INTERPARES TRUST AI

Records Management Challenges amidst Deployment of Automated Decision-making/AI in the Public Sector: the case of Sweden, Finland and South Africa

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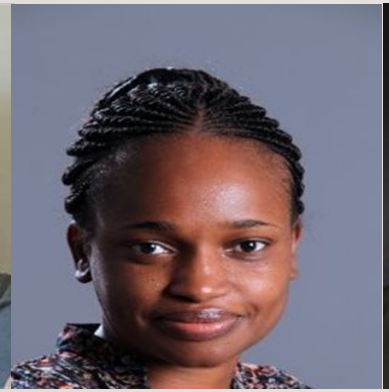
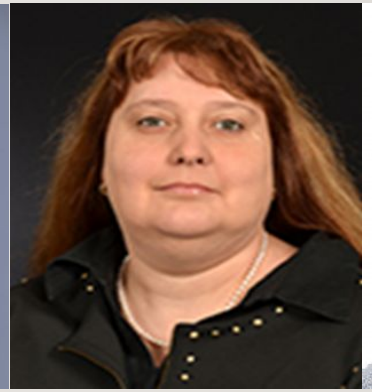
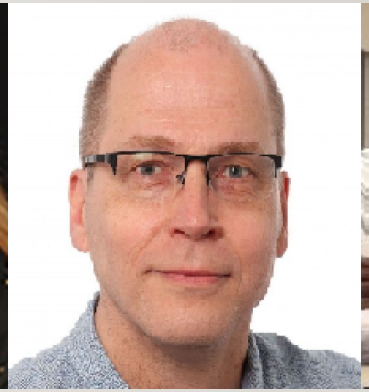
THE STUDY TEAM

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PRESENTATION GUIDE

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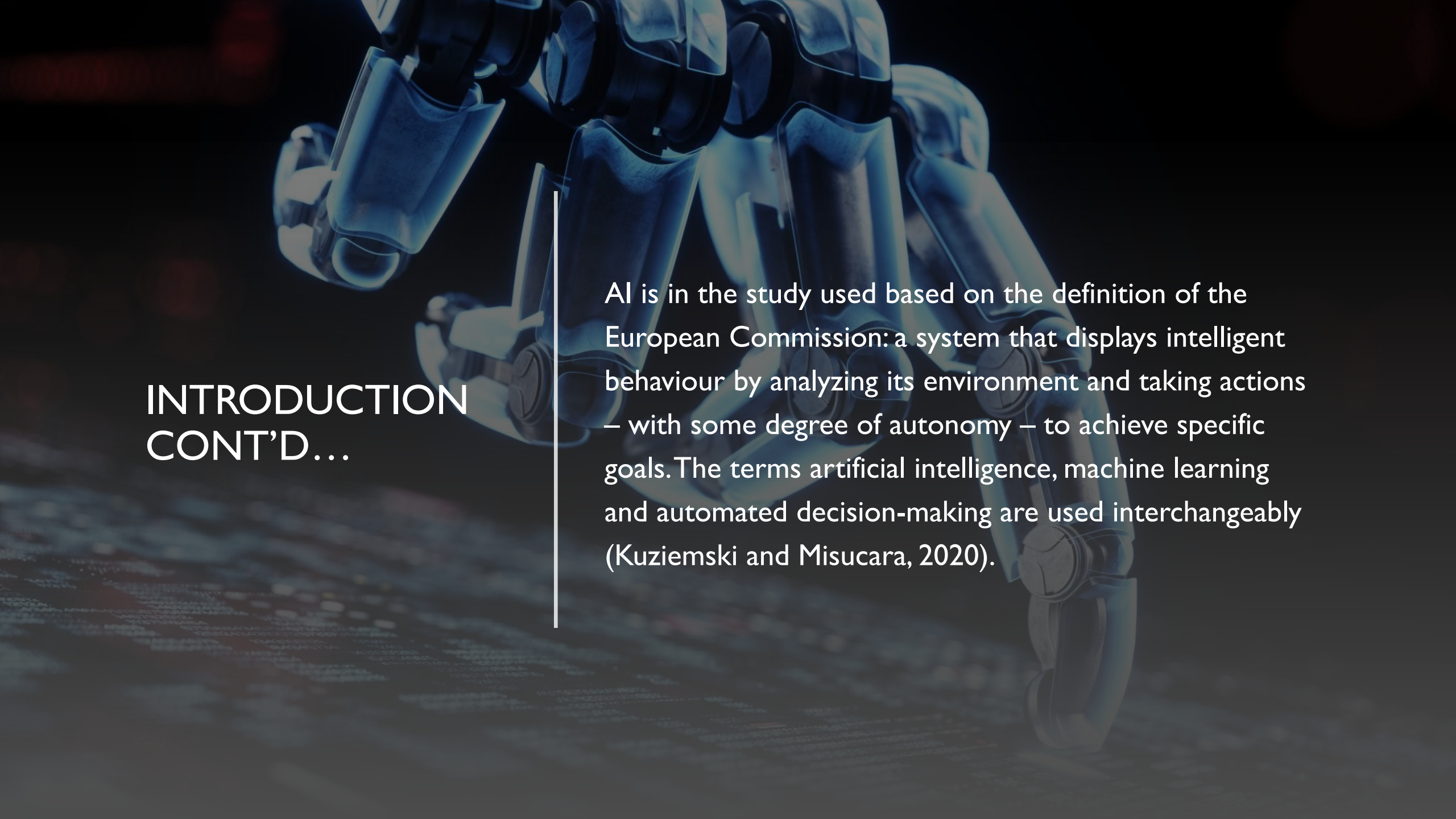
THE INTRODUCTION

Automated decision-making in the public sector has been motivated by the need to achieve, accurate, fair, efficient and uniform decisions through the exclusion of humans (Gualdi and Cordella and Reichel, 2023).

THE INTRODUCTION CONT'D…

Automated decision making is defined by Roehl (2022, p. 35) as "administrative decision-making being partly or fully based on automated outputs generated by algorithmic systems that incorporate relevant regulations of a given policy area."

May include; robotic process automation, rule-based (expert) models, regression, big data, predictive analytics, machine learning and neural networks to name but a few.



INTRODUCTION CONT'D…

AI is in the study used based on the definition of the European Commission: a system that displays intelligent behaviour by analyzing its environment and taking actions – with some degree of autonomy – to achieve specific goals. The terms artificial intelligence, machine learning and automated decision-making are used interchangeably (Kuziemski and Misucara, 2020).

INTRODUCTION CONT'D…

Rodriguez and Ballall (2022) argued that automation plays an important role in managing complexity, curbing uncertainty and performing mass activities at an affordable cost. Algorithmic automation is therefore expected to streamline processes, improve efficiency, reduce costs and to assist in decision-making.

However, despite the many claimed advantages, research studies also warned for a number of risks that may arise such as the perpetuation of choices and preferences, radicalization of speech, standardization of behaviour based on stereotypes, polarization of public opinion, enlargement of bias and discrimination and opaque decisions – lack of transparency and accountability.

INTRODUCTION CONT'D…

Kuziemski and Misuraca (2020) posited that though the public sector must harness technology to improve service delivery it has to do so cautiously to avoid any harm that might happen to the citizens. This is because although AI has the potential to transform societies and their economic systems, the risks it poses must be governed and the democratic values and human rights respected.

Some of the reviewed authors argue that although some studies have doomed the power of civil servants in decision-making, technological, organizational, political and ethical issues will require different configurations where both the civil servants and algorithmic systems will need to share the decision-making authority.

THE RESEARCH PROBLEM

The transparency and accountability of public processes are critical in any democratic government. Traditionally, through access to records citizens have been able to follow-up on decisions made by government institutions. With emerging technologies such as AI, the definition of a public record that can enable citizens to understand the automated decision-making processes is becoming complex. The documents that derive from such processes are not well defined and understood by all those involved in the processes.

THE AIM OF THE STUDY

The aim of the study is to investigate how the management of public records is affected in areas where automated decision-making and AI have been deployed in government institutions in Sweden, Finland and South Africa through the following research questions:

- RQ. 1. What are the areas within the e-government realm automated decision-making/AI is being deployed?
- RQ. 2. What are the records management challenges?

THE METHODOLOGY

A Case Study method: was applied and a total of 8 cases were investigated (Sweden).

Data Collection Technique: The interviews were carried out via the Zoom application and telephone due to time constraints except in one case where responses were sent via an email response in December 2023.

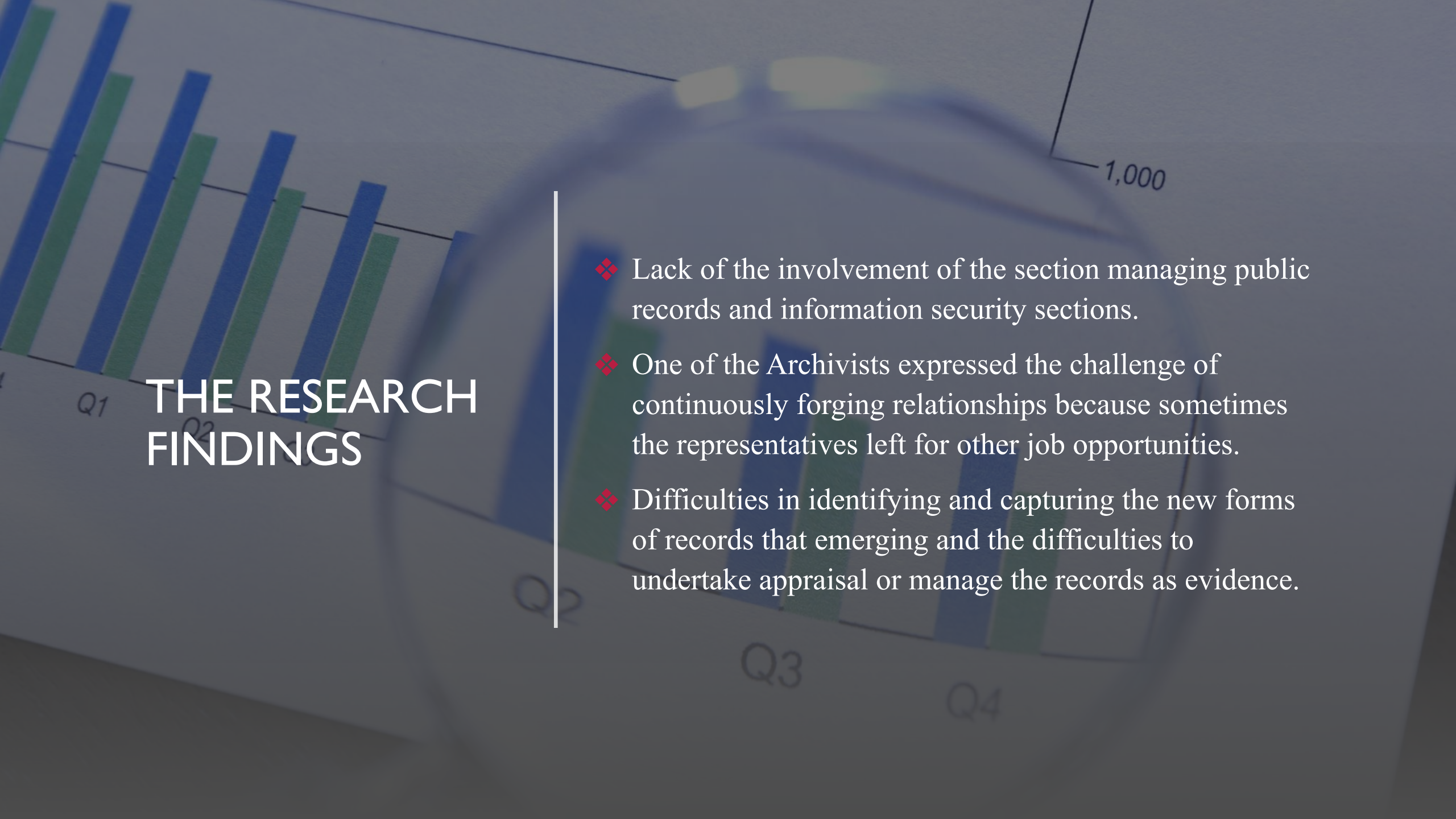
Officers interviewed: Digitalization strategists, e-service developers, business developers and archivists.

SWEDEN

Since the 1990s the Swedish parliament has encouraged its administrations to harness technology to improve their interactions with the citizens and companies and to develop and use electronic services. However, it also highlighted the need to adapt an administrative framework for decision-making.

SWEDEN CONT'D….

Reichel (2023) posited that although the legal consequences of digitalization, automatic decision-making, the general administrative law, the principle of transparency and the right to access public records have been a subject of several government commissioned enquiries in recent decades in Sweden, there are still very few general rules on automated decision-making and several issues remain unclear.



THE RESEARCH FINDINGS

- Lack of the involvement of the section managing public records and information security sections.
- One of the Archivists expressed the challenge of continuously forging relationships because sometimes the representatives left for other job opportunities.
- Difficulties in identifying and capturing the new forms of records that emerging and the difficulties to undertake appraisal or manage the records as evidence.

THE RESEARCH FINDINGS

- In one of the municipalities, the archivist was not sure of what type records that emanated from the activities of the Robot called Herbert. She only dealt with the records that ended up in the business systems.

A quote from one of the interviewees: "the archive perspective that should be considered during the introduction of new IT support systems is missing. This is due to gaps in knowledge about archives and the management of public documents. The archive function has not made itself sufficiently known in the organization. Informing about information management and archives in a large organization such as a municipality and developing the knowledge of the employees is really a challenge! The organization creates more information than those who work with information management know about. It is difficult to have an overview of where the information or data is being generated and how it should be taken care of. It is further difficult to know whether this is information that should be appraised or disposed of and if that is the case when should it be done. If something went wrong, would we be able to trace what went wrong and yet we depend on IT to understand what goes wrong or worse still do we even notice when things go wrong?"

RESEARCH FINDINGS: THE AI GENERATOR

In one of the case studies an AI Generator likened to ChatGPT 3.5-4.0 was to be suggested and discussions were on-going with the supplier.

The company is using language models – machine learning models and selling licences to those interested in the support function. The meaning is to use the language model as a base infrastructure upon which the municipality could add own data.

They were to start with the steering documents, guidelines for archives management, archival descriptions and later if the project is accepted, they would scale up to include the laws governing different areas and hence create their own ChatGPT. The intent is to reduce the administrative burden.

RESEARCH FINDINGS – THE AI GENERATOR

- The trustworthiness of the responses from the AI Generator function would require that it is only people with authorization that would upload the documents upon which the responses are based to avoid erroneous responses.
- The language model must be secured to avoid any data leakage – it has to be within the Swedish borders. For now, this is why municipalities pay licenses for this function to be able to access a language model to which they can add their own data.
- They also needed to ensure the right to their own information.
- The disadvantage of this development is wrong answers if wrong information is fed the language model. The language model also needs to train on the Swedish language.
- Issues of Provenance and authenticity of the documents uploaded have to be clear.

RESEARCH FINDINGS: INFORMATION MANAGEMENT

The respondent who worked as an Information Strategist and had an advisory role confirmed that during discussions on AI and digitalization very little attention is paid to the management of information even though it is information that is the driver of all these processes. People in projects focus on AI technology and not the management of information.

RESEARCH FINDINGS: NEW TYPES OF RECORDS

- Any information that has meaning towards the understanding of an automated decision.
- Source Code of the used software

CONCLUSIONS FROM THE SWEDISH CASE STUDY

To answer RQ. 1:

- Schools
- Public administration
- The Migration Agency,
- Health and Social Services,
- The Swedish Transport Agency,
- The Board of Student Finance,
- The Social Insurance Agency and Tax Agency

CONCLUSIONS FROM THE SWEDISH CASE STUDY

Answers to RQ.2:

- There are new types of records that are growing out of automated decision-making processes/AI deployment and they are not so clear to the archivists.
- The same traditional problem of excluding the records management and archival function still persists.
- Focus on technology and efficiency
- The management of records has to be prioritized to maintain the tenets of democracy; transparency and accountability.

FINLAND

Current Finnish legislation sets limits to the usage of AI in decision-making processes. There are several criteria that must be fulfilled if AI is to be used in decision-making. Automated decision-making is only allowed if the case can be resolved without case-by-case consideration.

In addition, among other things, there must be documented rules that describe how a resolution is reached from the inputs, and named officials who bear responsibility for the decisions and are able to identify errors in the process.

The use of AI technology as a “black box” in decision-making is prohibited.

RESEARCH FINDINGS – EXAMPLES OF AREAS WHERE AUTOMATED DECISION MAKING/AI HAS BEEN DEPLOYED

1. Prime Minister's Office intensified the processing of emails coming into the registry office through automation. The usage of AI was in the end more limited than anticipated because of information security and other (unspecified) concerns.

2. National Audiovisual Institute automated the cataloging work processes of radio and television archive program information management systems.

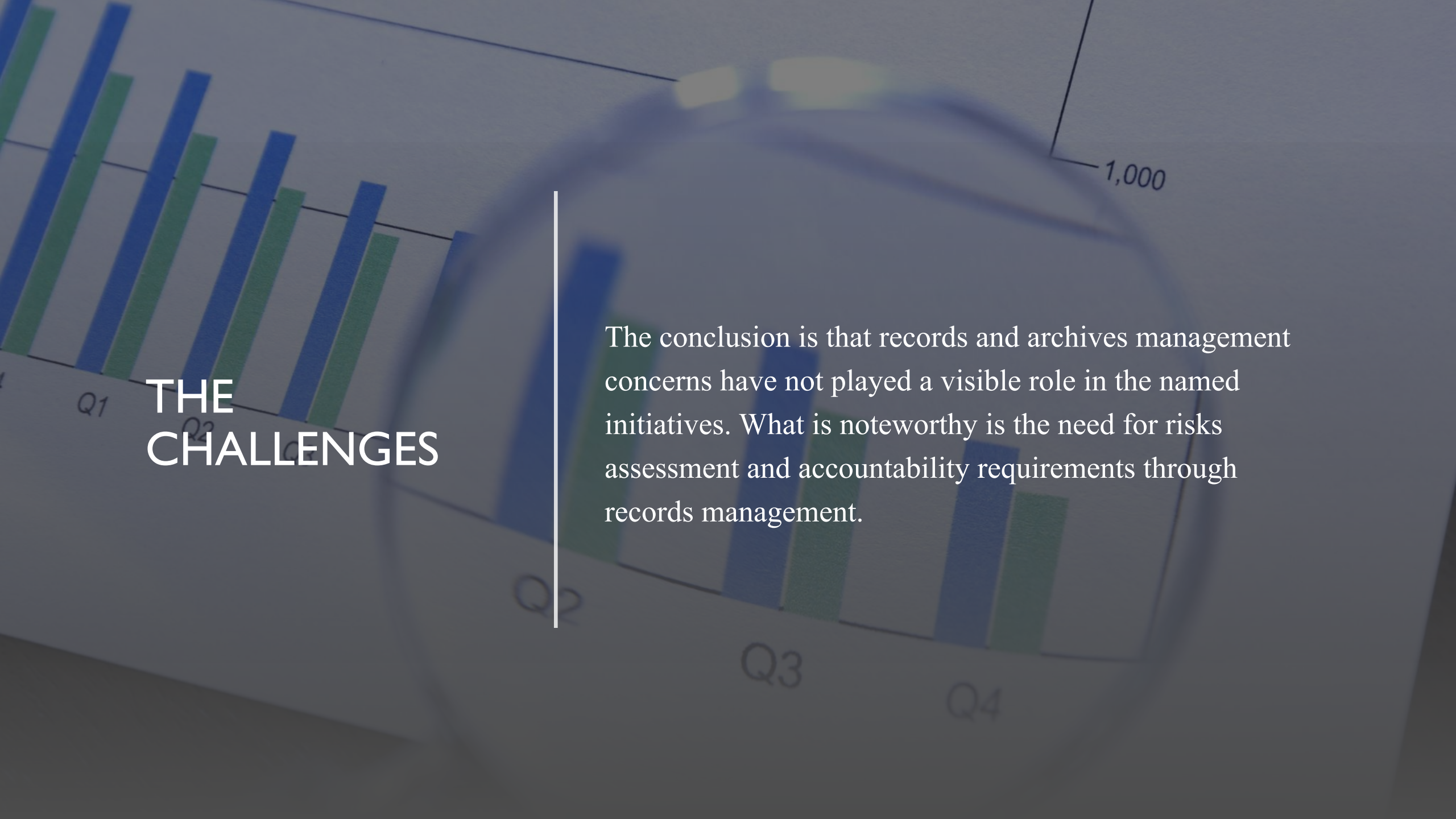
3. Legal Register Centre automated the sending of registry extracts/certificates with robotics.

RESEARCH FINDINGS CONT'D…

4. Center for Government Finance and Human Resource Services intensified the processing of fees recipients, fees invoices and external travelers' travel expenses and developed AI-assisted accounting for manual purchase invoices.

5. National Courts Administration automated the contact information search system for bailiffs. The new system gathers information from different sources to facilitate work processes.

6. National Police Board automated the reception and processing of money laundering reports, transcription of audio and video interrogations, and the advisory service chatbot.



THE CHALLENGES

The conclusion is that records and archives management concerns have not played a visible role in the named initiatives. What is noteworthy is the need for risks assessment and accountability requirements through records management.

SOUTH AFRICA

Gradual integration of automated decision-making into various sectors in South Africa.

Examples of areas of deployment:

- Public Administration (e.g., Placement of School Children in the province of Gauteng's public schools).
- Financial sector (e.g., Banking Association of South Africa implementation of ADM)

RESEARCH FINDINGS: CHALLENGES

Digital divide

Concerns about data security and privacy

Protection of Personal Information Act (POPIA) - prohibition of decisions with legal consequences or substantial impact on data subjects

Lack of standardized data formats and interoperability

Concern regarding misuse of data

RESEARCH FINDINGS CONT'D…

No literature on the adoption of automated decision-making in the context of records management

There is great potential in the use of automated decision-making in managing public records in South Africa

Careful consideration of regulatory frameworks (e.g., POPIA)

- Thank you for listening!