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ACCOUNTING

**AUDITING/CORPORATE GOVERNANCE |
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Video Transcription: Data CAATs



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Welcome to the video about data CAATs. Let's just look at some of the foundational issues, such as what a CAAT is. C-A-A-T, sometimes pronounced "caat" (k^hɑ:t) – "caat" (k^hɑ:t), or "cat" (k^hat) – "computer-assisted audit techniques" – are techniques used by the auditor to help them perform procedures, either test of controls or substantive procedures, in an environment at the client which is highly computerised. Because the environment is highly computerised, the auditor can make use of computer techniques in doing the audit procedures.

The system CAAT, which has been dealt with in a different video, is a type of technique, which tests controls using test data. Okay, but now we're dealing with a technique called a data CAAT. The confusion that students often have is they think system CAATs don't use test data and that data CAATs do. That's not right. I know data is in the phrase "data CAATs", but a data CAAT does not employ test data to do the test. That is a system CAAT. So what is a data CAAT? It's a data-related audit technique.

A common misconception is that a data CAAT only does substantive procedures. That is not entirely true. A data CAAT, because one of the functions that I'll explain just now is retrieving data from the client, you can employ a data CAAT to test controls. But it's true that the primary use of a data CAAT is in substantive testing – both substantive analytical reviews and substantive tests of detail. So I like to think of data CAATs as being able to do two things, and then when I'm asked to use it in a question, I make sure I address both capabilities of a data CAAT.

A data CAAT can extract information from a client system. Here's an example – Microsoft Excel is a general type of data CAAT used by audit firms, because often Excel is able to couple with the client's system (because most systems will be able to be integrated with Microsoft Excel, because Microsoft Excel is the most dominant spreadsheet program in the market). What Microsoft Excel could do, because of its data CAAT functionality, is extract information from the client's system.

The second thing that a Data CAAT can do, is it can do certain procedures on that data that has been electronically extracted. That's the second principle. A third principle for data CAATs is that it is sometimes referred to as "audit retrieval software". Audit retrieval software is a data CAAT; a data CAAT is audit retrieval software – so don't get confused about the two terms. Why would they call it "audit retrieval software"? Well, it's because one of the key functionalities of a Data CAAT is extracting information – audit retrieval software.

Now, let's talk about what those two broad types of procedures that a Data CAAT can do are:

1. One: retrieve data;
2. Two: work on to-do procedures on that electronic data that has been received.

A data CAAT can extract information and do audit procedures on that electronic data.



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Let's talk about extracting information. When you are wanting to audit accounts receivable, what are the reports (and all a report is, is a collection of information), so what information in the form of reports from the client would you need to audit accounts receivable? Straight away, you should think: "Well, I need a list of all credit sales during the year, because it's the credit sales during the year that produce an accounts receivable balance at year-end". But more specifically, it's the credit sales that have not yet been received in cash – outstanding credit – that is your accounts receivable balance. So there we've got two reports; a report of all credit sales, and a report of all outstanding invoices that have not yet been paid. You're using your data CAAT to extract that information from the client.

How about an age analysis? Either your data CAAT can manipulate the information to categorise it by "amount of days outstanding" (the client's receivables), or you could just extract the age analysis from the system, if that's possible. Either way, you are producing an age analysis which, as you know, is fundamentally important to auditing accounts receivable.

How about a schedule of "all bad debts incurred during the year by customer"? You see, you're going to need to look at that information in order to analyse the accounts receivable account and the age analysis.

So we've got three or four reports that are necessary to audit accounts receivable. And you would actually use a data CAAT audit retrieval software in order to extract that information (if you were going to do it yourself rather than, which is the other option if you don't have the data CAAT or the ability to extract the information yourself, is you request that information from management). Can you see the one functionality of a data CAAT – extracting information – could always be done without a data CAAT by simply asking management to provide you those reports.

So when a question says: "What reports would you want?", it's like a data CAAT question, because a big aspect of a data CAAT question is: "What reports do you need and can you use a data CAAT to extract?" So, once you've got your information through your audit retrieval software, now we want to do our procedures on that information.

So let's stick with accounts receivable. You need to cast those schedules that you've received. Casting, as you know with Microsoft Excel with AutoSum, is a procedure done by the program, but it's an auto procedure to make sure that the column is added up correctly. So you want to cast your schedule. You can also compare two amounts using a data CAAT – this cell against this cell – and calculate the difference if you're using Microsoft Excel, which is a generalised data CAAT.

You can also extract a sample using a data CAAT. Any sample tool used by the auditor to extract a sample and work with the sample is a type of data CAAT.

What else can you do with the data CAAT? Think of all your analytical review procedures – your substantive procedures which are analytical review in nature. What is an analytical review procedure? It's testing plausible relationships between information, often using trends and ratios. All of the analytical review procedures that you would want to do on credit sales and accounts receivable are mathematical in nature, and therefore the data CAAT can do it for you.



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So when you are auditing accounts receivable using a data CAAT, just think: “What are the analytical review procedures that I need to do?”. Every one of them, most likely, you can use a data CAAT to do.

A data CAAT can also extract information, for example exceptions, missing items, duplicate items. These are substantial procedures to test for accuracy, to test for completeness, to test for recurrence. For example, recurrences is your duplication, accuracy is your casting, and missing information is completeness.

Your data CAAT is used throughout tests of detail as well. It can produce an exception report, look for missing item, look for abnormal items, look for transactions processed outside of work hours. Can you see how the data CAAT is used to produce exceptions from the information that has been extracted?

Another thing a data CAAT can do is that it can track an audit trail. If it's the revenue cycle and you've extracted a credit sales and cash sales, when you draw your sample, you can draw information about all supporting documentation, including dates and people who have been involved in those transactions to which the sample has been drawn.

So what we have discussed so far with data CAATs is that there are two main types of data CAAT procedures; and when you get asked to use audit retrieval software or a data CAAT (because they are the same thing), you need to make sure that you address both. What data do I need? What data, therefore, can the data CAAT extract for me? Then the other part of your answer will be – remember the types of procedures that a data CAAT can do on that extracted information. All that electronic computing that Microsoft Excel, for example, can do, that your sampling tool can do – those are data CAATs.

What you do on the data – if it's done manually, it doesn't use the data CAAT – but if it's done electronically, or mathematically, (because you would use the calculator on the spreadsheet program or on the data CAAT; you would produce the ratios electronically, not manually), they would all use the data CAAT. So when you're practicing a data CAAT question and you're seeing the solution, highlight the two different types of procedures:

1. Extracting information; and
2. Doing substantive procedures on that information.

A great tip I was once told for doing data CAAT questions is: “Think, what do you need to do to audit this class of transactions account or this account balance account? What normal procedures would you need to do? Which of those procedures can you use a data CAAT for?” You cannot do well in data CAATs questions unless you already know how you would manually have audited that type of account, because remember what a data CAAT is doing is a certain proportion of those procedures – the data CAAT is helping you do it, or doing it for you.



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Something like enquiry with management cannot involve a data CAAT, because that is something you physically do. Attending the stock count is not something you could use a data CAAT for, but extracting the sample, or with the electronic inventory sheets at the stock count, you could stratify (which means separate and categorise) the data by the amount of time since purchase that the inventory has been sitting in the warehouse, to detect for slow-moving or obsolete goods.

So you can see that a slow moving test for an inventory count can be done using a data CAAT, but actually physically inspecting the inventory, and physically inspecting that the inventory is perhaps not damaged, you would have to do that physically. You cannot use a data CAAT for that.

Doing the calculation of net realisable value to test selling price and cost to sell against the cost of the inventory on the books, that comparison – the calculation of NRV and the comparison to the cost, which is sitting in the accounting records – that is an electronic calculation and comparison, and you can use your data CAAT to do that.

To finish this video, let's just highlight: system CAATs use test data that you run through the system. Please watch the video on system CAATs, which help you do testing of controls. In this video, we've discussed data CAATs (which are also called audit retrieval software), which is used to extract information from the client. When you extract information, you may need that information for control testing, but often, you'll be using it for substantive procedures. And then, the other thing that the Data CAAT does, is it does procedures on that electronic information. It cannot do manual procedures, which require the auditor to go and physically do, but the electronic tests – that a data CAAT can do.

I hope this video has been helpful.