**Electronic disclosure and technologies used in disclosure**

In this element we will look at the challenges of disclosure in a digital age, how technology is being used in relation to disclosure and some of the underlying principles of that technology.

**Introduction**

In relation to the Business and Property Courts (BPC), 57AD PD 2.5 and 2.6 make clear that ‘document’ means anything in which information of any description is recorded and that this extends to electronic documents (outside of the BPC, CPR 31.4 and 31B PD contain rules to the same effect). But note that this definition of document includes records of information which we would not normally consider documents at all, such as voicemails, videos, text messages, databases and meta-data (data about data).

The scope of the electronic documents that may need to be disclosed is therefore huge.

We will use the term ‘electronic document’ in this element to be consistent with the CPR - the breadth of this should not be forgotten.

In practice, electronic documents are now the norm, and paper documents are more the exception. The concerns expressed about the excessive cost and burden of traditional disclosure orders (as set out in other elements) largely result from the volume of electronic documents often encountered. Accordingly, the court’s focus when making case management decisions impacting on disclosure will generally be in relation to electronic disclosure.

**Civil procedure rules**

Given the broad definition of documents, the provisions in the CPR relating to disclosure apply to disclosure of electronic documents too. It is worth considering the regime in the BPC and the rules outside of the BPC separately.

**Electronic disclosure in the BPC**

The disclosure regime in 57AD PD requires the parties to seek to agree the scope of any search for documents, and the use of software or analytical tools, including technology assisted review software and techniques.

The court can also give directions in relation to these matters, and also direct the use of particular software or analytical tools, the use of data sampling or the format in which documents are to be disclosed.

Section 2 of the Disclosure Review Document also contains a form which guides the parties through important considerations in relation to disclosure and electronic disclosure, in order to prompt preparation in this area by the parties and provide a structure for discussion and hopefully agreement.

**Read alongside:** Access 57AD PD. Read Section 2 of the Disclosure Review Document at appendix 2. You do not need to learn all the details of the Disclosure Review Document, but you should understand the main issues that need to be considered from the perspective of electronic disclosure.

**Electronic disclosure in the CPR generally**

The CPR (outside of the BPC) require parties to consider before the first CMC how they consider disclosure should be managed. 31B PD brings this to life from the perspective of electronic disclosure.

**Read alongside:** Access CPR 31B PD. Read it, including the Electronic Disclosure Questionnaire (‘EDQ’) which forms the schedule to the PD. You do not need to learn all the details of the Electronic Disclosure Questionnaire, but you should understand the main issues that need to be considered from the perspective of electronic disclosure.

31B PD requires the parties to consider at an early stage how and where electronic documents are stored, how a search will be carried out, what a ‘reasonable search’ means in the context of electronic documents and how documents will be provided to the other party. The parties are expected to try and agree these matters. The EDQ provides a useful tool to help in that process, posing a series of questions to help parties gather the relevant information and discuss proposals with each other.

**Electronic disclosure – challenges - Task**

You act for X. X has brought a professional negligence claim against its accountants, Y. One issue in dispute (the ‘Issue’) is when, if at all, did Y tell X that X’s accounts had historically overvalued certain intellectual property (the ‘Advice’).

Let us assume, as is likely, that the parties have communicated by email over a long period of time, and that each party runs its business in a predominantly ‘paperless’ way.

As set out above, you need to give detailed consideration to disclosure prior to the CMC in accordance with the rules, although in practice you will usually need to attend to this much earlier, quite possibly before the issue of proceedings.

What will you need to consider with X and with Y’s solicitors to make disclosure work? Give this some thought.

Challenges include:

How far back are you going to search for the Advice?

How are you going to identify which emails are relevant to the Issue?

If you are going to do this using a keyword search, what keywords are appropriate? Will a keyword search be effective?

Are you going to limit the search to emails sent to / by particular individuals?

Are you going to search deleted items? Where are these stored? Could there be relevant emails on a backup server / safe storage somewhere?

Where could other (non-email) documents be? As well as ‘files’ in the traditional sense (documents, spreadsheets) are there databases that could hold relevant information, such as accounting databases? How can these be searched?

Could there be relevant emails / documents on employees’ phones?

Can you do all this without corrupting relevant metadata?

How are you going to provide all these emails / documents to Y for inspection?

**Electronic disclosure and technology?**

Within the challenges set out on the previous page, you can see challenges relating to:

a. The search for documents / the process of identifying disclosable documents;

b. The presentation of documents to the other party.

The expression ‘e-disclosure’ is now used to group a variety of technological solutions to disclosure including everything from spreadsheets to artificial intelligence, and we will look at some of these solutions in more detail.

**E-Disclosure Software**

E-Disclosure normally involves the sharing of a large volume of documents which renders document exchange using email impractical, unsafe and often impossible due to the size of the files.

Documents can be shared using any kind of cloud storage solution, and specific E-Disclosure solutions have evolved to allow lawyers to process, review and tag (categorise) documents in the cloud. Such software makes it easier for lawyers to search documents, eliminate irrelevant documents and duplicates, and manage the process of review more easily. It often allows for an analysis of data, redactions and the creation of new documents for other parties.

As well as the above some software utilises Artificial Intelligence to assist the human reviewer in the disclosure process. We will look at what AI is and how it can help lawyers in subsequent slides.

**What is Artificial Intelligence?**

**Oxford Dictionary Definition:** *the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.*

There are a variety of definitions of AI and some disagreement over what technologies should be covered. ‘Strong’ AI is normally considered to be the idea of sentient machines that can think like we do. ‘Weak’ AI is what we experience day to day – AI that performs a particular set of tasks.

Smart assistants (like Siri or Alexa) are obvious examples of AI in day-to-day life, but it is also fundamental to navigation, many apps, social media feeds, targeted advertising, video/music streaming etc – in fact it would be unusual for you to not use AI during any particular day.

**What is Machine learning?**

*Machine Learning* is a branch of AI which uses data to imitate the way a human learns. A mathematical model (known as an *algorithm*) can use data to recognise patterns, extract key insights, or make predictions.

Machine learning can only function with the use of large quantities of data. Data is provided to the algorithm which trains itself (to find patterns for example), while a human can help train the algorithm by modifying its parameters or focus. It is perhaps no surprise that the more data provided the more accurate a machine learning system can become.

**Machine Learning in E-Disclosure**

Using the case facts as a basis a machine learning algorithm can be tasked to *read* documents for relevant words, bringing those documents together in particular clusters.

This provides a basic grouping of which documents might be important.

**NLP:** Key to modern e-discovery is Natural Language Processing (NLP). NLP means the document search can be more refined because the algorithm can uncover concepts based on how humans communicate.

**Training the Machine**

**Predictive Coding** is the machine learning process by which case experts teach software to locate relevant information, thereby reducing the time human reviewers must spend doing so.

As the algorithm picks certain documents lawyers will review the documents to determine how important they are, and feed back into the system. That way the algorithm is being *trained*. For example, a human operator selects a sample of relevant documents from a larger set and an AI identifies further relevant documents based on the characteristics of the first hand-picked collection of data.

**E-Disclosure Challenges**

There are a number of challenges for any firm implementing machine learning in relation to e-disclosure:

- Cost – of course all technology comes with a cost and often a significant cost.

- Resources – as you have seen, expertise is required to ensure that the system is operated effectively.

- Client trust – some clients may need to be reassured about machine learning systems, but others might *expect* that such systems are used.

**Summary**

- In the vast majority of cases, disclosure is primarily about electronic documents.

- Parties need to consider in detail, before the CMC, their proposals for electronic disclosure.

- Both the disclosure regime in the Business and Property Courts and the CPR of general application provide structured questionnaires / forms to guide parties through the relevant considerations.

- Technology can play an important role in:

(a) The search for, and identification of, relevant documents.

(b) The storage of documents and their presentation to other parties and the court.

- E-Disclosure software can help lawyers organise and review disclosure more effectively. Such software often utilises Machine Learning to assist the human reviewer.

- Machine Learning requires:

(a) Large amounts of data

(b) Input/training from a human reviewer