Reimagining ETD with AI

A story of how Thomson Reuters brings AI to its knowledge discovery process and how ETD can benefit from a similar process

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Introducing myself

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Handling Content for better Knowledge Discovery

Let's discuss the use of AI along this Content Lifecycle

1. Techniques used in Content Acquisition and Content Processing

2. Metadata Extraction and Cross-referencing Content are done by SMEs powered by AI

3. Algorithmic Search for better efficiency
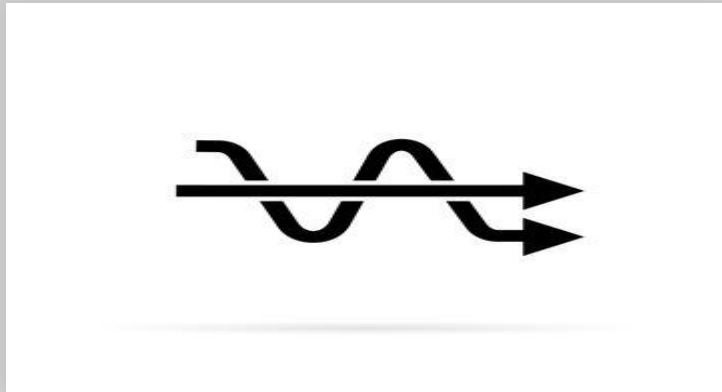
4. Enable useful Product features

Research Products

Acquiring the Content

Enabling better **Search** and Index

Information Processing

4

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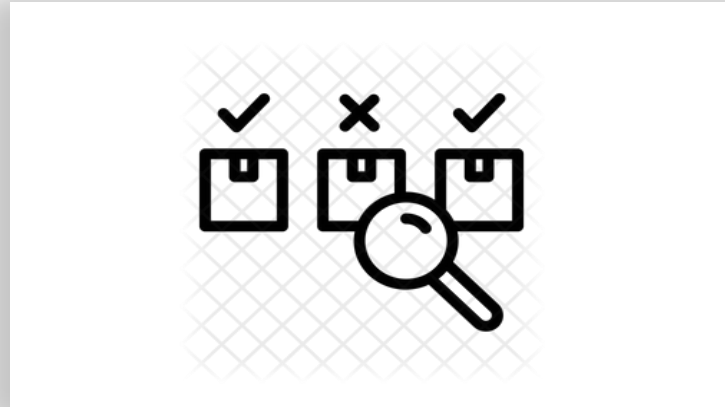
Why should we use AI?

Here are a few reasons we use AI

Process Simplification

Simplification leads to more efficiency

Quality Control

AI helps give the process an extra review

Speed & Efficiency

The world is fast-paced!

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Our Data and AI Ethics Principles

1. That Thomson Reuters use of data and AI are informed by our [Trust Principles](#).
2. That Thomson Reuters will strive to partner with individuals and organizations who share similar ethical approaches to our own regarding the use of data, content, and AI.
3. That Thomson Reuters will prioritize **security and privacy** in our use of data and throughout the design, development and deployment of our data and AI products and services.
4. That Thomson Reuters will strive to maintain meaningful human involvement, and design, develop and deploy AI products and services and use data in a manner that **treats people fairly**.
5. That Thomson Reuters aims to use data and to design, develop and deploy AI products and services that are **reliable, consistent and empower socially responsible decisions.**
6. That Thomson Reuters will implement and maintain **appropriate accountability measures** for our use of data and our AI products and services.
7. That Thomson Reuters will **implement practices** intended to **make the use of data and AI** in our products and services **understandable**.
8. Thomson Reuters will use employee data to ensure a **safe and inclusive** work environment and to ensure employee compliance with regulations and company policies.
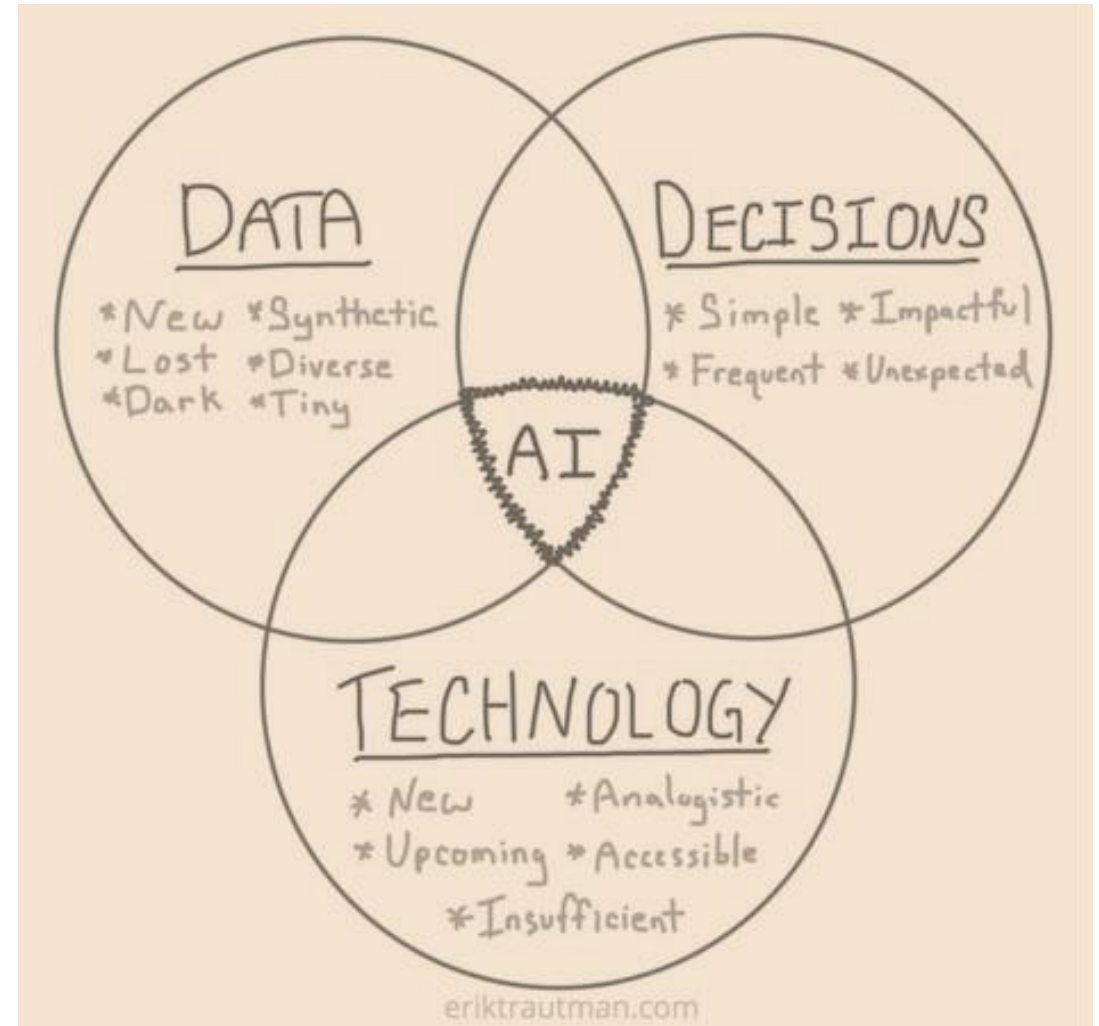
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What fuels AI use-cases today?

Data:

➤ What IT Systems are there?

➤ What third party data can be useful?

➤ Which systems can be complimentary?

➤ What data can be combined to form new data?

Skills:

➤ Analysts, Data Scientists

➤ Domain specialists who can connect possibilities of AI with data and technology

➤ Tech teams with Engineers

• What problems do you want to solve?
• What do you wish would change?

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Can we beat AI?

Laura Skylaki

Which one was generated by the machine?

Which music is composed by Machine?

A

B

1.

A

B

2.

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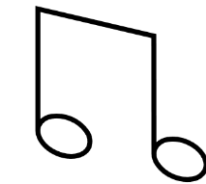
Which one was generated by the machine?

Which one was written by the machine?

 A

Defendants effected unauthorized interception and receipt of satellite programming by ordering programming for residential use and subsequently displaying the programming in a commercial establishment for commercial gain without authorization.

 B

Defendants unlawfully intercepted, received, published, divulged, displayed and exhibited plaintiff's satellite programming transmission signals, without getting authorization from plaintiff for commercial advantage.

Defendant failed to properly evaluate and treat plaintiff's injuries.

Defendant committed medical malpractice by failing to give standard medical treatment to plaintiff causing injuries.

Defendant violated the procedural requirements of the plaintiff's and its implementing regulations by its failure to initiate and complete consultation with the plaintiff, so as to protect the species and natural habitat.

Plaintiff seeks declaration that defendant has violated substantive requirements of the ESA by failing to ensure that implementation of the NFIP in Monterey County is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of the critical habitat of such species.

ETD 2023

the answer company™
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What is ETD all about?

The **Networked Digital Library of Theses and Dissertations (NDLTD)** is an international organization dedicated to promoting the adoption, creation, use, dissemination, and preservation of electronic theses and dissertations (ETDs). We support electronic publishing and open access to scholarship to enhance the **sharing of knowledge worldwide**.
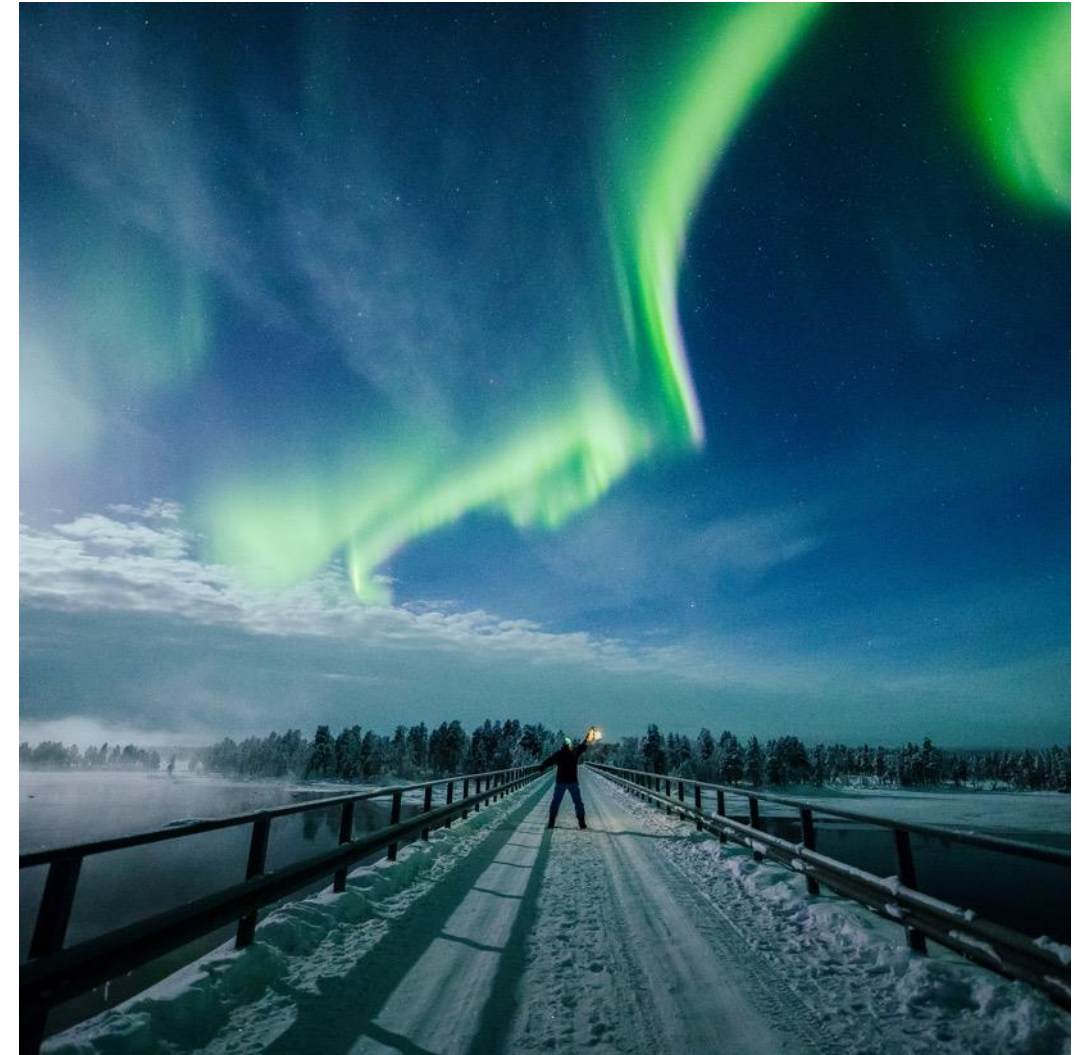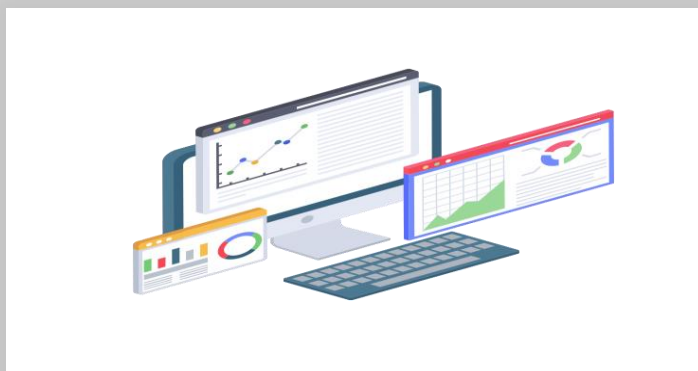
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Enriching ETDs and their reach

This year's theme

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Advantages of AI to ETD

Based on my discussions, meetings and demos with academicians, professors, techno-journalists, students, community members and librarians, I collected a few points, which has led me to list out the following suggestions

Enhanced Data Analysis

Leveraging the compute power to draw patterns and analyse large volumes of data more easily

Interactive Thesis and Dissertations

Can Intuitive, intelligent search play a better role in thesis development?

Automated Literature Review

Using AI for better search, annotation and reference checks

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Advantages of AI to ETD

Here are a few more points that I could come up with.

However, the power of this new technology once experienced will give any academician an ability to imagine more.

Can we list a few more from your ideas?

More Collaborative Research

Discover research in your domain around the world at a pace like never before. Connect with authors and academicians in your space, based on customizations

Multimodal Research

Having access to more content will mean different formats and types of content as well. This will mean taking research flows to different formats too, like audio files, video clips, art and others

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This has the additional advantage of a more equitable world, one that is more accessible to different people from different levels of accessibilities, disabilities and more open!

Generative Content for Thesis

Can a thesis include generative content?

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Advantages of AI to ETD
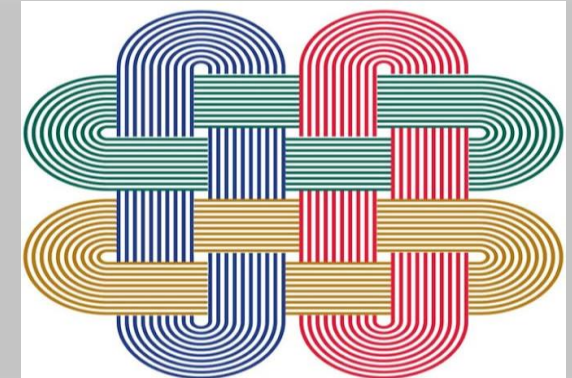
And more…

Dynamic World

Global Access and Translation made smooth with AI

Dynamic Updating with newer content

Customised Learning

Not just for ETD!

Inter-disciplinary Collaboration

It's a new world!

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Challenges and Concerns

Over-reliance on technology causes to devalue human analytical skills

Data Privacy

Ethical Considerations: Who is responsible when AI gets it wrong?

Quality Control: Authenticity and Originality of work

Skills Gap

Next Steps

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What does the future hold?

1

2

Case studies that help to
- envision the future
- assess risks
- accelerate advantages

- **Establish protocols** for AI-assisted ETD?
- **Continuous training** for academicians and researchers
- Academic Institutions to **establish standards**

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Thank you!

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