"Al-Powered Asset Management: Where does metadata fit in?"

Jeff Nova, CEO, Colorhythm

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Photo by Emily Ardrey





"If metadata is a statement about a resource, that begs the question of who is making that statement."



Jeffrey Pomerantz

Metadata

(2015) Cambridge, MA: MIT Press.



The Alignment Problem

"It boils down to this: ensuring AI systems act according to what we want them to do.

Misaligned AI systems can cause harm, even if unintentional.

As AI gets more powerful, so do the potential consequences of misalignment."

- Google Gemini Pro 1.5





Al in Metadata Workflows

- * What interests are met by AI-generated metadata?
- * What concerns are raised?
- * Should we always review AI-made metadata?

* As AI improves, how will its role evolve in knowledge access generally?



Interests Before Solutions

What are our interests here? We want photo metadata that is:

ACCURATE

CONNECTED

✓USEFUL

✓ SAFE

VUNBIASED



✓ PERSISTENT

✓ ACCESSIBLE

✓INSIGHTFUL

✓ ROBUST







So where do the differences between Al and human-made metadata make an impact on meeting these interests?



- * Speed of execution
- * Volume of queries
- * Lower cost
- * Visual content more accessible
- * Localization (100+ languages)
- * Variable output keywords, descriptions, summaries and potentially interactive



Benefits of Al Metaolata

- * Can be trained on institutional data: **Retrieval-Augmented Generation (RAG)**
- * Aid in cultural and historical preservation; can be trained in specific cultural/ historical contexts
- * OCR including text in many languages, making text within images searchable
- * Add AI-based text-to-speech (TTS) to produce audio files or stream



Pitfalls of Al Metadata

- * Volume of output potentially difficult to supervise
- * Hallucinations, inaccurate information confidently offered
- * Could miss nuances of ethical considerations, cultural context, copyright usage
- * Could promote biases present in its training

- * Costs can be difficult to predict
- * Situational knowledge of important kinds are difficult to train a model on
- * Face detection/recognition, characterizations of gender, race, and other sensitive data can be crudely mishandled



Al-Generated Voice and Video



Script by ChatGPT 4 Turbo

