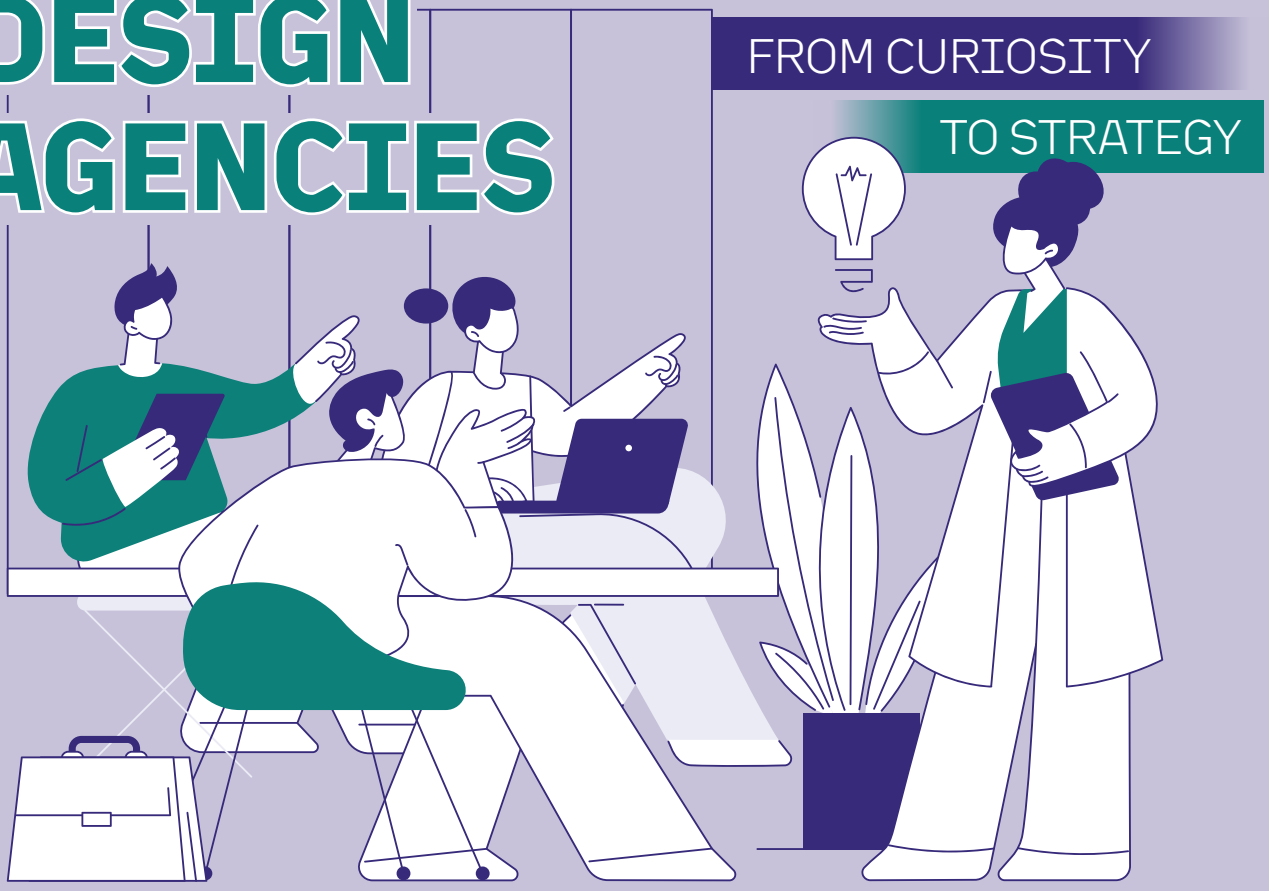
AI AT DESIGN AGENCIES

FROM CURIOSITY TO STRATEGY



Since the launch of ChatGPT in 2022, generative AI has been evolving rapidly. In many sectors, this technology gained attention, and design agencies are no exception. Design agencies are intrigued by the potential of AI, but at the same time struggle with the questions: How can AI be integrated into the design process? When does it add value? And if we don't act now, are we at risk of falling behind?

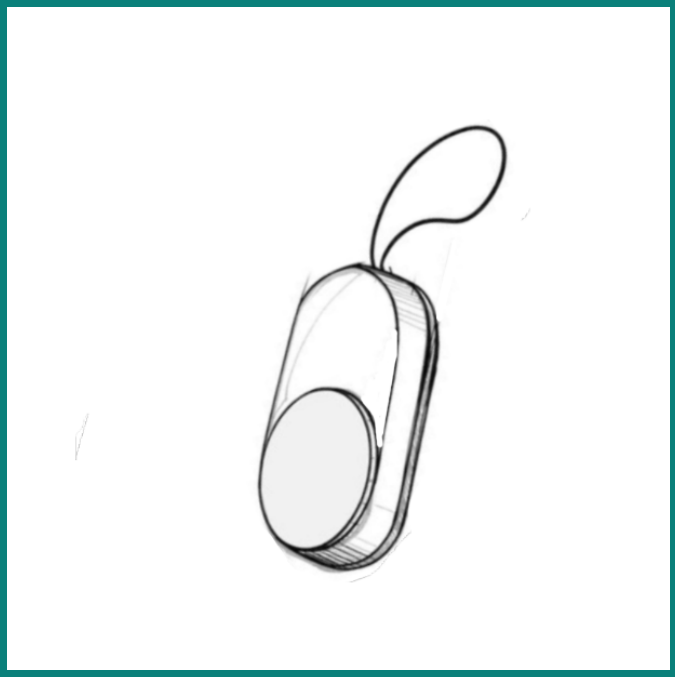
AI in Design: A Project in Practice

With these questions as a starting point, the Industrial Design research group at Saxion University of Applied Sciences launched the *AI in Design* project in October 2024. Together with design agencies 100%FAT, DE Design and Dynteq and an AI expert from VIRO, the project explores how generative AI can contribute to the design process. This exploration takes place along two lines: the capabilities of the tools, and the perspectives of the designers.

The project aims to better understand how generative AI can support complex design challenges. This requires understanding of the capabilities of the technology, the needs of designers and the culture within their organisations.

Interviews were conducted with designers and AI experts to explore how AI fits within the identity of design agencies and where the designers' needs lie. These interviews also helped to gain insight about relevant AI tools. A large group of students then tested AI tools across various stages of the design process.

Promising tools were distributed to partners, each supported by custom guidance tailored to the company's needs. Within the research group, we monitor this implementation process and, together with the partners, reflect on the tool and its implementation. Focus groups further provide valuable insights into the cultural and organisational aspects of AI adoption.



Handmade sketch of a keychain.

Render of sketch after expanded prompt in Vizcom.

From ChatGPT to Vizcom: How Designers Are Using AI

Several generative AI tools were tested during the project, leading to a variety of applications and strategies.

ChatGPT and other language models are used as starting point for market research, trend analysis and patent research. Designers also uploaded product requirement documents (PRDs) into these tools to receive a second opinion based on their own past PRDs. In these cases, the tools serve as a check on human findings to ensure high quality. Furthermore, these tools support prototyping by generating code and creating mock-ups.

Vizcom allows designers to convert handmade sketches into 3D renders. This tool is fast, allows for a lot of variation, and helps set a certain mood or style. It makes communicating ideas a lot faster and more accessible.

Midjourney, Dall-E and other image generators support designers with inspiration and communication of ideas. Rather than searching online for hours, designers can generate images that align closely with what they've imagined. These tools are still hard to control, so designers mainly use it for impressions rather than concepts. The tools are also used to enhance presentations by generating high-quality visuals.

But the tools are not perfect. Especially in detailing phases of the design process, designers run into limitations. The output can be inconsistent, difficult to control or simply not useful. As a result, confidence in AI declines and designers are more likely to give up experimenting with AI-tools.

Since AI tools cannot do everything, their strength lies mainly in combining the tools with traditional design tools and human expertise. For example, designers can use Vizcom to generate a lot of product variations, then use a graphics editor or CAD software to refine the outcome.

Similarly, a render of a product might benefit from a compelling setting. Instead of modelling that scene manually in Blender, designers can now use tools like Midjourney or DALL·E to create a fitting background, into which the product is placed. This hybrid approach saves time while maintaining visual quality.

Company culture as key to AI adoption

Interviews show that organizational culture plays an important role in AI adoption. Designers vary widely in their attitudes towards AI: some experiment enthusiastically, while others are cautious due to ethical concerns such as energy consumption. In many companies, AI is barely talked about, which hinders its use and slows down the development of AI literacy. This also prevents important discussions about how AI fits the identity and values of the company. These conversations are essentials, specially where you desperately need people with different attitudes.

Besides technical aspects about the tools, there are also fundamental questions among designers. Many designers wonder: ***Will this remain as my design if I use AI? What does this mean for my creativity? Where does my added value lie?*** Because agreements are rarely made within

3D feature from Vizcom to add different perspective.

companies, AI use often remains under the radar and people get the idea that using AI is cheating.

The advice? Have conversations within the company about AI. Make explicit what your identity is as a company, and under which conditions you do or do not want to use AI. This creates ownership, direction and clarity within the company, but also towards customers and partners. It also prevents frustration and embarrassment between colleagues with different views, which can hinder cooperation and efficiency of AI use.

Working with AI step by step

AI tools offer many possibilities, and with lightning-fast technological developments, those possibilities will only increase in the coming time. Low AI literacy often creates unrealistic expectations and additional frustrations. The reality is that applying AI requires time, curiosity and collaboration to exploit those opportunities. In many cases, it does not yet speed up the process, but it can improve quality in the areas designers currently pay little attention to. What helps with this is starting small: pick one application, test it, and discuss with your team what it achieved. The best way to build confidence in AI is by doing, reflecting and thus learning together. ■

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