

Accelerating Turnaround Time and Improving Data Accuracy with AI and Expert Insight



42,000+ images processed

95% data accuracy

50% reduction in TAT

Enhancing Clinical Content Indexing and Image Tagging with Artificial Intelligence

Diverse Client Base and Purpose -
Medical professionals, researchers, learners

Automation and AI-enhanced Efficiency -
Streamlined indexing, automated image retrieval

Data-Driven Taxonomy and Human Validation - Indexed concepts, human-validated structure

Our client is a leading provider of advanced clinical technology and research-driven answers to medical professionals, individuals under medical care, scientists, learners, and upcoming healthcare contributors.

The client sought to radically refine and amplify their content indexing and image retrieval processes for efficiency. The overarching intent was to utilize automation to efficiently extract and categorize relevant information from image descriptions and contents.

Straive offered the client an AI-assisted template with user-friendly dropdowns, streamlining indexing for Subject Matter Experts (SMEs). The solution also involved creating a taxonomy by utilizing indexed concepts derived from the data, allowing for a structured organization of information, augmented by human-in-the-loop validation for consistent and accurate tag generation.

Content Indexing and Tagging Automation Challenges

Our client faced three significant challenges in automating content and image indexing, and tagging:



Scale and Speed :

Managing and processing an extensive volume of content and images within tight timeframes presents a significant challenge, demanding efficient automation solutions to meet the accelerated indexing and tagging requirements.



Data Variety and Complexity :

Dealing with the diverse nature of content and images, including varying formats, and contexts, necessitates intricate automated mechanisms to ensure accurate and relevant indexing and tagging.



Resource Allocation and Infrastructure :

Optimizing the allocation of computational resources and infrastructure to handle the sheer magnitude of content and images demands careful planning to achieve rapid and effective automation without compromising quality.

Streamlining Health Library Access with AI

Straive's AI-powered solution restructured the content indexing and image tagging process for our client's health library, enabling seamless image retrieval for end-users.

Leveraging client-provided images and access to the specified e-book, our advanced analysis laid the foundation for a robust data repository. This repository was intelligently integrated into user-friendly dropdown lists, ensuring efficient categorization.

By thoroughly scrutinizing the book's content and chapters, we identified a comprehensive array of concepts suitable for the dropdowns by judiciously using AI and data analytics. Furthermore, regularly updated batches ensured an evolving list that encompassed new, relevant concepts.

**Seamless Image Retrieval :**

Straive's AI-driven approach streamlines content indexing, ensuring easy image retrieval in the health library.

**Data-Powered Foundation :**

AI and data analytics create a strong data repository from client images and e-book content.

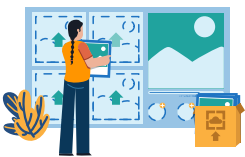
**Dynamic Concept Lists :**

AI dropdowns efficiently categorize content, updated with relevant concepts from comprehensive book analysis.

Moreover, we leveraged the experience and expertise of our medical domain SMEs to tackle data quality and integration challenges. This human-AI synergy enabled us to fine-tune the data repositories, resulting in continuous data quality enhancements and seamless integration.

Key Steps in the Enhanced Process:**Precision Image Retrieval :**

Extracted targeted images from designated e-books, leveraging metadata elements such as ISBN, chapter title, book name, and image/figure number. This meticulous approach fueled accurate content indexing.

**Dynamic Image Description Retrieval :**

Employed advanced algorithms to efficiently source image descriptions based on figure/image numbers, optimizing the retrieval journey.

**Automated Data Extraction :**

Integrated automation through dynamic data repositories to extract critical information from image descriptions, elevating precision and efficiency.

**Cohesive Taxonomy and Tags :**

Employed a consistent AI-powered human-in-the-loop approach, to offer coherent and pertinent Taxonomy Topic Tags and SNOMED Term & ID assignments, establishing a robust framework for content organization.

Delivering Results with AI and Expert Insights

By leveraging AI, cutting-edge data analytics, and the insights of medical domain SMEs, Straive orchestrated a significant transformation in the client's content and image indexing and tagging process. As a result of this synergy, we achieved the following outcomes :

- Streamlined image indexing and retrieval for end-users from the health library.
- Ensured data accuracy through SME intervention, considering the sensitive nature of medical data.
- Achieved consistent output across operations.
- Accelerated turnaround time, leading to enhanced efficiency and cost savings.
- Improved productivity and quality, particularly with SME involvement.
- Minimized manual data handling efforts.
- Elevated data accuracy and traceability.

Why did the client choose Straive?

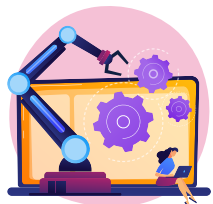
Enterprises leverage Straive's deep AI and data analytics capabilities and multi-disciplinary SMEs for enhancing operational efficiency, gaining actionable insights, ensuring scalability, and delivering personalized user experiences.

Straive's Capability Overview



Advanced AI Capabilities :

Capability to harness AI and use advanced algorithms that accurately analyze and interpret visual content.



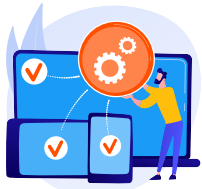
Efficiency through Automation :

Offer automated image and content tagging, reducing manual effort and improving operational efficiency.



Enhanced Data Insights :

Ability to extract valuable insights – patterns, trends, and user behaviour – from image and content repositories.

**Scalable Solutions :**

Customize scalable solutions that adapt to growing image and content volumes.

**Personalized User Experience :**

Offer personalized content recommendations based on user preferences and interactions.

About Straive

Straive is a market leading content technology partner that provides data services, subject matter expertise (SME) and technology solutions to multiple domains, such as research content, e-Learning / EdTech and data/information providers. With a client-base scoping 30 countries worldwide, Straive's multi-geographical resource pool is strategically located in eight countries - Philippines, India, USA, China, Nicaragua, Vietnam, United Kingdom, and the company headquarters in Singapore.



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