection with this?

A. Typically, as a part of one-pagers or requirements documents, it's common to have like a one-liner that would be a simple sentence of how this could be framed, and I included something like that here. It's sort of saying, if we were to launch this -- it's a proposal on how we would make that statement.

Q. In preparing this, did you go back and look at what the discussions had been in 2020 between Microsoft and Google regarding integrating auction-time bidding?

A. Just to clarify, is the question did I look at information from which discussions?

Q. From the discussions from the April 2020 to July time frame.

A. Sorry. Which discussions?

Q. Discussions between Microsoft and Google.

A. I don't recall what information I might have reviewed to produce this document. I believe what I primarily was doing here was updating a previous document from somewhere around January of 2020, looking at the latest capabilities in

Microsoft's documentation for accuracy. I might have discussed this with different team members. I might have reviewed an e-mail. But my primary recollection was taking a previous document and ensuring its accuracy.

Q. Were you aware at this time that Google had advised Microsoft that what they had been discussing in 2020 would not allow Microsoft to be able to utilize SA360's bidding strategies in connection with Microsoft Ads' auction-time bidding?

A. I'm not sure I remember those discussions. Do you mind just recapping what you mean by that, just so I follow?

Q. I'm asking you, did anyone at Google tell you that in the discussions they had with Microsoft, they said we weren't prepared to make SA360's bidding strategies available for use in connection with Microsoft Ads auction-time bidding feature?

A. I don't think I was aware of those discussions.

Q. Now, if we could move down to -- well, it's on the second page where you talk about feature comparisons.

A. I see it.

Q. And there, you identify some features that Microsoft Ads did not support; correct?

A. Correct.

Q. All right. Now, in your view, nothing in those feature requests were technical impediments to begin beta testing of Project Byx; correct?

A. Just to clarify, you're asking if that's what the feature

comparison states, or are you asking if that is my current opinion on if those are required?

Q. At the time you drafted this, you didn't see that this would preclude proceeding with Byx testing?

A. I believe my statements here were along the following lines: I started off by summarizing that there's a limited set of features that restrict customers, and then subsequently, I stated that if those features were not supported, it would be infeasible to activate on specific campaigns using those features.

So I don't think I was stating an opinion on whether it could be done. I think I was stating which features were missing and lack of those features would be limiting.

Q. And you go -- if you just go to the last line of your document on this same page, 13896, you say, "Without the above features, SA360 should consider only launching Byx as a beta."

And that's referring to beta testing; correct?

A. So again, this document is a discussion of high-level requirements and framing, certainly not finalized. And my recollection is if we were to build Byx without those features, we would only frame this -- we could only frame this as a beta, not necessarily beta testing, but I think I meant to indicate that launching this product would require parity features, or at least that was my proposal at the time.

Q. Okay. At this point in time, had Google gone to Microsoft

and asked about these features?
A. I'm not sure.
Q. Okay. And as of February 2021, Project Byx was not in beta testing; correct?
A. That's correct.
Q. Okay. That was first announced in November of 2021?
A. Perhaps. I don't have a vivid recollection of that announcement.
Q. Okay. Can you turn to PX1203.
A. Okay.
Q. Do you have 1203 in your binder?
A. Yes.
MR. CAVANAUGH: Your Honor, do you?
THE COURT: I do, yes.
MR. CAVANAUGH: Okay.
THE COURT: Is there a particular page we're trying to get to?
MR. CAVANAUGH: 987.
THE COURT: Mr. Krueger, you've got the document in front of you?
THE WITNESS: Yes. I'm trying to find it.
THE COURT: I think it's the second or third page.
THE WITNESS: I've got it.
BY MR. CAVANAUGH:
Q. And are you listed as one of the presenters here?

A. Yes, I do appear to be listed.
Q. If we could turn to 991, does this indicate that the big 6 ad agencies account for X percent of SA's total spend in 2019?
A. I don't have a vivid recollection of this, and there is a statement that says represent X percent and some other customers represent Y percent of our business. I don't know how that was calculated or what the metric is specifically, but that's what it says.
Q. And then the next largest are direct advertisers, and it provides a percentage for them as well?
A. Yes, I see that.
Q. Okay. And then if we could turn to 992, this identifies the -- these are SA360's biggest customers, correct, in 2019?
A. This slide seems to represent --
Q. And it indicates what percentage of SA360 spend came from X percent of its customers?
A. That's what this slide says.
Q. Okay. And then under "direct advertisers," it identifies a number -- the three largest direct advertisers?
A. I see three advertisers listed here, starting with the highest spend.
Q. And what those three largest of those 25 customers spending, what those total amounts are?
A. Their are spend numbers listed next to each name.
Q. Okay. And if you could turn to page .003.

A. Okay.
Q. And the heading here is "key metrics," and the third column is entitled "spend from January to August 2020"; correct?
A. Correct.
Q. And it provides the figure for the spend on SA360 through Google and then the spend for Microsoft; correct?
A. It appears to be those two numbers, yeah.
Q. And then there's considerably less spend on other search engines; correct?
A. Correct.
Q. And if you could turn to page .05, the title here is "engine integration 2021 plus strategy."
A. I see it.
Q. And it notes that SA360 is --
MS. WASZMER: Counsel, objection. This is confidential.
THE COURT: I'm sorry. What page are we on?
MR. CAVANAUGH: 005, Your Honor.
THE COURT: 005?
BY MR. CAVANAUGH:
Q. Does it describe where SA360 stands with respect to its support of other search engines?
A. I'm going to take a minute to read this. I don't recall seeing it or at least paying much detailed attention to its contents. So in order to weigh in, I need to read this closely.

And to be clear, I did not draft this slide.

I've read this slide.

Q. Does it describe where SA360 is in terms of its support of other search engines?

A. So this is not my area of ownership, and I have very limited exposure to what we had and what we were proposing.

So there are statements here about what could be done, but I don't have a deep enough understanding to characterize this in terms of the status and capabilities, to be honest.

Q. Okay. Let me ask you to turn back to -- Your Honor, we would move 1203 into evidence.

MS. WASZMER: No objection, Your Honor.

THE COURT: 1203 will be admitted.

(Exhibit PX1203 received into evidence.)

BY MR. CAVANAUGH:

Q. If you could go back to 1205 for a moment.

A. 1205?

Q. Yes. Now, in connection with the road map, I think you indicated that there's a sales review, and that's by senior members of the sales team?

A. This planning doc indicates that there's a sales review.

Q. And is the purpose of that for the sales team to provide information on customer demand for various features that might be considered for the road map?

A. I don't believe I was in these reviews. My understanding

based on the goals stated here is the goal is to review the road map, and my interpretation would be to get the sales team's feedback on the road map.

Q. And so the sales team were providing feedback on the features that were being proposed for testing for the next six months?

A. Perhaps. I think this is a vague statement. It says "get feedback." My interpretation is that could be either what is your feedback on the road map or maybe other things that are missing, but I was not in this review. So I'm speculating off of the two-word statement, "get feedback."

Q. One final question. We had been talking about floodlight data, and the judge was asking you about that.

Now, in your view, floodlight data is, quote, the source of truth for -- in the view of advertisers; correct?

A. Some advertisers would consider floodlight data their source of truth; others may not.

Q. And you've actually used -- you've actually used that "source of truth" line yourself, have you not?

A. This is a term that we've used in Search Ads 360 to describe floodlight and other conversion sources.

Q. And the reason why you view it as a source of truth is because of the percentage of ads that go through Google relative to other search engines; correct?

A. The way I would frame that presentation of a source of

truth is that is the product conversion tracking that Search Ads 360 produces. So at least from my point of view, one reason why this floodlight feature was promoted is it is the native conversion tracking capability of Search Ads 360. So in that sense, that's why we have advertisers use it, because they're using our tool, and we have built that technology.

Q. One reason why you view it as a source of truth is because so much information is drawn from it based on the extent to which Google sells more ads than anyone else?

A. I don't know if I would describe it that way. I think I would describe the source of truth as -- first, it's when an advertiser considers it a source of truth. It's an interpretation per advertiser. Primarily, my point of view is this is the conversion tracking system that Search Ads 360 owns and operates.

I don't have any other strong opinions on that mechanism.

MR. CAVANAUGH: Okay. Nothing further, Your Honor. Thank you.

THE COURT: Thank you, Mr. Cavanaugh.

All right. Does the Department of Justice have any questions for Mr. Krueger?

MS. BELLSHAW: No, Your Honor.

THE COURT: Okay. Ms. Waszmer?

MS. WASZMER: Your Honor, just to make this efficient, I will just hand out some binders for the entire exam. Thank

you, Your Honor.

CROSS-EXAMINATION

BY MS. WASZMER:

Q. Good morning, Mr. Krueger. Wendy Waszmer on behalf of Google.

Okay. And I've handed you two binders and I think two binders to the Court and our government colleagues, and one has some demonstratives and one has exhibits.

Mr. Krueger, let me just go back, and I'm going to have our colleagues put up PSX909, which actually is in the new binder I gave you. It's the blog post that Mr. Cavanaugh asked you about. This was the September 2019 blog post.

Do you remember that?

A. Yes.

Q. Okay. And looking to the bottom of this first page, Mr. Cavanaugh asked you some questions about beta testing. So I just want to go back to that.

Could you describe for the Court, when you started this process, how many advertisers had expressed interest in that beta testing of this feature?

A. My recollection is that we had -- first, before the beta testing, hundreds of advertisers had shared feedback that they had utilized Google Ads auction-time bidding. These were customers who were also using our intraday bidding. And overwhelming feedback that we had heard was that the Google Ads

outperformed our intraday bidding, and many of these advertisers had already what we call churned, meaning they stopped using intraday bidding in favor of Google Ads auction-time bidding. Others were on their own doing various forms of tests.

I recall personally seeing dozens of these per month over the course of well over a year.

Q. So Mr. Krueger, let me just ask you, as of this time, September 2019 or prior to September 2019, if SA360 had seen this overwhelming interest and the feature that we're talking about was a Google Ads feature, why did SA360 need to do any testing? Why didn't SA360 just build the integration at that time?

A. So just to make sure I understand, so we had seen advertisers claim that they had seen performance improvement. On select occasions, we had validated that, typically with a before-and-after type of analysis, which is what we kind of called directional. Someone turned a feature on, and they saw a performance change.

Our product, Search Ads 360 automated bidding, we have a responsibility to advertisers to ensure that we can achieve their goals ideally as optimally as possible within reason.

To incorporate a new feature, we want to have a very high level of quality standard, which ensures that we also can see those performance effects, for example, that they're not biased by seasonality, one of the reasons we want the test to be what's

called A/B split at the same time as opposed to before and after.

And just as importantly, we need to consistently see quality performance. There are many instances where an advertiser may see uplift, and for example, auction-time bidding may have an issue, and that performance could degrade.

So I would say that we need to see uplift reliably across the vast majority of instances, with reliable testing methods, with repeated and continuous quality of stability.

So those are some of the reasons.

Q. And, Mr. Krueger, when you said "we," who are you talking about when you say "we" need to see quality and consistency?

A. Primarily, the engineering team, with support from product management like ourselves.

Q. And is that the engineering team at SA360?

A. Correct.

Q. Okay. Now, I think the Court has heard many different terms to describe integration or feature support or feature build.

Can you explain to the Court Project Myx relating to Google Ads' auction-time bidding and SA360? Was that an integration?

A. I would describe it as integrating Google Ads technology or Google Ads feature auction-time bidding into a platform Search Ads 360 feature. So I would consider that an integration, meaning there's two systems, both with algorithms and technology

that are working together.

Q. The Court has also heard the terminology "to support a feature in a search engine."

Is it different in your experience to integrate a feature versus support a feature, or is that the same thing?

A. I would consider those different.

Q. Okay. Could you explain to the Court why it's different to integrate, let's say, a bidding technology rather than support a feature?

A. So the way I would put it is, the general expectation of supporting a feature is to make available a feature that an engine supports. This could be something as simple as a campaign setting from a search engine. Maybe for example, it targets a certain location. And these features that we support, there's a very clear understanding that it's not Search Ads 360 that is developing the feature; however, it's simply allowing an advertiser to enable, disable, and in some cases report on that feature.

Why this is important is if that feature performs inadequately, it's quite trivial to inform an advertiser, for example, you were targeting a specific location and you saw some traffic outside of that location, please reach out to the engine that is owning that feature and resolve the inquiry.

In other words, Search Ads 360 is not under any obligation to more or less explain that it worked, more or less that it was

correctly configured, for example.

By contrast, an integration -- and there aren't that many that I can think of at the moment -- typically involves two systems of algorithms or artificial intelligence, machine learning that have to work together. Both of these systems are continuously evolving. They may have issues. And there's several orders of magnitude complexity of integrating, given some of those considerations.

Q. Okay. Now, talking about Project Byx integrating Google Ads auction-time bidding into SA360, what was the approximate time frame of that project, if you know?

A. Of Project Byx?

Q. Project Myx, M-y-x.

A. I want to say from the time that we began requirements, which preceded my time as even a rotating product manager, was maybe early 2017, maybe late 2016, until the launch fully in September of 2020 for all the campaign types and features. So more than three and a half years from, you know, the requirements through all the stages of evolution.

Q. Okay. So just so the Court knows, I think we saw the blog post that was September 2019. Between September 2019 and what you described as the full launch in September 2020, what happened in that year?

A. If I recall, the first announcement in September of 2019 was for Google Ads search campaigns, also known as text

campaigns. And I believe the supported goal types for bidding strategies were target CPA.

I might be misremembering one of the details, but subsequently over the course of the next year, we launched support of Myx for shopping campaigns, a different campaign type, budget bid strategies, which is a different objective, spend-based instead of ROI-based, and then I'm not sure, but I think the value-based target ROAS also came later, but I'm not quite sure of that timeline.

Q. Okay. And in your experience during Project Myx, M-y-x, did SA360 encounter any, let's say, bugs or malfunctions as it was trying to integrate the Google Ads auction-time bidding?

A. Yes.

Q. And how does SA360 handle that kind of bug or malfunction during the course of Project Myx?

A. There's a lot of layers to it. So just on the Search Ads 360 side, there's sort of two main teams that would be -- engineering teams that would be responsible for an investigation. There's the conversions pipeline team that needs to validate if the conversions of floodlight, for example, were processed normally and exported to Google Ads as expected, both in the amount of conversions, if they were aligned to the correct number of clicks, and if those conversions were reported at a normal cadence.

The other team would be the Search Ads 360 automated

bidding engineering team, and typically, following validation that things were working normally from the first group, conversions, that team would subsequently validate various components of the Search Ads 360 algorithm that made decisions about bids, as well as configuration changes made to Google Ads.

And in some cases, in many cases, if those were working correctly, we would reach out to the Google Ads team and have them begin an investigation, and we would have to wait for them to make an interpretation if the issue was on their side, if it was something they could address, if it was a bug, for example.

So there was at least those groups, and oftentimes, they would happen simultaneously or subsequently. So there's a few different layers.

Q. Do you recall any circumstances during the beta testing or any other testing of Project Myx where an advertiser sought credits from Google or Google gave credits to an advertiser due to any malfunctions?

A. Yes.

Q. And why would an advertiser seek credits, or why would Google give credits during a bidding testing like that?

A. So generally speaking, advertisers that use automated bidding have a expectation that we would hit their goals as they've set. For example, if they want to hit a $50 target CPA, it should be somewhere in that ballpark unless we could explain a good reason otherwise.

For various instances, there might be an issue with the way the conversions were exported and conversions had some issue, the algorithms had some issue, and as a result, the performance may not be aligned to their expectations.

A common case where we would consider a credit or a refund is when we spent too much money, so instead of a $50 CPA, it was much higher, 500. In other words, we bid far too high.

For these bugs that we had validated to be real issues, we would often consider and deliver a refund in the amount of the overspend to what we call make good and help the advertiser reasonably achieve what they would have performed had the bug not occurred.

And these were only instances where we would give refunds if there was an actual identified bug, and we would subsequently attempt to fix that bug as soon as possible.

Q. Okay. I'm going to move on in a minute to talk about Project Byx, B-y-x, but let me just pause on floodlight data. The Court and Mr. Cavanaugh asked you some questions about floodlight, the tracking system and the data.

The floodlight data used by SA360, is that data the advertisers' data or SA360's data?

A. The advertisers own that data.

Q. Okay. You had I think mentioned in the context, I believe, of the Court's questions that advertisers could write what you called scripts in order to download data.

Could you explain to the Court what you meant by advertisers writing scripts?

A. I'm trying to remember the exact context I was referring to, but first, you can download easily in the Search Ads 360 interface data scoped as you'd like. So you can see over a time range a campaign's aggregate performance. You can also see many metrics that the engine provides, cost and clicks. And you could also see floodlight data, all as columns.

You could also download what we call events data, which is, each row is a conversion events, with various attributes.

I believe what I was referring to in terms of scripts would be taking that data and being able to move it somewhere else. This could be uploading into an advertiser's own data hub or to some other system.

In other words, you wouldn't have to manually download and have a human being upload it. A script would collect the downloaded report, potentially format it, if necessary, and schedule an upload to wherever data that would need to go.

Q. Thank you. Before we put PSX909 aside, I just want to put up the third and fourth page of this. So maybe you can turn to the third and fourth page of the blog. There's a segment at the bottom of the third page titled "how to enable Google Ads auction-time bidding functionality in Search Ads 360." And then right below that, there's a picture here.

Can you describe to the Court what that picture is with the

yellow box?
A. So the wider box we're looking at is a four-step setup. This is what we mean by an advertiser defining their goals of a bidding strategy. One of the settings of that bidding strategy is auction-time bidding, and there's a check box to enable that.
Q. So I think Mr. Cavanaugh asked you some questions about where one would turn on the functionality. Is this showing turning on functionality in SA360?
A. Correct, for Project Myx.
Q. Okay. And for Project Myx, I believe Mr. Cavanaugh asked you, but once the advertiser turns on via that check box, where is the bidding occurring?
A. So when this check box is enabled, it will then be eligible to turn on auction-time bidding if a Google Ads campaign, an eligible Google Ads campaign were added to it. In the case that a Google Ads campaign were added to an auction-time enabled Search Ads 360 strategy, the responsibility of bids would then be on the Google Ads system, so the serving product of Google Ads.
MS. WASZMER: And, Your Honor, just for time, I think I have about ten minutes. I can continue and maybe try to finish up before lunch.
THE COURT: You mean to say you have ten minutes total?
MS. WASZMER: I think I may have ten minutes total.

THE COURT: Okay.

MS. WASZMER: Let me see if I can beat my own estimate.

BY MS. WASZMER:

Q. Mr. Krueger, now let's turn to Project Byx, B-y-x.

At the time that you were working on the one-pagers that Mr. Cavanaugh asked you about in 2020 and 2021, did you know whether Google Ads auction-time bidding functionality and Microsoft advertising functionality were the same?

A. I had only an understanding of, let's say, how an advertiser would configure the features based on public documentation. I had no understanding of the underlying technology of Microsoft's auction-time bidding. And I had some understanding of Google's technology through the Myx project discussions.

Q. Okay. I think this came up in the context of Mr. Cavanaugh's questions. But was there any functionality that you knew that Google Ads auction-time bidding had that Microsoft auction-time or automated bidding did not have as of this time period?

A. So adjacent to Google Ads or Microsoft auction-time bidding is these conversion goals that need to be configured, sort of the inputs for auction-time bidding. Two notable features which I had highlighted in my requirements proposals included something we call fractional attribution and credit and

campaign-level conversion goals. These were two relatively sophisticated flexible reporting and configuration options in Google Ads which I observed to be absent on the Microsoft Ads side.

THE COURT: Sorry. What was the second one? I got fractional attribution credits, and what was the other one?

THE WITNESS: Campaign-level --

THE COURT: Campaign bubble?

THE WITNESS: Campaign-level conversion goals.

THE COURT: Okay. Can you just give me a quick summary of what those were?

THE WITNESS: Sure. So campaign-level conversion goals are straightforward to understand. In a Microsoft account, for example, if you wanted to say you're targeting someone to purchase shoes, like you're a running shoe company, there might be many conversions on your page, like just filling out a form or get directions, that are not meaningful conversions, but nonetheless, you report on them. And there's the very important ones, like a purchase event.

Microsoft would allow you to select one or many of those, but all the campaigns would object to that same conversion. So purchases, for example, is the main goal. A campaign-level conversion goal would say maybe the overall objective is purchases, but certain campaigns would have a different objective. Purchases might not be the main goal; it might be

something else, like find a dealer or -- and so Google Ads offered the ability to do both. At the account level or at the campaign level, you can modulate goals. Whereas, in Microsoft, it was only available to choose at the account level. So that's the campaign-level conversion goal selection.

The fractional attribution credit refers to when we export conversions from Search Ads 360 to an engine, Google offers what's called fractional credit, which means it's very common, most common for an individual user searching to click on multiple ads before a purchase, running shoes, brand Nike shoes, and any particular model.

When that conversion occurs, we call this an attribution credit. We might give 10 percent of the conversion credit to the first click and 30 percent to the next click and 60 percent to the next. This is very important, because each of those clicks have some meaningful contribution to the end event.

By contrast, Microsoft, at the time of my evaluation, only offered full integer conversions. So you would have to choose typically the last conversion event -- excuse me, the last click event and only give credit to the last click that led to the conversion.

The problem with this is the floodlight data dictated that the earlier clicks had substantial credit, but we were unable to export that credit. And that would be the main difference of what a fractional conversion credit system would do.

THE COURT: Thank you.

BY MS. WASZMER:

Q. Mr. Krueger, in your experience working with SA360, were those two -- the functionality you just described to the Court, do advertisers care about that functionality, fractional attribution and then the campaign-level conversion?

A. So fractional attribution credit is typically measured through what we call a non-last click attribution reporting method. I don't remember the exact adoption at the time, but at least half, if not the majority, of advertisers would have been using a non-last click reporting method, and even more have been using at least some part of it. So like maybe an advertiser has some mix of attribution, so at least a majority of advertisers using fractional conversion attribution.

And I don't remember the exact percentages, but we actually promote flexible conversion goals. I think we talked about it earlier in the slide. One of the reasons advertisers choose Search Ads 360 is choosing flexible goals for different portfolios and different campaigns.

So I would at least say most advertisers were using one or both of those.

Q. And, Mr. Krueger, the lack of those two functionalities, did that give you any sense of how developed Microsoft's auction-time or automated bidding was at the time you were doing the one-pager?

A. When I first was looking into the requirements of the one-pager and was dictating what would be required, I was quite surprised that Microsoft didn't have this capability. I hadn't previously looked into their offerings. And the previous four, five years that I had worked on Search Ads 360, I had seen most of our advertisers gradually mature to these data-driven fractional attribution model credits, as well as periodically or in a sustained state using various goals at the same time.

To support bidding through custom configurations of credit and goals, significantly, perhaps an order of magnitude, increases the complexity of automated bidding. For a simple example, the bidding system learns across different campaigns.

And so I was at the very least concerned or surprised that Microsoft hadn't begun their explorations into this level of customization, and my immediate thought was should they choose to build it, they would likely have to overcome various challenges associated with the customization framework.

And our level of standard is very high. So you would have to support, you know, 99 percent of use cases, which I personally observed to be very challenging to overcome.

So it made me think that their level of sophistication was at least not tackling some of the more complicated challenges that we had observed in Search Ads 360 and to some extent Google Ads.

MS. WASZMER: Your Honor, I think I just have one or

two exhibits. I'm happy to do them after lunch. It may take ten minutes.

THE COURT: Why don't we do that, since there's also a redirect.

So why don't we take our lunch break. It's a little after 12:30 now. We will return at 1:35.

Mr. Krueger, I will ask you not to discuss your testimony with anyone over the lunch break, and we will see everyone after lunch.

(Recess taken at 12:31 p.m.)

CERTIFICATE OF OFFICIAL COURT REPORTER

I, Sara A. Wick, certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

/s/ Sara A. Wick — October 24, 2023

SIGNATURE OF COURT REPORTER — DATE

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