

INNOVATION CENTER



HOW TO USE: AI TOOLS

31.08.2023

Andrea Heinz

Innovation Manager



LET'S INNOVATE REAL ESTATE



AGENDA



Please scan me
in and fill me
out



AGENDA

- 1 What exactly is AI?
- 2 Why are we talking about AI today?
- 3 How do companies use AI?
- 4 How can AI tool help your company?
- 5 How can AI tool help with your daily work?





WHAT EXACTLY IS AI?



- **Artificial Intelligence (AI):** A field of computer science focused on creating machines with human-like cognitive functions.
- **Machine Learning (ML):** A subset of AI where computers learn from data without explicit programming.
- **Applications:** Includes voice recognition, image recognition, autonomous vehicles, chatbots, and recommendation systems.
- **Ethical Concerns:** Issues related to data privacy, discrimination, and job loss.
- **Interdisciplinary Nature:** AI combines computer science with fields like psychology, neuroscience, and economics.

ANI

Artificial Narrow
Intelligence

aka

Weak AI

**NARROW
CAPABILITY**

AGI

Artificial General
Intelligence

aka

Strong AI

**GENERAL
CAPABILITY**

ASI

Artificial Super
Intelligence

aka

Strong AI

**TRANSCENDENT
CAPABILITY**

Present

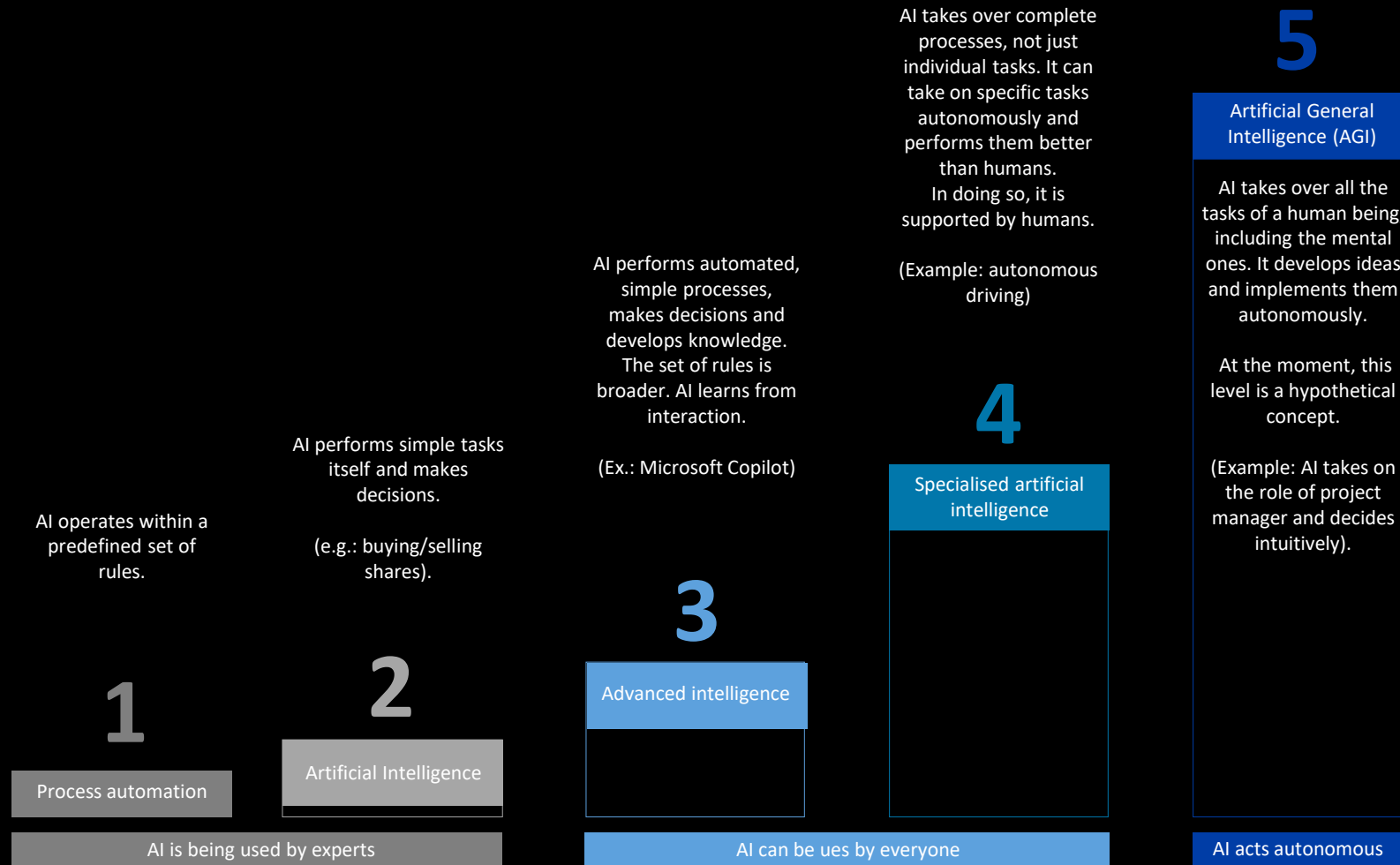


Future



5 STEPS FROM AUTOMATIATION TO ARTIFICIAL INTELLIGENCE

As of today, we are between Level 1 and 2, but we are currently seeing the first applications from Level 3





WHY ARE WE TALKING ABOUT AI TODAY?

Technology Trends 2023: future today institute

2023

2023 Tech Trends Report Executive Summary

IMPACT OF TRENDS ON YOUR INDUSTRY

Near-Term Relevance Long-Term Relevance

	AI	Generative AI	Climate and Green Tech	Mobility	AR/ VR/ XR and Synthetic Media	Robots and Drones	Web3 Infrastructure	Bioengineering	Metaverse	Quantum
Agriculture	Green	Yellow	Green	Orange	Yellow	Green	Red	Green	Purple	Purple
Automotive	Green	Orange	Green	Green	Green	Green	Red	Red	Purple	Purple
Aviation and Travel	Green	Orange	Green	Green	Green	Green	Red	Red	Purple	Purple
Construction, Engineering	Green	Orange	Green	Green	Green	Green	Red	Yellow	Yellow	Purple
Consumer Packaged Goods	Green	Orange	Green	Orange	Orange	Orange	Red	Yellow	Purple	Purple
Education	Green	Orange	Green	Orange	Orange	Orange	Red	Red	Purple	Purple
Financial Services	Green	Orange	Green	Orange	Orange	Red	Yellow	Orange	Orange	Orange
Government and Policy	Green	Orange	Green	Green	Green	Green	Green	Green	Yellow	Yellow
Health Care Systems and Services	Green	Orange	Green	Orange	Orange	Green	Orange	Green	Red	Red
Hospitality	Green	Orange	Green	Orange	Orange	Orange	Red	Red	Purple	Purple
Media (Entertainment)	Green	Orange	Green	Orange	Orange	Orange	Green	Purple	Yellow	Purple
Media (News)	Green	Orange	Green	Orange	Orange	Red	Green	Purple	Yellow	Purple
Pharmaceutical and Medical Products	Green	Orange	Green	Orange	Orange	Orange	Red	Green	Red	Red
Public and Social Sectors	Green	Orange	Green	Green	Green	Green	Yellow	Orange	Red	Red
Real Estate	Green	Orange	Green	Orange	Orange	Orange	Red	Purple	Red	Purple
Restaurants	Green	Orange	Green	Orange	Orange	Red	Red	Orange	Red	Purple
Retail	Green	Orange	Green	Orange	Orange	Green	Orange	Orange	Yellow	Purple
Space and Aerospace Defense	Green	Red	Green	Red	Orange	Green	Red	Yellow	Red	Red
Supply Chain and Logistics	Green	Orange	Green	Orange	Orange	Green	Green	Orange	Red	Red
Telecommunications	Green	Orange	Green	Green	Green	Green	Green	Red	Yellow	Orange

Longterm means max. 5 years

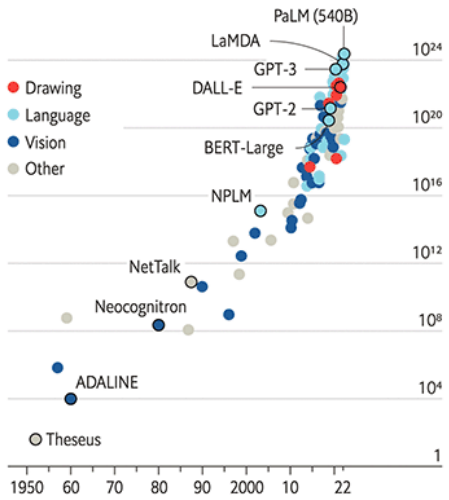


WHY ARE WE TALKING ABOUT AI TODAY?

We have arrived in the age of exponential growth

The blessings of scale

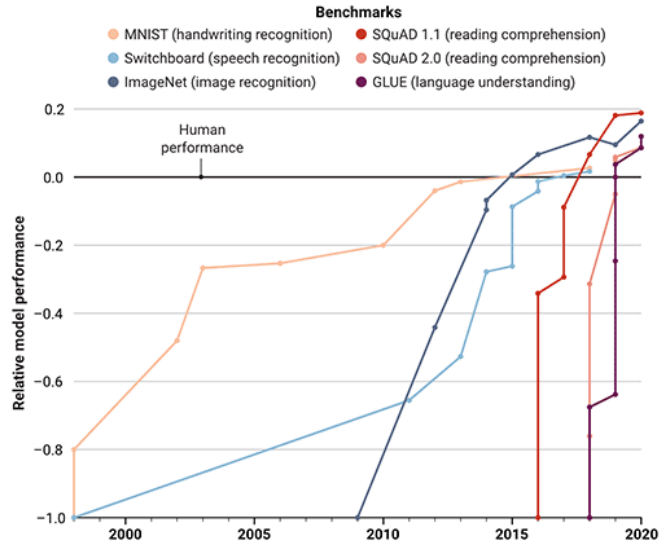
AI training runs, estimated computing resources used
Floating-point operations, selected systems, by type, log scale



Sources: "Compute trends across three eras of machine learning", by J. Sevilla et al., arXiv, 2022; Our World in Data

Quick learners

The speed at which artificial intelligence models master benchmarks and surpass human baselines is accelerating. But they often fall short in the real world.



(GRAPHIC) K. FRANKLIN/SCIENCE. (DATA) D. KIELA ET AL., DYNABENCH: RETHINKING BENCHMARKING IN NLP, DOI:10.48550/ARXIV.2104.14337

Number of Parameters of Significant Machine Learning Systems by Sector, 1950–2022

Source: Epoch, 2022 | Chart: 2023 AI Index Report

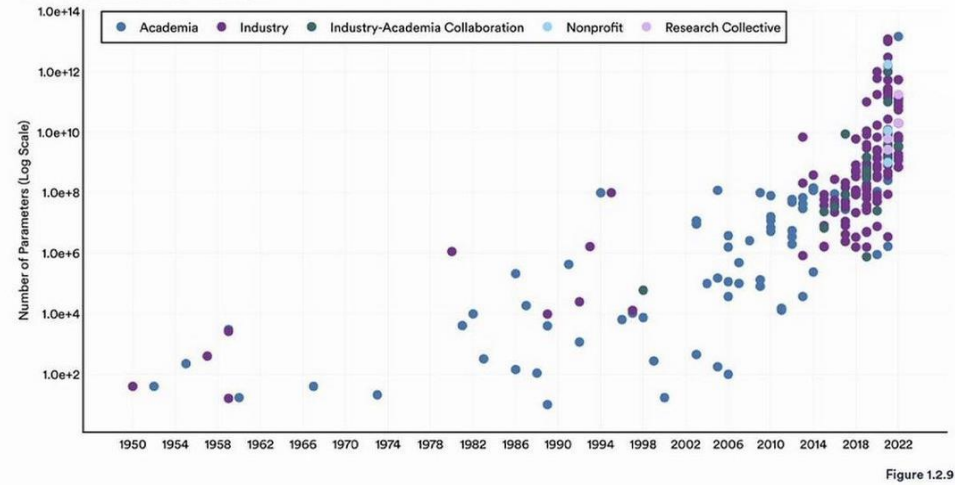
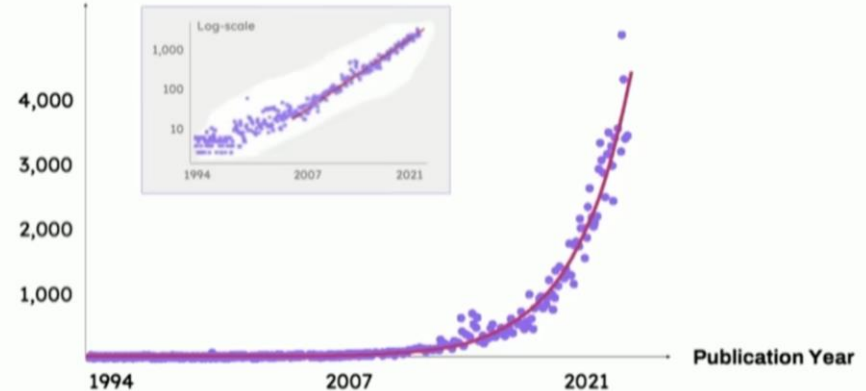


Figure 1.2.9

ML+AI arXiv papers per month

of papers per month





WHY ARE WE TALKING ABOUT AI TODAY?

We have arrived in the age of exponential growth





IBM RESEARCH INSIGHT

Augmented work for an automated & AI-driven world

AI won't replace people—but people who use AI will replace people who don't.

- Approximately 1.4 billion people will feel the effects of AI in the next three years.
- 40% of the world's 3.4 billion workers will need to be (re)trained due to AI and automation!
- According to experts, around 85 million jobs worldwide will also become redundant by 2025.
- But 97 million new jobs will be added.



BAD NEWS

AI's development brings risks

AI ABUSE



Monitoring
Control
Manipulation

WORKPLACES



Unemployment
Social unrest

DEEPFAKES



Distinguishing between
reality and forgery

GENERAL AI



Overpowering, uncontrollable
AI

REVELOPMENT



Unlearning one's own abilities
and skills



Atlasiko^{Inc}

THE “GODFATHER” OF AI

WARNS ABOUT DANGERS AS HE
RESIGNS FROM GOOGLE



DON'T FORGET THE GOOD NEWS!

There are many positive developments in the course of this transformation.

MEGA CITIES



Create housing
Smart Cities

ENERGY



Generation
Storage
Distribution

MOBILITY



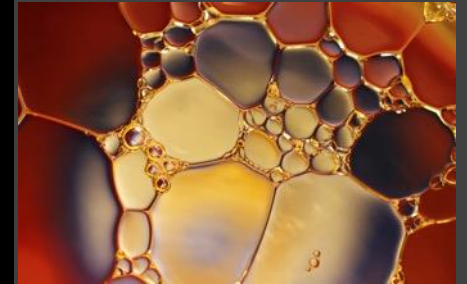
Alternative drives
Autonomous driving

NOURISHMENT



Lab-Green Food
Resource Management

MEDICINE

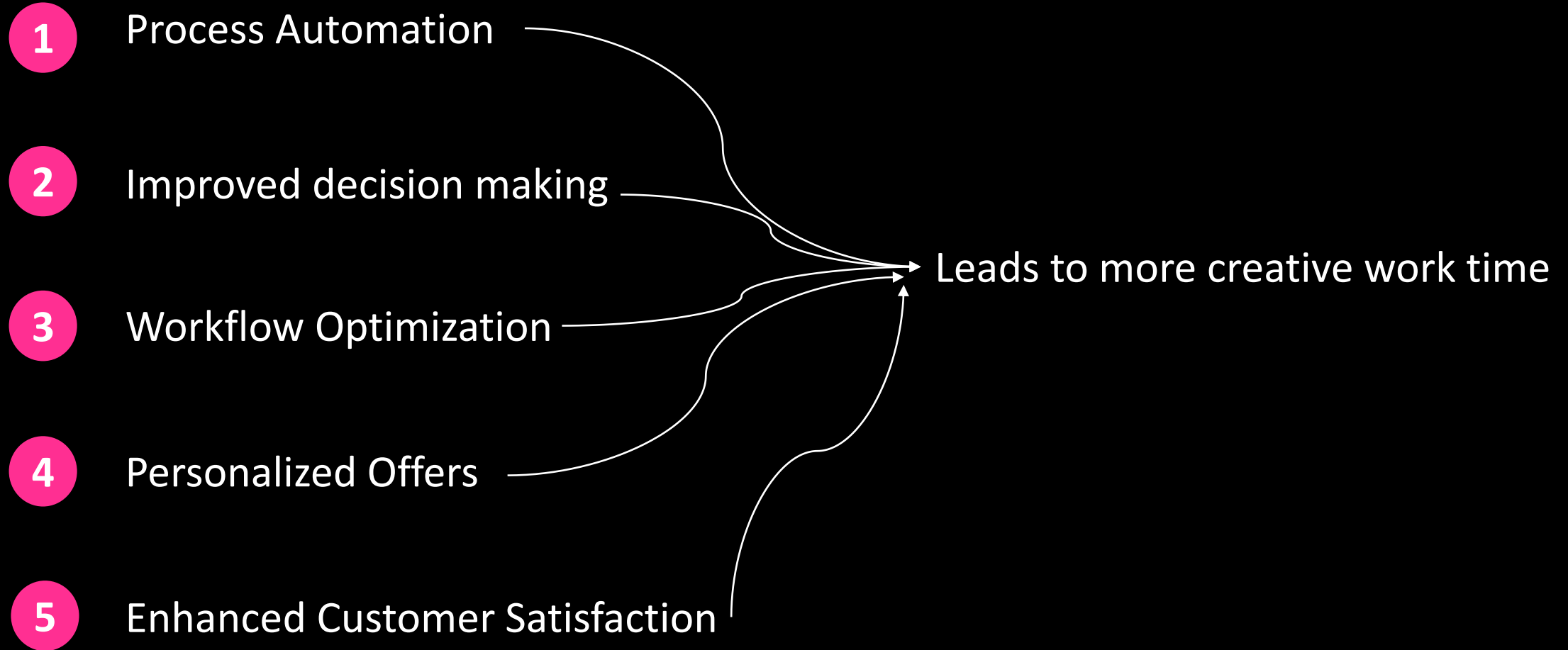


Research and data analysis



HOW COMPANIES USE AI

Companies develop their own GPTs





HOW COMPANIES USE AI

Companies develop their own GPTs



DREES & SOMMER GPT

- Ideathons → Dresos GPT
- Bing Chat
- Learning Nuggets
- Chat with PDF Pilot



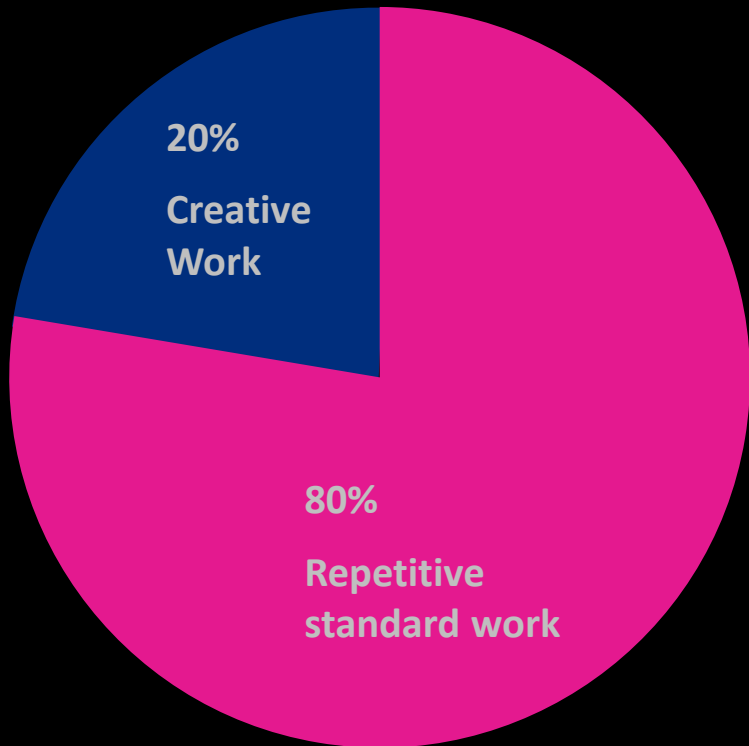
Copilot

A whole new way to work



AI IN OUR EVERYDAY PROFESSIONAL LIFE

Activities in everyday office life today



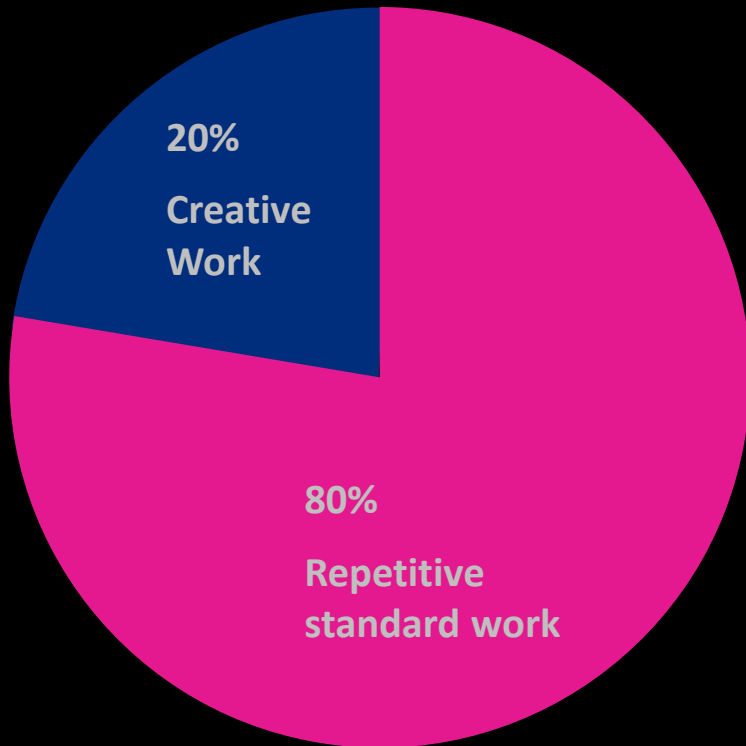
- 1 COMMUNICATING
- 2 SEARCHING
- 3 CREATE
- 4 PLANNING & COORDINATING
- 5 COLLECT INFORMATION





AI IN OUR EVERYDAY PROFESSIONAL LIFE

Activities in everyday office life today



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OUTLOOK



TEAMS

10:28



Inbox



Focused

Other

Filter

Today



Elisabeth Eriksson

2:06 PM

Quick question about Van Arsdel...
Hey @Lilly, pl was looking over the deck you...



2



Omar Bennet

1:42 PM

Tailwinds (New Client) Contract (6)
Hey Alumni! We're looking for volunteers for an upcoming portfolio...

14



Maya Robinson

12:35 PM

FW: Update on Proseware sales
Dear @Lilly and Team, I hope this email finds you well. I wanted to...

2



Hayden Cook

10:35 AM

Update on manufacturing plant...



Catch up with Copilot

Maya and the LT are discussing declining sales for Proseware.

2 of 3

Previous

Next



Shai Shamesh

9:48 AM

Presenting at the All Hands



Email



Search



Calendar



Move to | | | | | | | | | | ...

Core accounts business review

Join

Chat

Tuesday, March 16, 2023
10:00 AM - 11:00 AM

Microsoft Teams Meeting

Beth Andrews invited you

Email organizer

Add an optional message to Lydia Bauer

Yes

No

Follow

...

Messages Meeting Details



Beth Andrews

Setting up time for sale updates with the leadership, present the team's plan ...



9:23 AM



Search



Chat



Pinned

Babak Shammass 11:32 AM
Yeah, that sounds great

Cassandra Dunn Yesterday
Ok. I'll send an update later.

Core accounts finance 3:12 PM
Babak: Samantha should know the latest....

Copilot 11:24 AM
Here's a summary of the Core account...

Recent

Will Little 11:42 AM
I don't see that being an issue. Can you...

Marie Beaudouin 11:40 AM
Ohhh I see, yes let me fix that!

Hilary Reyes 11:02 AM
Haha!

Design Squad 11:00 AM
Kayo: The review went really well! Can't wai...

Charlotte and Babak 10:48 AM
Charlotte: The client was pretty happy with...

Reta Taylor 11:40 AM
Ah, ok I understand now.

Joshua VanBuren 10:29 AM
Thanks for reviewing!

Daichi Fukuda 10:20 AM
You: Thank you!!

Kadji Bell 10:02 AM
You: I like the idea, let's pitch it!



Core accounts finance Chat About +



Babak Shammass 1:30 PM

So, we are still short by 230K in numbers and the trend seems to continue in Q2 as well.


The inventory surplus continues to be a concern.

Erika Fuller 2:20 PM

That's not good news. We need to think of ways to increase demand for recycled materials and renewable energy products.

Babak Shammass 2:33 PM

I agree. We should start exploring new marketing strategies to drive demand for our products.



New marketing strategies
Last edited by Babak Shammass
newprod.sharepoint.com

Erika Fuller 2:42 PM

Yes, and we can also look into partnering with companies that have similar sustainability goals.

Amanda Bardy 2:43 PM

Sounds good. And speaking of updates, can we get an update on the Proseware status? Babak, do you know?

Babak Shammass 3:12 PM

Samantha should know the latest. **Samantha** can you share an update here?

Summarize what I've missed

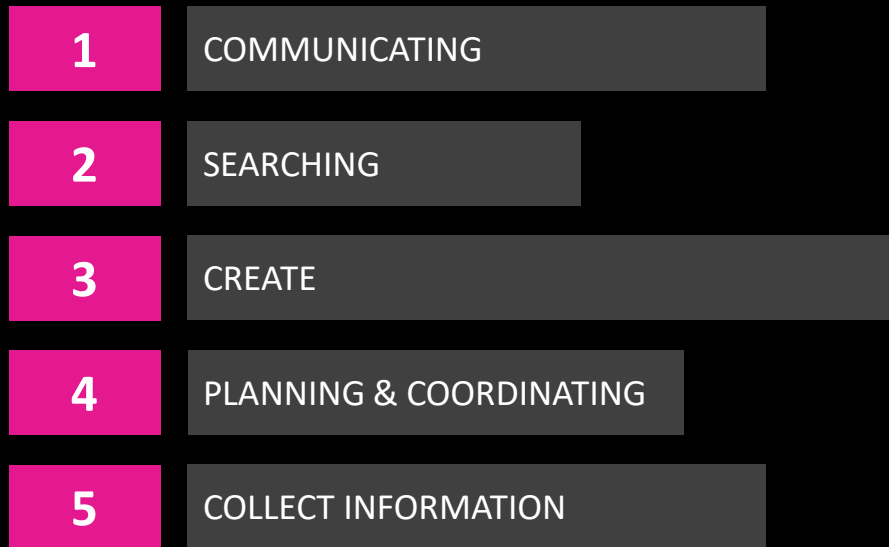
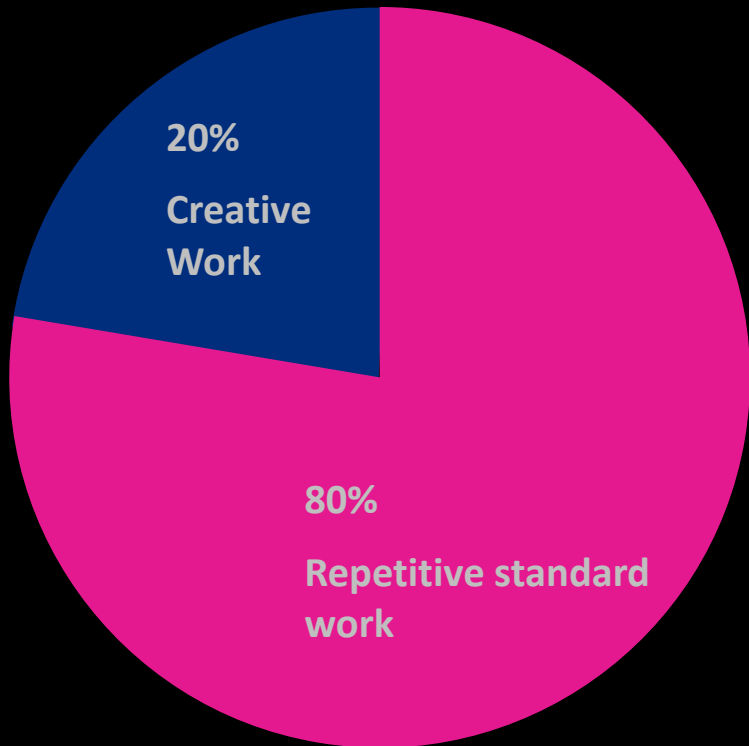
Type a new message





AI IN OUR EVERYDAY PROFESSIONAL LIFE

Activities in everyday office life today



WORD



POWERPOINT

Document1 • Saved ▾

Search

File Home Insert Draw Design Layout References Mailings Review View Help

Comments Catch-up Editing Share

Undo Copy Paste Font Family: Aptos (Body) Size: 11 Bold Italic Underline Color Highlighting Background Color Bullets Numbering Paragraph Styles Search Zoom View Copilot Grid

Page 1 of 1 0 words English (U.S.) Text Predictions: On Page View Web View 100% Fit Give Feedback to Microsoft

Presentation1 • Saved

Search

File Home Insert Design Transitions Animations Slide Show Review View Help

Comments Catch Up Present Editing Share

Aptos (Body) 11 A[^] A[~] B A

1

Click to add title

Click to add subtitle

Copilot

Hi Lilly, how can I help get you started?

Start with the same style as last time

Copy the format of the Director's Review

Describe what you'd like to create, or type / for suggestions

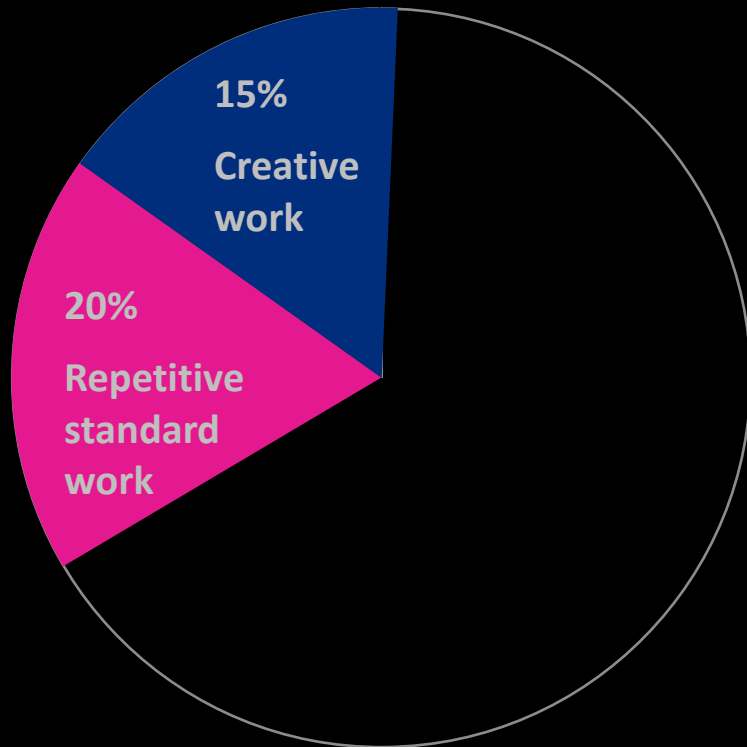
Slide 1 of 1 English (U.S.)

Give Feedback to Microsoft Notes 100%



KI IN UNSEREM TÄGLICHEN BERUFSALLTAG

Die Tätigkeiten im Büro von morgen...



- | | |
|---|-------------------------|
| 1 | COMMUNICATING |
| 2 | SEARCHING |
| 3 | CREATE |
| 4 | PLANNING & COORDINATING |
| 5 | COLLECT INFORMATION |





AI DEVELOPMENT IN THE REAL ESTATE SECTOR IS PICKING UP SPEED

Start-ups and large companies place themselves on the market

nPlan

SPACEMAKER
An AUTODESK product

oculai

HYPAR

nVIDIA

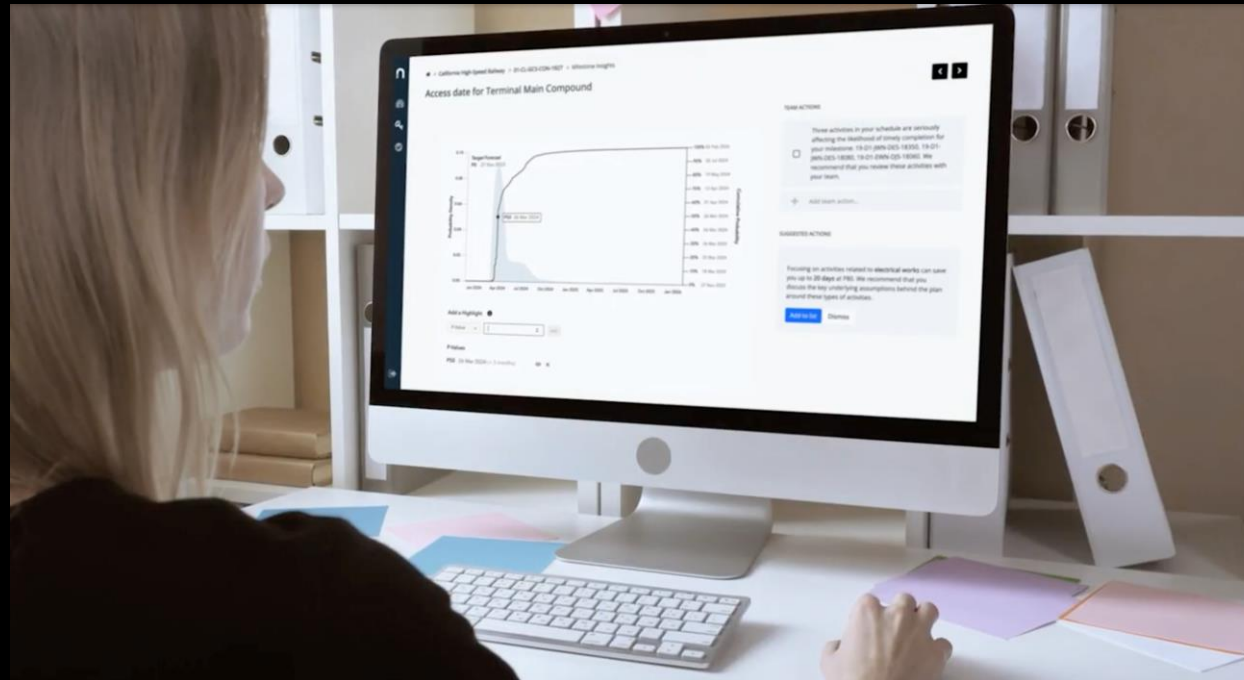
2017

2020

2021

2023

2023





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Start-ups and large companies place themselves on the market



2017



2020



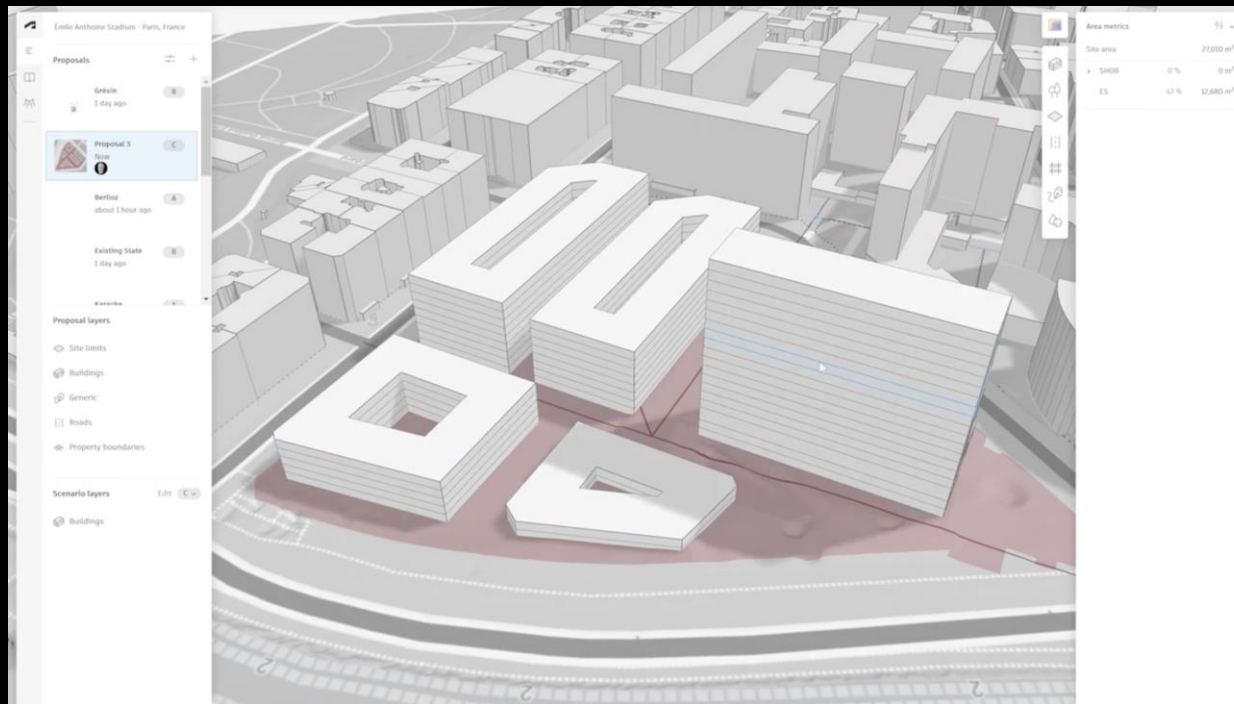
2021



2023



2023





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Start-ups and large companies place themselves on the market

nPlan

SPACEMAKER
An AUTODESK product

oculai

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nVIDIA

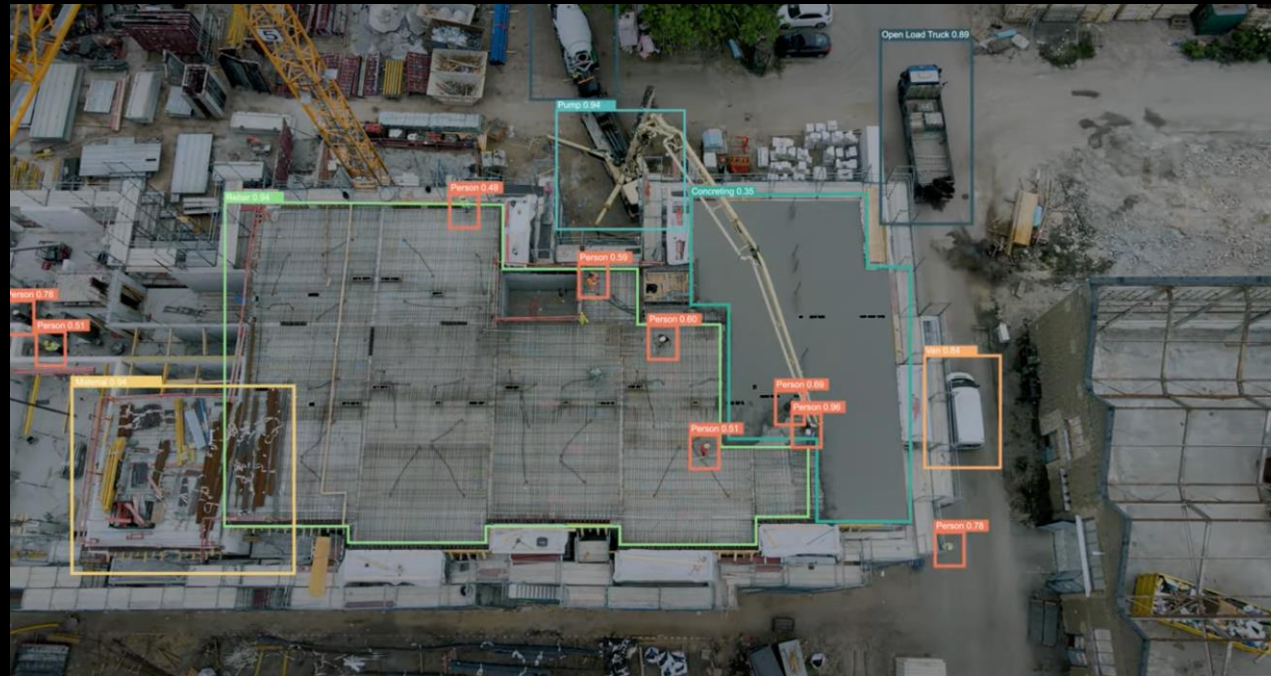
2017

2020

2021

2023

2023





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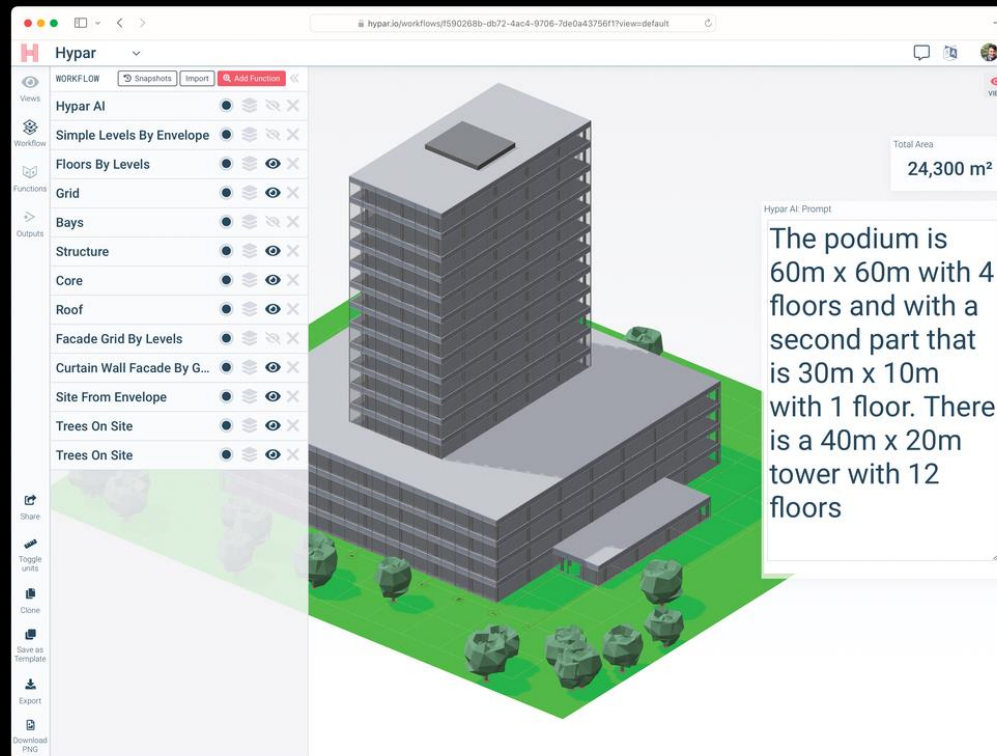
2017

2020

2021

2023

2023





AI DEVELOPMENT IN THE REAL ESTATE SECTOR IS PICKING UP SPEED

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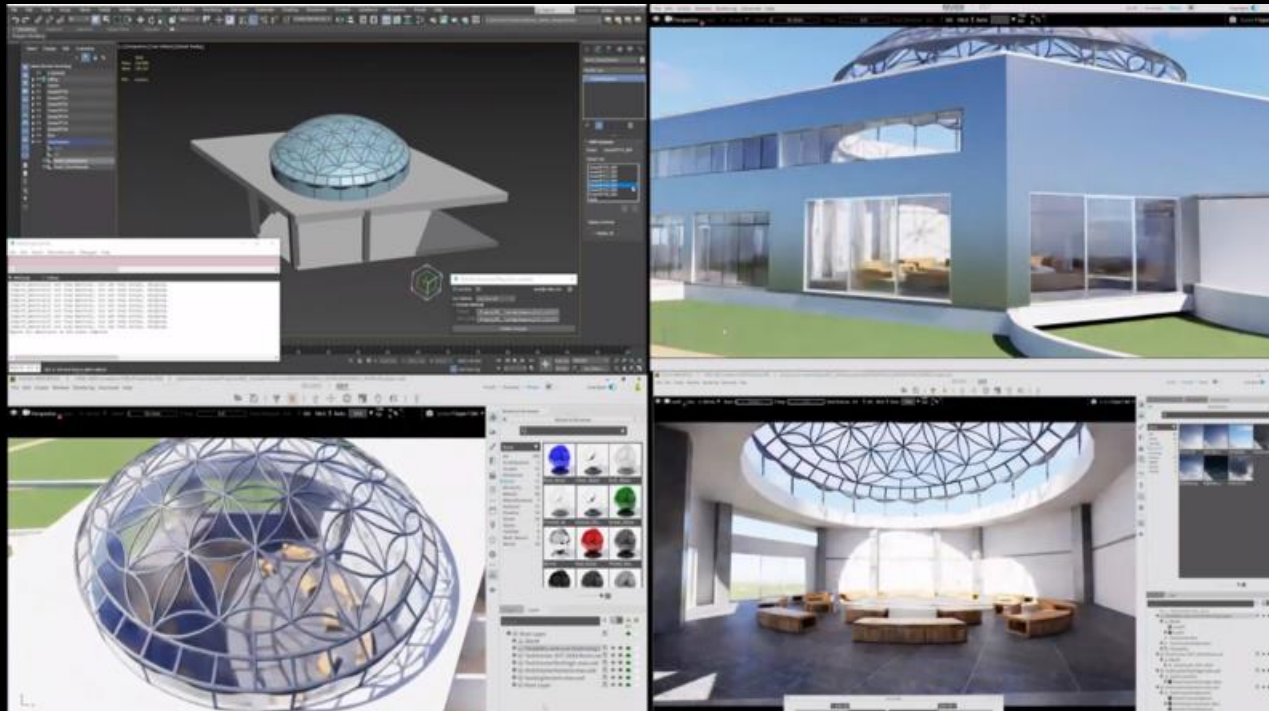
2017

2020

2021

2023

2023





VR UND METAVERSE

Twinmotion, Unreal Engine und Co.



[Link zum Video \(Klicken\)](#)

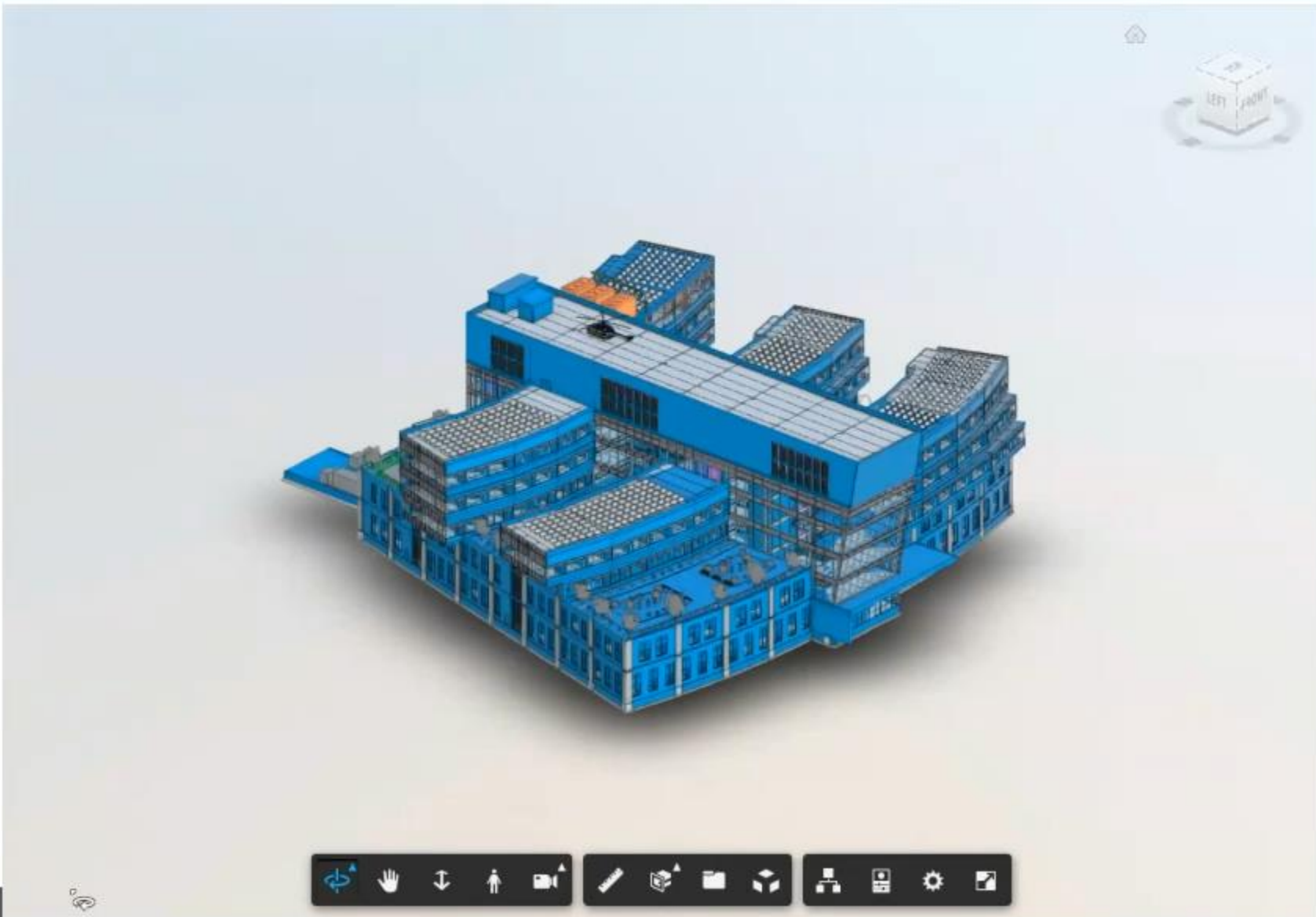
BMW verwendet Nvidias Omniverse um ihre Fabrik zu planen, zu testen und später zu bauen.

Und das in VR mit einer Game Engine.

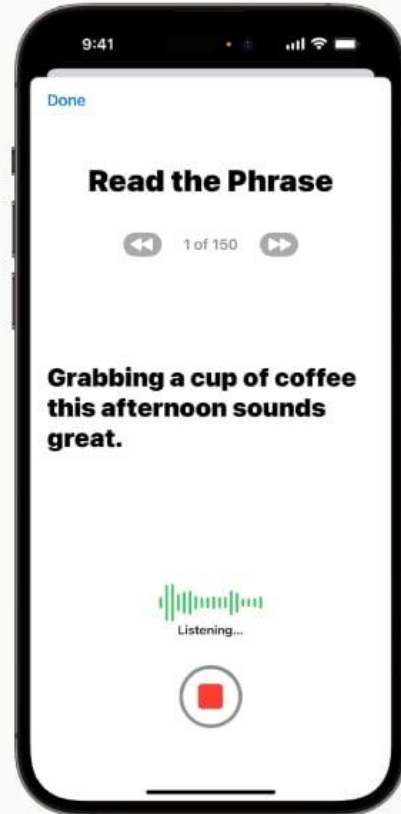
Gepaart mit BIM kann diese Technologie komplexe Projekte deutlich günstiger und effizienter handhaben, da mit dem Kunden gemeinsam das Ergebnis getestet werden kann.

Save Conversation Log

Input your query here



////
AI TOOLS





AI TOOLS

- 1 Chat GPT
- 2 Gamma
- 3 Stable Diffusion
- 4 Chat GPT
- 5 Fireflies
- 6 Innenarchitekt
- 6 ChatPDF