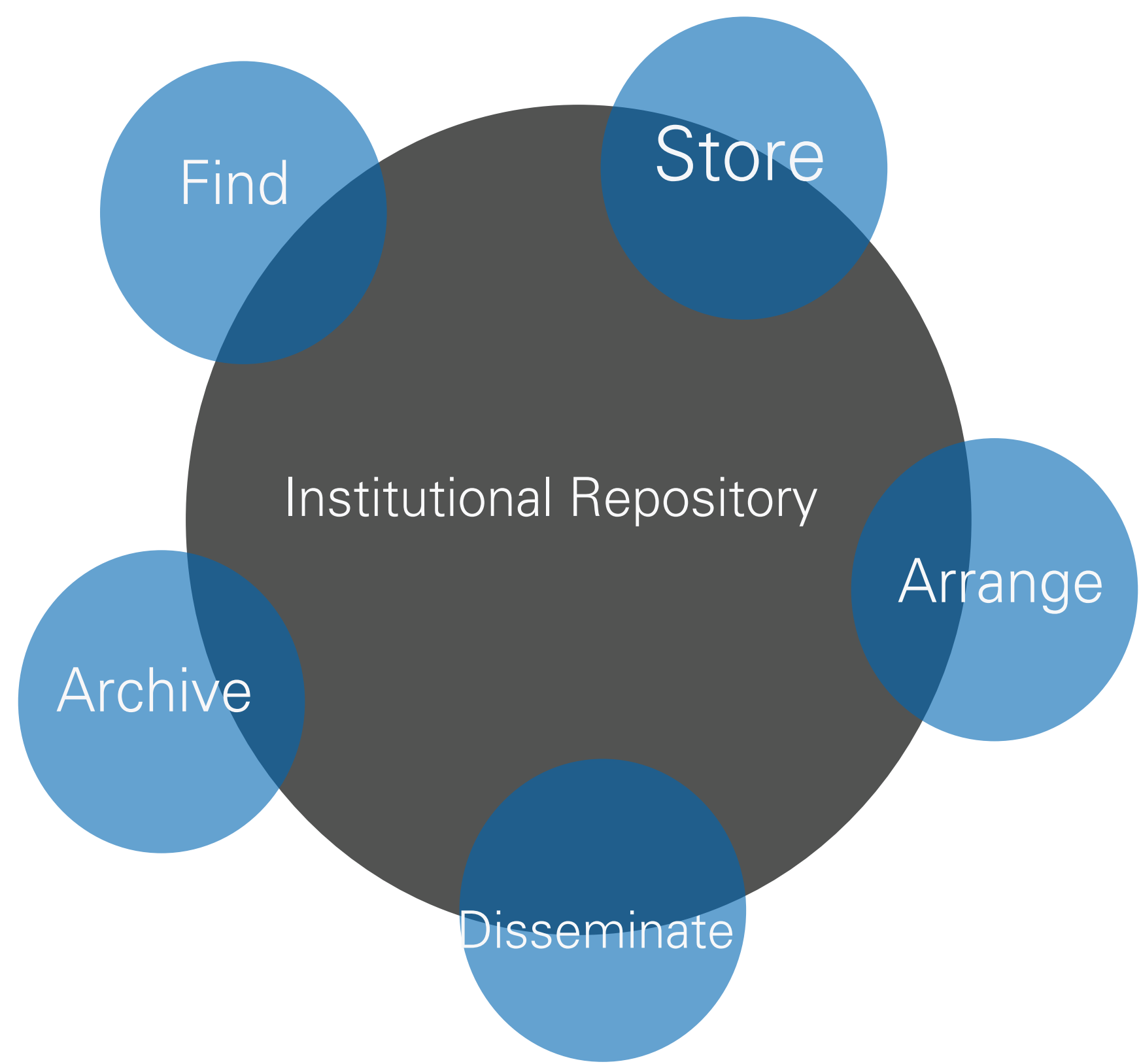# An investigation into the extent to which South African repositories comply with international trust standards

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Institutional Repository — Find, Store, Arrange, Archive, Disseminate
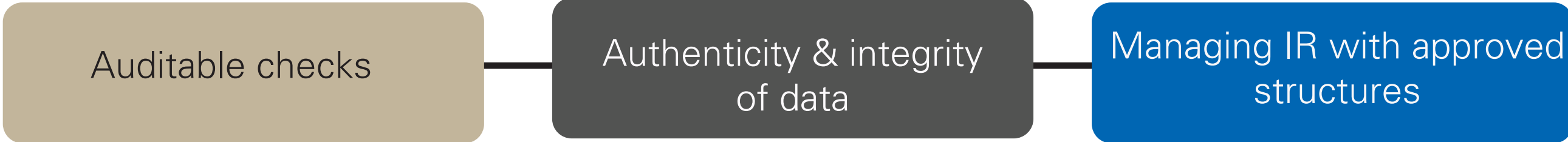
INSTITUTIONAL REPOSITORY (IR)

Consists of accessible collections of scholarly work that represent the intellectual capital of an institution.

- Maximises access to research outputs publication.

- Increase the visibility and academic prestige of both the institution and authors.

INTERNATIONAL TRUST STANDARDS

- IR trust assessment can be done in terms of the following international standards
- Trustworthy Repositories Audit & Certification (TRAC)
- The International Organization for Standardization (ISO) 16363
- The 'Deutsches Institut für Normung' (DIN) 31644

THE BENEFITS OF COMPLYING TO INTERNATIONAL STANDARDS

Auditable checks — Authenticity & integrity of data — Managing IR with approved structures

TRUSTED DIGITAL REPOSITORY

- Provides reliable, long-term access to managed digital resources to its designated community, now and in the future.
- Has practices, policies and performance that can be audited and measured.

TYPES OF TRUST ACCREDITATION

Basic certification: Granted to repositories which obtain DSA certification. It comprises 16 criteria that may be self-assessed or peer reviewed.

Extended certification: Granted to Basic certification repositories which perform a structured, externally reviewed and publicly available self-audit based on ISO 16363 or DIN 31644.

Formal certification: Granted in addition to Basic certification. Obtain full external audit and certification based on ISO 16363 or equivalent DIN 31644 .

TO WHAT EXTENT DO SOUTH AFRICAN DIGITAL REPOSITORIES COMPLY WITH THE DEVELOPED OAIS BASED MODEL IN TERMS OF TRUSTINESS?

Aims of the study

- Develop a South African digital repository trust assessment model.

Research questions

- Which international repository assessment standards can be used to assess South African repositories?
- To what extent do South African repositories comply with this model in terms of trustiness?
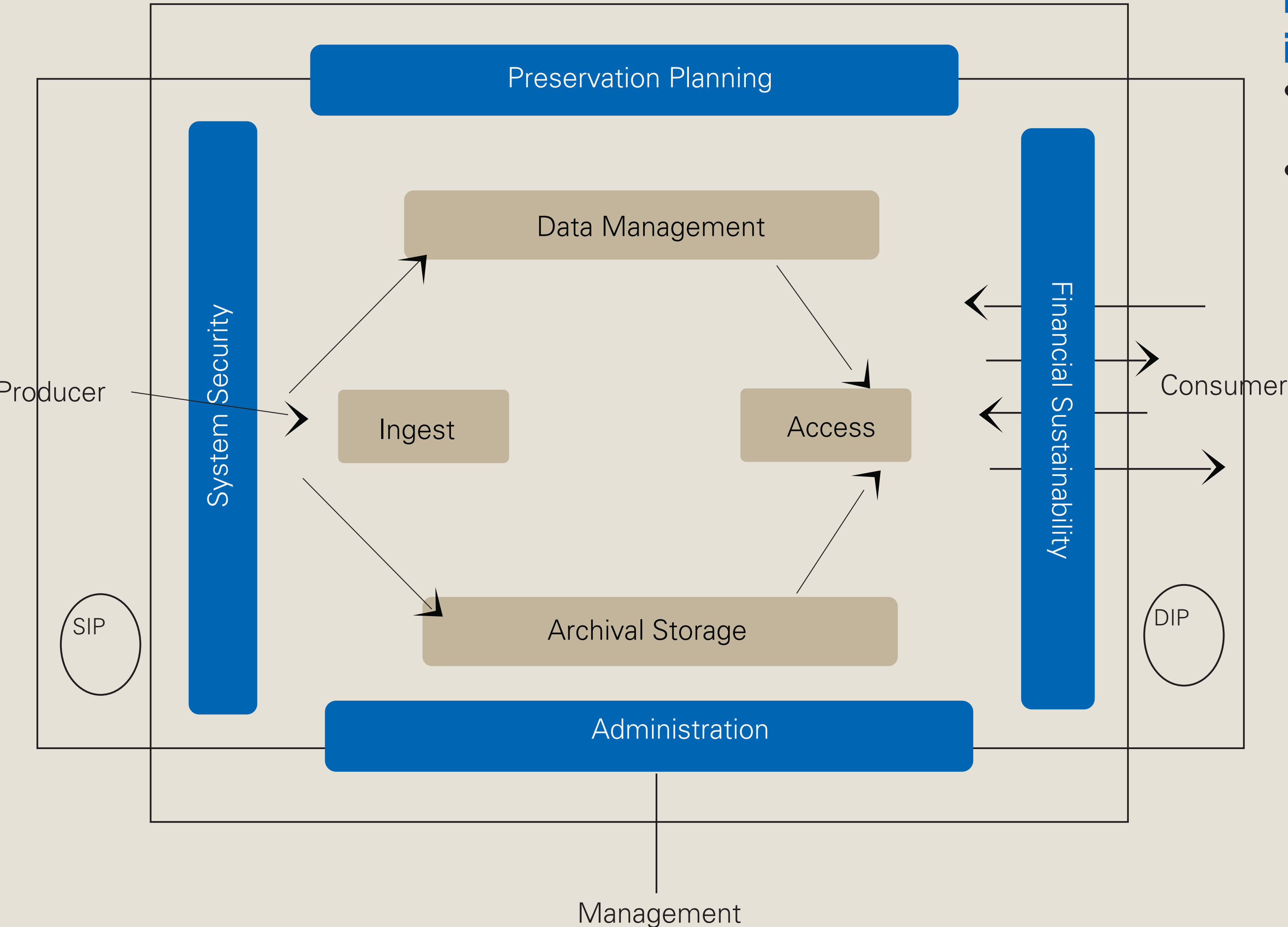- What model should be developed for South Africa as a developing country in striving for trustiness?

Research methodology

The research was a qualitative study which used a case study design and a structured interview schedule as the data collection instrument.

Data collection

Face-to-face interviews with a small purposively selected digital repository managers from South African institutions that have implemented functional digital repositories.

The model

Findings

Admin coordination infrastructure
- Comply with the criteria to a large extent
- Shortfalls caused by institutional structures and processes .

Ingest capability infrastructure
- Adequate tools and processes to manage the ingest processes.
- Compliance requirements are being met

Data management infrastructure
- Comply with the criteria on a medium to full extent.
- Shortfalls caused by not having skills to manage research data.

Metadata management infrastructure
- Full compliance with criteria
- Areas to improve on include checking interpretability on a regular basis.

Access capability infrastructure
- Comply with the criteria to a large extent
- Policies are in place for the disseminating digital objects.

Preservation capability infrastructure
- Compliance requirements are met minimally
- A common shortfall is not having preservation strategies.

Financial sustainability infrastructure
- Compliance requirements are met minimally.
- A common challenge is the absence of a fiscal programme to sustain the repository.

System security sustainability infrastructure
- Comply with the criteria on a medium to full extent.
- Shortfalls caused by risk assessments not being conducted regularly and having no security protection measures.

Conclusions

South African digital repositories.
- Do not fully comply with the assessment standard
- Do comply with international repository assessment standards at a certain level.
- May not be ready for full accreditation, but may be closer to the target than what was previously anticipated. It is possible for South African repositories to meet the international standard requirements for trustiness.

Recommendations

The four participating repositories should at least attempt to do a formal evaluation of their trust status. In order for South Africa's IRs to fully comply with international trust standards, the following goals need to be achieved:

- South African digital repositories need to review the processes in place that inform sustainability.
- The financial and human resources elements of digital repositories need improvement from an organisational perspective.
- Training in the use of international repository assessment standards should be introduced.
- Digital repositories could conduct feasibility studies based on the criteria of the OAIS based model.
- Similar assessments can be conducted at intervals to determine the level of digital repositories working towards compliance of international repository assessment standards.

References

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