ENGLISH LAW PRESUMES SPREADSHEETS ARE CORRECT

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Programmers are perfect
The presumption is that computers are ‘reliable’

The central problem (implicit and explicit):

‘In the absence of evidence to the contrary, the courts will presume that mechanical instruments were in order at the material time’ (Law Commission of England & Wales)

That is, the Law Commission have indicated that programmers are perfect

There is no understanding that failures in complex networks of software systems can produce subtle mistakes that are not like obvious errors such as when a cog falls off a spindle in a cash register

‘Perfect’ spreadsheets

For how this works for spreadsheets, see ‘Business records’ at xii-xiii in:-


Should the justice system test the evidence?
The evidence *must* be tested?

Judges have made mistakes by

refraining from ensuring that the nature and quality of the evidence is properly tested

making flawed assumptions about the evidence before them that is not warranted

Note the erroneous interpretation of the evidence, not based on any facts, by Stanley Burnton LJ in *O’Shea v R* [2010] EWCA Crim 2879 at [56]:

‘It is also surprising in the extreme that if the supposed fraudulent webmaster was able to debit the appellant’s credit card account, he did so for such limited amounts and on relatively few occasions. This, is however, a minor point.’
Judicial assumptions

Judges often assume that banks carry on their business competently

*Bernt Petter Jørgensen v DnB NOR Bank ASA*, Journal number 04-016794TVI-TRON, Trondheim District Court, 24 September 2004 (case from Norway)

A thief stole a number of cards, and where the customer claimed the PIN was not written down on or near the card, the trial court accepted the evidence provided by the bank, and found against the plaintiff

It does not appear that the decision in this case was appealed


Relevant evidence: audits of the banking systems

Comments made by Assistant Judge Leif O. Østerbø who tried the case, in relation to evidence that was never submitted to the court:

‘It is assumed that the standard security systems that are used are effective. However, according to Jørgensen, no cases have been documented that demonstrate the implementation of the systems are secure.'
Continued:

The court refers in this respect to the fact that banks are subject to supervision and operate a comprehensive internal control work, and the witness Haugstad’s explanation that both the standards and the practical implementation are revised thoroughly and regularly. In that regard, Haugestad explained that the systems are subject to annual audits. The Banks Control Center (BSK), in addition to the major international card companies, conducts such audits.

*The court does not find that there is reason to accept that the banks’ security systems are in doubt.* Although the implementation of a system necessarily involves opportunities for errors, the court cannot see that this involves significant practical risk for customers with cards.’ (Italics added)
Audits are important evidence

Is the purpose of a trial to test the evidence?
Should a judge *assume* that the standard security systems used by the bank were effective in the absence of any evidence?

Should a judge accept *untested* assurances that audits actually take place?, not knowing whether:

- such audits are conducted internally or by the Banks Control Center
- the audits revealed problems that might affect the systems for ATMs and PINs
- the audits were conducted by people with appropriate qualifications
No reason to doubt ....

Can a judge conclude that there was no reason to doubt the bank’s security systems could be at fault?

http://journals.sas.ac.uk/deeslr/article/view/1996/1933
Why audits are important

A and others (Human Fertilisation And Embryology Act 2008) [2015] EWHC 2602 (Fam)

Further action following on from AB v CD [2013] 2 FLR 1357, [2013] EWHC 1418 (Fam)

Following Cobb J’s judgment, the HFEA required all 109 licensed clinics to carry out an audit of their records

51 clinics (46%) had discovered ‘anomalies’ in their records:

- WP Forms and PP Forms absent from the records
- WP Forms or PP Forms being completed or dated after the treatment had begun
- Incorrectly completed WP Forms or PP Forms (for example, forms not signed, not fully completed, completed by the wrong person or with missing pages)
- Absence of evidence of any offer of counselling
Audits continued

Sir James Munby, President of the Family Division said, at [8]:

The picture thus revealed … is alarming and shocking. This is, for very good reason, a medical sector which is subject to detailed statutory regulation and the oversight of a statutory regulator – the HFEA.

The lamentable shortcomings in one clinic identified by Cobb J, which now have to be considered in the light of the deeply troubling picture revealed by the HFEA audit and by the facts of the cases before me, are, or should be, matters of great public concern.

The picture revealed is one of what I do not shrink from describing as widespread incompetence across the sector on a scale which must raise questions as to the adequacy if not of the HFEA's regulation then of the extent of its regulatory powers.
Compounding the problem
Failing to analyse facts and evidence critically

Outline of a failure: *Regina v Cahill and Pugh*

Nurses were alleged to have fabricated blood glucose readings (that is, not having actually taken any readings from patients) and then written them up in paper patient notes.

For vulnerable adult patients, fabrication would be a criminal offence.

The implication was that the nurses were lazy, dishonest and put patients at risk.

New developments

During the trial, the prosecution produced new evidence: an encrypted CD of gigabytes of XML files.

A joint report was produced by the experts.

A witness for the manufacturer of the device was called to be cross-examined over the joint report.

It became clear that this witness had visited the hospital before the police had seized a copy of the data.

It emerged that the manufacturer had ‘tidied up’ the database, and they had kept no records of their actions.

The judge excluded the evidence (see next slide).

**Conclusion:** it is about time lawyers understood the complexities of software code and systems.
Relevant materials


[https://journals.sas.ac.uk/deeslr/issue/view/340](https://journals.sas.ac.uk/deeslr/issue/view/340)


[https://journals.sas.ac.uk/deeslr/issue/view/528](https://journals.sas.ac.uk/deeslr/issue/view/528)
To sum up, consider the following:

Job v Halifax PLC (not reported) Case number 7BQ00307


http://journals.sas.ac.uk/deeslr/article/view/1905

Shojibur Rahman v Barclays Bank PLC, with a commentary


http://journals.sas.ac.uk/deeslr/article/view/2040

Shojibur Rahman v Barclays Bank PLC (on appeal from the judgment of HH District Judge Millard dated 24 October 2012), with a commentary


http://journals.sas.ac.uk/deeslr/article/view/2041

Regina v Seema Misra, T20090070, In the Crown Court at Guilford, HH Judge N. A. Stewart and a jury


http://journals.sas.ac.uk/deeslr/article/view/2217

Documents Supplement
Free journal

*Digital Evidence and Electronic Signature Law Review* [http://journals.sas.ac.uk/deeslr](http://journals.sas.ac.uk/deeslr)


Free books


*International Electronic Evidence* (British Institute of International and Comparative Law, 2008)

[https://www.biicl.org/international-electronic-evidence](https://www.biicl.org/international-electronic-evidence)