

InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Malaysia

Managing Primary Research Data and Records for Research in Research Institutions and Related Organizations: Examples from the TEAM Malaysia Case Studies

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InterPARES 3 Project

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Research Project Title:

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TEAM Malaysia

Agenda:

- Introduction
- Research on Primary Data and Records for Research
- Centralized Data Archives
- The Malaysian Case Study
- Conclusions



Introduction

- JISC Guidance on Managing Research Records
description of research records
- Spectacular examples of failures in recordkeeping
because of the technical challenges of managing
electronic records.



Research on Primary Data and Records for Research

- University of Northumbria, UK research in one higher education institutions in 2003
- National Archives of Malaysia survey on electronic records in 2003
- Research on education and training needs in the field of electronic records management in the Malaysian Federal Ministries in 2006

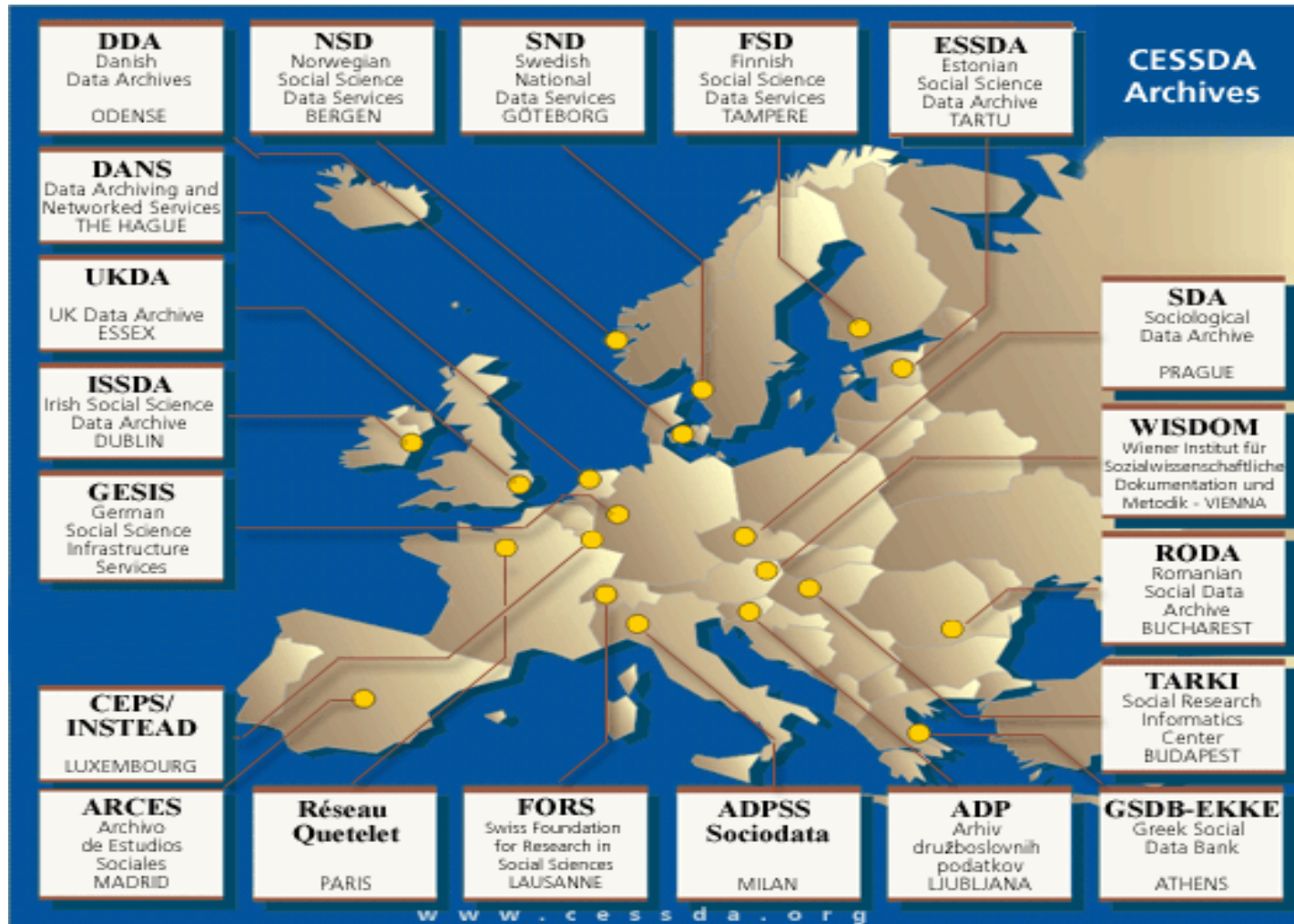


Centralized Data Archives

- European Data Archives
- UK Data Archives
- North American Data Archives
- Other Data Archives Worldwide.



European Data Archives



Economic and Social Data Service UK (ESDS)

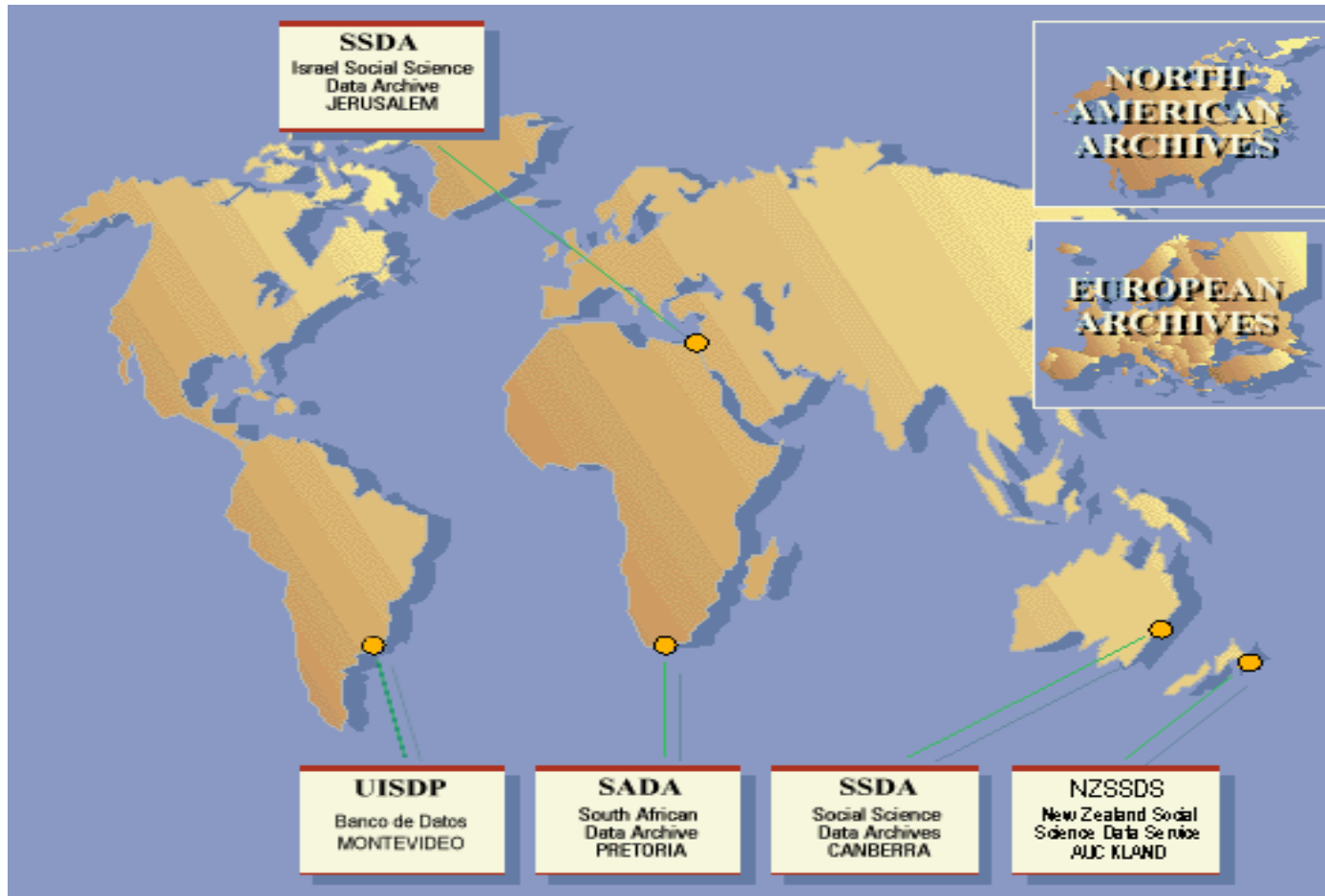
- University of Essex :
 - UK Data Archives
 - Institute for Social and Economic Research (ISER)
- University of Manchester :
 - Manchester Information and Associated Services (MIMAS)
 - Cathie Marsh Center for Census and Survey Research (CCSR)



North American Data Archives



Other Data Archives Worldwide



The Malaysian Case Studies: Background

- Extensive research done by the Malaysian research institutes and related organizations:
 - Lack of access to research data and records
 - Each research institute keeps its own data and records
 - Research findings and results that may not be fully utilized or be made known to the public.



The Malaysian Case Studies: Objectives

- To investigate the nature and characteristics of primary research data and records for research in the surveyed research institutions and how they are being managed.
- To assess the most urgent issues and problems associated with the creation, management and preservation of these records.
- To investigate “most-at-risk” materials and metadata, such as date created, date last accessed, carrier, operating systems, software used, equipment required and its availability.



The Malaysian Case Studies: Objectives

- To determine what research data needs to be archived for long-term storage and re-purposing.
- To study the practice of preserving digital archival materials in the United Kingdom since their commencement in practising electronic government.
- To create a framework of preserving digital archival materials within the context of InterPARES Project theory and methods.



The Malaysian Case Studies: Objectives

- To develop a proto-type data archives for social sciences research in Malaysia based on the findings of the research for the purpose of preservation and re-purposing.
- To make recommendation to the Ministry of Science, Technology and Innovation to provide facilities for the implementation of Data Archives for social research in Malaysia.



The Malaysian Case Studies: Methodology

- Theory and methods of digital preservation developed by InterPARES project and practices of the UK Data Archives.
- Questionnaire survey and semi-structured interviews.



The Malaysian Case Studies: Methodology

- Quantitative and qualitative data have been/will be gathered based on the following characteristics:
 - nature / type of research – personal scholarly activity / pure research / applied research
 - methodology – qualitative / quantitative / mixed
 - currency – in progress / completed
 - duration – short / medium / long
 - management requirements – simple / medium / complex
 - size, in terms of project team members – small / medium / large
 - staffing – academics / contract researchers
 - funding source – internally funded / externally funded
 - partnerships – staff only / internal partners / inter-institutional partners / external / international



The Malaysian Case Studies: Methodology

- The study involves the different stakeholders in the research institutions comprising:
 - Researchers
 - Research directors
 - Administrators
 - IT/Systems staff
 - Records practitioners or staff who are given the responsibility to manage records.



The Malaysian Case Studies: Locations of Research

- Institute of research in the public universities in Malaysia (UM, USM, UKM, UPM, UiTM and UTM)
- Institut Penyelidikan Perikanan
- Institut Penyelidikan/Pembangunan Belia
- Jabatan Perangkaan Negara
- Institut Penyelidikan Sains dan Teknologi Pertahanan (STRIDE)
- Institut Penyelidikan Perhutanan Malaysia
- Institut Perkembangan Minda (INMIND)
- Institut Kajian Malaysia dan Antarabangsa (IKMAS)
- Institut Penyelidikan dan Kemajuan Pertanian Malaysia (MARDI)
- Institut Sosial Malaysia
- Institut Kefahaman Islam
- Institut Penyelidikan Keselamatan Jalan Raya
- Institut Penyelidikan Perindustrian dan Standard Malaysian (SIRIM)
- Institut Penyelidikan Ekonomi Malaysia (MIER)
- Perbadanan Kemajuan Kraftangan Malaysia (Bahagian Penyelidikan)
- Institut Tanah dan Ukur Negara
- Institut Penyelidikan Kelapa Sawit (PORIM)
- Institute Penyelidikan Perubatan (IMR)
- UK Data Archives



The Malaysian Case Studies: Preliminary Findings

- Research in Malaysia is largely sponsored and conducted through the medium of universities and specialised departments in the public sector.
- The subject of research is either specialised or general (it reflects the specialised function of the research institution concerned).
- Policy formulation have been taken up by well-known research centres such as the Institute of Asian Studies (ISEAS), a think tank set up to advise the Malaysian government on policy matters.
- Centre for Policy Research, established within the ambit of the University Science of Malaysia to conduct various researches aimed at achieving innovative changes in Malaysia.



The Malaysian Case Studies: Preliminary Findings

- The surveyed research institutions have carried out extensive research, resulting in the collection of primary data, which are not fully utilized or made known to the public.
- The data and records are often lost, and do not find their way into published sources.
- Lack of access to such data result in duplication of research efforts, waste of government funds and personnel, and a lack of benefit for further research.
- The data exist in various forms: as handwritten documents, typed reports, register books, or in the forms of database or unstructured forms.



The Malaysian Case Studies: Preliminary Findings

- The software applications used for the same research design were different and could cause confusion to the users.
- The same software applications have different versions and the software applications themselves have been replaced by other more user friendly ones.
- The data are considered important because they have been collected at a particular point in time and a particular population and provide access to various other variables.
- The variables may be non-existent today, rendering replication of research impossible.



The Malaysian Case Studies: Preliminary Findings

- Problems with electronic media:
 - Easily erased
 - Prone to damage
 - Obsolescence and lack of reading equipment
 - Lack of preservation facilities
 - Lack of copyright control
 - Use of unstable or unproven long-term storage media



The Malaysian Case Studies: Preliminary Findings

- Problems with electronic media (cont.):
 - Risk of loss of critical records due to the use of software facilities
 - Poor backup practices
 - The risk of tampering
 - Technological changes in hardware and software environments
 - Electronic information systems are generally not designed for the purpose of preserving records



Conclusions

- The existence of European Data Archives and other Data Archives worldwide provides excellent examples for developing countries such as Malaysia to establish their own data archives.
- In an effort to develop a national data archives for social science research, within the InterPARES 3 Project, the preliminary findings of TEAM Malaysia's case study thus far highlights the concerns over the security and the preservation of primary research data and records both in electronic and paper forms.
- More data will be gathered from the research institutions as the research progresses into the next phase, eventually culminating in the development of a proto-type data archives for social science research for Malaysia.





THANK YOU

