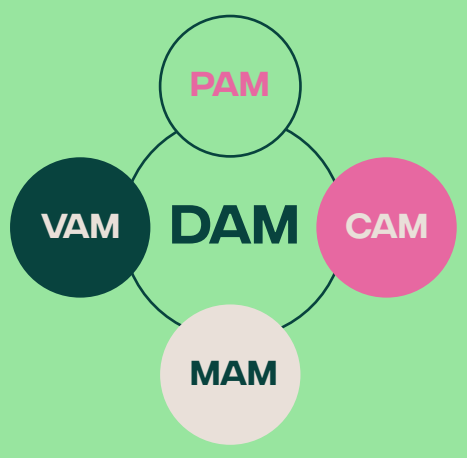
DAM, AI, & MACHINE LEARNING

A comprehensive guide to Digital Asset Management and the role of AI within.

DIGITAL ASSET MANAGEMENT (DAM)

Digital Asset Management, otherwise known as DAM, allows users to arrange, describe, store, and provide access to digital assets within one domain. It includes a search engine to provide results for assets for easy findability and improves workflow efficiency through automation of ingest, metadata creation and authenticated access.

INCLUDED IN A DAM SYSTEM:



- **PAM:** Product Asset Management
- **CAM:** Creative Asset Management
  - work in progress files such as InDesign or Illustrator files.
- **MAM:** Media Asset Management
- **VAM:** Video Asset Management
  - preproduction and post production of videos.

EXAMPLES OF DAMS

- Aquia DAM (Widen)
- Brandfolder
- Bynder
- Canto

DAM VS. GOOGLE DRIVE

A DAM has:

- Right management
- Tagging
- Technology to add information
- Archiving
- Reproducing
- Connecting with different workflow

ARTIFICIAL INTELLIGENCE (AI)

AI asset management makes use of cutting-edge technology such as Computer Vision, Natural Language Processing (NLP), Machine Learning (ML), and more. These technologies aid in the automation of processes like digital asset tagging, classification, and description.

MACHINE LEARNING

This is the heart of AI. It gains knowledge through exposure and doing repetitive things. This is how an algorithm is created.

DEEP LEARNING

Deep learning has the ability to automatically identify the collection of characteristics that differentiate various data categories from one another. It can also ingest unstructured material in its raw form, such as text or photos.

NATURAL LANGUAGE PROCESSING

Allows computers to understand, interpret, and generate human language.

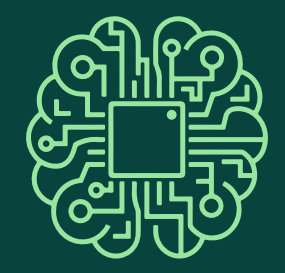
HOW MACHINE LEARNING WORKS

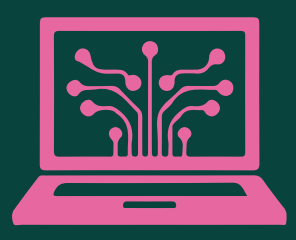
1. A Decision Process

Predictions and classifications are typically made using machine learning algorithms. An estimate of a pattern in the data will be generated by your algorithm based on certain input data, which may or may not be labelled.

2. Error Function

A tool used to assess a model's prediction. An error function can compare known examples in order to evaluate the model's correctness.





GENERATIVE AI

AI systems are employed to find underlying patterns in the data sources. With the use of generative AI, new material can be produced from text descriptions, pre-existing images, audio, or video. This can assist in generating metadata.

AI IMAGE GENERATION

This requires a lot of training and needs millions of image examples to understand what attributes make up your request.

CHALLENGES & CONCERNS OF AI IN DAM

Data quality

- The effectiveness of AI in DAM heavily relies on the quality of data it processes.

Data diversity

- AI can assist with DAM, but it must be reviewed and audited so it has accuracy and is not biased.

Ethical

- AI generated content should be used responsibility and not to be made to deceive.

Limitations and challenges

- Depends on quality of input data (poor data = bias, poor information quality)
- How do we reskill the people who have been displaced by AI? New jobs?

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