



AI

KONZEPT '23
HAUS
DESIGN STUDY

IN AUTOMOTIVE DESIGN

AI IN AUTOMOTIVE DESIGN



Introduction:

The Konzepthaus Design Survey (KDS) is an anonymous, empirical study that allows you to benchmark yourself against the industry and identify best-in-class opportunities. Our surveys provide critical insights into the global mobility market that will shape your future.

AI in Automotive Design:

This has been a long debated subject internally as to whether we should tackle the topic of artificial intelligence in the automotive design area within a study. It's a topic that is talked about a lot but still in its infancy and constantly changing. So, it wasn't an easy decision as it's quite controversial, but I believe the Konzepthaus team has done an outstanding job to shed some light on AI within the automotive design space. And, most importantly, share how the designers, modellers, visualisation artists, and everyone else working in the design departments of this world work. We can clearly see that AI will continue to have an impact on the industry. On behalf of the entire team, I am delighted to share the Konzepthaus Design Study on AI with you. Enjoy diving into the details, the results and share your views and opinions with us.

Martin Groschwald
CEO

AI IN AUTOMOTIVE DESIGN

The goal of the KDS is to create the most comprehensive, empirical overview of mobility design departments. The results are aimed to support global OEMs and suppliers alike to prepare their departments for the challenges of the coming years.

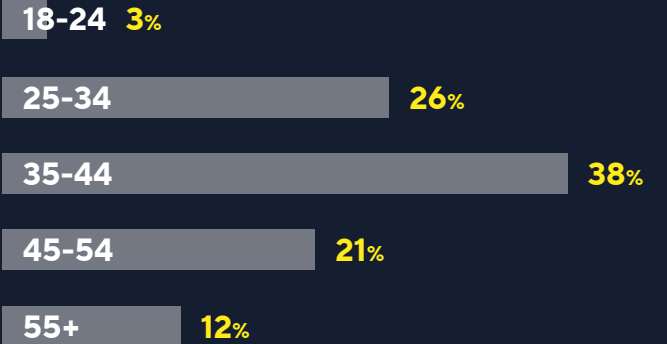
467

Participants

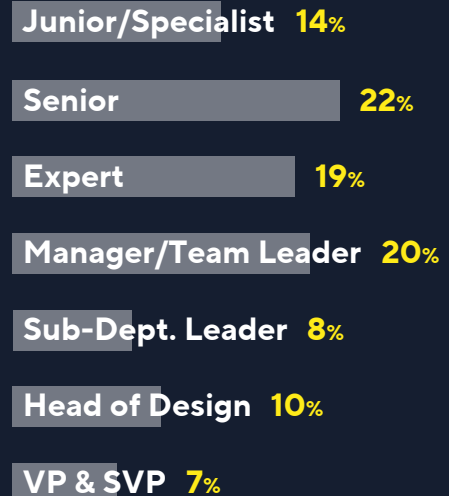
2% Prefer not to specify



AGE RANGE



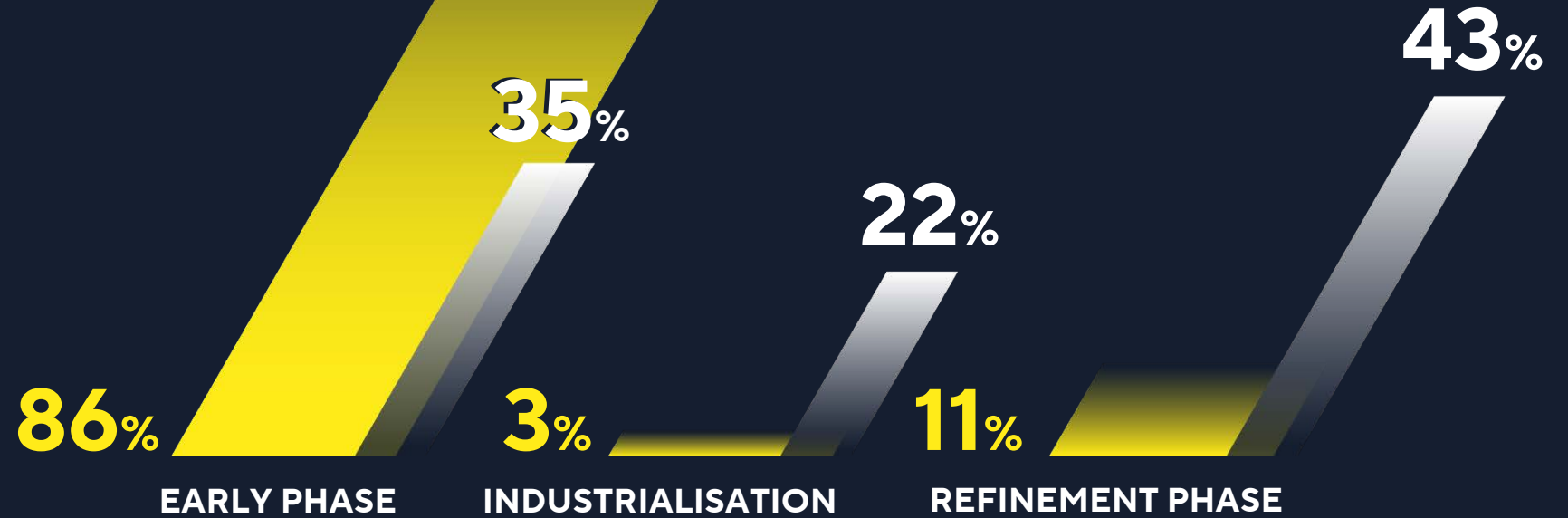
SENIORITY



FILTERS



IN WHICH DESIGN PHASE AI TOOLS ARE USED?



Asaf Yaacobi - "AI tools are still at a premature stage of evolution and have only recently shown improvements in results and function. Currently they're primarily used in early phase (87%) for a variety of design tasks, such as conceptual work, managing design volumes, blackout processes, sketching, and integrating 3D design renders into AI. The current limitations of the tools, along with their evolving pace, suggest a projection in which, (in the coming years), we will witness the technology maturing toward industrialisation phase."

REASONS WHY PEOPLE IN DESIGN DON'T ALREADY WORK WITH AI

51%

Don't yet work with
AI in a design
context

1

**My employer doesn't
offer me the opportunity**

2

**I don't have the necessary
knowledge to work with AI**

3

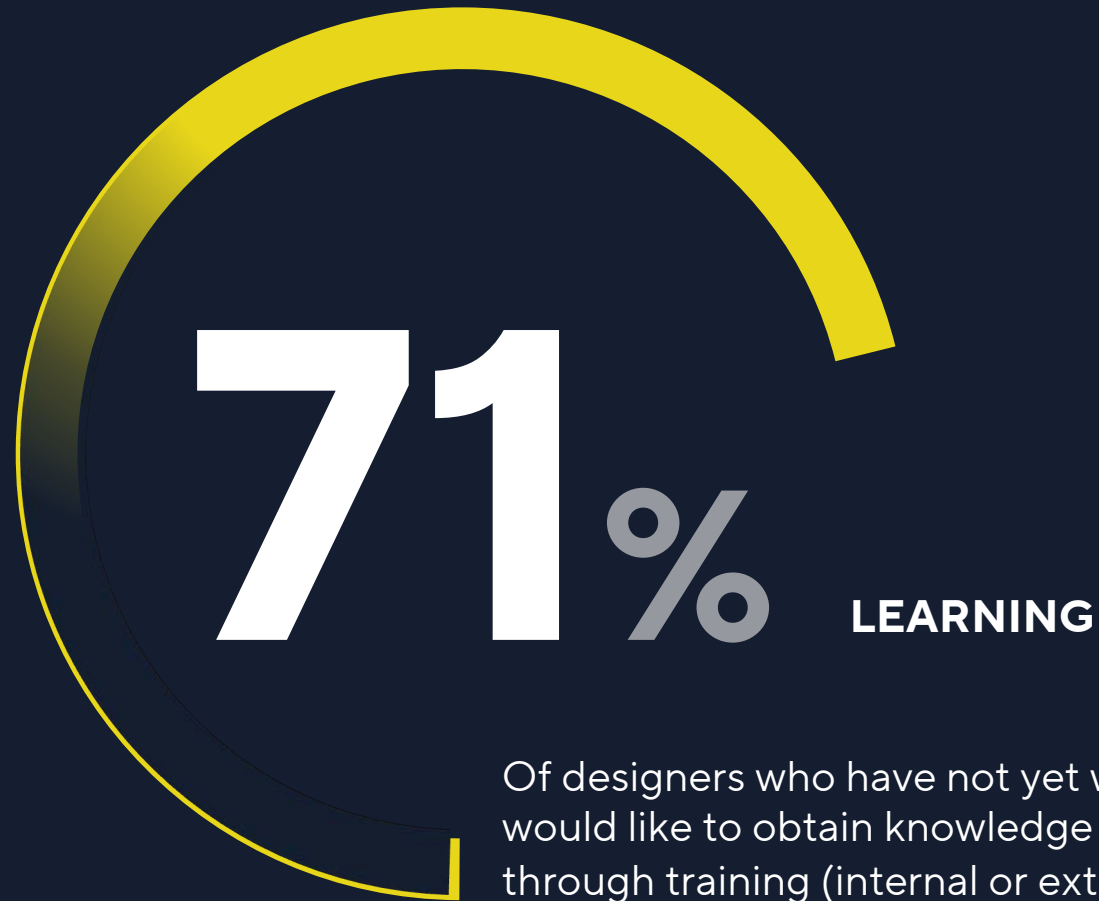
**I have too many concerns
about data security**



Asaf Yaacobi - "Transformation and innovation begin with leadership! Many designers express a desire to integrate AI design tools into their daily workflow, but they face challenges due to a lack of knowledge and background. Justifying the use of these tools to stakeholders or employers proves difficult.

The fear of unfamiliar technology, despite its functionality and potential, can be resolved through education covering all relevant topics whilst addressing emerging data security concerns."

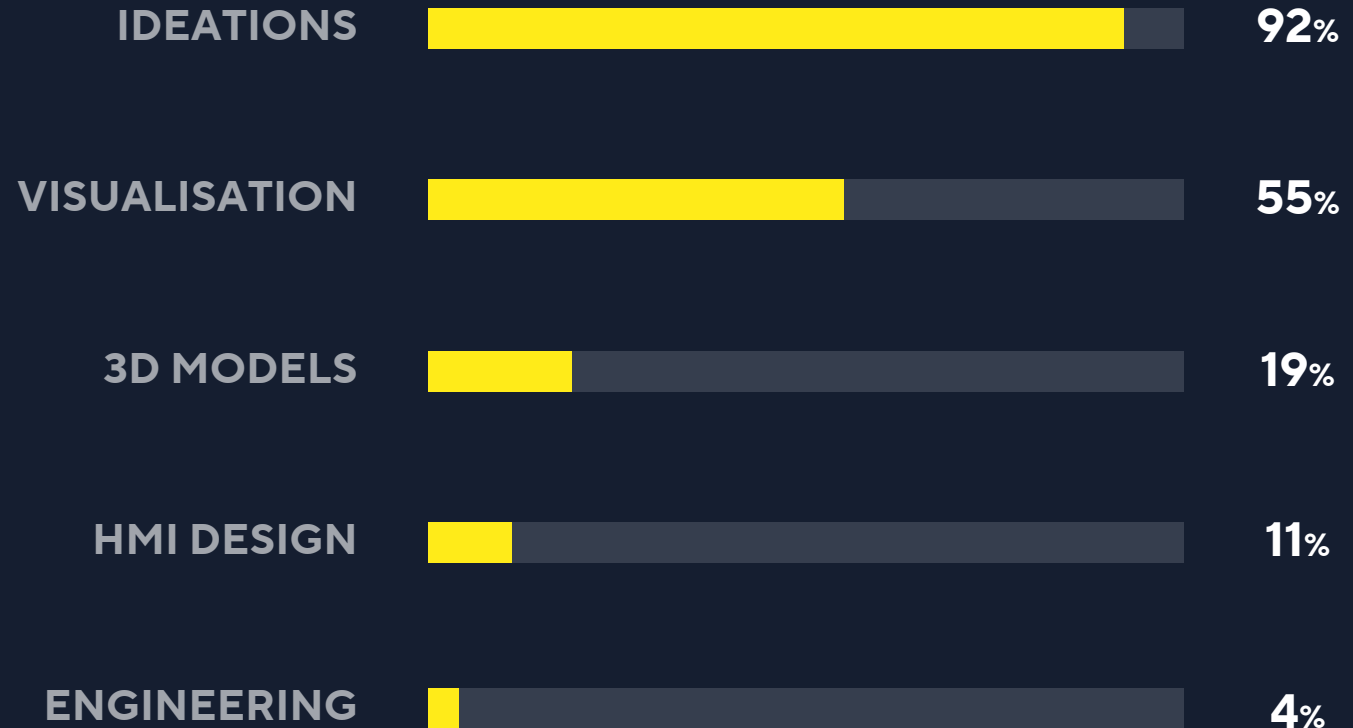
WHAT ARE THE EDUCATIONAL PURSUITS OF NEW AI DESIGN USERS?



Asaf Yaacobi - "It's fascinating to see two groups emerging: Users vs Newcomers. Until now, the majority of AI design tool users in our industry are self-taught, relying heavily on trial and error due to the lack of available knowledge. Newcomers to these tools now understand the complexity of prompting towards a controlled outcome. Therefore, 71% would like to receive customised training, tailored specifically to their area of expertise."

WHICH ACTIVITIES IS AI ALREADY BEING USED FOR?

Already being used 



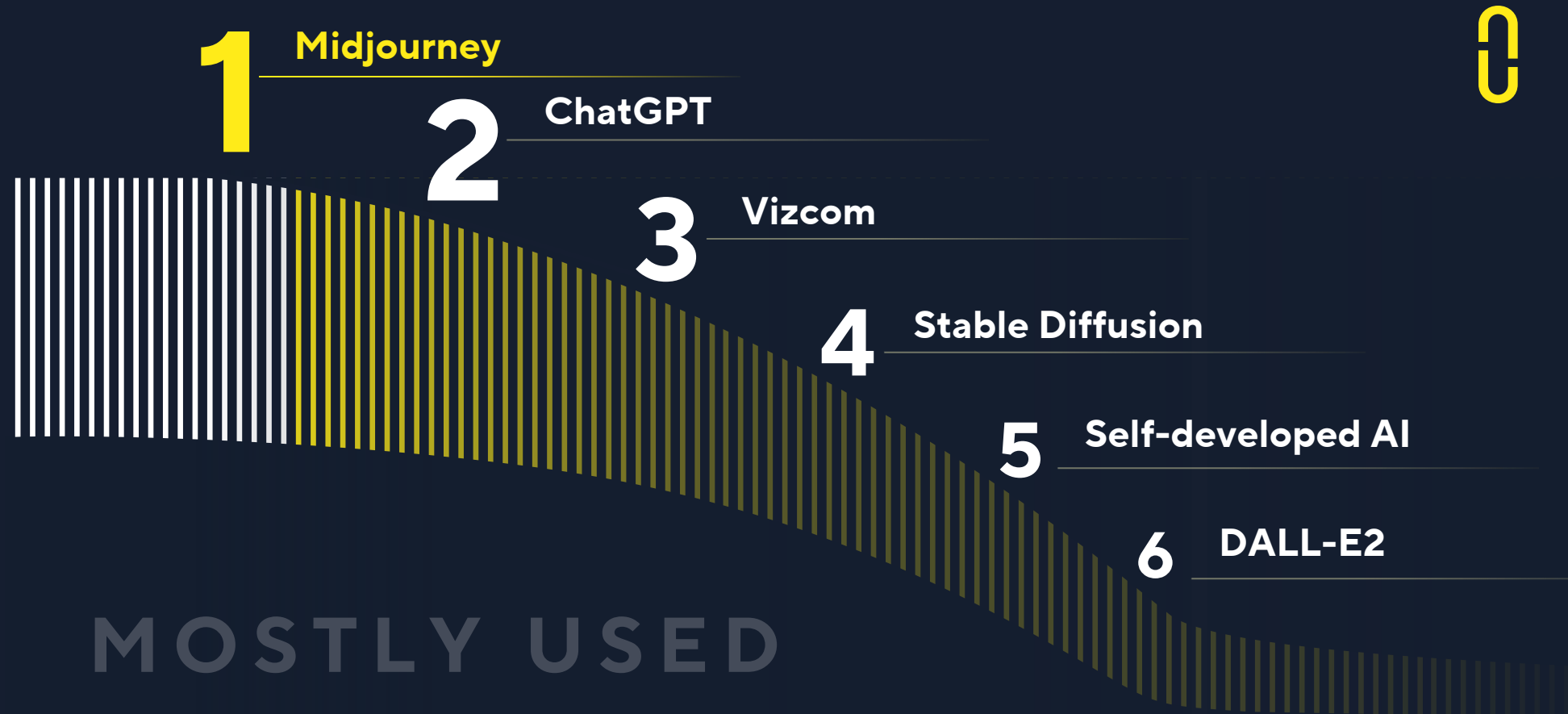
Oliver Vogt - "The results are not surprising, considering that currently AI in design is mainly used to create 2D output – that is what the most popular tools are made for. 19% claim to do 3D, although there is no such AI publicly available when we conducted this survey. Is that already a hint towards self-developed AI, exclusively being used within certain OEMs? "

WHICH ACTIVITIES DOES AI HAVE HIGH POTENTIAL FOR?



Oliver Vogt - "In relation to the other topics, AI usage for Ideation is rather seen to go down. The biggest growth potential is seen in 3D models and engineering. I find the the low value for HMI Design a bit underrated, because it also has a huge potential for AI tools contributing especially to process automation."

AI TOOLS AND THEIR USAGE



Asaf Yaacobi - "Ladies and Gentlemen, we have a winner! Midjourney has established itself in the top position in our survey as the most used AI design tool for conceptualising design. In this list, it has topped familiar names which is not surprising at all. Vizcom's evolution in recent years, its dedication to the automotive and product design niche, its development of unique functions enhancing automotive design workflow, is paying off. My prediction is that it will become a remarkable choice for designers."

AI TOOLS OUTPUT RATING

47%

AI USERS ARE
UNSATISFIED WITH
THE OUTPUT OF
THE AI TOOLS
THEY USE

Reasons why people are
unsatisfied with the
output

QUALITY



53%

EFFICIENCY



47%



Asaf Yaacobi - "While more than half of the users (53%) are content with the AI outputs, it is evident that the AI prompting process remains time-consuming. This is especially the case when aiming for a precise and meaningful result without manual intervention (like Photoshop). Numerous designers find it challenging working with unpredictable outcomes and compromised quality, leading to an overall perception of inefficiency in the process."

WHO SHOULD DRIVE AND IMPLEMENT AI?

P R N **D** S

71%

Management Level
should be the main
driver

29%

Working Level
should be the main
driver



Oliver Vogt - "The vast majority of our participants wish for managers to empower AI usage. The main reason for this wish (most likely), is that the utilisation of these tools is still a very political topic. Perhaps for data security reasons or because no one wants to be accused of cheating by asking for the help of AI.

Subsequently, non-managerial employees prefer to wait for an official "go". This of course doesn't block people from using AI for work-related tasks at home – potentially one of the biggest security risks in this industry at the moment."

INFLUENCE OF AI ON JOB PROFILES IN THE FUTURE

84%

Think that AI will
change job profiles
in the future

54%

"... the focus of work is shifting away from ideation towards more complex activities, as AI tools will take over this task"

46%

"... knowledge of AI tools is a new, necessary prerequisite for designers"



Asaf Yaacobi - "AI tools are already significantly influencing the perception of how designers' roles and responsibilities will evolve. While 54% of designers believe AI will automate certain design tasks and change the complexity of their activities, 46% see developing AI skills as an absolute necessity for an automotive designer to succeed in the future."

SHAPING TOMORROW: EMPLOYEE VISIONS FOR AI AT WORK



- | | | |
|---|------------------------------|---|
| 1 | Opportunity | I would like to have the possibility to learn more about AI and how I can integrate it into my daily work |
| 2 | Focus Time | I would like to have more time to focus on AI |
| 3 | Professional Training | I would like to have (more) concrete training offers |
| 4 | Covered | My employer offers me enough |
| 5 | Non-applicable | Nothing, the topic does not interest me |



Florian Teufel - "With the three most named answers of Opportunity, Professional Training and Focus Time, the majority of respondents demand the integration of AI into the daily business of design departments. This insight should be understood by all levels of the organization and incorporated into future decisions. The extent to which AI will influence creative processes, the software landscape and the role of designers/modelers, among other things, in the long term remains to be seen. The future, or perhaps ChatGPT, will tell us."

GET IN TOUCH

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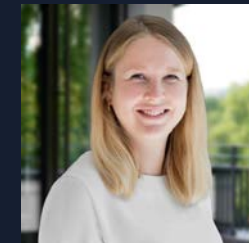
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