

Content Mate

Triples Content Managers' Productivity

Content

- The Problem
- The Solution
- How it's Made
- Under the Hood



The Problem

The more products have an online store on display, the more potential customers it could attract.

Product cards must be visually appealing and contain actual information about goods. That is why creating product cards is labor intensive and slow process.

Long tail retail strategy means that unique items in the assortment are sold rarely, so the spendings on the content for each item affects costs significantly.



Typical Workflow Slow and Expensive

Images

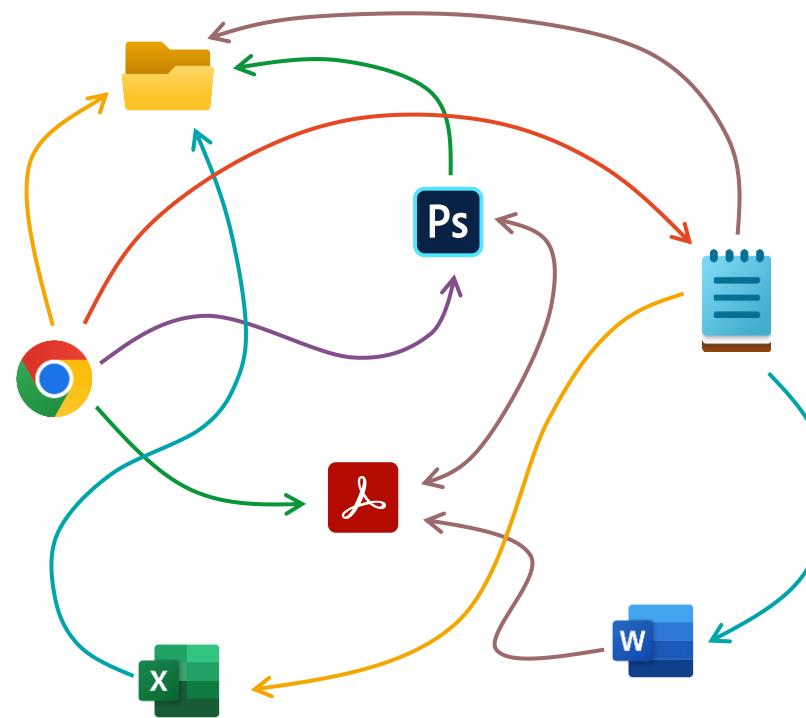
Crop, pad, resize, enhance

Files

Download, rename, add header and footer

Specifications

Create list of specifications



Texts

Compose name, write preview text and description

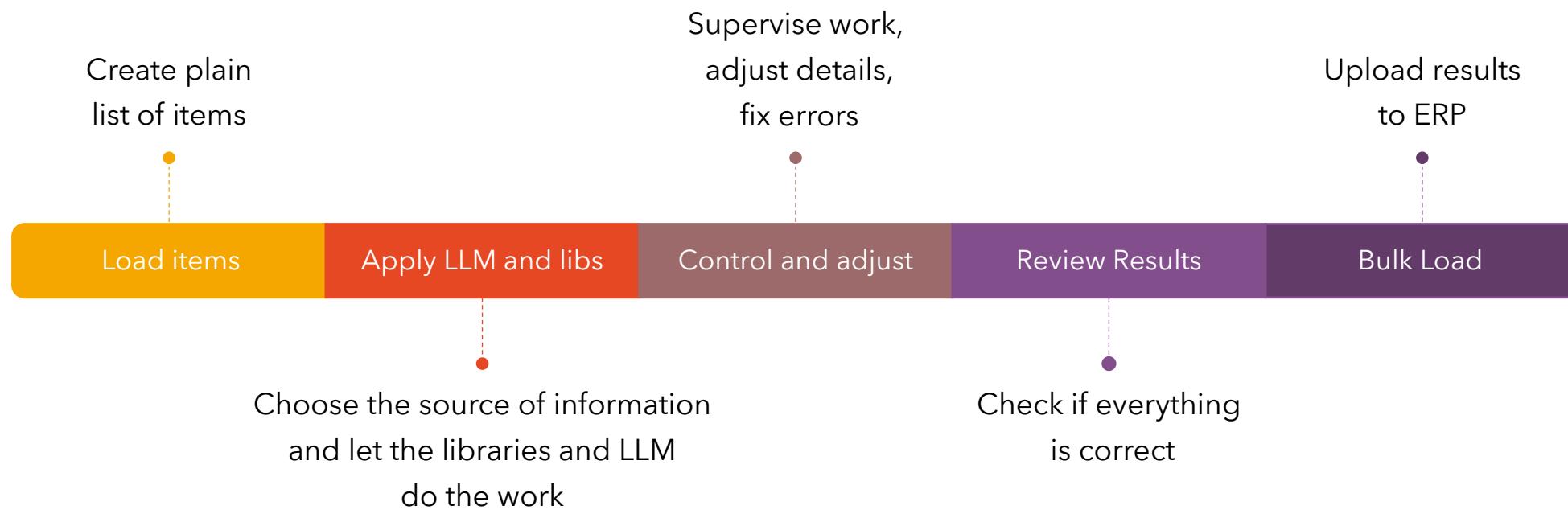
Attributes

Fill in weight, volume and other essential attributes

Properties

Fill list of properties varying across categories

The Solution



My Page

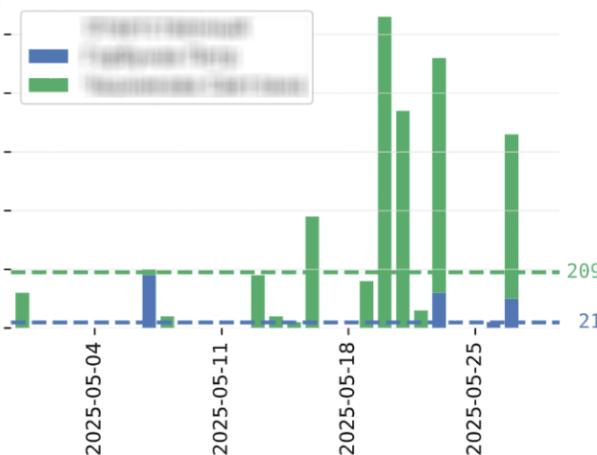
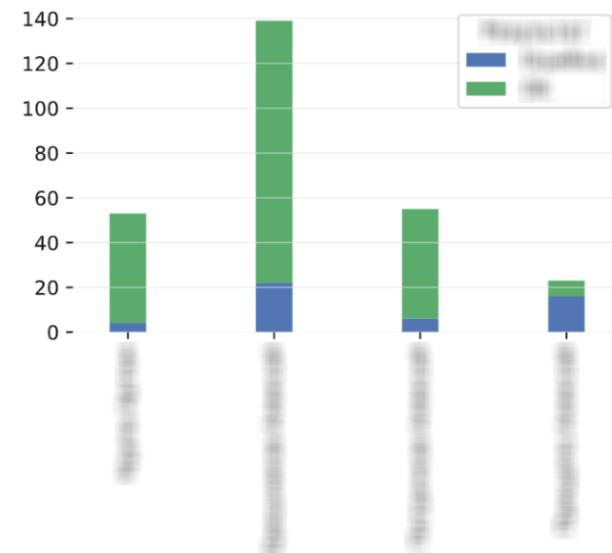
[Create a task](#)My Tasks • [All Tasks](#)

No tasks found

Tasks to review

Name	#	Vendor	Reviewer	Items	Updated
Add new SMARTEC products	15815	SMARTEC	██████████	15	27.05.2025 14:39:
Add new iFLOW products	15806	iFLOW	██████████	24	16.05.2025 16:59:
Add new OPTIMUS products	15829	OPTIMUS	██████████	11	23.05.2025 07:55:

Statistics

Completed [i](#)Reviews [i](#)

How it's Made

Content Mate is a web application that consolidates dozens of fragmented operations into a single interface. The input is a list of product SKUs, and the output is an archive containing processed images, PDF documents, and spreadsheets with product names, descriptions, attributes, and key features—ready for bulk upload.

Design

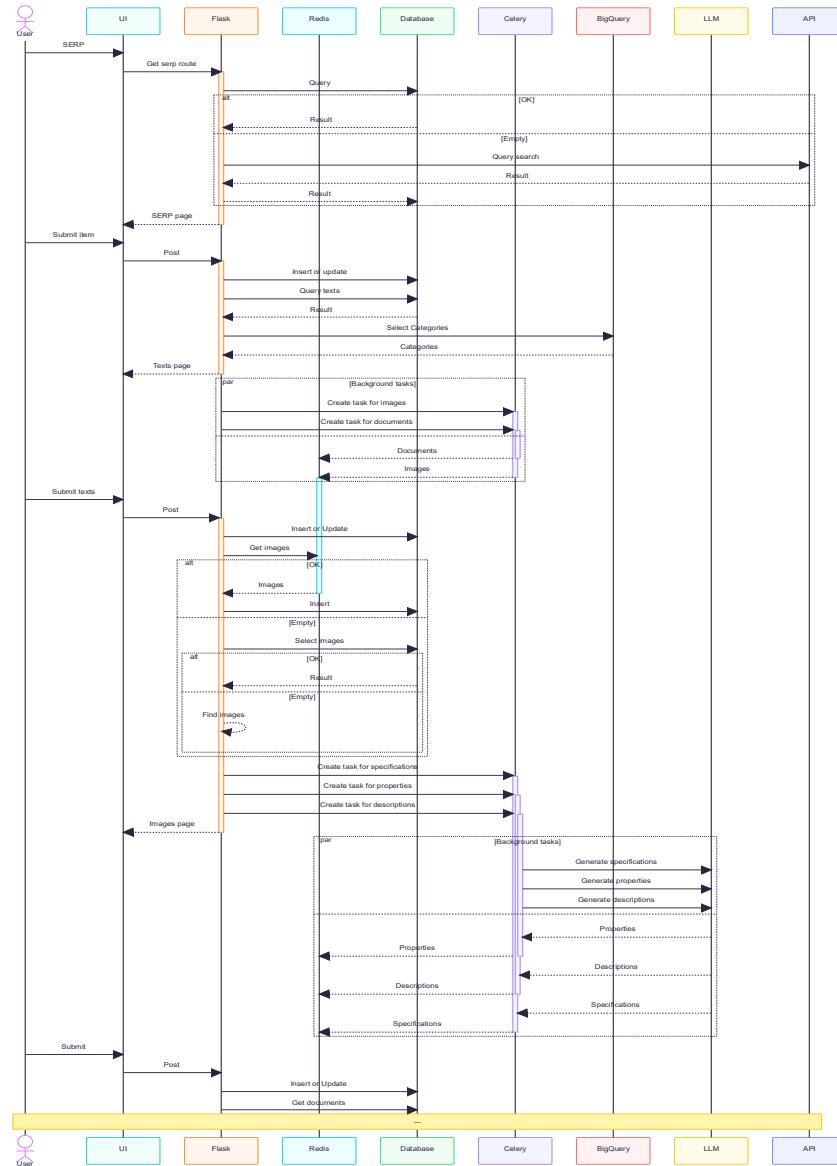
The application design is characterized by its minimalism and clarity. A consistent set of controls is maintained throughout all screens. There are two primary workflows for creation and review processes. The architecture of the application enables lengthy tasks, such as queries to the LLM, to be carried out in the background, ensuring fast and responsive user experience.

The screenshots illustrate the Content Mate application's interface, which is designed for managing product data and reviews.

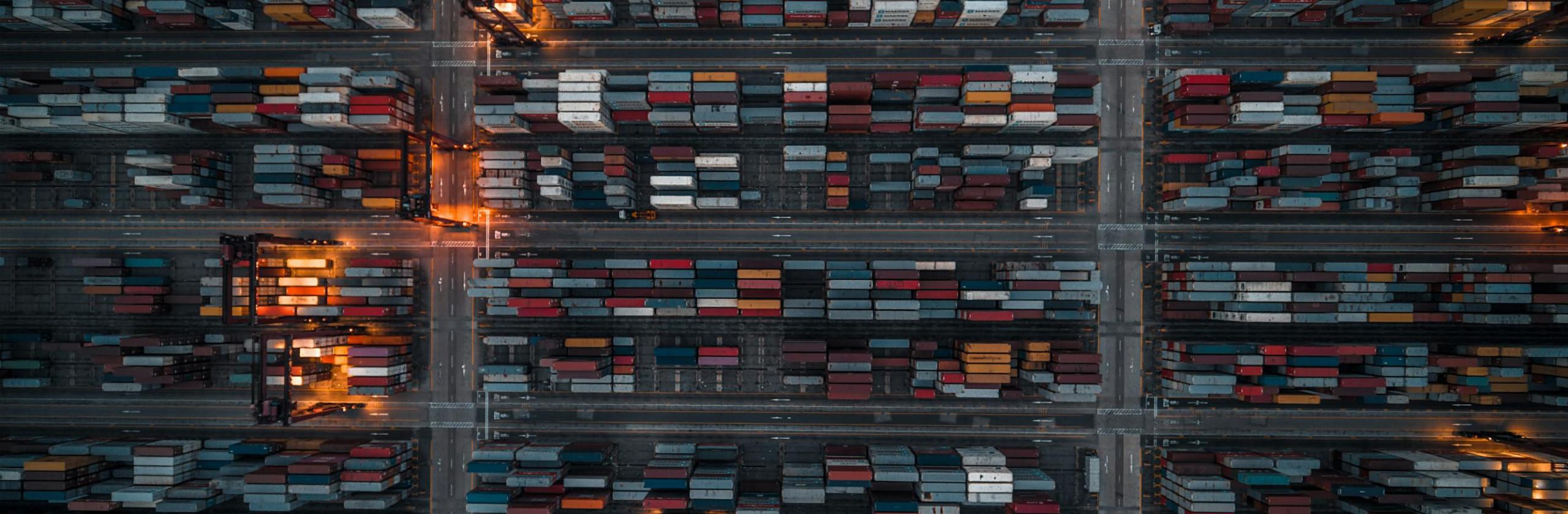
- Top Left (Product Creation):** A screen titled "Content Mate" with a sub-header "Add new iFLOW products". It shows a "Process" section with "Full" selected, and a "Vendor" section with "iFLOW" selected. A table lists various product items with their categories, images, and details. A "Save" button is visible.
- Top Right (Product Review):** A screen titled "Content Mate" with a sub-header "Edit Details". It shows a "Task Name" field with "Добавить новинки iFLOW", a "Process" field with "Full", and a "Vendor" field with "iFLOW". A "Task List" and "Task Tracker" button are present. A table lists products with their names and descriptions, with a "Rename" column and a "Hide" column.
- Bottom Left (Image Management):** A screen titled "Content Mate" with a sub-header "Add DAHUA Sensors +". It shows a "DHI-ARD2251E-W2 - Images" section with a sub-header "Images". It lists several product images with their alt text, widths, heights, and a "Pick" column.
- Bottom Right (Product Search):** A screen titled "Content Mate" with a sub-header "IP-E012.1(2.8)MPL - Results". It shows a "Images" section with a thumbnail of a camera, a "Documents" section with two PDF files, and a "Name and description" section with a product name and a preview. It also includes "Advantages", "Description", and "Similarity" and "Length" columns.

Under the Hood

- Flask, Gunicorn for serving the app
- SQLite, BigQuery, Pandas for working with data
- Celery, RabbitMQ, Redis for background and scheduled tasks
- Frontend: HTML, Jinja, CSS, JavaScript
- Libraries: bs4, pymupdf, pillow, matplotlib, langchain
- Docker compose for building



Sequence diagram of the first two screens of the creation workflow (click to open)



Aleksei
Prishchepo
[LinkedIn](#)

Thank you

Images' credits

[Mark König](#)

[Nana Smirnova](#)

[Marcin Jozwiak](#)

[Timelab](#)