

Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems

AA01 - Final Report



An ITrust^{AI} Report
September 30, 2024

Report prepared by Jenny Bunn, Patricia C Franks, Katherine Hodgson, Patricia Moore, Alicia Barnard

Table of Contents

InterPARES TrustAI Report Cover.....	i
Introduction	1
Study Team	1
Study Background and Context.....	1
Focus 1 – Existing literature	2
Annotated Bibliography and Literature Review	2
AI in Archival Science: A Systematic Review.....	2
Focus 2 – Vendors and existing vendor offerings	3
Inventory of AI-enabled Software and Services	3
Focus 3 – Practitioner experiences	4
An iTrust ^{AI} User Survey Report.....	4
User Focus Groups	6
On appraisal and disposition y Latin American—Spanish speaking countries (SSC)	7
Appraisal and disposition in Brazil—Portuguese speaking country	7
Focus 4 – Researcher reflections	8
Researcher reflections on the study "Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems"	8
Next Actions for individual practitioners.....	9
Application of AI/ML in the digital information and recordkeeping space	10

The Future Role of the Recordkeeper	10
Related ITrust ^{AI} Studies	11
Identification of critical archival challenges which are the best candidates for improvement by AI technologies in the context of retention and preservation of digital records (RP01)	11
The role of AI in identifying or reconstituting archival aggregations of digital records and enriching metadata schemas (CU05).....	12
Future Research	12
Common Generative AI tools and records management and archival processes.....	12
Appraisal and disposition: AI tools being used to support records creation and recordkeeping in Brazil and Mexico	13
Conclusions and Recommendations	13
Appendix A – Contributing Members	16
Appendix B – Dissemination of Results.....	21
Appendix C – Reflections in the Researchers Own Words.....	31



Title	AA01 - Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems – Final Report
Working group code	WG2
Study title	Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems
Status	Final
Version	1
Writers	Jenny Bunn, Patricia C Franks, Katherine Hodgson, Patricia Moore, Alicia Barnard
Date	Sep 30, 2024

Introduction

In a field where information, records and their corresponding metadata are core assets and the focus for operations, the emergence of AI and its rapid flow into general use has the potential to fundamentally alter professional practice and to challenge disciplinary norms. This report provides an overview of the activities and conclusions of the members of the AA01 Group as they sought to interrogate how Artificial Intelligence (AI) and Machine Learning (ML) are being utilised in the Records and Information Management field at present. Further, it provides a glimpse into the potential influences and challenges that AI implementation may bring to this discipline and practice.

Study Team

The study reflects work completed by 15 researchers and a total of 8 graduate students who assisted with the research for at least one semester each. The final team comprises 15 researchers and one graduate student. A complete list of all AA01 Researchers and graduate assistants is included in Appendix A.

Study Background & Context

AA01 - *Employing AI for Retention and Disposition in Digital Information and Recordkeeping Systems* was approved in October 2021. The goal of the study was to investigate how AI could be used to both create and action retention schedules, enable litigation controls, provide PII security, and ensure consistency with organisation-wide policies and procedures. Activities undertaken during the study included: literature reviews, surveys, interviews, and focus groups. Further details of these activities are provided in this report.

Due to the multiple prongs of this investigation, a work breakdown structure suggested by one member, Alex Richmond, was agreed to by participants. This structure divided the AA01 team into 5 subgroups, with some of the members serving on more than one subgroup. The groups¹ were established as follows:

- SG#1 - Identification of applications/technologies currently in use
- SG#2 - Identification of commercial recordkeeping applications
- SG#3 - Exploring how AI and ML is being used for retention and disposition
- SG#4 - Understanding how ERP solutions such as SAP support retention & disposition requirements?

¹ Two researchers worked with Graduate student assistants to complete the annotated bibliography and both literature reviews apart from the work of the subgroups.

SG#5 - Exploring typical retention and disposition processes, what are the pain-points, interrupts?

Ultimately however, the work evolved organically and in retrospect is perhaps best viewed as having had four distinct foci, e.g. 1) existing literature, 2) vendors and existing vendor offerings, 3) practitioner experiences, and 4) reflections on what had been learnt.

Focus 1: Existing literature

Annotated Bibliography and Literature Review

To gauge the status of peer-reviewed articles related to AI and records management, an annotated bibliography² and a literature review³ were completed by SJSU GRA Alicia Butler and researchers Dr. Patricia Franks and Dr. Souvick Ghosh and published May 20, 2022.

A records management lens was used to examine literature on artificial intelligence, machine learning, algorithms, and retention and disposition of records. Both ARMA's *Generally Accepted Recordkeeping Principles (The Principles®)* and the *Records and Information Lifecycle* were used to provide a framework for this research. Findings revealed that AI tools could be used for retention and disposition activities but that the use of AI should be started at the beginning of the RIM lifecycle with creation and capture. AI could then be used during each stage of the lifecycle for activities such as appraisal and classification, search and retrieval, and preservation. Articles related to *The Principles®* revealed that AI models must make decisions that are explainable and unbiased, demonstrate integrity, and comply with governing laws and regulations.

This initial exploration revealed that little had been written on the topic of AI-enabled retention and disposition up to that point. It was, however, determined that a study of custom-built tools, e-discovery technologies, and software-as-a-service offerings would reveal how AI is and could be used to aid in retention and disposition of records stored in Digital Information and Recordkeeping Systems. This led to a shift in focus to vendors and existing vendor offerings, which is described in more detail later in this report.

AI in Archival Science - A Systematic Review

As the AA01 study began to wrap up, it became clear that an updated literature review was in order—one that was more technical in nature. Rather than publish an internal document, two researchers with the assistance of two student research assistants prepared a journal article, *AI in Archival Science - A Systematic Review*. The article, authored by Gaurav Shinde (Department of Engineering, San José State University), Tiana Kirstein (School of

² https://interparestrustai.org/assets/public/dissemination/AA01_AnnotatedBibliography.pdf

³ https://interparestrustai.org/assets/public/dissemination/AA01_LiteratureReview.pdf

Information, University of British Columbia), Souvick Ghosh (School of Information, San José State University), and Patricia C. Franks (School of Information, San José State University) is currently under review by the *Journal of Contemporary Archival Studies*. A summary of the article is provided below.

The rapid expansion of records creates significant challenges in management, including retention and disposition, appraisal, and organisation. Our study underscores the benefits of integrating artificial intelligence (AI) within the broad realm of archival science. In this work, we start by performing a thorough analysis to understand the current use of AI in this area and identify the techniques employed to address challenges. We analyse 45 papers published between 2011 and 2023. The papers were all written in English, with 40% being review papers and the remaining 60% being original research articles. Subsequently, we document the results of our review according to specific pre-decided criteria. We investigate the key AI techniques and their applications in archives and records management functions. Our findings also highlight key AI-driven strategies that promise to streamline recordkeeping processes and enhance data retrieval efficiency in the immediate future. We demonstrate our review process to ensure transparency regarding our methodology. Furthermore, this review not only outlines the current state of AI in archival science and records management but also lays the groundwork for integrating new techniques to transform archival practices. Our research emphasises the necessity for enhanced interdisciplinary collaboration between the disciplines of artificial intelligence and archival science.

When published, a link to the article will be posted to the InterPARES Trust^{AI} website.

Focus 2: Vendors and existing vendor offerings

Inventory of AI-enabled Software and Services

As described above, the initial literature review suggested a shift in focus towards investigating the AI tools and technologies currently offered by vendors of records and information management solutions. Subgroup #2 researchers Georgia Barlaoura, Jason R Baron, Jenny Bunn, Lois Evans, Prisca Giordani, Isto Huvila, Patricia Moore, Olefhile Mosweu, and Sarah Weldon took on this task with the assistance of graduate research assistants Melissa Kemp and Jordan Kerr.

Based on the premise that decisions made all along the records lifecycle will impact the ability to perform retention and disposition activities, the team endeavoured to understand how existing software and services use AI technologies to capture, manage, and preserve digital content. The goal was to complete data collection and report by the end of 2022. To avoid duplication of efforts, the lead of this subgroup, Jenny Bunn, met with members of the CU05 study team, and research materials were shared with all members of both teams.

An initial list of 56 vendors/products was reduced to 41 for further analysis. The research revealed that the 41 products/services fell into three categories: 25 recommended for vendor interviews, 12 not recommended for interviews but included in the final report due to potential value to other researchers and potential further investigation, and 4 not recommended for interviews or potential for further investigation but included because of potential value to other researchers.

The final report, *Inventory of AI-enabled Software/Services*⁴, was published on December 31, 2022. An analysis of the products/services of the 25 vendors was conducted to determine if/how AI tools such as machine learning, natural language processing, deep learning, and natural language understanding were employed within their products. The terms used to describe the object of the AI technologies were content, document, record, and email. All but one of the vendors employed AI for classification. Record retention was mentioned by 52 percent and disposition by 20 percent.

Limitations of this study included lack of vendor input into the product/software reviews. Therefore, this report, while helpful to practitioners, should be used only as a starting point when investigating AI-enabled records and information management solutions. The team recommended interviews with the 25 vendors listed in the first section of the report to verify findings. Attempts were made to reach out to these vendors but with little success. Ultimately only two interviews were carried out and this was considered too small a sample for any meaningful conclusions to be drawn.

Focus 3: Practitioner experiences

An ITrust^{AI} User Survey Report

The study researchers were also interested in better understanding the user perspective of AI-enabled products and services for records and information management. To this end, subgroup 1 designed and conducted a user survey.

The investigators in subgroup 1 were Patricia C. Franks (lead), Jason R. Baron, Lois Evans, Patricia L. Moore, Samuel Tweneboah-Koduah, and Sarah Weldon. They were supported by research assistants Melissa Kemp, Michael Carelse and Linnet Chappelka. Assistance in the form of reviewing the survey and encouraging participation was received from Robert M. Gerbrandt, Managing Director, IG Consulting, Global Head of Information Governance Advisory, Iron Mountain and Graham Sibley, Chief Executive Officer, Collabware.

⁴ https://interparestrustai.org/assets/public/dissemination/AA01_AIproductreport.pdf

The survey was conducted in Spring 2023, and the final report, *An ITrustAI User Survey Report*,⁵ was published June 30, 2023. While 400 responses were received, only 214 were considered complete and were analysed. The majority of respondents were from the United States (50%), followed by Canada (19%), Mexico (10%), and the United Kingdom (9%). The remaining participants were from Indonesia, Spain, Ecuador, and Botswana. The role of records manager was held by 35 percent of respondents and archivist by 28 percent. When asked to indicate their specialisations, 27 percent of respondents indicated records management. The term Records Management appeared again in combination with other specializations (archives, 12%; information governance, 12%, both archives and information governance, 10%; other, 4%). In this case, a total of 65% of the population surveyed indicated they were skilled in records management.

The survey found that traditional systems (e.g., Document Management Systems, Records Management Systems, Enterprise Content Management Systems) are still in use for managing data, information, and records despite the more advanced technologies, such as Content Service Platforms and Intelligent Information Management Systems, promoted by vendors. Challenges arise from the use of multiple systems producing documents in multiple file formats. Organisations continue to face disposition challenges, with 90 percent of respondents stating records are being held beyond their disposition dates.

While 46 percent of respondents indicate the use of automation for records management functions, only 16 percent believe AI is being used within their systems. The AI-enabled features mentioned most often include content analysis, data extraction, and search and retrieval, followed closely by auto-classification based on a classification scheme. An encouraging finding is that the use of AI for records management is expected to grow. More than half (68%) reported plans to either use AI for the first time or to add artificial intelligence initiatives to systems already in place.

Among the recommendations presented in the report, two that relate to AI-enabled record management are especially relevant:

1. Employee training programs must be designed to support the organisation's AI strategy and may address AI basics; risks and benefits of the use of AI; available AI tools and technologies to facilitate recordkeeping; and effective use of AI tools and technologies made available to them.
2. In addition to increasing awareness of the risks, benefits, and potential uses of AI in recordkeeping, institutions and archivists/records managers should endeavour to understand how their current and historical recordkeeping processes may inform AI

⁵ <https://interparestrustai.org/assets/public/dissemination/AA01-EmployingAIforRetentionDispositioninDigitalInformationandRecordkeepingSystems-UserSurveyFinalReportJune302023.pdf>

models, and how to effectively document existing workflows and decision points for future incorporation into AI solutions.

User Focus Groups

Participants of the User Survey were asked if they would be willing to be contacted to provide further information. An invitation was sent to those who provided their contact details inviting them to participate in one of four focus groups scheduled for September 2023.

A total of 12 individuals participated and nine industries were represented. The top two were Records and Information Management (25%) and Educational Services (17%). Other industries represented were Public Administration, Legal, Finance and Insurance, Utilities, Archives Management, Library and Information Science, and Information Governance. The majority (83%) of invitees worked within the United States and Canada, with the remaining participants operating within Spain and the United Kingdom.

Based on the findings of the user survey, four prompts were developed to facilitate discussion within the groups. Additional questions were formulated based upon the responses to these prompts:

- What differentiates automation from AI?
- How much discussion is happening in your work about AI and its uses?
- How is AI used in your work, if at all?
- How will the use of AI change the role of the records manager, if at all?

The *AI User Focus Group Report*⁶ prepared by Jenny Bunn, Patricia C. Franks, Patricia L. Moore, and Katherine Hodgson was published April 19, 2024. Among the AI-related concerns raised, the role of the human appeared most often. As one participant is quoted in the report, “I’m not afraid of [AI]. I’m afraid of some of the ways some people might use it.” Open communication among stakeholders may alleviate some of the concerns about trust and transparency in the minds of users. When discussing the changing role of the records manager, the final thought among focus group participants is that the use of AI should be viewed as a chance to redefine the modern records manager and to more clearly determine what could be done by AI and what must continue to be done by humans.

⁶ <https://interparestrustai.org/assets/public/dissemination/AA01-EmployingAIforRetentionDispositioninDigitalInformationandRecordkeepingSystems-FocusGroupReport.pdf>

On appraisal and disposition y Latin American–Spanish speaking countries (SSC)⁷

As part of the effort to understand appraisal and disposition processes within Latin American government and to identify the challenges that affect them, a survey was conducted by Alicia Barnard, México; Aída Luz Mendoza, Perú; Norma Fenoglio, Argentina; and Raquel Umaña, Costa Rica. The survey, conducted in Spanish, solicited responses from public officials responsible for ruling on the disposal of physical and/or digital records. The survey consisted of 24 questions, which were answered by 71 respondents from eleven countries of the region plus Spain and Portugal (one from each country). There were 22 responses where the location was not identified. Respondents were primarily from national or general archives, national autonomous organisations, congresses at the national level, and the judiciary or national courts.

In addition to the results of the survey, a report, *Report on regulations on appraisal and possible related dispositions of Artificial Intelligence in selected countries (AI)*, was written by Aida Luz Mendoza about the regulations governing appraisal in selected countries. The report, which is included on pages 21–28 of the larger document, sets out those regulations in force in Argentina, Colombia, Chile, Costa Rica, Mexico, and Peru which contain provisions that directly or indirectly affect appraisal and which could serve as a basis for the regulation of AI applications, with the modifications or additional adjustments that will, possibly, be required.

Appraisal and disposition in Brazil–Portuguese Speaking Country

The survey, *Appraisal and disposition in Brazil*,⁸ was conducted by Ivina Flores Melo, IBICT1 Researcher, and coordinated by Alicia Barnard. Data collection was assisted by Ana Carolina Araújo, an archival science student at UnB. This study extended the previous study and was designed to elicit a more comprehensive understanding of regional dynamics in records management and the potential for AI integration.

The survey was sent as a Freedom of Information request to 38 ministries and agencies of the Federal Government of Brazil and 34 responses were received from February to May 2024. It was conducted in Portuguese to increase participation with questions organised into three sections: 1) overview of the final disposition process, 2) problems in disposition of records, and 3) use of AI in digital records management.

Inconsistencies in responses to questions in the first section indicated a superficial understanding or reporting of records management practices, which in turn indicated a

⁷ <https://interparestrustai.org/assets/public/dissemination/AA01-SG05AppraisalinLatinAmericafinaloct112023.pdf>

⁸ <https://interparestrustai.org/assets/public/dissemination/AA01-SG05AppraisalanddispositioninBrazil.pdf>

potential misalignment between policy and practice across agencies. It was found that respondents had a limited understanding of AI and how it could improve their digital records programs.

Comparing the results from both Latin American surveys revealed similarities and differences. For example, while 82% of the respondents to the SSC indicated that they had mandatory classification schemas; in Brazil only 50% reported that they had such an instrument in place. Conversely, 86% of the SSC reported that physical records were being kept beyond their regulated retention period; with a similar situation (90%) being reported in Brazil. As for AI applications for appraisal, 93% of the SSC respondents held an optimistic view, while Brazil responses were less optimistic since only 55% of the answers were positive.

Focus 4: Researcher reflections

As a concluding activity, members of the research team were invited to participate in a reflective research exercise. The intent was to draw together threads from the preceding research activities, readings, discussions amongst the team and the larger ITrust^{AI} group, and to explore individual perspectives on the initial research question: how AI and ML are and could be used effectively in RIM.

Prompts were provided to stimulate reflection, and team members were invited to respond. *Seven* individual responses and one group response were submitted. The prompts and full responses are provided in Appendix C.

Researcher reflections on the study "Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems":

Prompt: What (in your opinion) can we conclude as a result of the work of the AA01 study?

Five major themes derived from the responses:

1. **Early Stage of AI Integration in Record Management:** The application of AI in records and information management (RIM) is still in its infancy, with low adoption rates of AI technologies like auto-classification, retention, and disposition among organizations. Many RIM professionals lack familiarity with AI, further slowing its integration into the field.
2. **Knowledge and Skills Gaps Among RIM Professionals:** There is a significant gap in AI-related knowledge and skills among RIM professionals, limiting their ability to fully leverage AI tools. A substantial portion of professionals surveyed expressed little to no awareness of AI methods, highlighting the need for education and training in AI's potential to enhance RIM processes.
3. **Challenges of Digital Complexity and Lack of Control:** RIM professionals face growing challenges managing vast amounts of digital content, diverse systems, and file formats. The complexity is compounded by a feeling of being "out of control" in

managing digital records, leading to the perception that AI could help address these issues, though concerns about its implementation remain.

4. **Miscommunication and Unmet Needs Between Vendors and RIM Professionals:** There is a disconnect between what AI vendors are offering and what RIM professionals need. Miscommunications, lack of transparency, and premature saturation of the AI market are contributing to scepticism and uncertainty about how to effectively use AI for record management.
5. **Potential for AI to Support Recordkeeping:** Despite the challenges, AI presents opportunities to improve record management processes, such as automating retention schedules, tagging, classifying, and managing emails. However, the study concludes that there is no single solution available yet, and ongoing research, collaboration, and skill development are essential to maximizing AI's potential in this field.

Next Actions for individual practitioners

Prompt: What one change/action does the work produced as a result of the AA01 study suggest individual practitioners should be making now?

Five major themes derived from the responses:

1. **Need for Leadership Buy-In for AI in RIM:** Progress in AI adoption in Records and Information Management (RIM) requires not just efforts from RIM professionals but also strong support from senior leadership. Leaders need to understand the return on investment (ROI) and efficiency gains AI offers, which necessitates cultural change and evangelizing the benefits of AI to decision-makers.
2. **AI as Both Crisis and Opportunity for RIM:** The emergence of AI presents a dual challenge for RIM professionals. While many organizations are lagging in key areas like disposition, AI tools offer a pathway to improve performance. However, self-education on AI and participation in training are critical for RIM professionals to stay relevant and leverage these tools effectively.
3. **Training and Engagement with Governance Teams:** RIM professionals need to actively seek education on AI's potential in their field through workshops, conferences, and governance teams. Engaging in AI and data governance groups within organizations can help RIM professionals stay at the forefront of AI adoption and influence how AI systems are implemented.
4. **Challenges and Opportunities of AI for Smaller Organizations:** While AI can offer consistency and help classify records, there are concerns about its high costs and long training periods, which could limit its use to large organizations. Smaller businesses and NGOs might struggle to adopt these tools, widening the gap between them and larger companies.
5. **Importance of Cross-Departmental Communication and Informed AI Use:** Collaboration with IT, governance, and legal teams is essential to ensure AI is integrated effectively into larger systems. RIM professionals must proactively learn about AI, ask critical questions regarding its training data, alignment with organizational values, and ensure it meets regulatory and evidentiary standards.

Application of AI/ML in the digital information and recordkeeping space

Prompt: Has/How has the work produced as a result of the AA01 study changed your thinking on how ML/AI can best be applied in the digital information and recordkeeping space?

Five major themes drawn from the responses:

1. **Technological Shifts Redefine the Role of Recordkeepers:** The emergence of AI is seen as a significant shift, like previous technological revolutions like the introduction of office systems in the 1980s. However, unlike past changes that highlighted the concept of records, the focus now is on core principles like authenticity, integrity, and reliability within recordkeeping, requiring new ways of thinking about how to ensure these values with AI.
2. **The Challenge of Big Data and Appraisal:** AI brings attention to the challenges posed by big data, particularly around volume, velocity, variety, and veracity. The traditional focus on reducing the physical volume of records (spatial thinking) may need to shift to more dynamic, data-driven approaches where knowledge is generated "in the moment" based on real-time data analysis (temporal thinking).
3. **AI/ML as Key Tools for Managing Complexity:** AI and machine learning (ML) are crucial for dealing with the increasing complexity of information management, driven by the volume, velocity, and variety of data. There is no universal solution, but AI-enabled systems, especially customizable ones, offer a flexible approach to meet varying organizational needs.
4. **AI's Impact on Business Information and Communication:** As AI becomes embedded in business communication systems and generative AI is used for authorship and writing support, the nature of information and records management will change. There will be a need for stronger mechanisms to ensure traceability, explainability, and accuracy of AI-driven outputs, making the role of recordkeeping more essential.
5. **Customization and Adaptation of AI Solutions:** While many current information management systems are integrating AI features, organizations with more advanced needs may benefit from customized AI solutions or developing proprietary systems. This flexibility will be important to tailor AI's capabilities to specific business contexts and challenges.

The Future Role of the Recordkeeper

Prompt: Has/How has the work produced as a result of the AA01 study changed the way you think we should envision the role of the recordkeeper for the future?

Five major themes from the responses:

1. **AI and Automation in Recordkeeping:** The RIM profession remains behind in adopting AI and automation despite available technologies. Institutions should be moving toward fully automated recordkeeping processes, including auto-classification, automated retention and disposition, and AI-enhanced search and sensitivity filtering, but studies show that there is still a long way to go.

2. **Contextual and Functional Analysis for AI Integration:** Systematizing context analysis for AI is challenging but necessary. To support automation, RIM professionals must focus on a detailed, functional analysis of processes, understanding who is involved, traceability requirements, and how systems interact. Managing exceptions in records handling is critical for effective AI integration.
3. **Role of Recordkeepers with AI:** The fundamental role of recordkeepers remains the same—focusing on control, governance, and ethical use of data—but their practices must evolve with AI. Recordkeepers need to adapt by working alongside AI agents, becoming innovative and flexible while maintaining their core responsibilities.
4. **Need for AI Guidelines and Explicability:** To effectively apply AI in recordkeeping, professionals must understand how AI systems work and develop clear parameters for regulatory compliance and managing sensitive information. Organizations need guidelines for AI implementation, ensuring transparency and explicability.
5. **Challenges in Latin America:** In Latin America, the integration of AI in RIM faces unique challenges due to language, legal, and economic barriers. Collaboration between archival professionals and AI experts is essential, but finding AI expertise within the region remains difficult, making knowledge exchange critical for progress.

Related ITrust^{AI} Studies

Some of the activities and foci of the AA01 study were shared with other ITrust^{AI} studies and, where this was particularly the case, details are provided below.

- *Identification of critical archival challenges which are the best candidates for improvement by AI technologies in the context of retention and preservation of digital records* (RP01) led by Hrvoje Stancic, University of Zagreb.⁹ The study aimed to identify critical archival challenges in the context of retention and preservation of digital records. An online study was conducted in April 2022 with 106 valid responses from 27 countries. Between then and January 2023, 14 follow up interviews were conducted in English, Portuguese, and Croatian.

This study shared the focus on practitioner experiences, but the main difference between RP01 and AA01 was that RP01 was more oriented towards archival functions, rather than records and information management systems. Most (79%) respondents in the RP01 study were affiliated with archival institutions with 50% working in government archives. When asked which archival functions could best be improved using AI/ML, most respondents indicated arrangement and description, however the general consensus was that AI/ML could be used within all of the archival functions listed. RP01 also conducted follow up interviews to delve into the needs of the respondents when considering or using AI/ML in the workplace. Most indicated a need for education and training, including an understanding of both IT and AI vocabulary; however, almost all replied they were not afraid they would lose their jobs because of AI. The study concluded that critical challenges could be improved

⁹ <https://www.youtube.com/watch?v=Yk8Axge9OM0>

by AI, including digitization (e.g., quality control and metadata extraction), digital preservation, and reference and access (e.g., identifying and redacting PII).

- *The role of AI in identifying or reconstituting archival aggregations of digital records and enriching metadata schemas* (CU05) led by Mariella Guercio, Associazione Nazionale Archivistica Italiana-ANAI, and Stefano Allegrezza, Università di Bologna.¹⁰

This study shared AA01's focus on vendors and vendor offerings. As with AA01, CU05 conducted a review of the main platforms available for records management and followed up by approaching vendors directly. Since both CU05 and the first phase of AA01 (inventory of products and services) were being conducted simultaneously, the work was coordinated to avoid duplication of effort. Whilst the studies conducted similar activities, they did approach those activities from different positions. CU05 was interested in the ability of AI to support the creation (or recreation) of archival aggregations to address the issue of non-aggregated, unarranged, or de-contextualized records, and AA01 was interested in the application of AI/ML to the records management lifecycle, specifically retention and disposition.

Future Research

Although the AA01 study will be completed by the end of September 2024, participants are considering next steps for further studies. One recommendation is to explore GenAI Tools and Technologies and their use in archives and records administration. A second recommendation is *Appraisal and disposition: AI tools being used to support records creation and recordkeeping in Brazil and Mexico*.

Common Generative AI tools and records management and archival processes

The emergence of Generative AI has in recent years grown to a point where it must be considered when investigating the use of AI for archives and records and information management.

In spring of 2024, two researchers, Samuel Tweneboah-Koduah and Olefhile Mosweu, compiled a *Survey of Common Generative AI Tools*.¹¹ The report, published July 30, 2024, introduces and reviews 21 products including Leonardo, Typeset, Durable AI, and ChatGPT. The purpose of this report is to understand their deployment in terms of functions and capabilities to map the core management and archival functions to a specific AI tool and suggest which tools could be useful for records management and archival processes.

¹⁰ https://interparestrustai.org/assets/public/dissemination/Report-CU05-Survey-of-the-Companies_v121.pdf

¹¹ <https://interparestrustai.org/assets/public/dissemination/AA01-GenAIReport.pdf>

Depending upon the resources available, the authors may use this report as the basis for a proposal to conduct a new InterPARES Trust^{AI} study to map the tools reviewed in the document to the following major records management functions and activities:

1. Records creation/receipt
2. Registration of records
3. Tracking of files (folder that contain individual records in the manual systems).
4. Records retrieval
5. Records Classification
6. Records Appraisal (to determine records retention and disposition)
7. Records preservation (records storage in conducive environments)

If pursued, work would take place between January 2025 and December 2025.

Appraisal and disposition: AI tools being used to support records creation and recordkeeping in Brazil and Mexico

As reported in the AA01 final report, much research has been conducted in Latin America (both in Spanish and Portuguese) as part of the AA01 study. The results revealed that appraisal and disposition functions in Latin American countries are not satisfactory. Therefore, a decision was made to explore in more detail the activities involved in records creation and recordkeeping that later can be improved upon using AI.

Qualitative methods will be used. The study will involve conducting surveys in Brazil and Mexico to identify creation and recordkeeping activities related to appraisal and disposal that can be supported with AI, as well as systems that are already using AI for that. Data will be collected on recordkeeping systems providers and agencies that are using such tools. Data collected will help assess the extent to which the AI tools are able to support these activities.

The proposal will be submitted to the InterPARES Trust^{AI} Executive Committee for their consideration. If approved, the study will run from January 25, 2024, through January 26, 2025. Alicia Barnard and Claudia Lacombe Rocha will serve as primary investigators.

Conclusions & recommendations

In seeking to identify the records and archives challenges to be addressed by AI, this study has identified many critical challenges. These include but are not limited to:

- Lack of executive support and funding for recordkeeping within organisations.
- A proliferation of different technologies and systems across which digital material needs to be managed, meaning that control over and selection from that material is an increasingly complex proposition.
- Difficulty in communicating and coordinating with others operating in the wider information ecosystem (e.g. IT professionals, providers/developers of business information systems including those already incorporating the use of AI, etc.).

Some of these challenges (such as the last) are unlikely candidates to be addressed by AI. Indeed, it could even be argued that some of them are, if not exacerbated by AI, at least thrown into sharper relief with the advent of AI. Certainly, it seems that the gap in understanding and the lack of ‘an understanding’ between those focused on archives and records work and those vendors and organisational colleagues focused on business systems and the deployment into such systems of the latest (AI) technological developments is becoming more difficult to bridge every day.

It is interesting to note that the work needed to bridge this gap was much more often framed, by those archives and records professionals consulted, in terms of self-education about AI and how it works rather than in terms of others educating themselves about the risks and benefits of their technology choices. Those archives and records professionals interviewed were very attuned to the risks of using AI technologies in terms of, for example, dangers such as unintended societal harms and a loss of transparency, accountability and explainability. They were equally aware that AI could bring benefit to their own work. They also demonstrated a nuanced and sophisticated judgement in analysing the costs/benefits and practical feasibility (given the current state of relevant commercially available offerings incorporating AI and the need for large labelled training sets for some forms of AI) of applying it in ways, such as auto tagging and auto classification, that would directly support the work of selection.

Arguably this could be taken as evidence to support the idea that archival concepts and principles can inform the development of responsible AI. Certainly the study has found that those versed in such concepts and principles are inclined to only want to employ AI in their own processes if they can do so ‘responsibly’—that is to say with some understanding of how the technology is working, what it is ‘actually’ doing, what its limitations are, and whether the errors/problems it might engender directly or indirectly (particularly those for the record and the social good) are within their risk appetite. This could be viewed by some as a small ‘c’ conservative outlook. Several study members felt an undercurrent of frustration that progress towards making new technologies (such as AI) work for archives and records professionals seemed to be relatively slow.

One reason perhaps for this slow rate of progress is that archives and records professionals, particularly those embedded in organisational/business contexts, are trying to make progress on two fronts simultaneously:

- a) How can they change their own processes (using AI or automation more generally) to allow them to stay on top of an ever-increasing workload and remit?
- b) How can they be involved in what is going on upstream in business systems? This being vital to allow them a) to anticipate the risks the deployment of AI into such systems might bring to the quality of the record society will inherit, and b) to seek to influence practices and processes outside their own to mitigate against these risks.

Against this context, it has been notable that the period over which this study has taken place has coincided with the latest step change in AI—the arrival of Large Language Models and the subsequent shift in focus towards generative AI. This shift was very apparent in the focus groups and highlighted the different kinds of approaches that allowed progress to be

made on each of the fronts mentioned. For example, in terms of a) they considered AI use to be framed as automating RIM processes, e.g., the evaluation of applicable retention schedules and the roles within different departments to come up with suggested base retentions for those areas. Whereas, in terms of b) there was a common attempt made and reported (with mixed results) for records and archives professionals to get involved in emerging organisational governance/policy making about the use of LLMs.

In summary, there is evidence that archival concepts and principles (personified by records and archives professionals) can and are informing the deployment of responsible AI within organisations, albeit with mixed success. Archives and records professionals can identify how different AI technologies could be used to address the challenges they face and are very attuned to the benefits and risks of using them on records and archives. The main challenge that AI brings to archives and records professionals is that it heralds yet more changes to the technological environment in which they must operate. Meeting this challenge will be as much, if not more, about developing influence as about developing AI.

Appendix A

Contributing Members

Researchers:

Patricia C Franks, Professor Emerita at San Jose University, teaches courses in Enterprise Content Management and Digital Preservation. Her research focuses on emerging technologies—such as Blockchain Distributed Ledger Technology and Artificial Intelligence—and their impact on archives, records, and information management. Pat is author of numerous publications, including the upcoming 3rd edition of *Records and Information Management* (2025).

Her contributions include: Annotated Bibliography (May 20, 2022), Literature Review (May 20, 2022), Inventory of AI-enabled Software & Services (December 2022), User Survey (June 2023), AI in Archival Science - A Systematic Review (submitted for publication May 2024), and Focus Group Report (April 2024).

Jenny Bunn is Head of Cataloguing, Taxonomy and Data at The National Archives (UK). She has over 25 years' experience as an archival practitioner, educator and researcher and her research interests have always lain at the intersection of archives and technology.

Her contributions to the project include: Inventory of AI-enabled Software & Services (December 2022) and Focus Group Report (April 2024).

Patricia Moore is Scholarly Communications & Research Engagement Librarian at Carleton University (Canada). As an academic practitioner her work has emphasised how technology is used to explore, preserve and communicate information. Her research looks at how social, organisational and behavioural factors influence the use of information and related technologies.

Her contributions to the project include: Inventory of AI-enabled Software & Services (December 2022), User Survey (June 2023), and Focus Group Report (April 2024).

Georgia Barlaoura is a Records and Archives Officer with the International Monetary Fund (IMF) in Washington, DC, as well as a Graduate Research Assistant with InterPARES.

Her contributions to the project include: Inventory of AI-enabled Software & Services (2022).

Alicia Barnard is an independent consultant for records and archives. Previously, she was the director of the Documentation Center at the Federal Ministry of Health in México, with much of her work focusing on records and information management. She has presented and published over 40 papers and articles.

Her contributions to the project include: Appraisal in Latin American Countries (2023).

Jason R. Baron is a Professor of the Practice at the University of Maryland's School of Information, focusing on the intersection of law, archives, and information retrieval. His current research interests include practical applications of AI, including providing enhanced public access to government records through the Freedom of Information Act.

His contributions to the project include: Inventory of AI-enabled Software & Services (2022) and User Survey (2023).

Lluís Esteve Casellas i Serra, Head of Services of Records Management, Archives and Publications of the City of Girona, is a member of the Steering Committee of ICA-SMLT and the Expert Group ICA-MDPR. He has been a member of RADI Ad Honorem Committee, the National Commission of Catalonia on Records Access and Appraisal, and CTN50/SC1 of Spanish Agency of Normalisation.

His contributions to the project include: Focus Group Participant (September 2023) and dissemination of information through workshops, presentations, and posters such as "Functional Analysis for a Transparent And Understandable Appraisal," (Poster, September 2022) and "Valoración documental: un modelo de análisis funcional" (Presentation, September 2023).

Lois Evans is an archivist and records manager with over 20 years' experience. Her doctoral research explores retention and disposition and climate action in archives. She is a member of UNESCO's Experts Group on Disaster Risk Management in Asia and the Pacific Region. Lois is a working group co-convenor of the Canadian General Standard Board's Electronic Records as Documentary Evidence standard.

Her contributions to the project include: Inventory of AI-enabled Software & Services (2022) and User Survey (2023).

Norma Catalina Fenoglio is a Doctor in Social Studies of Latin America, a Master in document management and archive administration, and a Graduate in archival science. A Professor at the National University of Córdoba, Argentina, for 25 years, she is experienced in appraisal. She has numerous publications on evaluation and municipal archives and participates in national and international research projects.

Her contributions to the project include: Appraisal in Latin American Countries (2023).

Ívina Flores Melo is a digital preservation researcher at the Instituto Brasileiro de Informação em Ciência e Tecnologia.

Her contributions to the project include: Appraisal in Latin American Countries (2023).

Souvick 'Vic' Ghosh is a Tenure-Track Assistant Professor at the School of Information, SJSU. His scholarship involves the development of research models and methods that extend the traditional view of information seeking into voice-based and interactive environments. His research involves extensive use of techniques and approaches in

Machine Learning, Natural Language Processing, Deep Neural Networks, and Human-Computer Interaction.

His contributions to the project include: Annotated Bibliography (2022), Literature Review (2022), and AI in Archival Science - A Systematic Review (2024).

Prisca Giordani is currently the Deputy Head of Unit at the European Anti-Fraud Office.

Her contributions to the project include: Inventory of AI-enabled Software & Services (2022).

Isto Huvila is a Professor in the Department of Archives, Libraries, and Museums at Uppsala University, in Sweden. His primary areas of research include information and knowledge management, information work, knowledge organisation, documentation, research data, and social and participatory information practices.

His contributions to the project include: Inventory of AI-enabled Software & Services (2022).

Aída Luz Mendoza is a Doctor of Law and Master in Public Policy Management. She is a professor and coordinator of the Archives and Document Management Program at the Catholic University Sedes Sapientiae and a consultant in Archives and Document Management. She has participated as a speaker in various national and international forums and events.

Her contributions to the project include: Appraisal in Latin American Countries (2023).

Olephile Mosweu, PhD, is a Knowledge and Information Coordinator for Botswana Power Corporation, Botswana. His research interests are archival education, digital records management, research methodology, and the impact of Industry 4.0 on records management. He was a Research Assistant and member of Team Africa InterPARES Trust (2013 – 2018) and is currently a researcher in InterPARES Trust AI (2021-2026).

His contributions to the project include: Inventory of AI-enabled Software & Services (2022) and Survey of Common Generative AI Tools (2024).

Alex Richmond is an enterprise information architect at the Bank of Canada.

His contributions to the project include: Development of a Work Breakdown Structure to formulate five research subgroups.

Samuel Tweneboah-Koduah is an Assistant Professor at Gannon University and holds a PhD from Aarhus University, Denmark. He has over 16 years of teaching experience. As an interdisciplinary researcher, his research interests span wireless-networks, cybersecurity and risk assurance, cloud computing, IoT and embedded systems, Data Science, DL, ML, NLP, and AI. He has over 20 peer-reviewed publications with over 394 citations.

His contributions to the project include: User Survey (2023 and Survey of Common Generative AI Tools (2024).

Raquel Umaña Alpízar is a professor at the University of Costa Rica, School of History.

Her contributions to the project include: Appraisal in Latin American Countries (2023).

Sarah Weldon, J.D., M.L.I.S. was a Senior Research Analyst at Iron Mountain during the three years she participated in this study.

Her contributions to the project include: Inventory of AI-enabled Software & Services (December 2022) and User Survey (June 2023).

Graduate Student Assistants:

Alicia Butler was a Graduate Research Assistant from the SJSU School of Information from January 2022 to May 2022. She contributed to the Annotated Bibliography (2022) and the Literature Review (2022).

Michael Carelse is a master's student in Library, Archival and Information Studies at the University of British Columbia (UBC). He has worked for InterPARES Trust AI, the UBC Indian Residential School History and Dialogue Centre, and UBC Libraries. He contributed to the User Survey (2023).

Linnet Chappelka was a Graduate Academic Assistant from the UBC iSchool from January 2023 to March 2023. She contributed to the User Survey (2023).

Heather Harrison was a Graduate Research Assistant from the SJSU School of Information from January 2023 to June 2023.

Kat Hodgson is a Master's student in Library and Information Studies and Archival Studies at UBC, and a Student Librarian at Library and Archives Canada. Her previous work has focused on metadata creation, collection management, and records management. She contributed to the Focus Group Report (2024).

Melissa Kemp was a Graduate Research Assistant from the SJSU School of Information from August 2022 to December 2022. She contributed to the Inventory of AI-enabled Software & Services (2022) and the User Survey (2023).

Jordan Kerr is a records assistant at British Columbia College of Nurses & Midwives. She contributed to the Inventory of AI-enabled Software & Services (2022) and the Literature Review (2022).

Tiana Kirstein was a Graduate Academic Assistant from the UBC iSchool from May 2023 to December 2023. She contributed to the journal article "AI in Archival Science - A Systematic Review" (2024).

Gaurav Shinde, PHD candidate at the University of Maryland, was a Graduate Research Assistant from SJSU from September 2023 to June 2024. Currently his research focuses on Federated Machine Learning. Previously he worked on utilising ML for fault tolerance and prognostics, as well as for automating archival processes. He contributed to the publication, “AI in Archival Science—A Systematic Review” (2024)

Appendix B

Dissemination of Results

Members of AA01 participated in numerous presentations, workshops, and panel discussions. Examples of ethos activities are listed in Table 1.

Table 1. Sampling of Activities undertaken by members of the AA01 research study team.

Name of author(s)	Title of presentation, article, etc.	Date of activity	Activity Type	Activity title (Name of conference, journal, website, etc.) and Location if relevant.	Link to the item, if available
Barnard, Alicia	Acerca de los Archivos Electrónicos	May 13, 2022	Conferencia	Sistema Institucional gestión documental y administración de archivos Online Mexico, Cámara de Diputados	
Barnard, Alicia	Archivo públicos e inteligencia artificial	October 13, 2021	Presentación	Semana Distrital de Archivos: Archivos, Sociedad y Transformación Digital: una mirada desde Bogotá Online. Organizers: Universidad Distrital Francisco José de Caldas y Dirección Distrital del Archivo de Bogotá.	
Barnard, Alicia	Los archivos electrónicos: Retos para el resguardo de la información	June 9, 2022	Conferencia	Primer Foro: Impulsando nuestros archivos Guanajuato Mexico	
Barnard, Alicia	Archivos, Inteligencia Artificial y Transformación Digital	October, 2023	Conferencia online	Dirección Técnica del Patrimonio Bibliográfico Guatemala	

Barnard, Alicia	Avances del proyecto InterPARES Trust sobre Inteligencia Artificial.	March 28, 2023	Round table panelist	Avances del proyecto InterPARES Trust sobre Inteligencia Artificial. 12th International Seminar of Ibero-American Tradition. Toluca, México	
Barnard, Alicia	La ciencia archivística y la inteligencia artificial	October 29, 2021	Peer review presentation	XIX Jornadas Archivísticas. Archivos y Derechos Humanos 2021 Online. Organizers: Universidad de Guadalajara y Red Nacional de Archivos de Instituciones de Educación Superior	
Barnard, Alicia	Entorno de los archivos digitales en el siglo XXI	November, 2023	Book chapter referred	Perspectivas y noticias en el ámbito de los archivos (Perspectives and news in the archives field) Instituto de Transparencia, Acceso a la Información de la Ciudad de México	
Barnard, Alicia	La IA y los Archivos	September - December, 2023	Articles and reviews	Gazeta de Saltillo, México	https://www.archivomunicipal-desaltillo.info/files/ugd/e91b2b_fb522170786b4388b0a43a485c297a74.pdf
Barnard, Alicia	Inteligencia Artificial en el entorno de la Archivística	November 17, 2022	Conference online	Inteligencia Artificial en el entorno de la Archivística. - Diploma Course Inauguration	

				University of Valencia, Spain	
Barnard, Alicia	Perspectivas y noticias en el ámbito de los archivos (Perspectives and news in the archives field)	October, 2023	Book (coordination) approved by the Editor's Committee	Book of Instituto de Transparencia, Acceso a la Información Pública, Protección de Datos Personales y Rendición de Cuentas de la Ciudad de México Mexico	
Barnard, Alicia; Escoto, Claudia; Cuellar, Rodrigo	Los archivos en el contexto de las tecnologías y el manejo de los datos personales	March 24, 2022 (online)	Round table	VI Coloquio de Archivística "Archivos y tecnologías Disruptivas" Morelia, México	
Barnard, Alicia; Umaña, Raquel; Mendoza, Aída Luz; Hernandez, Gennessy; Oviedo, Estif	Reporte de resultados del proyecto SGO5 sobre valoración documental y disposición final en América Latina	December 4, 2023	Panel presentations	Panel para la Asociación Latinoamericana de Archivos	https://www.facebook.com/ArchivosALA/videos/1106381410744753
Barnard Amozurrutia, A.; Bernal Astorga, Y.; Cuellar Hidalgo, R; Escoto Velazquez C.A; García-Velazquez, L.M	Inteligencia artificial en los archivos. Consideraciones de diseño e implementación	January, 2023	Journal article	Tábula, (25), 41–59 Salamanca, Spain	https://publicaciones.acal.es/tabula/article/view/936
Barnard Amozurrutia, Alicia; Fenoglio, Norma; Mendoza, Aída Luz; Umaña, Raquel	Valoración documental e Inteligencia Artificial	March 23, 2023	Round table panelist, online and on site	Universidad de Costa Rica, Costa Rica	

Barnard Amozurrutia, Alicia	El uso de la inteligencia artificial en los archivos	March 24, 2023	Panelist	Event on the National Archivist Day INAI Mexico City	
Baron, Jason R.; Sayed, Mahmoud; Oard, Douglas	Providing More Efficient Access to Government Records: A Use Case Involving Application of Machine Learning to Improve FOIA Review for the Deliberative Process Privilege	January, 2022	Journal article	Journal on Computing and Cultural Heritage, 15:1, article 5: 1-19 (2022)	https://dl.acm.org/doi/abs/10.1145/3481045
Baron, Jason R.; Rollings, Nathaniel; Oard, Douglas	Using ChatGPT for the FOIA Exemption 5 Deliberative Process Privilege	June, 2023	Workshop paper	3rd Legal Artificial Intelligence and Intelligent Assistance (AIIA) Workshop, ICAIL 2017 Braga, Portugal	https://ceur-ws.org/Vol-3423/paper4.pdf
Casellas-Serra, Lluís-Esteve	El análisis funcional para la evaluación y el acceso	June 6, 2022	Workshop	XXIV Reunión Anual del Grupo Español de la Sección SPP-ICA Vitoria (Basque Country, Spain)	
Casellas-Serra, Lluís-Esteve	Functional Analysis for a Transparent And Understandable Appraisal	September 22, 2022	Poster	ICA 9th Annual Conference: Archives: Bridging the Gap Rome	http://www.girona.cat/sgdap/docs/POSTER-ROME.pdf
Casellas-Serra, Lluís-Esteve	Patrones de análisis funcional y evaluación documental	March 23, 2023	Presentati on	Foro Internacional de Evaluación de Documentos: "Evaluación de Documentos en la Era Digital" Universidad de Costa Rica	

Casellas-Serra, Lluís-Esteve	Valoración documental: un modelo de análisis funcional	September 20, 2023	Presentati on	XXVIII Jornadas de Archivos Universitarios (CAU-CRUE) Santander / Online	https://youtu.be/WB-3Z9VLsRk?t=1076
Casellas-Serra, Lluís-Esteve	Valoración documental y acceso: ¿análisis de funciones o análisis funcional	November 4, 2022	Workshop	Encuentro ASARCA) "Liarse el archivo a la cabeza" Gáldar (Canary Islands, Spain)	
Franks, Patricia	The AI-Enabled Information Professional: Employing AI to Manage Digital Content	April 6, 2023	Presentati on as part of the spring seminar (invited)	Spring Seminar - Mania III ARMA Triangle Chapter Online (USA)	Information about presentation on their website (under past presentations)
Franks, Patricia	AI-Enhanced Records Management: From Hype to Practical Implementation	January 16, 2024	Presentati on	ARMA San Antonio (Texas) Chapter Webinar Hybrid - webinar online, meeting in San Antonio, Texas	https://armasanantonio.org/meetinginfo.php?id=123&ts=1701962128
Franks, Patricia	AI Governance Roundtable Discussion	October 3, 2023	Panelist	InfoGovWorld 2023 Conference San Diego, California	https://infogovworldconference.com/conference-schedule
Franks, Patricia	AI Governance Workshop	October 2, 2023	One of 5 facilitators	InfoGovWorld 2023 Conference San Diego, California	https://infogovworldconference.com/conference-schedule
Franks, Patricia	AI in IG: Trends and Issues (Roundtable)	October 4	Panelist	InfoGovWorld 2023 Conference San Diego, California	https://infogovworldconference.com/conference-schedule
Franks, Patricia	AI Trends for Libraries & Archives	May 29, 2024	Presentati on	IDEA Institute on Artificial Intelligence Online	

Franks, Patricia	AI & Records & Information Management: The Future Is Here--It's Just Not Evenly Distributed Yet	June 7, 2022	Presentati on	International Conference on AI and the Development of Records and Archives Management Online	Program: https://mp.weixin.qq.com/s/QnO_QKqaNFK1KGWSIXpfA?fbclid=IwAR06Vwfr0gh_qLzyDkTQY_YLK9aGnUZ_Cs1t31wXMBEtMaFUX7eEFM7HK8LQ Registration: https://www.wjx.top/vj/h4M2kJU.aspx?fbclid=IwAR3G_dKkd-Z44peh2BI22RWw4HEaR5O5sgxviflVyZMYcicgdKCxsblwN5l
Franks, Patricia	Can AI improve information quality to help support organizational accountability?	May 25, 2022	Presentati on (Invited)	AIIM True North Webinar Online	https://community.aiim.org/communities/community-home/digestviewer/viewthread?MessageKey=2e6b4bd2-72b6-4180-beee-b341ab72f963&CommunityKey=36dad0c1-080a-47ee-bbef-43305297fcf2#bm2e6b4bd2-72b6-4180-beee-b341ab72f963
Franks, Patricia C.	Converging Worlds: Data, Information, Records	May 9, 2024	Invited to help the board forecast the future for RIM, Data, Records, AI and Paradata.	PRIMO (Pharmaceutical Records & Information Management Org.)- Annual Board meeting Online	https://www.pharmarim.org/
Franks, Patricia	Demystifying AI: Challenges and Solutions for Records & Information Managers	May 14, 2024	Online spring conference	Twin Cities ARMA Online	
Franks, Patricia	Navigating the AI Landscape: From Content Creation through Retention &	October 3	Presenter (Invited)	InfoGovWorld 2023 Conference San Diego, California	https://infogovworldconference.com/conference-schedule

	Disposition				
Franks, Patricia	Records Management & Governance in The Age of AI	February 28, 2024	Podcast	The Digital Leader Show (video/podcast) Online	https://www.youtube.com/watch?v=NHAECO_G_9M&list=PLXJbOi5CbKI3Md170bwpMzu3GBzjtOxYx&index=1
Franks, Patricia	RIM Roundtable Panel Discussion	October 3, 2023	Panelist	InfoGovWorld 2023 Conference San Diego, California	https://infogovworldconference.com/conference-schedule
Franks, Patricia	Role of RIM in AI Governance	March 13, 2024	Webinar	GKCARMA Online	https://www.facebook.com/GKCARMA . (only announcement for now)
Franks, Patricia C.	The Role of RIM in AI Governance: Data, Information, Records, and Paradata!	June 11, 2024	Virtual presentation	ACA Virtual Conference 2024 Online	
Franks, Patricia; Barlaoura, Georgia; Baron, Jason R.; Bunn, Jenny; Evans, Lois; Giordani, Prisca; Huvila, Isto; Moore, Patricia L.; Mosweu, Olefhile; Weldon, Sarah; Kemp, Melissa (SJSU); Kerr, Jordan (UBC)	Employing AI for Retention & Disposition in Digital Information & Recordkeeping Systems – Inventory of AI enabled Software and Services	December 31, 2022 (prepared); April 1, 2023 (published)	Conducted inventory of AI enabled software and services, published report of findings	ITrustAI Report - PDF ITrustAI website	https://interparestrustai.org/assets/public/dissemination/AA01_Alproductreport.pdf
Franks, Patricia; Baron, Jason R.; Evans, Lois; Moore, Patricia L.; Tweneboah-Koduah, Samuel;	Employing AI for Retention & Disposition in Digital Information & Recordkeeping	June 30, 2023	Survey conducted, Report published	ITrustAI Report - PDF ITrustAI website	https://interparestrustai.org/assets/public/dissemination/AA01-EmployingAIforRetentionDispositioninDigitalInformationandRecordkeepi

Weldon, Sarah; Kemp, Melissa (SJSU); Carelse, Michael (UBC); Chappelka, Linnet (UBC)	Systems – An ITrustAI User Survey Report				ngSystems- UserSurveyFinalReportJ une302023.pdf
Franks, Patricia; Ghosh, Souvick; Butler, Alicia	Employing AI for Retention & Disposition in Digital Information & Recordkeeping Systems – Annotated Bibliography	May 20, 2022	Annotated bibliograp hy	ITrustAI Report - PDF ITrustAI website	https://interparestrustai. org/assets/public/disse mination/AA01_Annotat edBibliography.pdf
Franks, Patricia; Ghosh, Souvick; Butler, Alicia	Employing AI for Retention & Disposition in Digital Information & Recordkeeping Systems – Literature Review	May 20, 2022	Literature review	ITrustAI Report - PDF ITrustAI website	https://interparestrustai. org/assets/public/disse mination/AA01_Literatur eReview.pdf
Hofman, Darra; Franks, Patricia; Ghosh, Souvick; Mooradian, Norm	Time to Join the "AAA": Are you an AI-Aware Archivist?	July 16, 2022	Presentati on	NAGARA 2022 Conference Salt Lake City, Utah	https://www.nagara.org/ AnnualConferences/Ann ual Conferences Home /Annual%20Conference s/Home.aspx?hkey=623 f85c9-0769-4762-ab57- ca49e55fc1e5
Mendoza, Aída	Archivos e inteligencia artificial: algunas reflexiones normativas	Julio 19, 2023	Conferenc e presentati on	Archiveros sin Fronteras- Bolivia, Webinar	
Mendoza, Aída Luz	Asuntos Jurídicos de la Inteligencia Artificial en el campo archivístico	October, 2023	Conferenc e online	Dirección Técnica del Patrimonio Bibliográfico Guatemala	
Mendoza, Aída Luz	Inteligencia artificial, derechos humanos y archivos	September , 2023	Studium Veritatis Vol. 21 Núm. 27 (2023): Studium	Article Universidad Católica Sedes Sapientia, Peru	https://studium.ucss.edu .pe/index.php/SV/issue/ view/21

			Veritatis		
Mooradian, Norman; Bushey, Jessica; Franks, Patricia; Ghosh, Souvick; Hofman, Darra	SJSU Faculty Research Participation in the InterPARES Trust AI Project	October 19, 2023	Panel presentation	TBA Webinar	
Umaña Alpízar, Raquel; Bustos, Gerardo; Flores, Ivina; Umaña, Raquel	Panel Ciberarchivos	June 6, 2024	Round table panelist (Webinar)	Semana Internacional de los Archivos 2024. Latin American Association of Archives (ALA),	https://alaarchivos.org/dia-internacional-archivos/

Appendix C

Reflections in the Researchers Words

AA01 researchers were asked to reflect on the work completed by the team since its inception by writing a short (1-2 page) piece that addresses any two of four questions at a minimum:

1. What (in your opinion) can we conclude as a result of the work of the AA01 study?
2. What one change/action does the work produced as a result of the AA01 study suggest individual practitioners should be making now?
3. Has/How has the work produced as a result of the AA01 study changed your thinking on how ML/AI can best be applied in the digital information and recordkeeping space?
4. Has/How has the work produced as a result of the AA01 study changed the way you think we should envision the role of the recordkeeper for the future?

Rather than include the documents submitted by each member of the team, their comments were extracted as written and included under the appropriate questions. One exception is the reflection piece submitted based on Latin American research. That is included in a separate section.

Question 1: What (in your opinion) can we conclude as a result of the work of the AA01 study?

Response 1-1

The AA01 study entitled “Employing AI for Retention & Disposition in Digital Information and Recordkeeping Systems” (2022) supports the conclusion that we are still in the early days of applying automation, let alone more advanced AI tools and technologies, to the discipline of records and information management (RIM). In response to Question 11 on the use of automated recordkeeping methods, out of 82 respondents at best 37% reported the use of auto-classification; other categories included disposition (24%); content types (13%), and retention (11%). The results of the survey are consistent with my anecdotal experience over two decades of involvement in providing advice on records management issues to both private and public institutions (mostly consisting of Fortune 500 corporations and US federal agencies).

The results of the survey further demonstrate a substantial knowledge gap on the part of RIM professionals in the use of AI methods. For example, Question 28 of the survey asked about familiarity with AI, and out of 200 respondents, a combined 72% (n=142) stated that

they were either not at all aware of AI methods (38%) or only slightly aware (34%). Additional questions about AI asked in the survey only serve to buttress the basic findings on the lack of AI awareness, and hence use of AI, in the RIM profession at the current time.

In other documentation produced by the AA01 group, certainly the case can be made that the vendor community theoretically has the know-how to help educate RIM professionals; this includes expertise as to a variety of means to auto-classify or otherwise tag documents, as well as to automatically execute on retention/disposition decisions. Many such services remain under-utilized. However, our interviews confirmed that there are indeed at least some knowledgeable individuals in institutions who would be open to using more state-of-the-art AI tools, if made available. Whether there is institutional support for fully deploying advanced software currently available on the market is an open question worthy of further exploration.

Response 1-2

The main take away for me from the AA01 study is a clear picture of a practice and its practitioners working under pressure in an increasingly complex environment. This complexity is experienced in several ways, e.g.

- as a proliferation of different technologies and systems for managing digital content along its life cycle (user survey Qs12 and 18, and the vendor inventory) and a proliferation of file formats and content types (user survey Qs20 and 21)
- as a diffusion of roles, specialisms and professional identities (user survey Qs4 and 5), reflected in a wide variation in the function organisations consider they contribute towards (user survey Q7)
- as a feeling of not being 'in control', of knowing that there is digital content in systems that should be disposed of (user survey Q22)

Against this context, AI becomes just one more thing for them to deal with, e.g. *"It's something that we can't ignore..."*, *"It's just another technological development and we'll have to figure out a way to deal with it"*. Some are sanguine about this - *"It's not the first time we've seen something that's going to change the way we do things"* – others feel anxious - *"AI also, you know, as a concept, is still a little scary ... what does it mean?"*

There is optimism and hope that this new technological development might be harnessed to help them regain control - *"Millions of records and we do not have the manpower to go in and individually categorize that. [...] I would welcome it. AI could do that work. I would be very happy"* – but there is also recognition that this development brings specific challenges which fall within what they see as their sphere of responsibility (information, its use and preservation), e.g.

"I don't even think [AI professionals] understand the background of how [AI] is grabbing the information and what it's using ..."

“I think that as content gets created, what from these systems or as spatial technology becomes a thing [...]. I think that's all new content and new information that we have to understand to preserve and retain.”

Response 1-3

From my point of view, the study highlights:

1. The very early stage of AI use in archival appraisal.
2. The deficiencies in the management systems of institutions to properly handle the retention and disposal of their documents, whether in paper or digital form.
3. The weakness of professionals, either due to their training or their institutional position, to develop appropriate retention and disposal policies and, above all, to implement them.
4. Finally, it seems that all the analysed proposals consider only reactive solutions, that is, at the end of the records' lifecycle. Should we assume that digital transformation brings us back professionally to the starting point of the mid-20th century? It is at least surprising that no solution addresses the point of record creation and capture.

From the analysis of professional literature, I draw the following conclusions:

- Generally, the studies predominantly present a theoretical approach to the intersection of RIM/Lifecycle and AI. Therefore, for a practitioner, the most interesting are real case studies from the TNA and especially from Australia.
- There is a primarily possibilistic rather than practical approach with a tendency to positively assess the results obtained and, consequently, the potential of AI. For example, valuing an 84% accuracy rate (Rolan et alii) positively is to overlook that a possible 16% error would be absolutely critical for the organisation.
- Most studies are experiments on samples but never examples of regular application. Therefore, we are in a very early phase of AI application in this field except for very specific solutions.
- On the other hand, when talking about such large volumes of digital records, the reduction through AI of the volume to be supervised lightens but does not solve the immense effort of the remaining supervisory tasks that humans must assume.
- The analysed studies start from absolutely different realities and problems, which conditions both the methodology used and the comparison of results. For example, applying retention periods based on classification schemes is very different if one first needs to establish or refine the classification or identify record types. Or identifying content relationships, for example, in emails, to later decide what to delete or to keep.
- It is not directly related to the literature review, but it is significant the application of AI in "sediments" of large sets of emails and .DOC or DOCX formats. These types of documents are not considered records in certain jurisdictions but auxiliary documents

that can only serve as evidence in very specific judicial cases. Nevertheless, it is surprising that if they are considered records, they are managed without any control, necessitating action afterward.

- This opens the door to considering what we (professionals) really understand by appraisal if, for example, we consider that the detection of duplicates or copies (example of 40% of 4,6 million emails) or the detection of .DOC or .DOCX formats is part of archival appraisal. We are more likely talking about repository content analysis and cleaning but not archival appraisal itself. That is, we automate tasks with AI more than apply AI to functions.

In this regard, the findings from the Survey Employing AI..., the User Focus Group, and the Latin American case study converge to reinforce the “conclusions” 2 and 3. However, I would particularly highlight the following points from the Survey, which, in my opinion, are crucial:

1. Regarding systems and retention and disposition, there is a clear alignment in the lack of policies, documentation, and knowledge of low-level activities and processes from a granularity perspective. This issue is exacerbated by the lack of standardization among institutions.
2. Concerning AI, professionals generally have little knowledge about how it works and what we can expect from it. In fact, considering the entirety of the three aforementioned studies, one could even point to a lack of professional position on the impact of AI. Therefore, it is essential that, with a more granular understanding of low-level processes, the profession steps forward to extrapolate archival knowledge in a way that can be useful in applying AI solutions.

Response 1-4

The user survey and interviews demonstrate that participants are challenged to manage the records lifecycle in digital environments due to the extent of materials, the number of systems and formats producing these materials, and the seeming paucity of digital tools for records and information management. As an example, only about 59 percent of the participants confirmed their organizations had a trusted digital repository, and only about 38 percent listed specific digital preservation products and services in place—despite 30 to 40 years of desktops in the workplace, over 20 years’ availability of electronic records management systems, and over ten years’ availability of digital preservation systems. From this perspective, our study demonstrates the ongoing deficiencies of archives and records programs, which are often attributed to a lack of executive support and funding and a lack of digital expertise on the part of practitioners. However, based on the data, participants appear to lack agency around AI and recordkeeping primarily due to a lack of expertise—a problem not easily solved as there is no single resource where they can obtain the requisite knowledge and skills. Although many of the participants make contributions beyond conventional recordkeeping activities, they are often excluded from discussions and projects related to artificial intelligence.

On the more positive side, our study identified opportunities whereby artificial intelligence capabilities could alleviate recordkeeping challenges in under-performing areas:

- Sorting and tagging files and personalizing search
- Categorizing and classifying documents
- Describing and transcribing images and audio/visual files
- Improving the production of disposition schedules
- Automating retention
- Automating email management
- Identifying private and confidential records and improving access control (aka security management)
- Security management (who should see what)

However, as the inventory of software and services demonstrated, there is no single killer app that an organization can buy, or a practitioner can train on that will address these issues.

Response 1-5

The application of AI to records, information, and archives management is primarily in the planning and piloting stages. Users are concerned, first, that they do not know enough about the potential of the use of AI to enhance their work processes. They, then, are confronted by the practical challenges of understanding how to work with stakeholders (e.g., data stewards, AI designers, IT, and more) and/or vendors to explain their needs, evaluate options, obtain financial support, and determine the return on investment.

Response 1-6

- Both sides of the equation (vendors and RIM professionals) are suffering from miscommunications, lack of transparency, lack of understanding, and overwhelm. The market for AI systems almost feels prematurely saturated for how rapidly they have developed in the past few years - while AI is by no means a new phenomenon, this sudden explosion of innovation seems to come before there is a fulsome understanding of what these programs are, what they do, and most importantly, what we *want* them to do. There is a divide in foci between the market/vendors and consumers:
 - The market focus seems fixated on production over transparency/amelioration - and with how many new programs are being developed, it's easy to forget the details (again, on both sides).
 - The effect this seems to have on buyers (and RIM/IG in this case) is both optimism and overwhelm - liking the theory of what *could* be done but unsure how realistic their expectations are if they don't understand how it truly works.
- With the widespread creation and use of digital records, retention and disposition has moved beyond just a records management practice, yet this is not so widely recognized. Other departments and professionals are engaging in such actions with a lack of awareness about the impacts of their daily functions on RIM. For example, email came up a lot when discussing how AI could help records management, as it is something all employees use, but few effectively manage.

Response 1-7 (4 members of the Latin American team contributed to this response)

In our opinion the activities of AA01 study, particularly about SG05 case study, we can conclude that:

- Appraisal is still a process that needs more research to apply AI systems. We feel that human-machine will work better. AI could be used as a source of information on the regulations applicable for record series.
- We feel it is urgent to teach and train records managers and archivists on certain skills and abilities of computing related to digital records as well as about a responsible AI. Also, organizational culture is and has always been an issue that needs attention for a fluent communication among different participants of the development of AI in order to avoid biases and ensure authentic products in favor of persons, society and organizations.

Besides, costs, volumes and budget need to be considered. Training AI for appraisal does not seem to be cost-effective due to fact that before training digital records need to be classified according to a specific classification schema that is not always available for digital records and archives, while physical ones in paper need first digitization, with enough metadata that support extraction for an AI system.

Question 2: What one change/action does the work produced as a result of the AA01 study suggest individual practitioners should be making now?

Response 2-1

We all would wish that RIM professionals embrace greater automation and the use of AI in workflows, including through participation in career training, educational workshops, and vendor demonstrations. As alluded to above, the burden on making progress in this area shouldn't entirely fall on records officers and others in the trenches – rather, it is important that senior leaders in the organization “get” the ROI involved in terms of efficiencies achieved when automated services and AI tools are made available to RIM professionals. This is a matter of maturing information governance in institutions, where culture change is concededly difficult.

If these propositions are accepted as true, then studies like the ones we have been conducting in the AA01 group will only have real impact if we start talking to the right crowd. A “meta” recommendation for iTrust professionals is that we need to think how we ourselves can evangelize the benefits of AI to a larger segment of individuals in leadership roles who have the institutional clout to recommend that real dollars (or whatever the currency may be) be spent on automation and AI. The AI hype curve is at an all-time high; so one might think that we are at a propitious time to undertake such a push. Those involved in iTrust consider themselves to be on the vanguard of change. Perhaps the AA01 studies can assist in helping us galvanize institutions – including our own -- into taking greater action.

Response 2-2

Our study demonstrates that the emergence of artificial intelligence is both a crisis and an opportunity for record and information professionals. Given that only 10 percent of the organizations in the study are up to date on dispositions and that many are struggling in the areas listed above, artificial intelligence tools may provide mechanisms for improving performance as well as highlighting the capabilities of RIM practitioners within their organization context. From this perspective, the main action practitioners should take is to self-educate by reading available materials from their own discipline and taking general courses that provide background on key topics. This in turn suggests that a useful output from our study might be a white paper or similar product directed towards records and archives practitioners that acts as a stop-gap measure pending the development of an accreditation program from a reputable body such as the Society of American Archivists (e.g., Digital Archivist Specialist [DAS]) and similar programs available through ICRM, ARMA, and AIIM.

Response 2-3

Learning all they can about the potential for the application of AI to archives, records, and information (especially as related to the systems they use) through training, workshops, conferences, co-workers, vendor demonstrations, speaking with other information professionals, etc. Related to this, they should become active on any and all governance teams forming—such as AI Governance and Data Governance.

Response 2-4

- Not so much a concrete action, but as was brought up in the focus groups, the idea of considering AI/ML in practice in RIM really brings to mind how a system can be trained to enforce retention and disposition schedules when the majority of companies are already behind on doing so or operate on schedules that are completely out of date.
- A worry that arose for me as well is that with the price point of these systems, and the cost-benefit ratio when considering how long it would take to train them, it seems as though such systems could only feasibly be employed by large companies, furthering the divide between them and NGOs/smaller businesses and information institutions.
- Consistency is a persistent issue within R&D, but this could be a huge opportunity for the application of AI within the field. Using it to classify records, for example, removes some burden for RIM/IG workers.
 - Humans are flexible but inconsistent, whereas AI can be trained to be consistent but may not be able to handle unique cases as well as a human could. There is possibility for synthesis and collaboration instead of the commonly considered “replacement” of workers with AI.
- Though it is difficult to fathom at the moment, it is crucial for RIM professionals to identify how/where AI could be useful in their positions in the hopes of better expressing their needs to potential vendors.

- I'm personally very interested in practical applications - for example, how useful AI could be when utilized with born-digital records, versus digitized records.

Response 2-5

Much of the AI/ML is going to be embedded/integrated with larger systems in the organization. **Two actions - intra-organizational communication and proactive learning.**

It will be important to communicate frequently with IT, governance, legal, mgmt. regarding risks, requirements and opportunities of AI. Within an integrated system being able to clearly articulate the necessary information (metadata/paradata) to support effective RM / Archiving, and why these are important.

Learn as much as possible, practicable about AI, both as processing, analytics tool and as generative tool. Particularly in the context of exist vendor products. Ask the hard questions. What was the core LLM/AI trained on, how does it deal with your data - reintegration of your material into the training LLM? Is the original LLM aligned with your corporate ethos? Trained on domain specialized literature? What is the testing protocol, reconfiguration process? How auditable / documentable are the processes. Will they meet evidentiary standards for your organizational and regulatory context.

Question 3: Has/How has the work produced as a result of the AA01 study changed your thinking on how ML/AI can best be applied in the digital information and recordkeeping space?

Response 3-1

I agree very much with the comment that *"It's not the first time we've seen something that's going to change the way we do things"* and I think the results of the AA01 study have led me to reflect on how earlier technological developments have led to previous re-envisioning(s) of how I conceptualise and articulate the role and practice I see myself as carrying out. Looking back to the 1980s (as a period when "archivists witnessed the widespread introduction of office systems, the decentralization of computing, the development of much more complex applications, and the early use of network technologies"¹²), I consider that this did lead to a re-envisioning (formalised by the theory of the continuum) into the role of the recordkeeper.

I'm not sure that AI or the results of the AA01 study have led me to change the way I envision this role, but I am interested in the way in which, whereas the previous technological shift opened up a paper/digital distinction, this one is opening up an

¹² *Electronic Records Research and Development: Final Report of the 1996 Conference held at the University of Michigan, Ann Arbor, June 28-29, 1996.* Ann Arbor, Michigan, 1997.

artificial/human or perhaps virtual/real one. Similarly perhaps whereas the earlier distinction brought the concept of the record to the fore – looking to new ways in which we could instantiate it - the more pertinent ‘recordkeeping’ concepts are now authenticity, integrity and reliability and the question is now how to instantiate these?

Then again with the advent of AI I find myself focussing on data, the questioning, processing and interpretation of it and I also find myself thinking about the ‘V’s’ of big data. Thinking in terms of records, the problem of appraisal and selection has been framed mostly in terms of volume and value, rather than velocity, variability, variety or even veracity. I wonder whether we are still thinking too spatially rather than temporally – focusing on distilling down to a set of essential resources and not on enabling the ability ‘in the moment’ to generate evidenced insights? I’m not sure where I am going with this, but I can’t shake the image that we need to invert the funnel, e.g



Appraisal as a physical action - reducing volume (of space)

Appraisal as a ‘virtual’ action – knowledge grounded in and built on data (DIKW pyramid style)?

Response 3-2

AI/ML is necessary to enable us to meet the challenge presented by the variety, velocity, and volume of information that must be captured, managed, analyzed, and preserved. But there is no one-size-fits-all solution. While many of the systems in use for information and recordkeeping are now integrating AI features or offering those features as optional add-ons, customized solutions may be best. It is likely that using an AI-enabled system is a good way to start, those with more sophisticated needs will find customizing a commercial product or creating their own will better suit their needs.

Response 3-3

The incorporation of AI and ML into business information and communication systems, as well as informal integration of generative AI in authorship, and writing support will have significant knock on effects in RIM. Increased transience of information, greater emphasis on search and generation at moment of need change the character of the endeavour.

There may need to be a new understanding of authorization, of source documents. And certainly the ability of systems to maintain traceability, replication of search and analytics, including underlying prompts and algorithmic logic will be crucial. (‘explainable AI’ perhaps). As such, the role of record keeping takes on a broader and more pressing stake.

Question 4: Has/How has the work produced as a result of the AA01 study changed the way you think we should envision the role of the recordkeeper for the future?

Response 4-1

I joined the iTrust AA01 subgroup in the expectation that we would be working towards the highlighting of best practices in the use of automation and particularly AI methods in the field of RIM. I think our group has done an excellent job, especially given the time and resource constraints everyone is under, in reporting on the “as is” state of the RIM world. This itself is a valuable contribution. But the findings of our studies haven’t moved the needle in terms of changing my perception on the need for AI adoption – they have simply confirmed what I have taken as a given for twenty years, namely, that the RIM profession is woefully behind in its adoption of best practices using available technologies.

In the year 2024, institutions of a certain size, whether they be private or public in nature, should be converting to fully automated methods of recordkeeping, including (i) adopting auto-classification through simplifying records schedules to allow for easy automatic labelling and tagging; (ii) automating the retention of records as well as performing disposition functions; and (iii) using best-of-breed AI/machine learning methods to search through voluminous record repositories and archives for responsive records, as well as to filter records for sensitivities precluding wholesale access, in accordance with existing law.

Regretfully, the studies we have conducted only serve to confirm that there is a long way to go before institutions are adopting all of the above ways of conducting business. Recordkeeping should no longer be in the hands of individual end-users, to any extent; and the recordkeeper of the future needs to be empowered with the ability to deploy a fully automated suite of tools including through the use of AI/machine learning.

I applaud the efforts of my colleagues in advancing these thoughts in the series of excellent written reports that have been produced. I have been privileged to have played a very, very small part in these collective efforts.

Response 4-2

One of the key insights I have gained from collaborating with this group, and also with CU05, is the difficulty of systematizing context analysis in a way that can be transferred to AI solutions. AI faces challenges on this, yes, but no more than we professionals do in systematizing our own context analysis—assuming it is standardized, which it is not.

This challenge fits into question 2, about what we need to do, and I would add that it should be addressed urgently. Given the rapid and diverse evolution in the creation of records, the identification of their context, their relationship and aggregation, and the establishment of retention and disposition systems will be crucial, albeit likely reactive for now. Nonetheless, based on the previous section's approach, I believe two aspects are essential.

First, the analysis of complex processes and systems: why it is done, why in this particular way and not another, who is involved and how, which points in the process require formal validation, what kind of traceability is required, etc. In other words, what I consider a 'functional analysis' (deconstructing to understand) of the system, rather than an analysis of functions in the "classic" archival sense of the institution.

Second, the granularity in the analysis, down to a very detailed level, to establish useful administrative processing patterns for automation, and also for AI, while simultaneously identifying exceptions that need to be accounted for. This is crucial because the presence of a particular records in a file can change its retention period, or also its interrelation with another record or file. Applying "standard patterns" is much simpler than managing exceptions. To be able to identify and manage them is the key.

Related to this point, I believe that diplomatic analysis could be a perfect element to be applied to this kind of analysis. We need to systematize this knowledge in a way to be transferred to AI, instead of current approaches based on the meaning of content, mainly.

In summary, regarding appraisal and retention, there is currently a lot of work to determine which tasks can be automated, which combinations of tasks can form a process, and even which simple combinations of processes can also be automated. However, the analysis, identification, modelling, and supervision of complex processes will be the area where professionals will develop their role in relation to RIM.

Response 4-3

My view of the central role of recordkeeper has not changed. We are the conservative side of the use of technology concerned with the control, governance, ethical use, etc. of data/information/records. The need to create, capture, manage, provide access, preserve, and dispose of records remains, but the tools and technologies—and, therefore, practices will constantly evolve. Recordkeepers will need to be innovative, creative, and flexible when working with "AI agents" to carry out their responsibilities.

Response 4-4 (4 members of the Latin American team contributed to this response)

In relation to has/how has the work produced because of the AA01 study changed your thinking on how ML/AI can best be applied in the digital information and recordkeeping space? We conclude the following:

- As with other recordkeeping processes professionals need to learn about explicability to understand how ML/AI systems work to assess their application and get benefits for their archival activities as well as to provide better information access services. Besides, organizations should have basic criteria or guidelines for developing projects using AI systems.
- The development of parameters and protocols are needed for regulatory compliance; best practices as well as information control of restrictive information and sensitive data are also relevant.

- In Latin America we need to exchange knowledge with AI experts since we can provide our expertise on archival science and records management with them, but it is not easy in our Region to work on our language (Spanish) and our legal, economic and methodological environment because there is not easy to find AI experts to interact.