

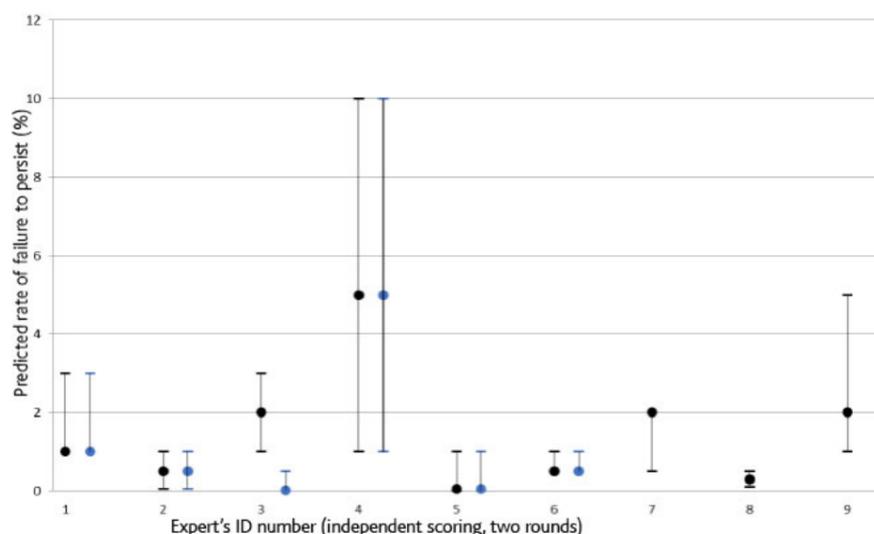
# Safeguarding the Nation's Digital Memory

## Building the evidence base for Digital Preservation Risk

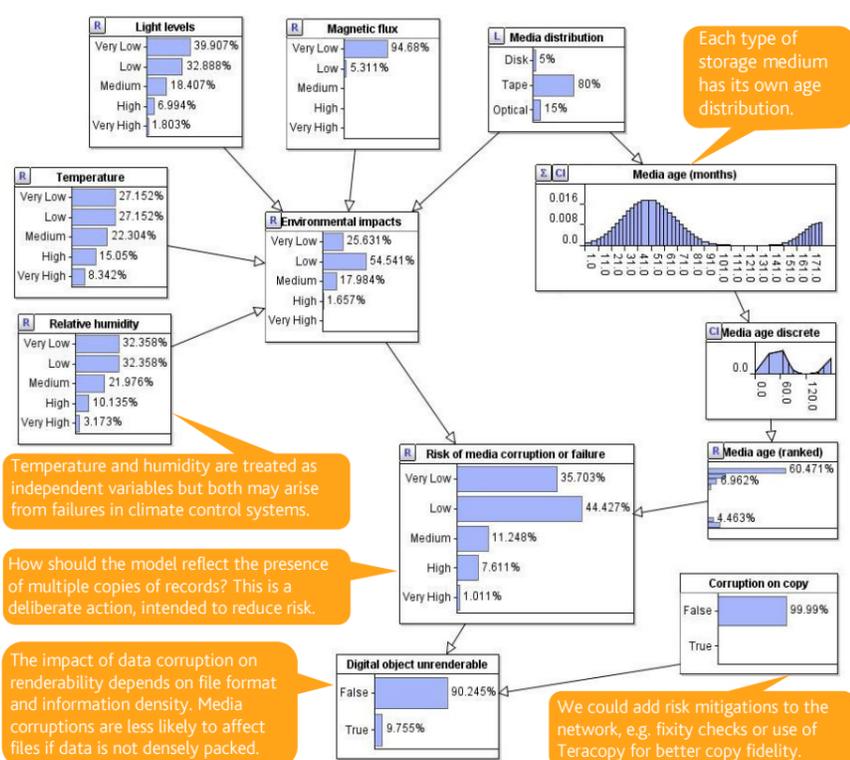
We're aiming to create a new, evidence based framework for understanding and managing digital preservation risk. This will:

- Describe and explain a complex and interdependent map of risk events, risk management actions and their impact on preservation outcomes.
- Allow us to compare and prioritise very different types of threats to the digital archive with potential impact in different areas.
- Operate even where we have limited data or imperfect evidence.

Out of 100 instances when an archived item is physically intact *and* digitally intact, in how many instances will it *fail to persist*?



Range graph showing experts' upper, lower and best estimates for two rounds of the IDEA protocol. *Workshop report: Modelling digital preservation using Bayesian Networks, TNA & University of Warwick, 2018.*



Part of TNA's experimental Bayesian network, with areas for further work.

## Eliciting expert judgements

Where there is limited quantitative evidence, expert elicitation protocols can help fill the gaps. In the IDEA (Investigate, Discuss, Estimate, Aggregate) protocol for structured expert judgement, a specific question is framed for experts who offer an informed view. After discussion, and structured challenge the process is repeated and these values are aggregated to provide a working estimate for the statistical model.

## New Horizons

This is a fundamental tool for building inclusive digital archival practice for the future:

- A new approach to Trust

A "bottom-up" data driven alternative to technocratic, standards-based approaches which do not recognise diverse contexts and different priorities.

- An inclusive digital archive

Combining expert judgement and hard data for a new approach to decision making. Analysing our experience, decisions and reasoning to reduce bias and improve accountability.

- New partnerships

An approach that is greater than the sum of its parts. This work relies on partnership and sharing insight and experience across archives and the wider cultural heritage sector.

- New skills

Quantitative modelling skills for digital archivists will help equip us to build the next generation of disruptive digital archives.