




Australian Academy *of the Humanities*

Trust and its discontents

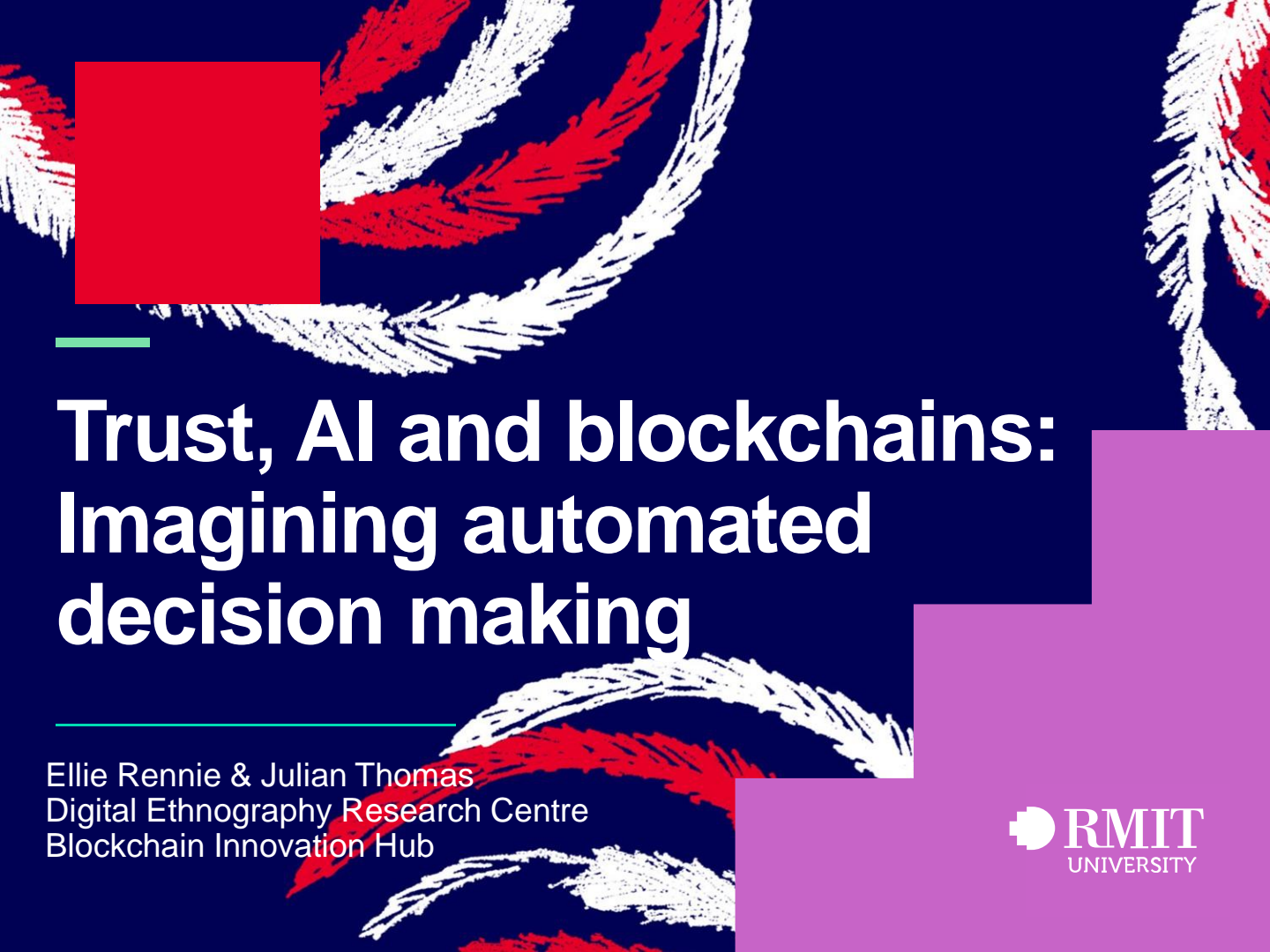
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ELLIE RENNIE & JULIAN THOMAS

@ElinorRennie @juliant09 | #AAHTrust

The background features a vibrant red field. In the top-left corner, there is a bright yellow circle. Overlaid on the red field are intricate, dark blue line-art patterns that resemble traditional Indigenous Australian designs, possibly representing a map or a specific cultural motif. The text is centered in the left half of the image.

We acknowledge the
Wurundjeri people of the
Kulin Nations as the
traditional owners of
this place



Trust, AI and blockchains: Imagining automated decision making

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Digital Ethnography Research Centre
Blockchain Innovation Hub

ADM: Computers making decisions, using technologies such as ML, blockchains: currently reconfiguring public services

AI and blockchains formalise activities that may otherwise fall outside the view of governments

AI and blockchains are “trust-minimising” technologies — displacing institutional functions/protections?

ADM creates new, expanded mechanisms for “co-operation without trust” (Cook, Harden and Levi)

AI and blockchain technologies:

- Make activities **governable** by making them **visible**;
 - Do so at a **scale** and **speed** for activities to be **regulated continuously**, rather than occasionally, periodically, and retrospectively
 - Enable **coordination** and **connection** between institutions in ways that reflect the distribution of regulation and governmental functions in complex modern economies.
- Facilitate general purpose digital infrastructures that aim to enable “**co-operation without trust**” (Cook, Hardin & Levi) across all parts of government and the economy.

Paradise Papers

✦ Consisting of 13.4 million leaked files, the Paradise Papers contained information showing how some of the richest companies and individuals were using transnational structures to avoid tax.

✦ The ATO used natural language processing techniques and scalable cluster computing infrastructure to index and extract names and other information. AI enabled review of a dataset that would have been extremely resource-intensive to undertake manually

AUSTRAC

- ◆ Detect suspicious cash-funded international fund transfers that span multiple financial institutions (working with Fintel Alliance partners).
- ◆ Data-matching and machine-learning tools are combined with privacy-preserving technology, to identify financial-crime risks that don't become visible until they join up disparate and distributed data silos in a privacy-preserving manner.
- ◆ Once a case for suspicion has been established, AUSTRAC can then request that the banks provide the identities of those involved, and commence further manual investigation, which may then lead to law enforcement activities.

Australian National Blockchain

- ◆ A “private”/permissioned blockchain, developed by Data 61, IBM, national law firms
- ◆ Smart contracts meet all the legal requirements of an enforceable contract in Australia, including requirements such as compliance with Australian privacy and data protection laws
- ◆ Owned/controlled by a multi-sectoral network of participants— large corporate entities, public sector bodies, NGOs, etc. All the network participants hold copies of the ledger; subscribers get access to the services

MyGovID

- ✦ User establishes their identity once, and then uses that identity to interact with services.
- ✦ Trusted Digital Identity Framework – all players abide by privacy and security protocols.
- ✦ Towards gateway services.

Land Title

- ◆ Creates efficiencies within existing Torrens system. May also enable new innovations, such as different forms of leasehold, or greater transparency in historical records of a property that could inform valuation and markets.
- ◆ Grey areas could experience rapid change (as has occurred with short-term rental markets).

dutyof.care

- ◆ Intended to provide a platform for organisations to better monitor compliance. The platform detects if an individual's compliance has been revoked, expired or has lapsed by verifying records from websites and APIs (such as databases of Working With Children check in Victoria).
- ◆ The record is then recorded in a smart contract. The results are stored privately, published only to organisations with 'an appropriate relationship to the verified constituent'.

IMPLICATIONS...

Cooperation between institutional actors could be significantly improved, with possibilities such as continuous regulation/compliance

Opportunities for service provision by non-government actors (social innovation) due to “trust minimising” capabilities.

