

The Economics of Image Creation

A Case Study of AI-Driven Visual Content

This Master's thesis examines whether it is reasonable for contentstrategy.at to replace free stock photography with AI-generated images.

contentstrategy.at is the Open Educational Resources platform of the Content Strategy Master's program at FH JOANNEUM, where students take on the role of editors, going through the full publishing process and being responsible for creating and publishing both textual and visual content.

PROBLEM STATEMENT

The platform depends on editors independently selecting and uploading images, without centralized review or binding visual guidelines. As LinkedIn and Instagram have become major distribution channels, visual output is no longer confined to the website but publicly amplified across high-visibility platforms. **This decentralized and uncontrolled image selection process leads to inconsistent brand presence.**

RESEARCH OBJECT

The research object of this Master's thesis is the suitability of GenAI-generated images for establishing a consistent, credible, and aesthetically appropriate visual language for contentstrategy.at. **The study investigates whether AI-generated illustrations can replace previously used free stock photography** while supporting recognisability, message alignment, and brand coherence under real production constraints.

METHODOLOGICAL APPROACH

Stakeholder Interview

At the beginning of the study, an interview was conducted with key stakeholders responsible for the editorial structure and governance of contentstrategy.at.

The interview identified visual inconsistency as a key issue, and due to the stakeholders' journalism-driven focus on credibility and trust, illustration-based visuals were preferred over photography.



Creation of 4 Visual Styles

Four styles were developed — **Flat Crayon (#1), Coloured Pencil Vintage (#2), CMYK Risograph Print Style (#3), and Comic Pop Drama (#4).**

To obtain clearly different styles, it was important to use design terms with strong and recognizable characteristics.



Online Survey (Style Evaluation)

The questionnaire mainly focused on asking participants to evaluate the four visual styles in relation to contentstrategy.at's message architecture.

- **Tool:** Google Forms
- **Period:** June 16 – July 28, 2025
- **Participants:** 73
- **Language:** English
- **16 questions** (mainly Likert scales)
- **Duration:** approx. 7 minutes
- **Distribution:** Social Media
- **Target group:** contentstrategy.at audience

Validation Interview with Stakeholders

A follow-up interview was conducted to present and discuss the survey results. The **CMYK Risograph Print Style (#3)** was confirmed as the most suitable visual direction, with a mean rating of 3.098.



Custom GPT Development

At the time of development, up to 20 files could be uploaded to the Custom GPT.

These included structured instruction documents and selected reference images that reflected the intended visual style.

Uploading one single PDF containing all reference images did not improve stylistic consistency compared to uploading individual image files.

Testing Output from CustomGPT

2025: Contains risograph elements but is overall too inconsistent.

2026: The aesthetic of images have changed significantly due to new updates to ChatGPT².



²OpenAI. (2025, December 16). New ChatGPT images is here. <https://openai.com/de-DE/index/new-chatgpt-images-is-here/>

KEY FINDINGS

Photorealistic GenAI images create credibility tension: In a journalistic and research-oriented context such as contentstrategy.at, AI-generated photorealistic imagery raises concerns regarding authenticity and trust. Stakeholders and evaluation results therefore indicated illustration-based visuals as the more appropriate alternative.

Defined time budget for image sourcing: The Master's thesis analysed that within the course focused on publishing for contentstrategy.at, 1.94 hours (approx. 116 minutes) are allocated per article for image research and creation. In a 44-minute

test session, 14 images were generated with the Custom GPT; at that time, images could only be generated one by one. This means that within 1.94 hours, around 28–32 images were technically possible.

However, not all outputs were usable, and additional time was needed for prompting, selection, and correction, which reduced the real efficiency advantage compared to stock image search. These approximately 28–32 generated images must also be weighed against how many stock images can realistically be searched and reviewed within the same time frame.

Visual consistency matters: Survey results confirmed that visual coherence is important for brand credibility.

Custom GPT enables partial control: Colours and stylistic elements could be reproduced reliably; however, enforcing a strict 16:9 image ratio was not technically possible and required manual adjustment.

Image sourcing is never "free": Searching, selecting, editing, and checking usage rights for stock images also consumes time and resources.

ORGANISATIONAL BENEFIT

The project offers an early glimpse into the future of Algorithmic Brand Governance and creates awareness of its potential to enable stronger central control over visual outputs instead of relying on individual decisions. However, within the scope of this Master's thesis and at the current stage of development, a Custom GPT does not yet fully meet the visual requirements nor provide automatic cost reduction; rather, it encourages organisations to critically reflect on their own use of generated images in terms of authenticity, and the real time investment behind their visual production.

WHY CHATGPT FOR IMAGE CREATION?

The goal was to create a workflow as simple as searching for free stock photos. ChatGPT was chosen because it is easy to use, and all editors in the Content Strategy program in 2024/25 already had an account. A new image generator update had just been released¹. Other tools like Midjourney or Runway required paid subscriptions, and building a custom solution with its own interface was beyond the project's scope.

¹Rubison. (2025, March 25). OpenAI rolls out image generation powered by GPT-4o to ChatGPT. The Verge. <https://www.theverge.com/openai/635118/chatgpt-roll-out-image-generation-chatgpt?>

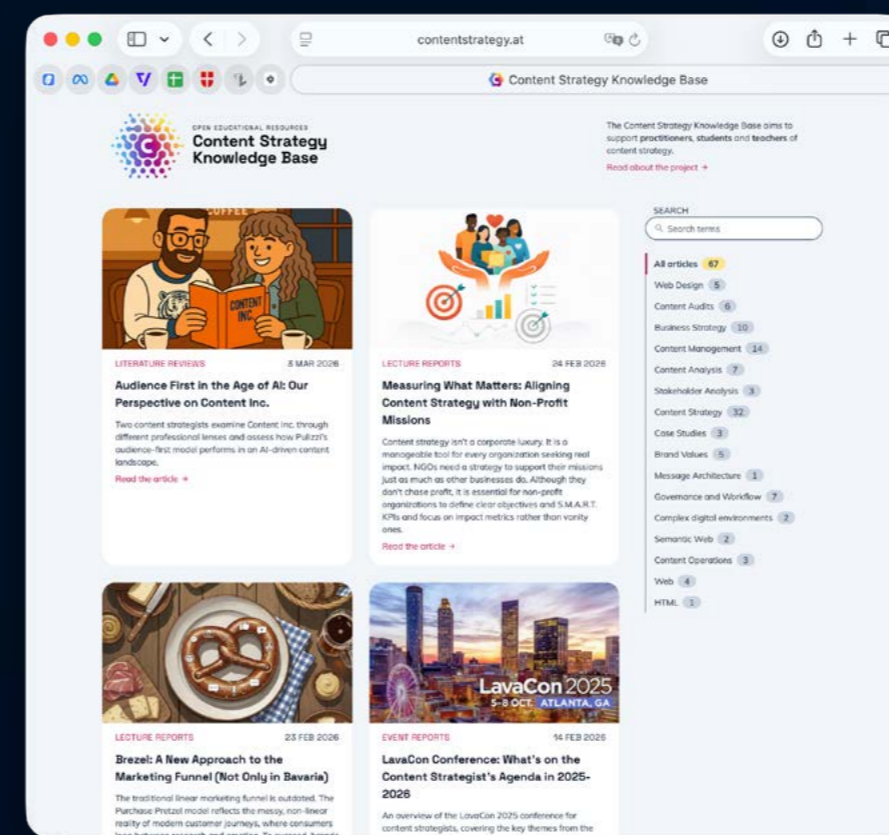


HOW MUCH DO YOU AGREE WITH THE FOLLOWING STATEMENT?

Visual style #3 feels to me ...

☹ 1 2 3 4 5 ☺

Academic	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authentic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Empowering	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Building	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eyecatching	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Professionally	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Welcoming	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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MA
Christina "Tiny"
Bernhard
contact@deaex.at



FH-PROF. MAG. DR.
Robert
Gutounig
robert.gutounig@fh-joanneum.at



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