



InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Canada

The Impact of the Organizational Culture of Test-beds on the Action Research Case Study Process

Luciana Duranti

InterPARES Project Director

InterPARES 3 Symposium

Rio de Janeiro, Brazil

30 September 2009



InterPARES Project

Luciana Duranti

Project Director

Case Studies Methodology

The type of organizational setting and culture of the organization will have an impact on what can be implemented and how, based on:

- **Giddens' theory of structuration**: mutual interaction between structures, functions, and actors
- **Adaptive Structuration Theory (AST)**: it studies the interplay existing between social structures, human action, and advanced information technologies



Duality of Technology

Orlikowski's concept of “duality of technology”, derived from Giddens' “duality of structure,” allows us to see technology (including “records and archival technology”) as created and changed by human action (i.e., as **an outcome**) and, at the same time, as a structure that both facilitates and constraints human action (i.e., **an instrument**)



Action Research

A set of disciplined, material practices that involve collaborative dialogue, participatory decision making, inclusive democratic deliberation, and the maximal participation and representation of all relevant parties

Research becomes practical, reflective, pragmatic action, directed toward solving problems in the world

Research subjects become **co-participants** and **stakeholders** in the process of inquiry



Ethnographic Approach

A form of inquiry characterized by the position of the researcher vis-à-vis the phenomena being studied

The researchers place themselves within an **archival environment** to gain the cultural perspective of those responsible for records.

The **creators** of records (this includes records managers), their **users**, and **archivists** form a community of practice - the archival environment - for which social interaction creates meaning and defines values



Ethnographic Research Process

It includes observation of the environment involving

- **detailed description** (using contextual analysis, diplomatic analysis, and activity modeling),
- **extensive interviewing** (unstructured interviews aimed at answering three sets of questions common to all case studies), and
- **analysis of documentation of the test bed and of the documents** produced or accumulated in the first two activities



Subsequent Steps

- The analysis of this material by all researchers produces **action items** which are implemented and the outcome of which is reported back to the TEAM.
- The process continues in an **iterative** way until the archival environment and all TEAM researchers are satisfied with the solutions
- The entire process is guided by **a case study flowchart**, which ensures that all steps are followed in the correct order, and is concluded by **a final report**.
- Each document produced in the course of the case study is structured as to form and content on the basis of **a template used for all case studies**.



Examples of Case Studies

Three-universities e-mail management case study:

- Public institutions
- Same geographic areas
- Major research in humanities, social and hard sciences
- University Archives with multiple archivists
- Archivists with graduate archival education
- Archivists responsible for records management



Three-Universities

Creator one: governance unit

- Unstructured e-mail directory with ad hoc folders
- University functional classification linked to a retention and disposition schedule
- Cross-walk quick and easy folders reduced of 1/3
- Recordkeeping practice: print all e-mails and save them as paper records
- Interest in converting folders or individual e-mails to text files or to PDF
- **Model e-mail management policy** (with two guidelines for individuals and business units): same directory of records, allowing each university unit to customize it—according to specific rules—for its particular environment.



Three-Universities (cont.)

Creator two: academic unit

- does not place his messages into a predetermined folder structure
- relies on keyword searching to retrieve e-mails
- deletes no messages other than spam or junk mail
- no time to classify e-mails and place them into a folder structure
- made it clear that his staff would not be e-mail gatekeepers
- willing to give the responsibilities of managing “appropriate” messages to his staff by forwarding them
- **e-mail guidelines categorizing messages** (i.e., executive, routine, and ephemeral/personal) and providing detailed information about their retention periods
- **“cheat sheet” and a “what if” scenario**: no reaction



Three-Universities (cont.)

Creator three: operational unit

- Became un-cooperative after the data collection
- purchased a non-DoD-compliant shared directory because it would be user friendly and “was cheap”
- were interested in being helped with the configuration of the system but
- were not available for an appointment for the following few months
- This test-bed was a dead end we moved to another

Conclusion: a university-wide e-mail policy would be welcomed only by governance offices, but it is urgent for universities to develop such a policy and make it a strict requirement to follow it



Three-Cities

- Large cities in the same geographical area, with the same juridical-administrative context
- Have established archives
- Their records managers/archivists are graduates of archival programs
- Different degree of digital programs development
- Different relationships creators/records managers/users/archives



Three-Cities (cont.)

City one: a strong integration between records management and archival functions

- the professionals in charge of both work together and involve IT personnel and administrators and expert consultants, so the archival environment is broader than we envisioned at the outset
- eager to work with us and involved at the highest level in the research development, providing the most input and critical analysis of proposed solutions
- have an ERMS in the prototyping phase to be integrated with a records preservation system ingesting the city records and the private archives acquired by the city
- holistic approach to the relationship among structure, human agents and technology and open to modifications
- a walk through of the city procedures using the COP model.



Three-Cities (cont.)

City two: city administration has a relationship of trust with the archives, it is not ready yet for an ERMS, neither for a city wide policy for born digital records

- responsibility for records is divided between the departments staff for the paper records, and the Information Technology department for the servers on which the digital records reside
- employees do not rely on or use any formal maintenance strategies to maintain their records
- records are kept in various locations and, although the original documents are typically created electronically, employees print nearly all their records
- the digital version of the documents is placed in a folder on the City's local area network (LAN) and kept for an indefinite period of time



Three-Cities (cont.)

City two: continues

- no corporate records management policy.
- to preserve the active or semi-active records, the IT Division has implemented Symantec Enterprise Vault (SEV)
- the IP3 action plan aims at the development of a city wide electronic records policy from the bottom up
- using as **test-bed the legacy files accumulated outside the LAN** but whose relationship to paper records is as yet to be explored
- the archives “provides services to ensure proper management and control of all civic records”
- the archivist represents the entire archival environment of the city in our research and favors a bottom-up strategy



Three-Cities (cont.)

City three: the creator/records manager(s)/users have no interaction with the archives, but use heavily a records center

- all city records are regarded as permanently active, but those not continually used are sent to the records center
- the city has acquired an Enterprise Content Management System and wishes to migrate the records it holds in its many servers to the new system
- it needs procedures for the identification and appraisal of the records and for their migration
- the archival environment is constituted of the records manager, the IT professional and the city business analyst



Three-Cities (cont.)

City three: continues

- a proposal to involve the archivist in the development of the procedures, especially as it regards appraisal, has been rejected
- the city managers and the archival environment are eager to participate in the research and trust our guidance implicitly
- there is a less than equal relationship between the academic researchers and the professional researchers and this situation needs to be corrected
- must foster the development of a relationship of trust and ongoing interaction between the archival environment and the archivist
- the technology needs to be implemented in such a way that the administrative structure will support collaboration



Summary of Findings

- Developing, learning and teaching **how to use** the structural features of an application or a system **is important**
- Even **more important** is learning the spirit behind those features
- Users who are not acquainted with archival principles and methodologies may – intentionally or unintentionally – appropriate an application or a system “unfaithfully” more easily than records professionals
- **With digital tools**, like e-mail applications and ERMSs, which are **mostly developed by IT experts** outside the organization that will use them and often without consulting archival professionals, **unfaithful appropriations are likely to happen more frequently**



Summary of Findings (cont.)

- **Training** for users of applications and systems “**emphasizes details of use rather than general philosophy.**”
- **Time is important:** the moment of the launch of a new system is very critical for its success
- **Managers favor the explicit knowledge** that is incorporated in organizational artifacts like processes, structures, documents, and technology
- Thus, it has been common to design **systems primarily focused on the codified, explicit organizational knowledge**
- Management reporting systems, decision support systems, and ERMS, are all focused on the identification, collection, and dissemination of this knowledge type



Conclusions

- We must pay more attention to **knowledge management** literature
- A core competency for implementers requires *know-how*, i.e. “the particular ability to put know-what into practice”
- Fostering this more complex form of organizational capital should be the focus of our case studies
- The outcome of our efforts will be successful only if
 - we are able to make the archival environment **understand the spirit of what we recommend**
 - we will be able to incorporate into our recommendations the outlook and way of working of those whom it intends to serve.

