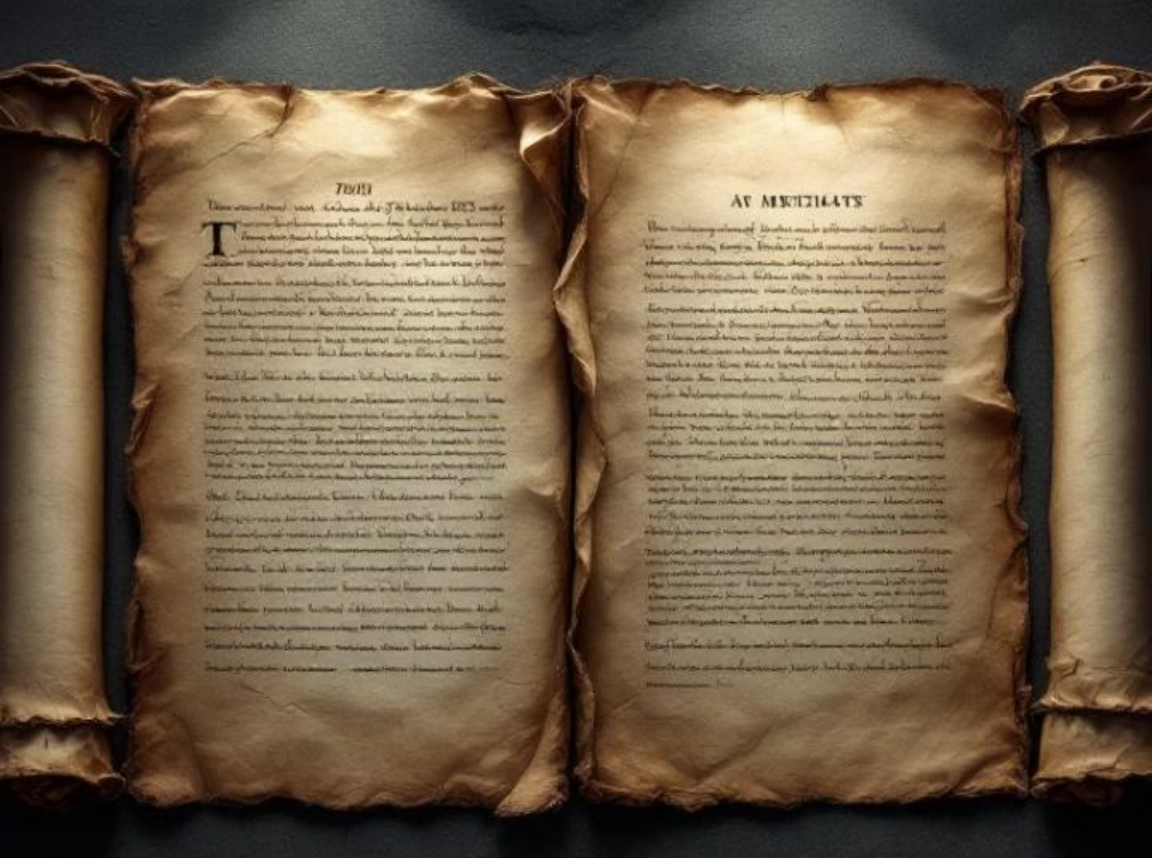




From Parchment to Pixels: How AI can support now and in the future.



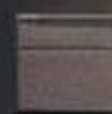
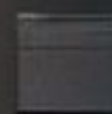
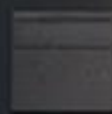
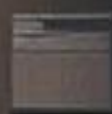
TECHNICAL AND FIELD RELATED PROBLEMS OF TRADITIONAL AND ELECTRONIC ARCHIVING

Radenci/Slovenia, May 21-23, 2025

ing. Jasper Hunnekens MBA
Export Manager – Bruynzeel storage systems

20 years storage specialist
Passionate about AI







Why This Topic?



Relevant Intersection

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Growing Challenges

Archives and museums face exponential growth. Physical storage space remains limited. Digitization increases.

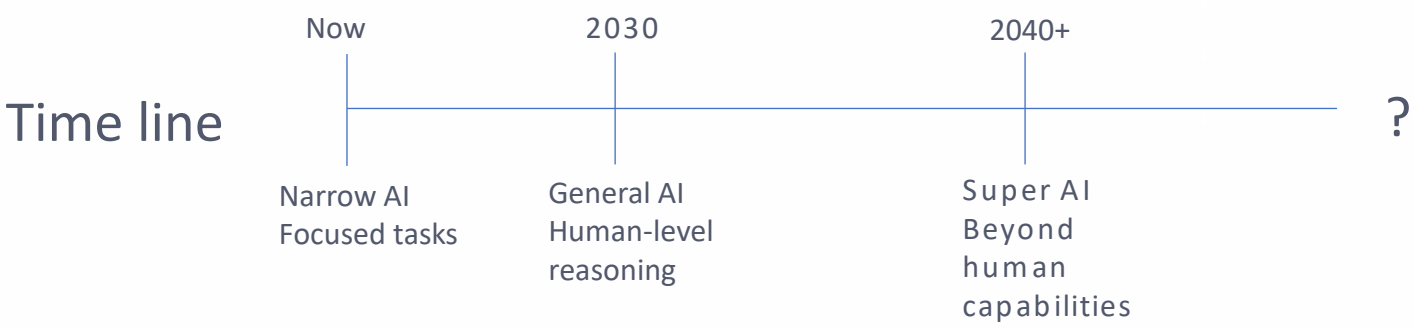
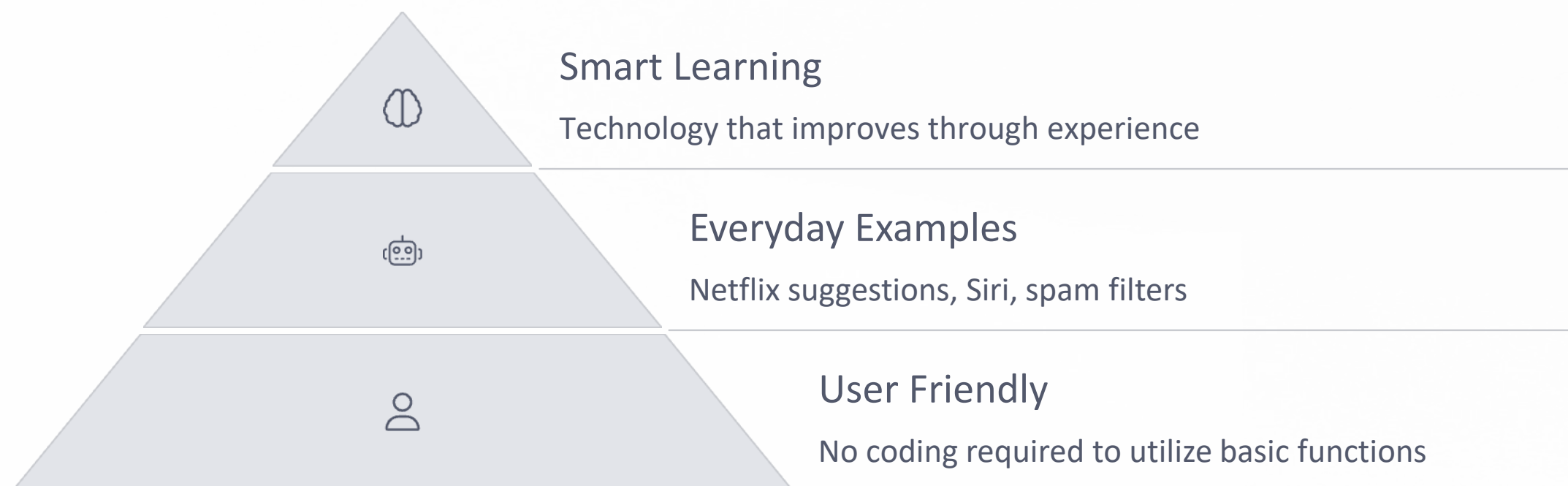


Supportive Role

AI offers assistance, not replacement. It enhances the archivist's expertise and physical preservation work as well as provides support in less obvious topics like space planning

Above all: it is a continuous development that we should closely monitor and use in our advantage!

What Is AI – Simply Put



Where AI Meets Collection Storage



Smart Search

AI finds connections between documents. It suggests appropriate appropriate metadata.



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AI categorizes materials. It tracks physical storage locations.



Storage System planning

AI helps create consistent requirements and helps prepare a reconstruction or new build. It suggests important details.



Translation & OCR

AI translates multilingual archives. It converts handwriting to searchable text.



Example – Process Optimization of routine tasks



Example – Smart Search

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Limited to exact keywords. Requires precise spelling. Misses related related concepts.

Physical items can be difficult to locate without precise catalogue information.

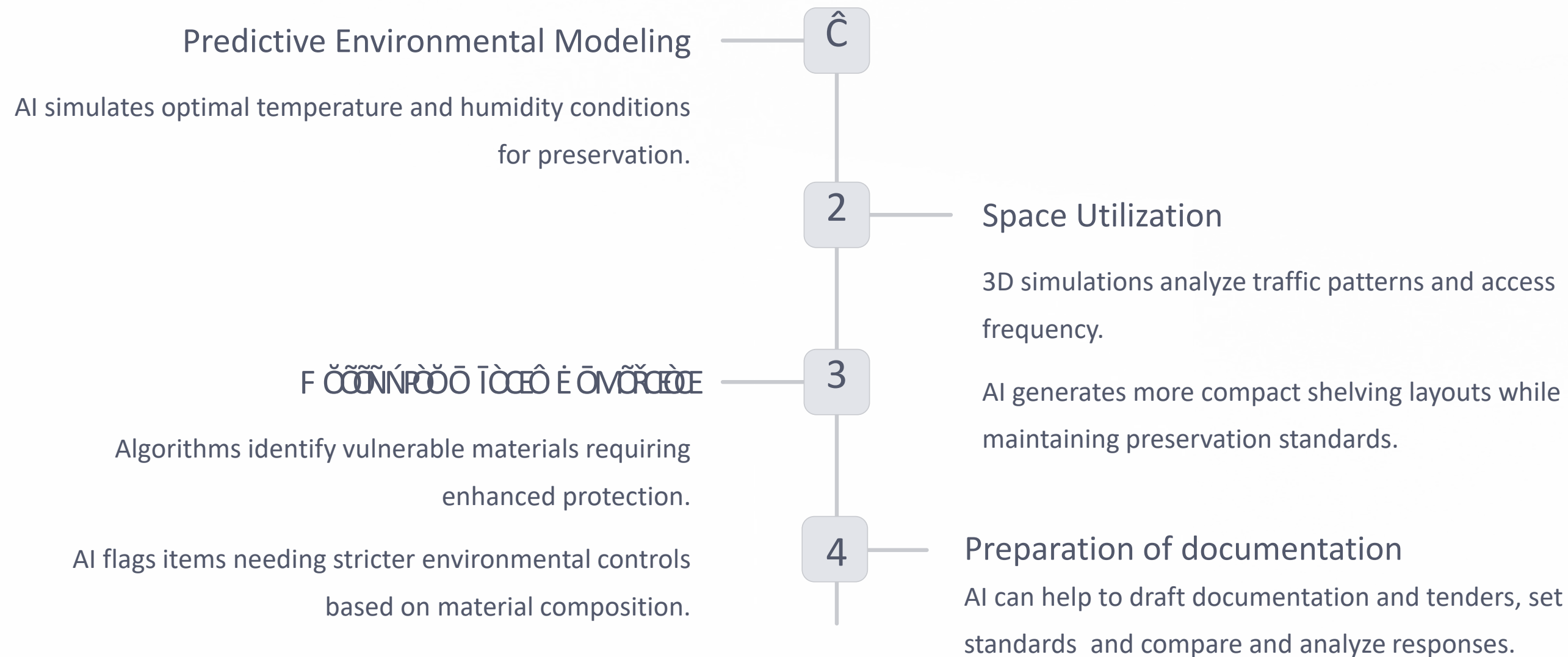
Smart search bridges digital and physical. It helps users locate exactly where items are stored in physical systems.

AI-Enhanced Search

Understands meaning and context. Suggests synonyms and related terms. Handles typos and variations.

Links digital records to physical storage locations. Makes physical archives more accessible.

AI in Storage System Planning



Example – Drafting Tender Specs

Structure Assistance

AI analyzes previous successful tenders. It suggests proven formats and sections. The system ensures all technical requirements are included.

Technical Specifications

AI recommends appropriate physical storage solutions. It provides precise measurements and materials. Environmental controls and preservation factors are automatically included.

Consistency Check

AI identifies contradictions in requirements. It flags missing information. The system ensures specifications align with industry standards for physical preservation.



Example – what elements to look for?

Input: we are considering investing in space saving mobile shelving systems for our regional archive.
what elements should we look for when selecting a supplier **and why?**

Answer:

Archival experience→ Knows how to protect sensitive collections.

High quality systems→ Long lifespan, strong materials, low maintenance.

Safety & ease of use→ Anti-tilt, smooth movement, safety features.

Max space efficiency→ Custom designs that fit your building & needs.

Climate compatibility→ Works well with HVAC, doesn't block airflow.

Smart options→ Electronic controls, RFID, software integration.

Service & support→ Local help, fast response, solid warranty.

Sustainability→ Eco-friendly materials, low energy use.

Strong references→ Proven results with other archives.

Example – Compare suppliers on sustainability

Input:
Can you make an analysis of space saving storage systems manufacturers and compare their sustainability efforts? also, can you rank them based on this?

Comparison of Sustainability Initiatives

Manufacturer	Key Sustainability Actions	Certifications	Circularity / Innovation	Notes
Bruynzeel	Net Zero by 2045, solar-powered production, EPDs, recycled steel, full lifecycle thinking	ISO 14001, FSC	High – design for disassembly, CO ₂ calculator for projects	Strong EU sustainability focus
Montel	GreenSteel program, energy-efficient factories	ISO 14001	Moderate – but less transparency	Claims focus on local sourcing
Spacesaver	LEED project support, recyclable materials, powder coating	Not ISO 14001 listed	Medium	Focuses more on end-user certifications
Kardex	Carbon neutrality goals, energy-efficient logistics	ISO 14001, ISO 50001	Medium–High	Strong in automation efficiency
Lista/Vidmar	Durable products = long lifespan, some eco initiatives	Not widely disclosed	Low–Medium	Limited public sustainability data
Aurora Storage	Recycled steel, powder coating, USA-made	Unclear	Low	Small scale, few reports

What AI Doesn't Do



Doesn't Replace Expertise

AI lacks historical context and judgment



Doesn't Handle or replace Physical Items

Conservation requires human touch



Doesn't Make Ethical Decisions

Values judgment remains human-centered

Physical preservation remains fundamentally human. AI tools support but cannot replace the skilled handling of delicate materials and storage materials and storage systems.

The Future



Intuitive Tools

AI interfaces will become more natural. Voice commands will streamline workflows. Physical and digital systems will integrate seamlessly.



Multilingual Access

Real-time translation of all documents. Cross-cultural connections revealed. Physical collections become globally accessible through digital twins.



Predictive Preservation

AI will monitor environmental conditions. It will forecast preservation needs. Storage systems will adapt automatically to protect materials.





Our advice

Begin With Basic Tools

Try ChatGPT for writing and summaries. Experiment with Google Lens for quick identification. Use simple OCR for text extraction.

Get buy in from all levels in the organization

Organize knowledge sessions. Share examples. Involve the Board of Directors, the IT department etc etc etc.

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Approach AI as a tool, not a project. Focus on solving specific specific problems. Balance digital advances with physical preservation needs.

Check check double check

Build in checks, do not simply rely on results. Trust is a great asset great asset that should be used with cautious.



Tips and tricks

- Use AI to make your Prompt better
- Ask which sources have been used
- Ask AI to check itself
- Be specific in your questions
- Be aware of security settings
- Never trust an application letter again 😊

Tools used for this presentation



Creating avatars in any language



Aligning conceptual framework for the presentation



Converting basic Powerpoint into design including images



Creating images and timeline



Questions?

