Why preserving databases matters and why it is harder than it sounds

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UK Data Service

Title

```
UPDATE PROGRAMME
SET TITLE = “Why curating relational
databases is different and why it’s
more of a philosophical matter than
one might immediately think”
WHERE TITLE = “Why preserving
databases matters and why it is
harder than it sounds”
```


STUDENT	
ID	COURSE_ID
26	CS101
27	CS101

COURSE_FEE	
COURSE_ID	FEE
CS101	£200
CS102	£150

ESRC Big Data Network

- Phase 1: Administrative Data Research Network
- Phase 2: Business and Local Government Research Centres
  - Urban Big Data Centre (University of Glasgow)
  - Business and Local Government Data Research Centre: (University of Essex)
  - Consumer Data Research Centre (University of Leeds and University College London
- Phase 3: Third Sector and Social Media Data

UK Data Service: “Big Data Network Support”

- Pre-ingest / Collections Development
- Ingest
- Data Curation
- Access
- Training / Capacity Building
- Benefits Framework
- Public / Researcher Engagement
- Planning / Protocol Development
- Sustainability

Big Data Network Support: Preservation

- Capacity building within the UK Data Service
  - Research project --- archiving and providing access to administrative and transactional data
  - Research project --- archiving and providing access to social media

Operational databases --- states

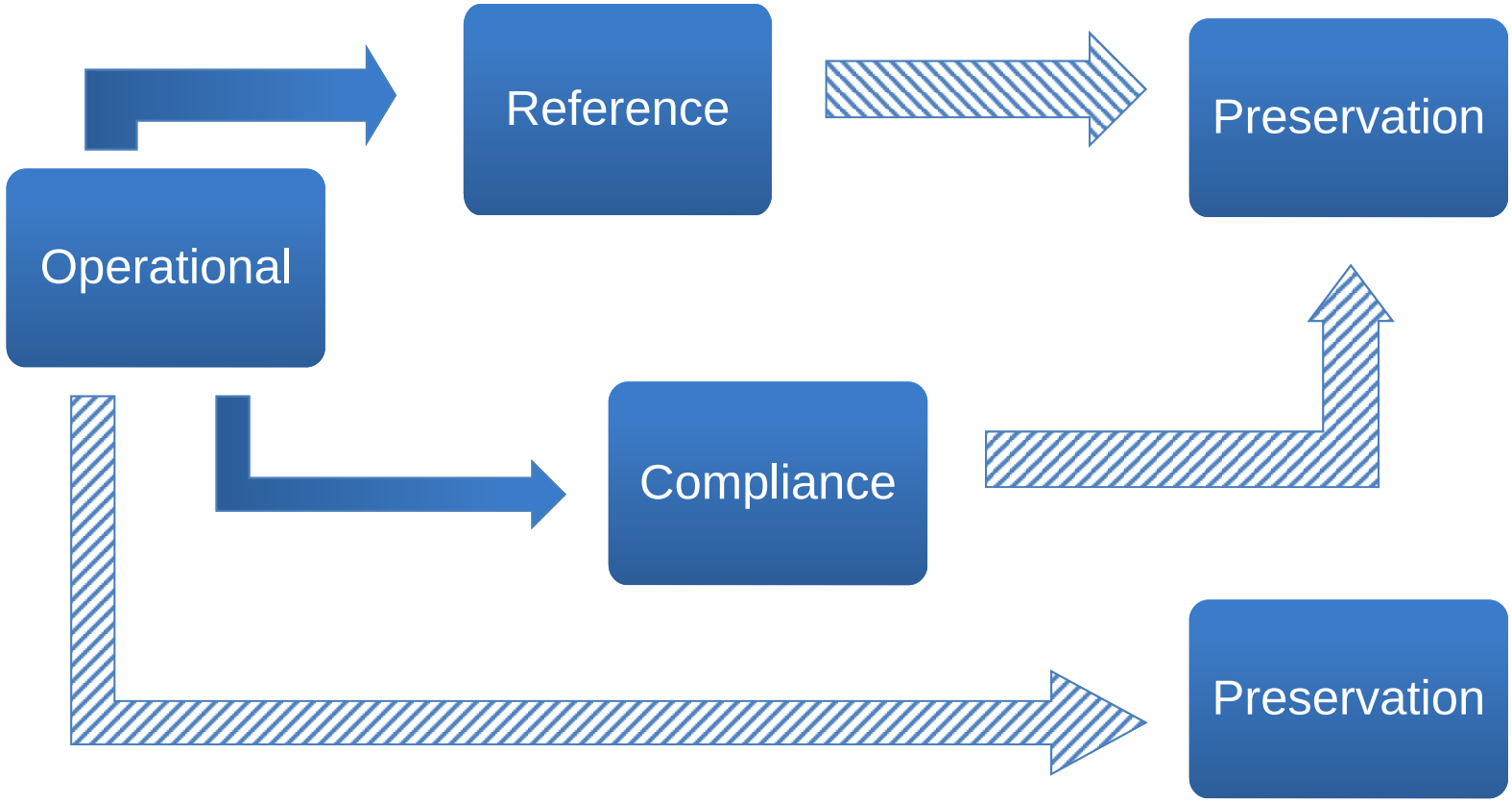
- Operational
  - Current use version
- Reference
  - Non-operational snapshot
- Archive
  - Version maintained for compliance and business protection

(Source: Mullins (2007))

Operational databases --- states (2)

- Operational
  - Current use version
- Reference
  - Non-operational snapshot (contender for SIP)
- Compliance
  - Version constructed from non-operational records (i.e., not expected to be referenced again) (contender for SIP)
- Preservation
  - Bit-stream
  - Primary migration

Workflow?


Reference
Preservation
Operational
Compliance
Preservation

Questions

- Does this model seem ring true?
- And, if yes, which is the best route to:
  - Reliability
  - Integrity
  - and Usability