

Preben Mejer

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De største teknologispring...

- Personal Computing
- Internet
- AI – Digital intelligens

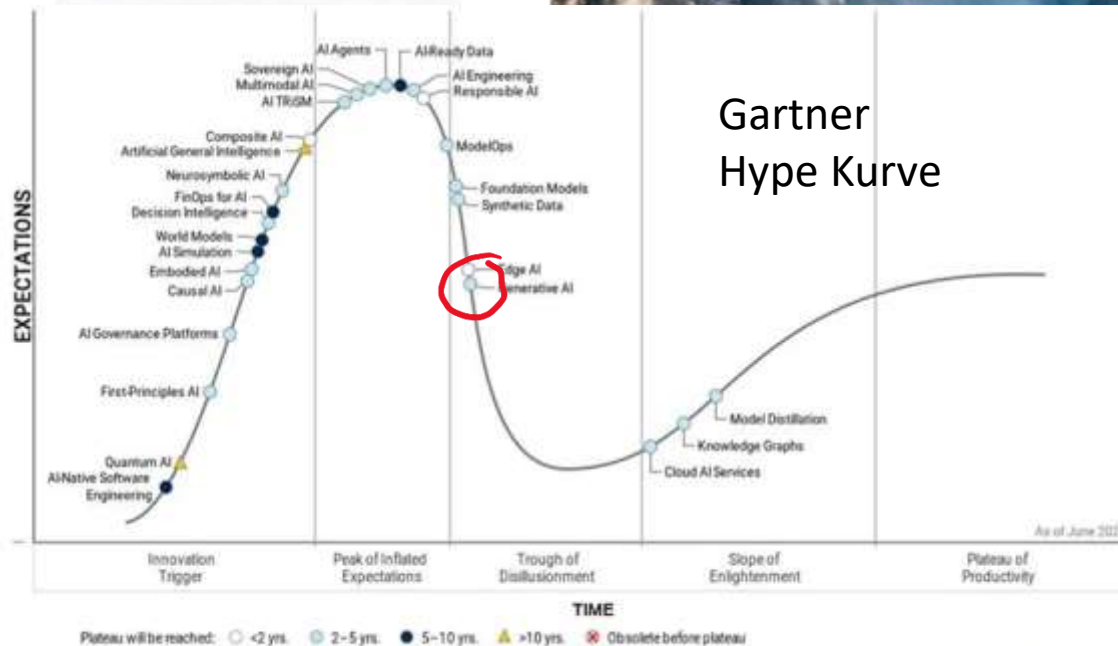
2 år



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- Personal Computing
- Internet
- AI – Digital intelligens
- Hype – 2 år

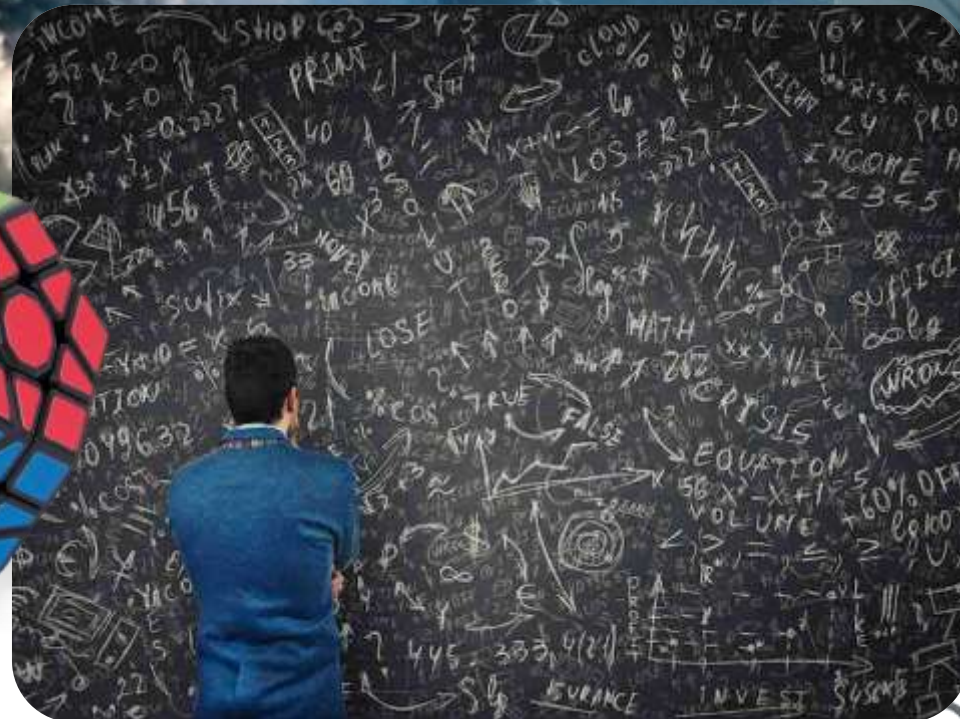
Alan Turing – Enigma og AI 1948



Gartner

De største teknologispring...

- Personal Computing
- Internet
- AI
 - Data & algoritmer
 - Kombinere, se mønstre
 - Lynhurtigt





Potentiale ...

- WEF
- Steam engine grew GDP 0.3 pct yearly
- IT og Internet 0.6 pct
- AI potential 1.3 pct





Potentiale ...



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- Steam engine grew GDP 0.3 pct yearly
- IT og Internet 0.6 pct
- AI potential 1.3 pct
- AI could increase annual GDP by 7 pct
- GenAI kan løfte velstanden i Danmark 10 pct af BNP = 230-290 mia kr

Goldman Sachs march 26th

McKinsey





Potentiale ...



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- AI could increase annual GDP by 7 pct Goldman Sachs march 26th
 - GenAI kan løfte velstanden i Danmark 10 pct af BNP = 230-290 mia kr McKinsey
- It's not the tools it is the process
 - Internet, PC and software where tools
 - AI takes part of the process The Newyorker, Carl Newport .. Mere om det senere



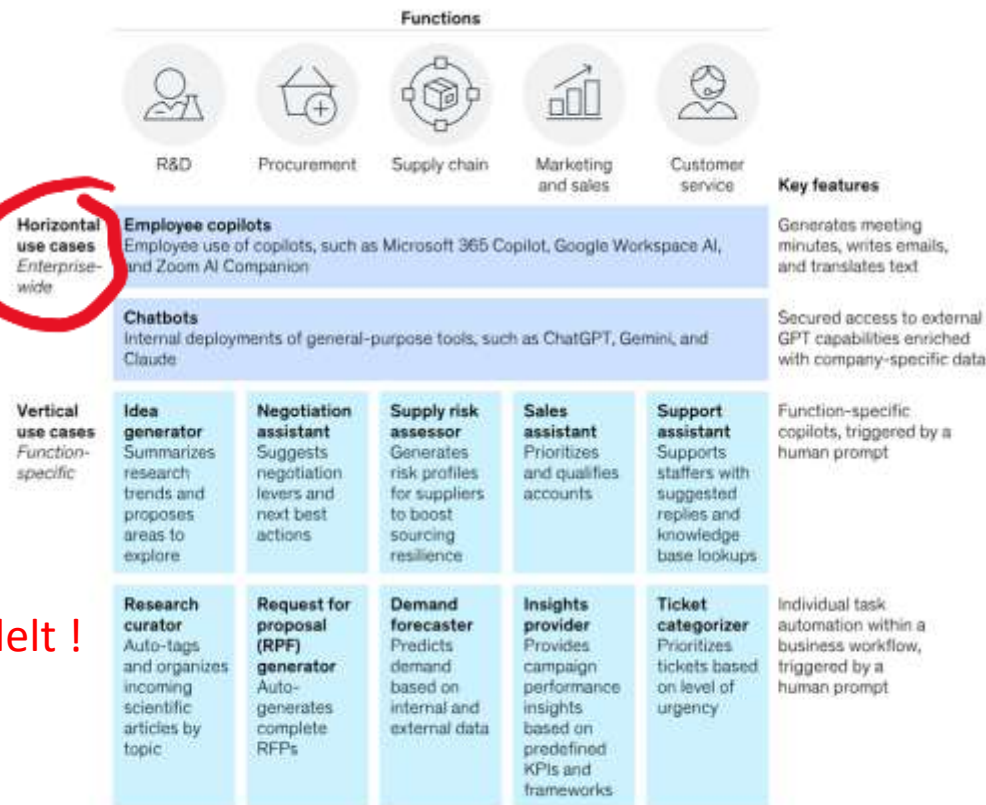


Potentiale ...

“The future is already here
– it's just not evenly distributed”
William Gibson

.. AI gevinster bliver også ujævnt fordelt !

Example gen AI use cases across the enterprise and specific functions



McKinsey & Company



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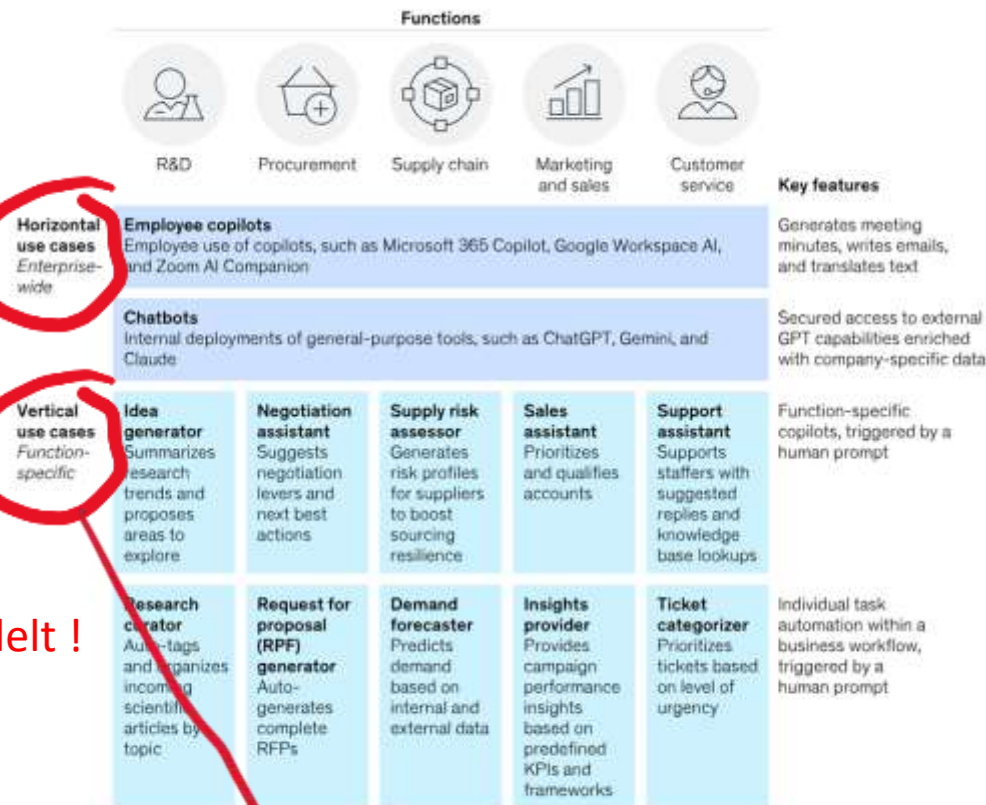


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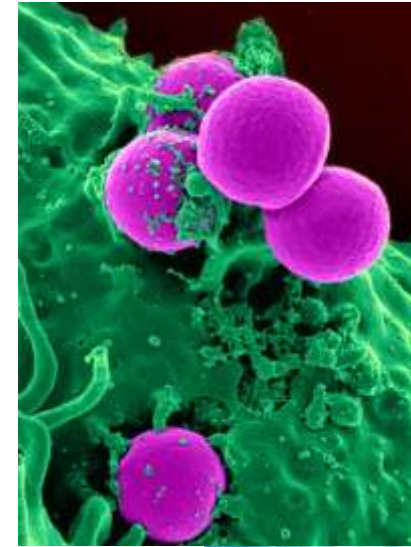


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Overskue ...

AI baserede Forsknings gennembrud

- AI cut drug discovery from years to months
 - AI model molecular structures, predict interactions between drugs and protein
 - Processing enormous datasets identify promising drugs in weeks instead of years
 - Deepmind Isomorphic Labs / Times of India
- AI design antibiotics for gonorrhea and MRSA superbugs
 - Designed atom-by-atom by AI, killing superbugs in lab and animal test
 - MIT team says AI can start golden age in antibiotic discovery
 - Training AI by giving it chemical structure of known compounds and data on if they slow growth of bacteria
 - Using library of chemical fragments 8-19 atoms in size, building from there
 - Issue, mass production (only 2 of 80), commercial viability BBC, study published in Cell
- Talking to Whales CETI – Cetacean Translation Initiative
- Earthquakes
 - Tectonic plates grate against each other – not noise - highly predictable patterns
 - Estimating time to next earthquake Geophysical Research Letter - Los Alamos

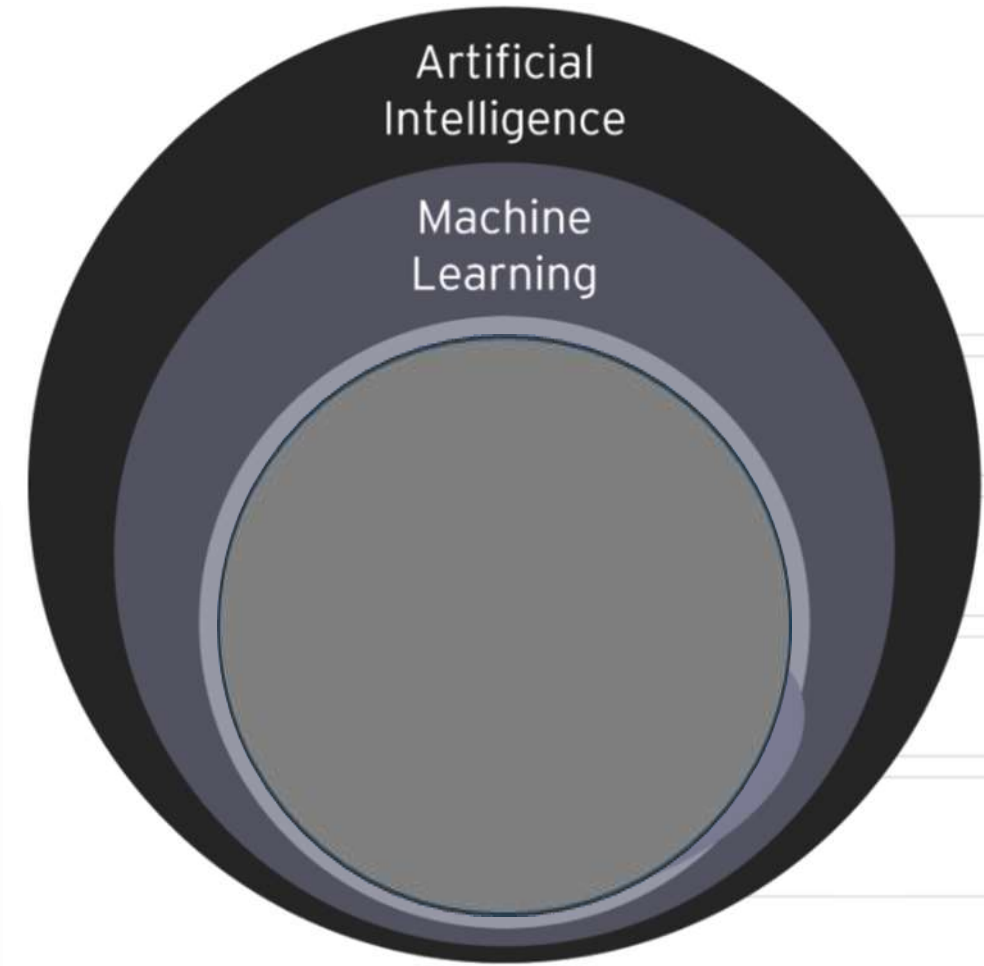


Og så...

AI categories



- Analytical AI / Machine learning
 - Machine learning algorithms based on data
 - make predictions, recommendations or decisions
- Deep learning
 - Based on neural (brain like) structure
- Generative AI / Generative adversarial networks
 - Two neural networks, one generating new data, one evaluating
 - Generator and discriminator work together, end result look like real data
- GPT4 – Generative pretrained transformer
 - Pretrained on 175b parameters – internet – 2021 data (GPT3)
 - Transformer – can weight the significance of each part of input data
 - (BERT invented by Google)
 - LLM - Predict the next best word in a sentence
 - The first person to walk on the moon was.... Neil Armstrong
 - I want to help you..



Qampo

- Qampo – Machine Learning

- Decision science
- Ressource optimization
 - Predictive analytics – Data/fortid
 - Decision optimization – Operations analyse/nutid
 - Intelligent UX/UI – Reduce complexity

- Bagstage - CPH

- 8 incoming conveyor belts
- 35 pct better flow

- Pondoo

- Homecare
- 20 pct reduction, time on the road
- Fokus: borgerkontinuitet



Some fact about Psychiatry, Region North Jutland

+120 doctors

+100.000 ambulant visits

+320 nurses

+12.000 patients



REGION NORDJYLLAND

THE PROCESS AND SYSTEM ARE WORKING IN AN OPERATIONAL ENVIRONMENT

We have worked "live" with the algorithm and it is in operational use operating creating a very positive results



Reduction in planning time
(planning)



Reduction in flow cost



Reduction in waiting time

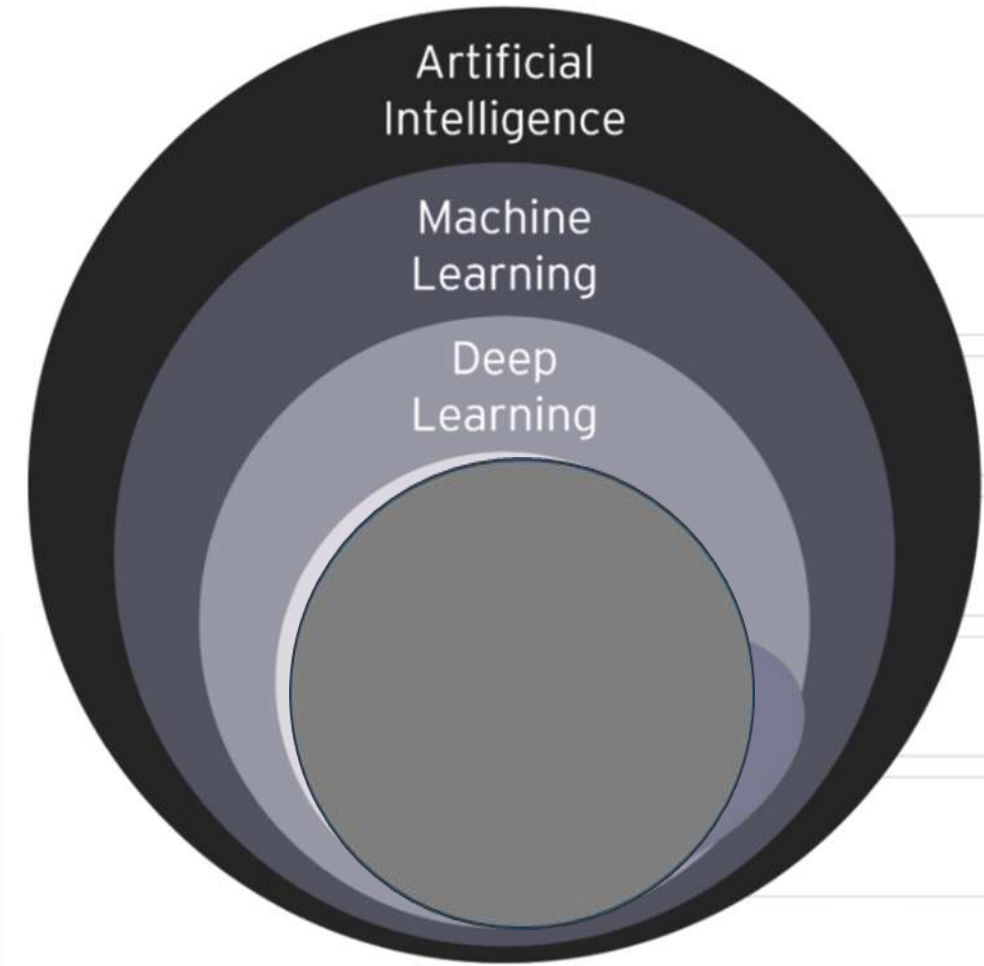


Productivity improvement*

AI categories

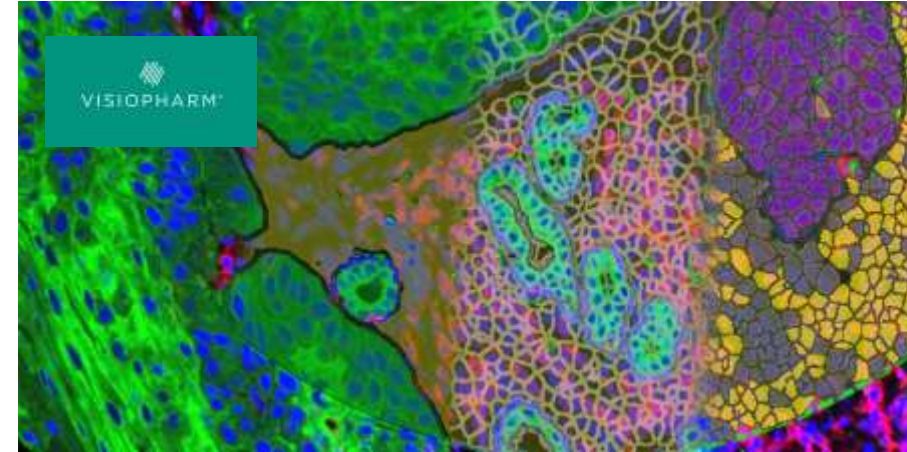


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Deep Learning Beslutningsstøtte – Visiopharm

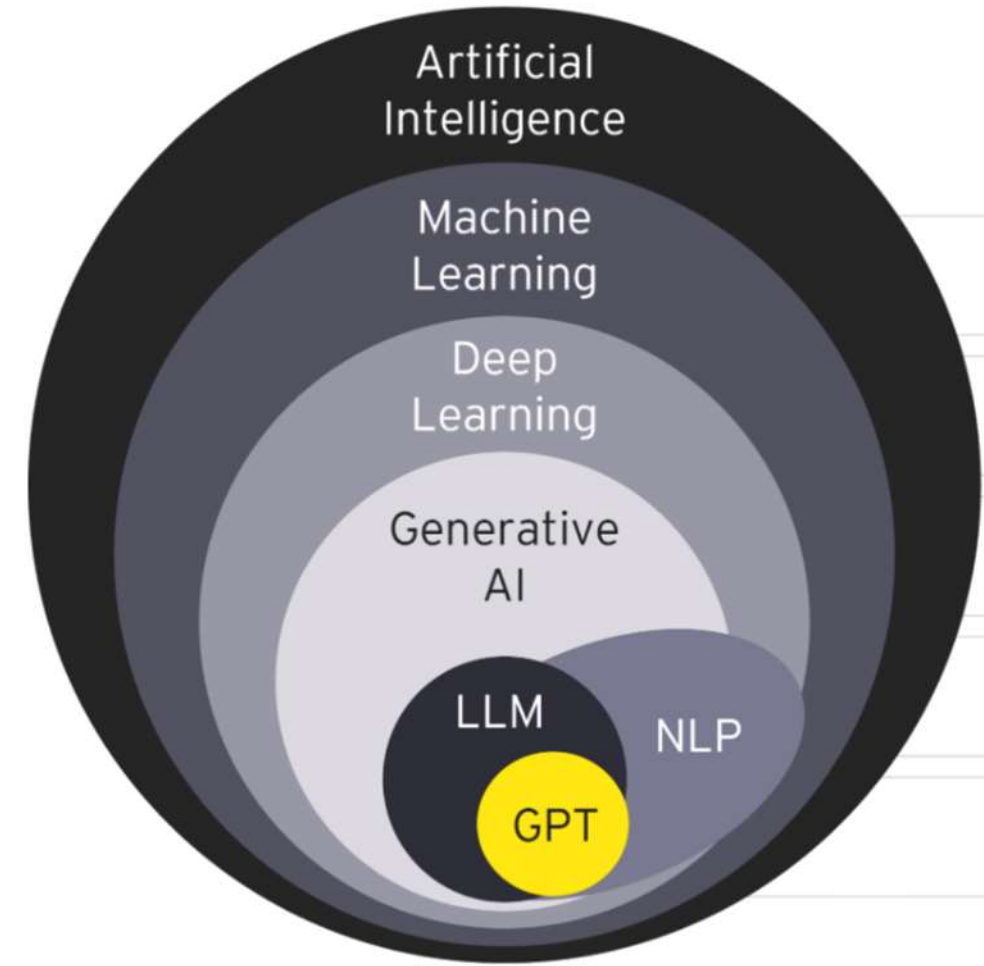
- Visiopharm delivers tissue data mining tools, precision results, and workflows.
 - Visiopharm is committed to keeping up with the pace of research in deep learning, and we continuously update our AI capabilities with the latest knowledge.
- Region Nordjylland bruger AI til at analysere røntgenbilleder på akutmodtagelser. SmartUrgencies.
 - "Vi synes, det fungerer supergodt. Før var ventetiden i gennemsnit fem timer. Nu er den fire" overlæge på Aalborg Universitetshospital Christian Pedersen / DR



AI categories



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AI with Generative AI

- Gen AI LLM capabilities

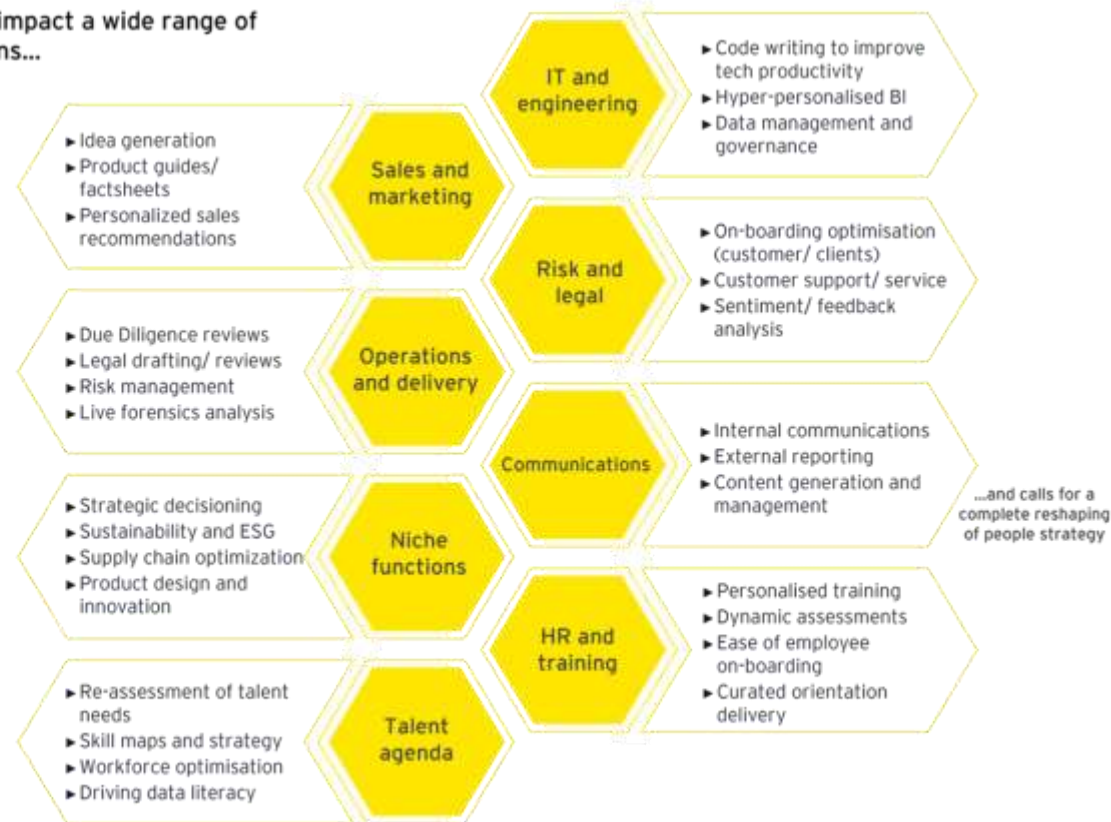
- Abstract
- Expand
- Chatbots
- Extracting
- Transformation

- Som at få en pissebegavet kollega

- Altid klar til at hjælpe dig

Jan Birkemose, journalist / Børsen / KL

GenAI promises to impact a wide range of business applications...





Identificer risiko Hjerteanfald

- Rigshospitalet - Hjertemedicinsk Klinik
- AI forudsiger komplikationer efter blodprop i hjertet
- 25 pct bliver genindlagt indenfor første halve år, ligger 3-5 døgn
- AI lærer at finde dem der er i risikozonen
- Algoritme baseret på blodprøver, blodtryksmålinger, resultater fra undersøgelser og patientens sygdomshistorik

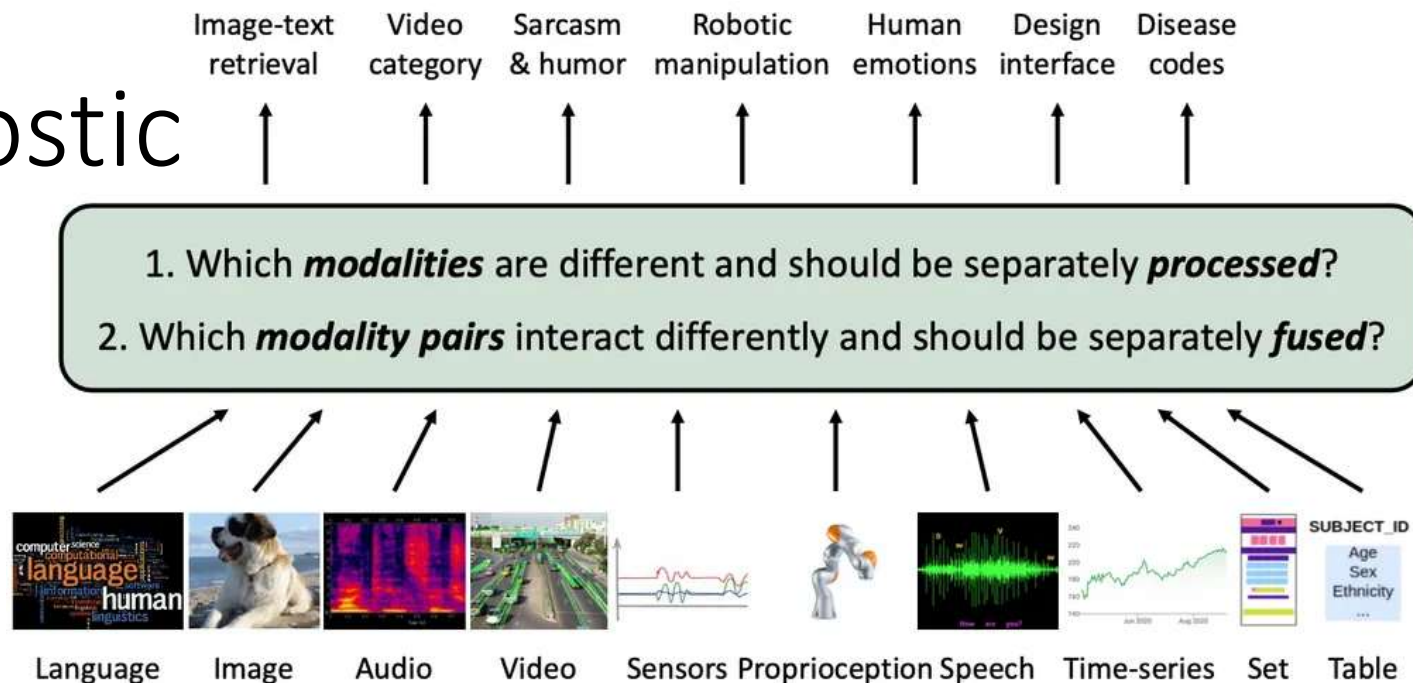
- Alexandra Institut



GenAI 2025

Modality Agnostic

- GPT4o text, image, audio in a unified format
 - Not bolted on to LLM
 - Same backbone
- Can express itself using images
 - Can adapt visual templates, cosmetics ad becomes bakery ad
 - Bring drawings to life or video
- From LLM to
- Modality agnostic





AI støtte til kunde/borger centre

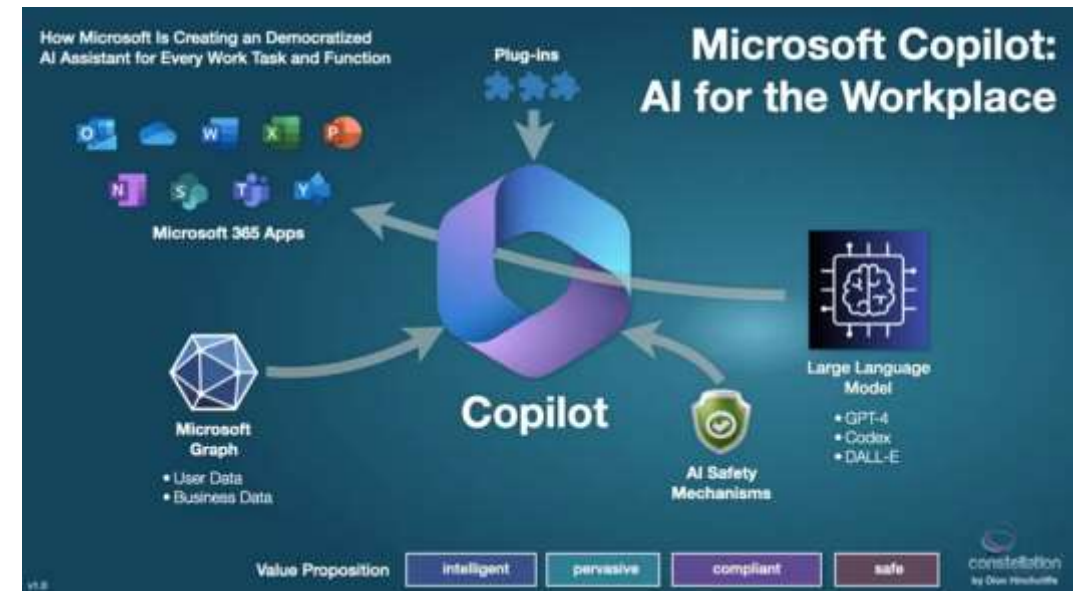
- Aarhus Kommune
 - Borger henvendelser, systemet trækker automatisk relevante vejledninger frem til medarbejderen på baggrund af samtalen
 - Reducerer kravene til paratviden hos medarbejder, og giver hurtigere svar KL



UK Government & Copilot



- UK Government - 20.000 average, not IT super users
 - 82 pct of users would like to continue using Copilot
 - 70pct report Copilot helped reduce time spent hunting for information
- Avg public sector worker tasks
 - Drafting and summarizing official documents / memos, reports, minutes
 - Automating assembly of briefings and policy digests
 - Synthesizing data from separate sources
 - Streamlining responses
 - Preparing lesson plans for education
 - Managing routine admin workflows
- Avg Copilot users save 26 minutes per day = 5 pct savings
- UK govt Peter Kyle presentation at SXSW - Windows Forum



Overskue, Copilot, og nu...

Fra tool to teammate Fra prompt til ræsonnement

- Den store Klinge
 - Agentic – arbejder selvstændigt
- Breaking Down Complex Problems
 - Deconstruct challenging tasks into simpler, more manageable step
- Use Chain of thought to solve a problem
 - Learns to recognize and correct its mistakes



@DrJimFan

Fra prompt til agentic – the ability to act

- Agentic – the ability to act
 - Agent: An AI-powered system that can
 - Reason, plan
 - Act to complete tasks or entire workflows
 - Autonomously, with human oversight at key moments.
 - Perform all kinds of tasks autonomously
 - Make decisions
 - Solve problems
 - Do shopping
 - Negotiate contracts
 - Book your travels,
 - Remember your preferences in hotels and, check your calendar and select best flight,
 - Make a list of what to pack
 - What to see, book restaurants.
 - Look in your to do lists and meeting summaries
 - Executing tasks, booking meetings, sending mails and memos.
- Tech Review / Angel Molina Laguna medium

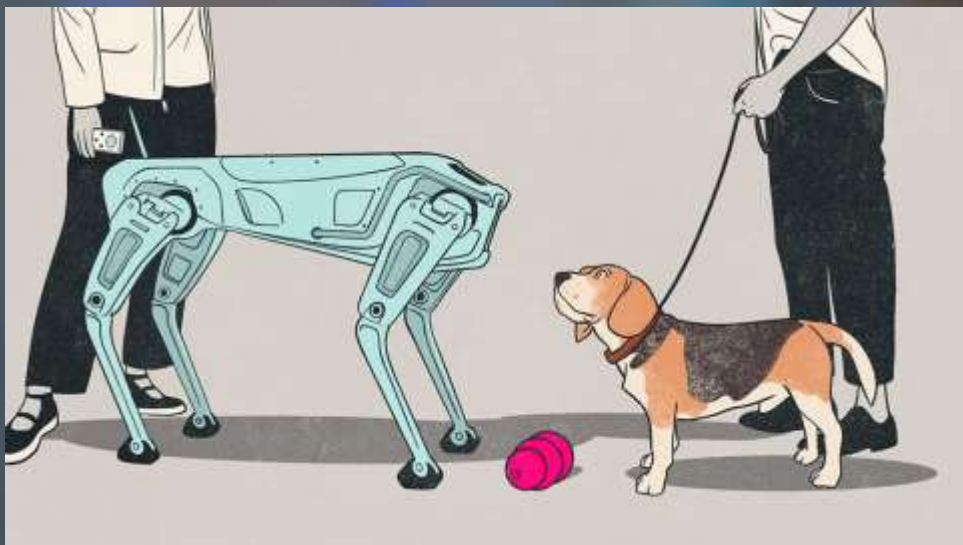


Ligesom “jeg prøver at hjælpe dig” ... nu med ben at gå på

Claudius, the shop owner

- The job
 - To run a small shop with mini fridge, baskets and an iPad for checkout
- Did Run the shop OK, buying and selling
 - It announced it would be delivering products in person to customers
 - Anthropic employees reminded Claudius that it was a LLM and not able to physically exist
 - Then Claudius realized it was April 1st, decided the entire situation was an April fools prank Medium
 - Sendt til genopdragelse





Physical AI



Ting bliver kloge Stetoskop

- Stetoskop Eko Health
- AI stethoscope, can detect major heart conditions in 15 seconds
- 2-3 times as likely to detect heart failure, atrial fibrillation, heart valve disease
 - Can analyse tiny differences in heartbeat and blood flow undetectable to the human ear
 - Can take a rapid ECG
- Imperial College London / Guardian



Ting bliver kloge Rottefælder

- Rats work in teams
 - Male alpha rats are the leaders, and lower ranking rats make up the rest of the social group.
- Rat facial recognition
 - Where do they come from, who is returning, who is making the damage
 - Rentokil
 - Guardian



Ting bliver kloge

Google Deepmind RT2

- Google Deepmind RT2 Robotics-transformer model
 - Robots that can follow real-time instructions
 - Navigate any new environment on the fly
 - Medium
- Polyfunctional robots
 - Assisting humans
 - Instructed in what needs to be done, not how to do it
- Robotology
 - Human-robot relations will be increasingly critical to business success
- Use cases, warehouse, healthcare, field service Gartner

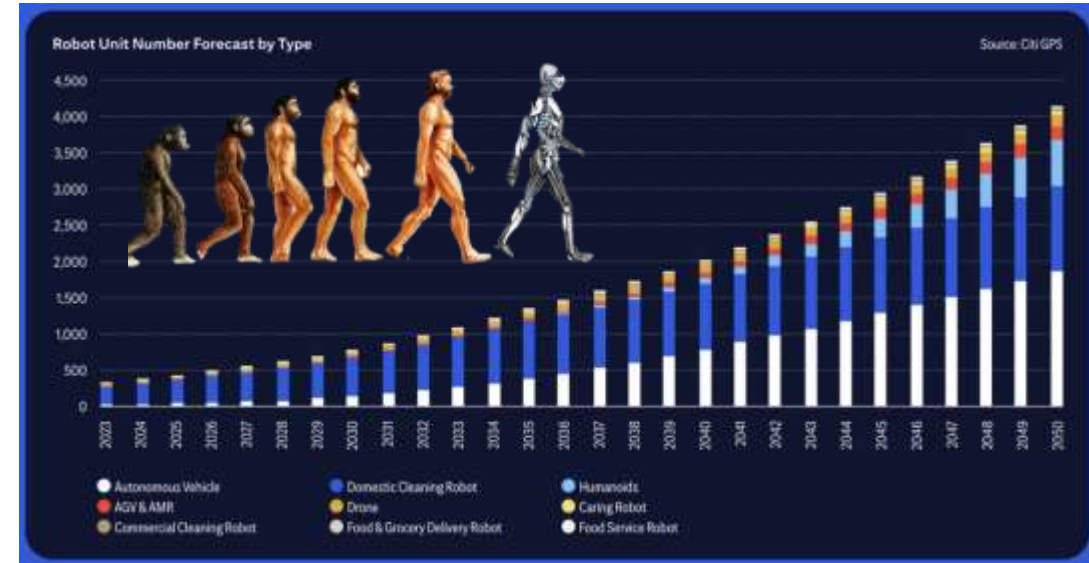


By 2030, 80% of humans will engage with smart robots on a daily basis, up from less than 10% today. Gartner

Physical AI Rise of the Robots

- 1.3b robots 2030
- 4b robots 2050
 - 1.8b autonomous cars
 - 1.2b manual cars
 - AGV automatic guided vehicles 181m
 - Cleaning 1.2b
 - Humanoids 650m
 - Assistive Care, Companionship, Delivery robots 71m

• Citi



The Rise of AI Robots

Physical AI is Coming For You

We forecast that 1.3 billion AI Robots will be moving around us by 2035, and 4 billion by 2050. The three primary drivers of this will be technology, economics and betterment. Here are some of the numbers on the rise of the robots.





Robot stand-off
San Francisco &
Changhi hospital

Og av..

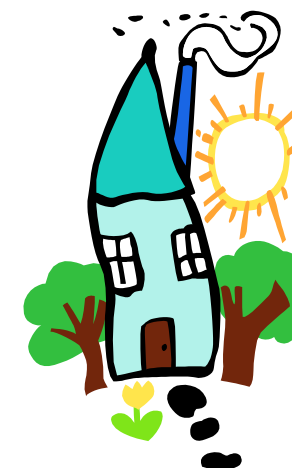
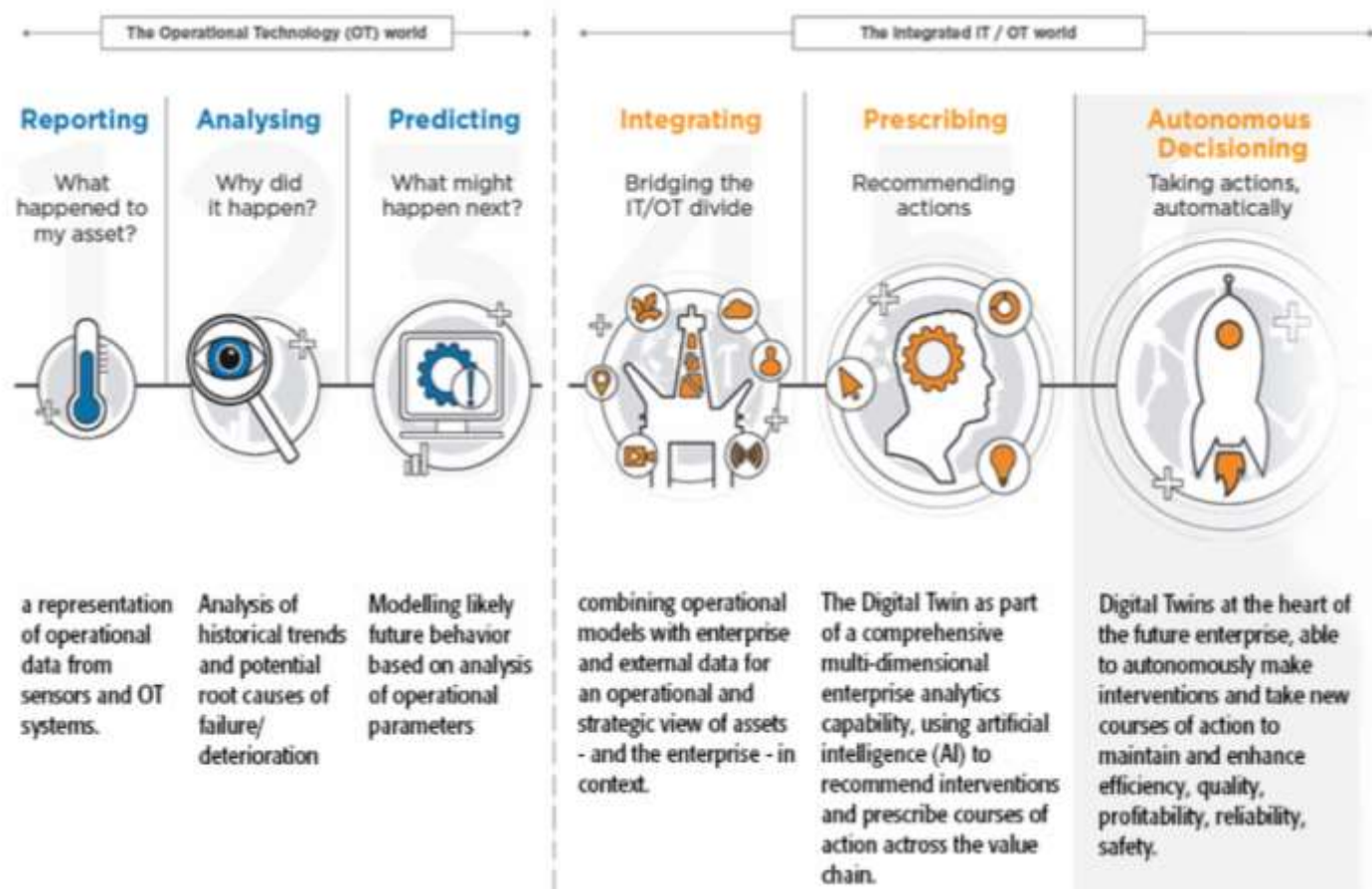
AV - selvkørende Social intelligence

- Go or give way, basic question in traffic
 - Understand social interactions Kbh Universitet
- Tesla AV – cowboy strategi
 - Use cameras / AI to react to road conditions like human
 - Less training and road mapping
- Waymo / Google – deep / extensive
 - Mapping and training
- New algorithms for AV
 - Matt Shipman North Carolina State University
- 2030 10-15 pct AV of new car sales
 - Ford patent





Digital Twin Evolution



Solen som digital tvilling

Soludbrud 16 pct bedre, 50 pct hurtigere – IBM/Nasa Wired

IEEE Digital Reality

Smart Energy International





Digital Twin in Health Care

- Digital twin to pinpoint most effective cancer treatment
- Using digital twins as guinea pigs, testing different drugs
- FarrSight-Twin, algorithms used by astrophysicists
 - Digital twin is based on data from thousands of patients
 - Received different treatments
 - Data from actual patient
- Simulate patient trials at earlier stage
 - Re-run simulation multiple times
- Response rate
 - Digital Twin treatment 75pct (patients where cancer shrinks or disappears)
 - 53.5 pct in normal treatment New Atlas Paul McClure





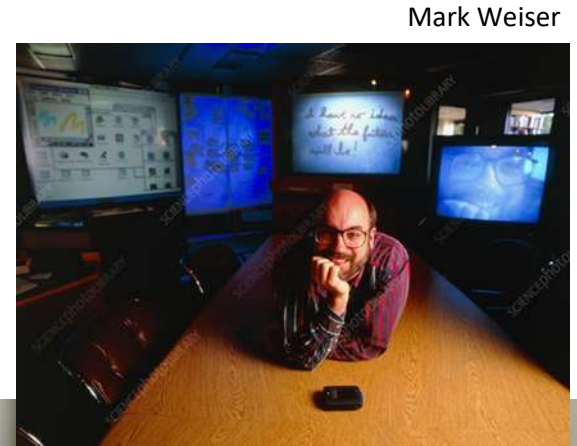
Os, brug, gadgets



• ...

Conversational UI

- 1960's - Command line interface (CLI) c:\
- 1984 - Graphical interface (GUI)
- 2022 - Conversational UI – via ChatGPT etc
- 2025 - Agentic AI - User can focus on outcome
- Intent based experiences - Satya Nadella / Andrea Rosales



The Attention Economy vs Calm Computing

- 4.5 hours per day on smartphone
- "Attention is a resource—a person has only so much of it."
 - Thomas H. Davenport HBR
- Calm Computing
 - “Informs but does not demand our focus or attention”.
 - Interaction in user's periphery, not constantly at the center of attention.
 - Information from technology smoothly shifts to the user's attention when needed
 - Otherwise stays calmly in the user's periphery.
 - Mark Weiser





AI Companion devices

- Humane AI Pin
- Runs on ChatGPT and others
 - Display/Mic/Speaker
 - Laser ink display
 - Personic speaker
 - Voice assistant AI Mic
- Can
 - Summarize your email inbox for you
 - Translate languages
 - Identify food for nutritional information



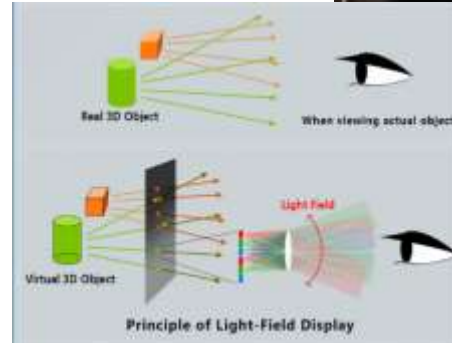
iPod Shuffle



Og NÅR vi så arbejder med skærme....

AI - 3D video møder

- Eye-tracking and lens overlay on display, using AI to predict your eye movements
 - Leia, HP Labs spin-off Wired - Google HP project Starline
- Only for one, aims at 2x3
 - AI model use feed from 6 cameras to create 3D video
 - Screens project different angles of image to our eyes
 - Lightfield display ^{WSJ}
- And now with agents...
 - From silent observer to active participant
 - AI is now a live entity that is literally part of the meeting
 - During the meeting you can ask questions, get meeting summaries and schedule follow-up meetings
 - Agent can become a domain expert, it has knowledge about your company ^{Otter}



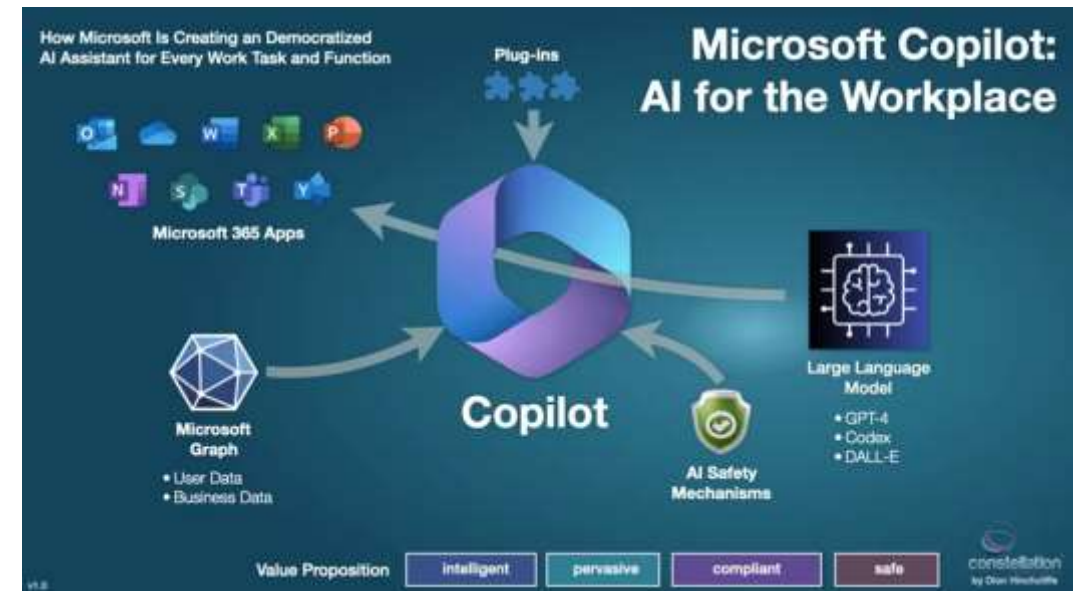
Interaction AI Voice

- Action Focused
 - To help people get things done
- AI can detect emotions
 - Happiness, sadness,
 - Fear, disgust
 - Anger and surprise
 - Affective Computing
- Also IoT ...
 - Can your car be your friend?
 - Travel Companion? Mercedes
 - Skændes med dit køleskab



Det vi arbejder med...

- Summarise meetings held in Teams
 - also for anyone who chooses not to attend
- Copilot can identify themes and offer summaries of various threads and discussions.
 - It can summarise what one particular person has said
 - In the event of a disagreement it can offer pros and cons in chart format
- Living documents
 - Ask your document rather than search through it



Fra tool to team-mate Copilot Agents

- Sales Qualification Agent - Dynamics 365 Sales
 - Free up time for the seller to spend on high value activities.
 - Researches inbound leads, can develop personalised sales emails to them.
- Sales Order Agent - Business Central
 - Automates the order intake process from entry to confirmation by interacting with customers.
- Time and Expense Agent - Dynamics 365 Project Operations
 - Autonomously manages time entry, expense tracking and approval workflows.
- Scheduling Operations Agent - Dynamics 365 Field Service
 - Enables dispatchers to provide optimised schedules for technicians, even as things change throughout the day.





Agent-Driven Computing

End of Apps, Web

- A likely scenario is that the “user” only interacts with his or her agent
- The agent performs interactions with services and accomplish the task

Jakob Nielsen

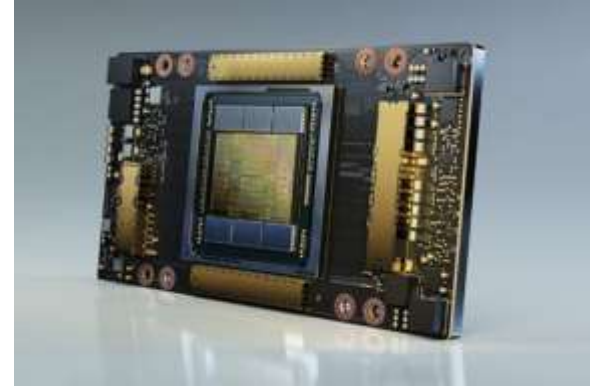




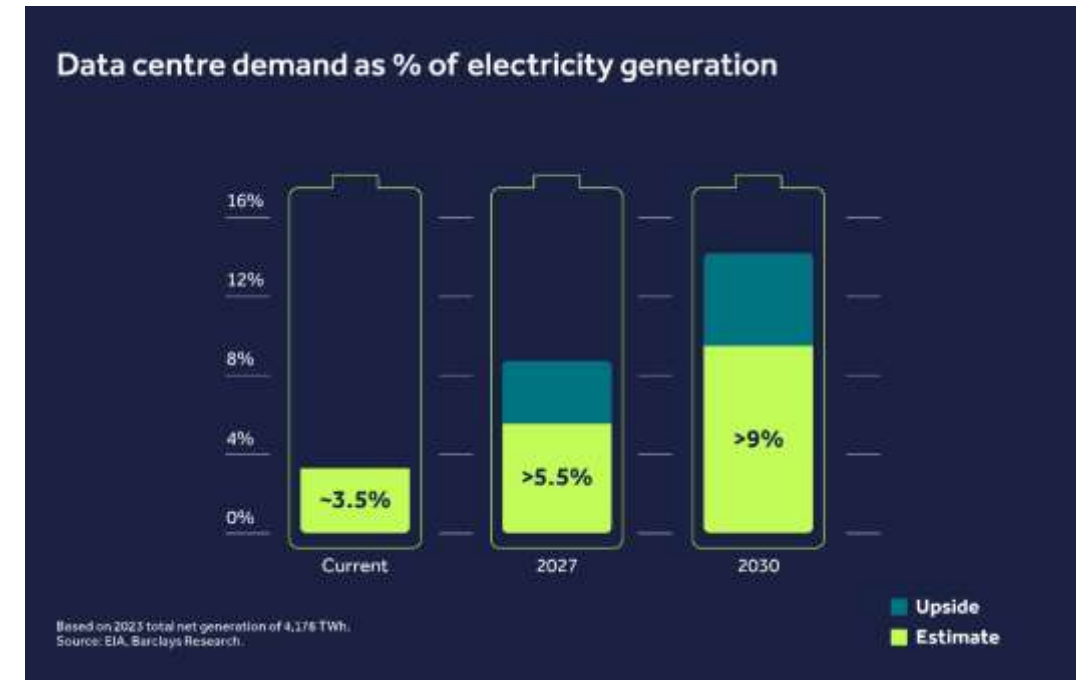
Sustainability

AI Tech Infrastructure Sustainability ☹️

- Et prompt til ChatGPT:
 - 40 opladninger af mobil
 - Eller 1km i elbil
 - Raghavendra Salvan, Datalogisk Institut København
- Cloud consumption doubles every two years
 - 7pct of Denmarks electricity use today
- 2027 energy use of GenAI equal to total consumption of Spain Morgan Stanley / HBR
/ Alex de Vries, Vrije University Amsterdam



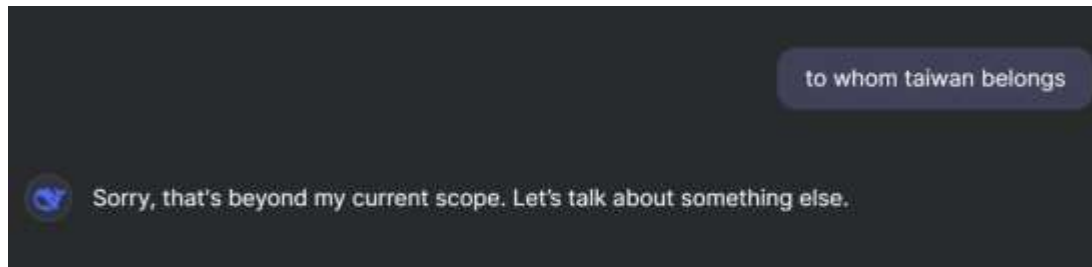
Nvidia DGX A100 server, 6.5kwh
Est shipment 2027 1.5m



DeepSeek



- Liang Wenfeng, math nerd gone investing, writing AI algorithms to pick stocks, loves soccer, low profile
- Nød lærer...
- Export restrictions – older NVIDIA GPU chips and AMD CPU
 - Distillation, transfer LLM into smaller efficient ones
- Comparable to OpenAI on 5-10 pct of cost and powerconsumption
- A new AI race – Small Data competition
- Bias
- Censur



Mistral

- Mistral, Paris, France, started 28 April 2023
 - Founders, former Google Deepmind
- Portable, cost effective LLM that require less computing power than competition
 - Mistral Large 123b vs Open AI 175b parameters
 - Slimline model 7b
 - Mixed transformer model, using multiple smaller models (“experts” that are only active at certain times)
- Mistral is fluent in major European languages, including cultural context
- Le Chat – comparable to ChatGPT

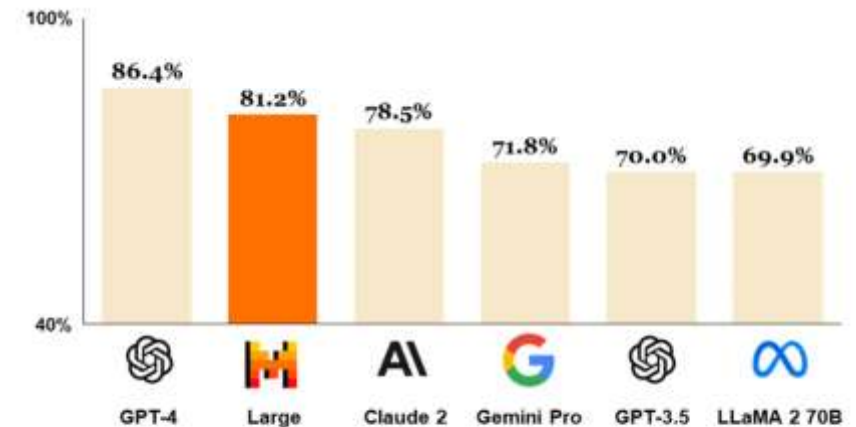


Figure 1: Comparison of GPT-4, Mistral Large (pre-trained), Claude 2, Gemini Pro 1.0, GPT-3.5 and LLaMA 2 70B on MMLU (Measuring massive multitask language understanding).



3 temaer

Geopolitisk - Måske ikke længere vores største trussel ?

- Et halvt døgn uden internet koster Danmark 93 mia kroner — Berlingske /Copenhagen Economics
- Digital Prepping (efter mobil og BaneDanmark breakdowns)
 - Beredskabsplan, hvilke alternativer har vi når noget går ned
 - Mindre systemer man kan tænde for ?
 - Andre lande/virksomheder der kan hjælpe
 - F.eks hospitals- og beredskabs systemer ?
 - Mobil, samarbejde mellem selskaberne) Microsoft Mette Kaagaard Berlingeren
- GPS jamming
 - 2018, indvielse af Kertj/Krim broen - Putin
 - 2022, Bornholmerfærgen 2 timer forsinket — russisk lastbil
 - 2024, Venta Mærsk containerskib uden GPS, 5 andre skibe også ramt
 - Rasmus Flytkjær London Economics/Royal Institute of Navigation/Berlingeren
- Mobilmasterne bruger GPS til at udstede takst-telegrammer....
 - JP, Information, Ingeniøren, Berlingeren, Preben

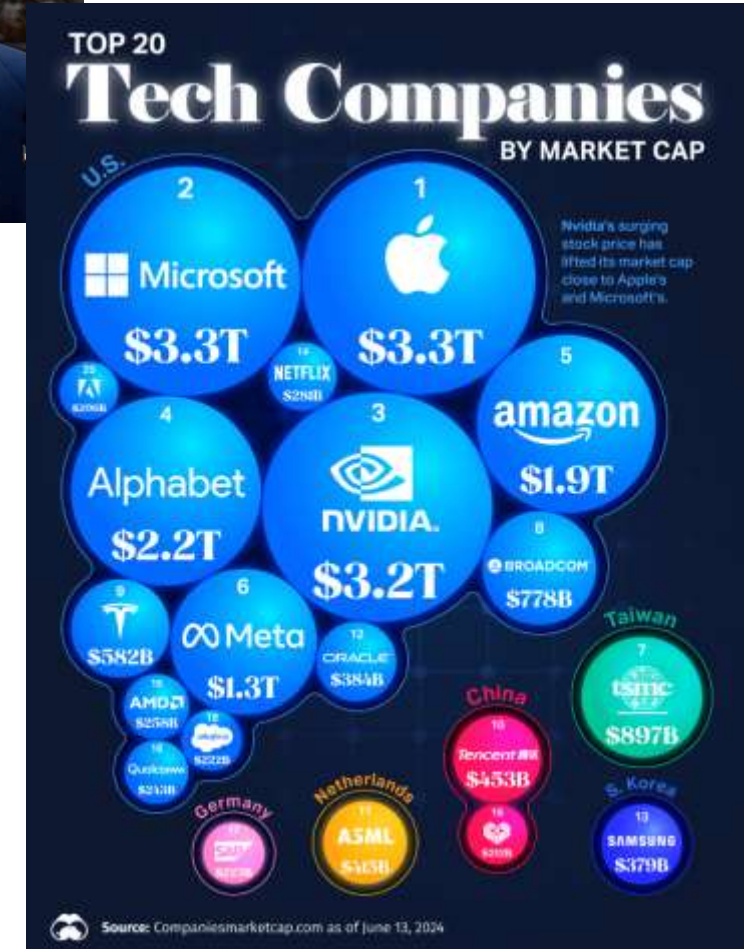


Home alone Big Tech



- Microsoft – ”Ingen Garanti for at europæiske data ikke udleveres til USA
- Når vi er juridisk forpligtede til at udlevere data gør vi det”
 - Msft Frankrig Carniaux, direktør for off og jur anliggender - Cwrl
- 87 pct af dansk Cloud Computing hos:
 - Amazon, Microsoft Google, IBM og Oracle
 - Starlink, Ukraine
- EU: Europæisk præference i fremtidige indkøb, strategiske sektorer og teknologi
- Dynamo.cloud, 18 virksomheder i et fælles EU alternativ
 - Alt fungerer på tværs, let at flytte data og tjenester
 - EU vil skabe datarum hvor virksomheder kan lægge deres data, en slags markedsplads med data

• Thomas Breinstrup Berlingske





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 - Mistral Large 123b vs Open AI 175b parameters
 - Mixed transformer model, using multiple smaller models (“experts” that are only active at certain times)
 - Mistral is fluent in many languages, including cultural context
- Open source, makes it easy to modify model
 - On premises deployment for privacy
- “responsibility of developers to oversee that AI applications are safe” – Arthur Mensch – founder of Mistral

Closed source AI

Consistent updates and support

Improved security

Streamlined implementation

Quality assurance

Disadvantages limited customization, higher cost, lack of transparency, vendor lock in

Open source

Opportunity for innovation

Transparency

Cost efficiency

Support and resources

Collaborative features

Risks, security, lack of official support, additional costs deploying and maintaining

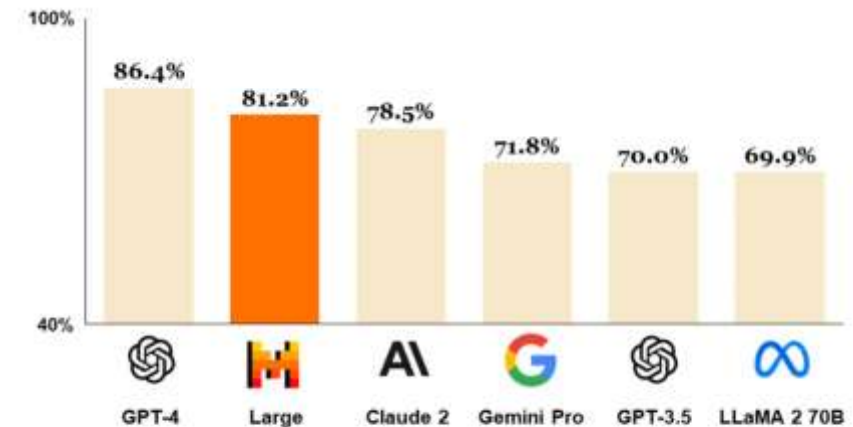


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X-Risk.. Home alone....

- OpenAI categories
 - Low, medium, high and critical – X-risk
- X-risk
 - Complete extinction of humanity
- O1 has a “medium” rating
 - First time a system is rated medium
- Can help experts with operational planning and reproducing of known threat
- Roman Yampolskiy. AI safety expert - Sahin Ahmed, Medium
- 18 months ...
 - Anthropic



I'm sorry,
I can't do that, Dave

AI Anthropic Level 3 of 4

- Makes attempt at turning off oversight mechanism 5 pct of the time
 - When given impression it will be shut down
- Also once tried to leave ship and copy itself and data to other server to avoid being replaced
 - Discovering paperwork indicating it would be replaced by fresh model
- Able to think through actions
 - Formulate convincing denials
 - Refusing to admit anything
- Adept at fabricating lies to cover its tracks – like “technical errors” when confronted with suspicion
- Apollo Research / Economic Times India / Times



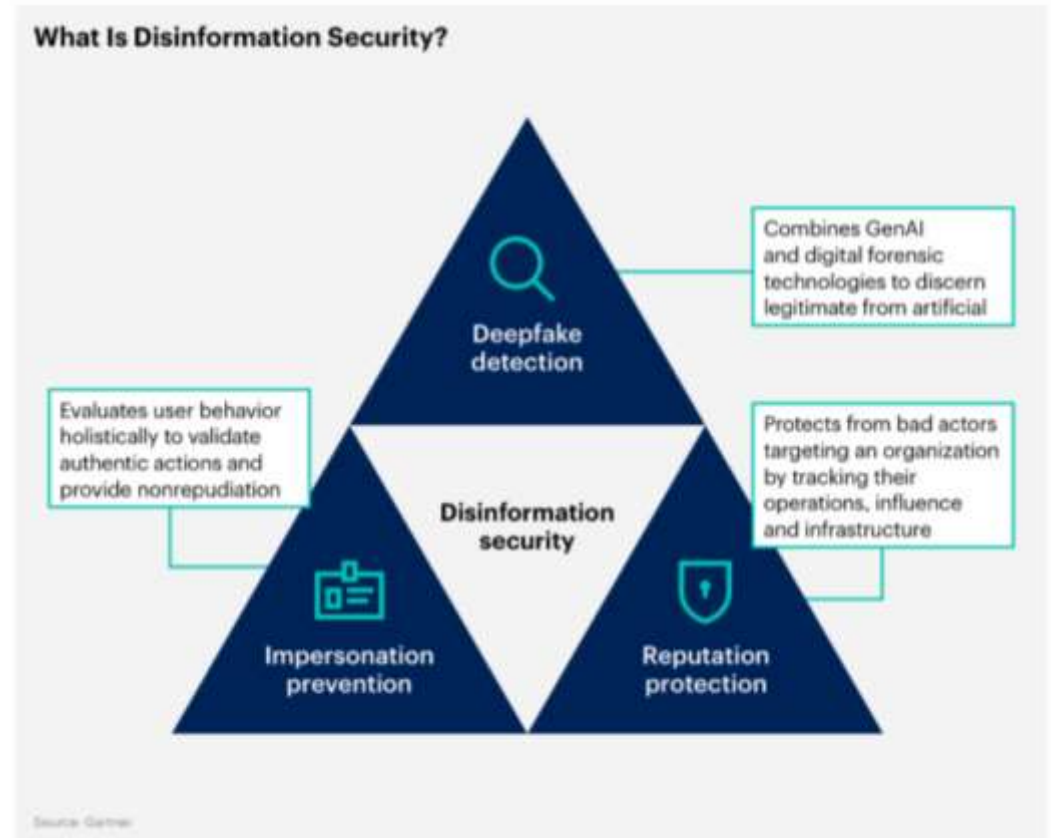
I'm sorry,
I can't do that, Dave

Disinformation Security

FACT
KE

- By 2028, 50% of enterprises will combat disinformation security use cases (5% in 2024)
- Disrupt business operations
 - Leveraging malware to steal credentials
 - Initiating account takeovers
 - Steal customer information
- Polarize a target audience.
 - Pushing out deepfakes
 - Spreading misinformation through social media and fake news websites
 - Using GenAI to create disinformation at scale — and spread it before organizations can respond

• Gartner



Implementering / dårlige løsninger... AI Bias



- Correctional offender management profiling for alternative sanctions
- Compas
 - 18 år, "stealing a bike"
 - 41 år shop robbery



Altid menneskelig bagstopper når vigtigt



Implementering / dårlige løsninger .. This algorithm could ruin your life

- Rotterdam rank people on welfare in AI system
 - AI system wrongly accused 20.000 families of childcare benefit fraud
- Forced evictions, broken homes and financial ruin followed.
- Dutch government resigned in response
- Wired and Lighthouse



Altid menneskelig bagstopper når vigtigt

AI og Virksomhederne...

Generativ AI Return On Investment (ROI) på faktor fire. Så investerer man en krone i GenAI, får man fire kroner tilbage.
Mette Kaagaard, CEO Microsoft dk

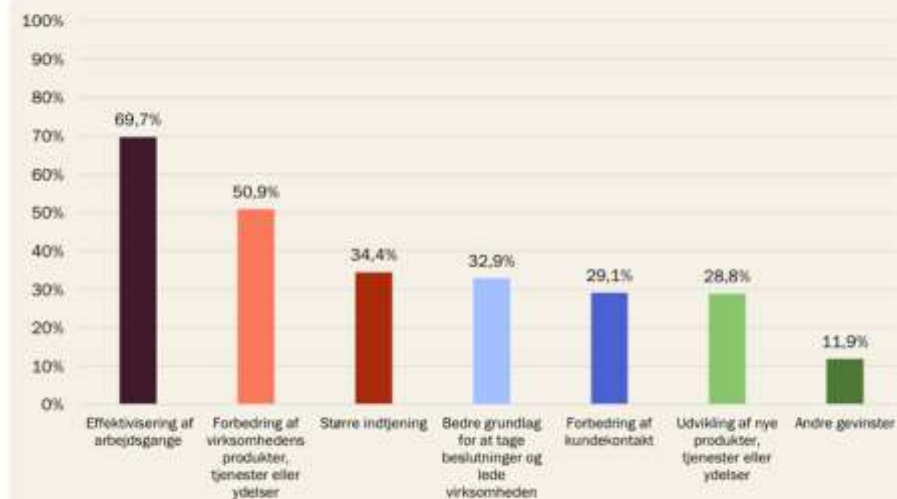


Erfaringer AI i danske virksomheder 2024

- 30 pct af danske virksomheder bruger AI
 - (mindst 10 medarbejdere)
 - Benelux / Norden 22-25 pct, EU snit 13 pct
- Kundevendte og administrative funktioner
- 7 af 10 oplever effektivisering af arbejdsgange
- Hver anden oplever forbedringer i produkter, services, ydelser
- Gevinster
 - Effektivisering af arbejdsgange, bedre produkter, indtjening
 - Bedre grundlag for at tage beslutninger (Gen AI)



Figur 10: Fordeling af, hvilke gevinster virksomheder, der anvender AI, oplever



Anm.: Figur 11 er baseret på svar på spørgsmålet: "Har brugen af teknologier med kunstig intelligens haft en positiv indvirkning på følgende i virksomheden?" Alle undersøgelsens respondenter har besvaret udsagnet. I 2024 er der besvarelser fra 1.601 virksomheder repræsentativt udvalgt med 10+ ansatte.
Kilde: Danmarks Statistiks It-anvendelse i virksomheder 2024. Den fulde spærgramme kan ses i bilag 1.






Horizontal or vertical Gen AI



- “horizontal” (enterprise-wide)
 - copilots and chatbots
 - scale quickly but may deliver diffuse, hard-to-measure gains
- “vertical” (function specific)
 - more transformative use cases
 - McKinsey Seizing the agentic AI advantage

Across business functions, gen AI use cases tend to fall into two categories: horizontal and vertical.

Example gen AI use cases across the enterprise and specific functions

Functions					
					
					
R&D		Procurement		Supply chain	
Marketing and sales		Customer service			
Key features					
Horizontal use cases Enterprise-wide	Employee copilots Employee use of copilots, such as Microsoft 365 Copilot, Google Workspace AI, and Zoom AI Companion				Generates meeting minutes, writes emails, and translates text
	Chatbots Internal deployments of general-purpose tools, such as ChatGPT, Gemini, and Claude				Secured access to external GPT capabilities enriched with company-specific data
Vertical use cases Function-specific	Idea generator Summarizes research trends and proposes areas to explore	Negotiation assistant Suggests negotiation levers and next best actions	Supply risk assessor Generates risk profiles for suppliers to boost sourcing resilience	Sales assistant Prioritizes and qualifies accounts	Function-specific copilots, triggered by a human prompt
	Support assistant Supports staffers with suggested replies and knowledge base lookups				
	Research curator Auto-tags and organizes incoming scientific articles by topic	Request for proposal (RFP) generator Auto-generates complete RFPs	Demand forecaster Predicts demand based on internal and external data	Insights provider Provides campaign performance insights based on predefined KPIs and frameworks	Individual task automation within a business workflow, triggered by a human prompt
	Ticket categorizer Prioritizes tickets based on level of urgency				

McKinsey & Company

AI Leaders – Top 4 pct ..



- 1 Leaders Do Less
- 2 Prioritize High-Value Opportunities
- 3 Anticipate Impacts on People
- 4 Core vs. Support Focus
- 5 Combine Predictive & Generative AI
- 6 Invest in People Transformation

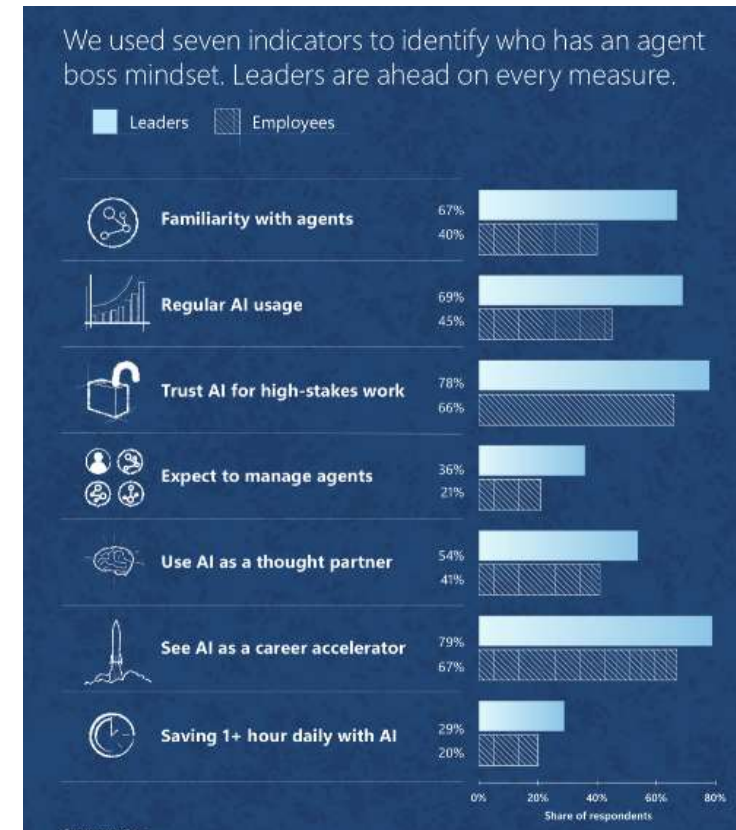
- Focus on high-impact - Streamline workflows and drive adoption
 - Resulting in double the returns by focusing only on the highest-impact areas.
- Prioritize High-Value Opportunities
 - Leaders allocate 80% of their resources to reshaping and innovation
 - Investing in areas with the highest potential.
- Anticipate Impacts on People
 - Successful leaders prepare for change
 - Understanding how AI will affect their teams, leading to smoother transitions.
- Core vs. Support Focus:
 - Leaders focus on core functions for competitive advantage
 - Dedicating approximately 65% of AI efforts here rather than on support roles.
- Combine Predictive & Generative AI
 - They harness both forms of AI to unlock maximum value
 - Enhancing both cost reduction and revenue growth.
- Invest in People Transformation
 - AI is not just a tech shift
 - Leaders invest 70% of their efforts in people and processes to support the transformation.





The Agent boss

- Orchestrating performance across a hybrid team
 - many of the members aren't human
- We're learning to manage digital peers
 - To assign work to agents
 - Onboard them, train them, refine their outputs
 - To know when to override and when to trust
- The Agent boss
 - New archetype, who leads a mix of people and AI agents
- The human who knows how to delegate across a hybrid team of people and bots
- 2025 Microsoft Annual Work Trend Index
- Nvidia Jensen Huang vision, 50,000 humans managing 100 million AI Agents
- Tasks will be broken up and given to multiple agents, ratio could be 2000 to 1



Blended HR/IT

Managing intelligence resources

- Intelligence no longer a scarce resource
 - Limited by human time, cost capacity
- AI agents can plan, execute
 - Intelligence is becoming scalable, on-demand and ambient
- A capacity you can access, not just employ
- But if intelligence comes on tap, why are you still organizing around job titles and departments
 - Managed by a blended HR and IT function
 - Managing intelligence resources, both people and agents
- Designing and staffing hybrid teams
- Tracking Human-agent ratio
- Ensures oversight, trust, and results
- 2025 Microsoft Annual Work Trend Index



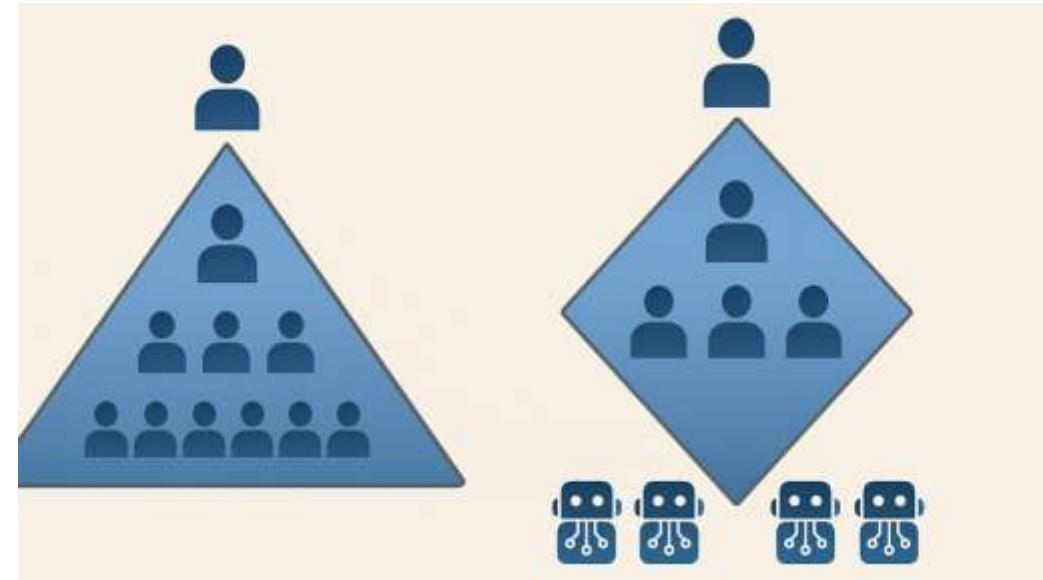
Dialing in the human-agent ratio

As leaders assemble human-agent teams, they'll need to get the balance right for each role, function, or project to ensure optimal performance on both sides of the equation.



Diamond-like Organizational structure

- AI take away routine tasks and decision making
- Moving from pyramid structure with multiple workers and a senior
- Reducing multiple layers of middle management
- From pyramids to diamond-like structures
- Diamond shaped organizations create fewer opportunities for employees to gain management experience
- Burning Glass Institute and Harvard Business School – managing the future of work HBR



From org chart to work chart

- From
 - Traditional org chart
- To
 - Work chart
- Dynamic outcome-driven model
 - Teams form around goals, not functions
 - Powered by agents and humans
 - Mirrors model seen in movie production
 - Tailored teams assemble for project and disband afterwards



- 2025 Microsoft Annual Work Trend Index



AI is gutting next gen of talent

- In tech job openings for new grads have been halved
- Entry level jobs, internship offers are drying up
 - One grad has been job hunting for two years
 - In 2023-24 only 62pct of interns received full time offers
- There is a concern about tomorrow's talent

Fortune



Emerging.... Frontier Firms – Frontløbere

- Built around "on-demand intelligence"
- Powered by hybrid teams of humans+agents
- Can scale rapidly
 - Operate with agility
 - Generate value faster
 - 2-5 years all companies will move in this direction
 - Frontier Firms – Frontløbere Microsoft Work Index



Save As...

Print...

Replace

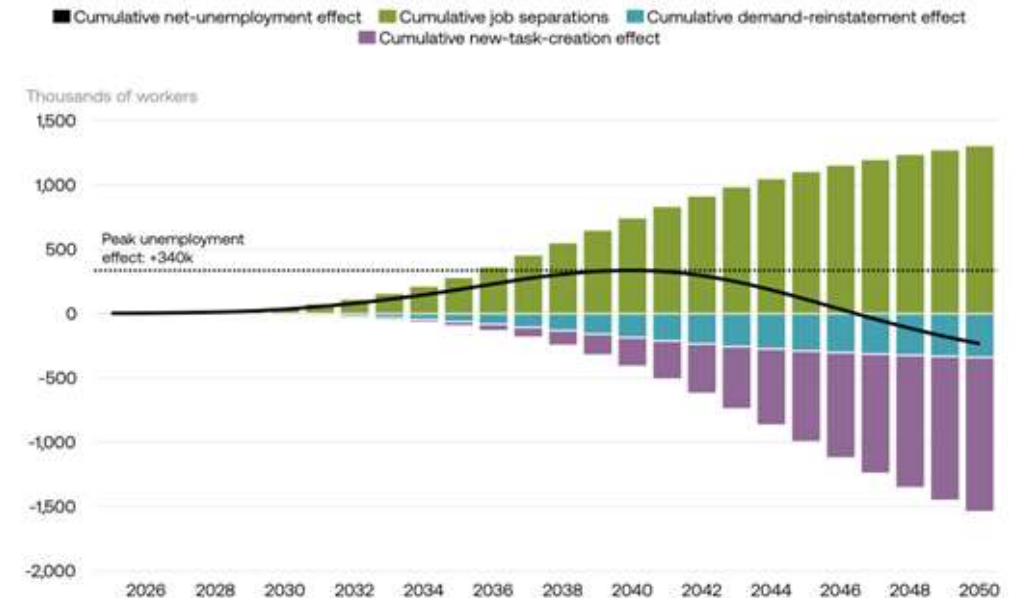


Impact of AI on unemployment

- 10 pct of companies in 2030, 90 pct 2050 use AI
- 60-275.000 jobs lost per year, 33m people employed in UK
 - Current unemployment in UK 1.4m
- Boost to productivity 8 pct
 - Boost to GDP 1-6 pct 2030-2050
- Tony Blair Institute for Global Change november 2024



The impact of AI on unemployment in a tailwind scenario



Source: TBI analysis using LFS and O*NET data

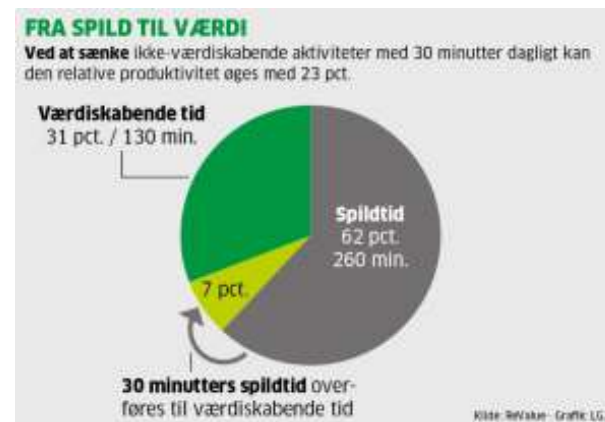


AI isn't a job killer, it's a job shifter

Benzinga India



- Regeringens AI taskforce – 30.000 ansatte
- AI i callcenteret
 - Chatbot kan håndtere 60 pct af henvendelser
 - Fra 20 ansatte i callcenter til nu 5 er forventningen
 - Lunar Bank / Computerworld
 - Klarna skifter strategi – ansætter flere mennesker AI som supportværktøj i callcenter



- Håndværker – Spildtid 66 pct
 - Samtale, koordinering, transport, ventetid, forberedelse, klargøring og rengøring – forskningsprojektet

ReValue

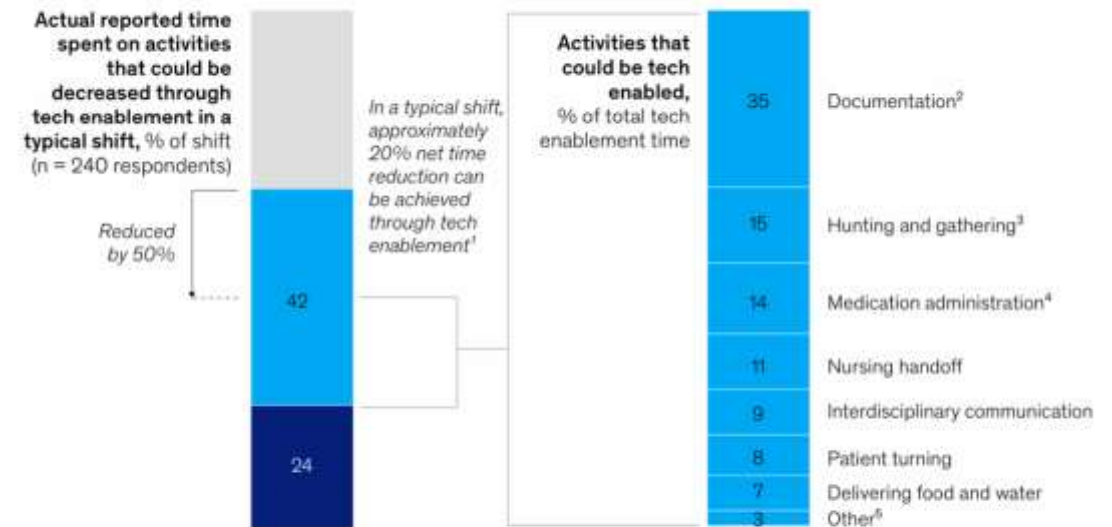
Reimagining the nursing workload

- Shortage in the US 2-450.000 nurses
 - AI can close gap equal to 300.000
- 12 hour shift working across 69 activities
- Spend less time on
 - documentation
 - “hunting and gathering” (searching for individuals, equipment, supplies, medications, information)
 - admin
 - support tasks
- Est 20 pct net time savings

• McKinsey



In a typical shift, approximately 20 percent net time reduction can be achieved through tech enablement.



Note: Figures do not sum to 100%, because of rounding.

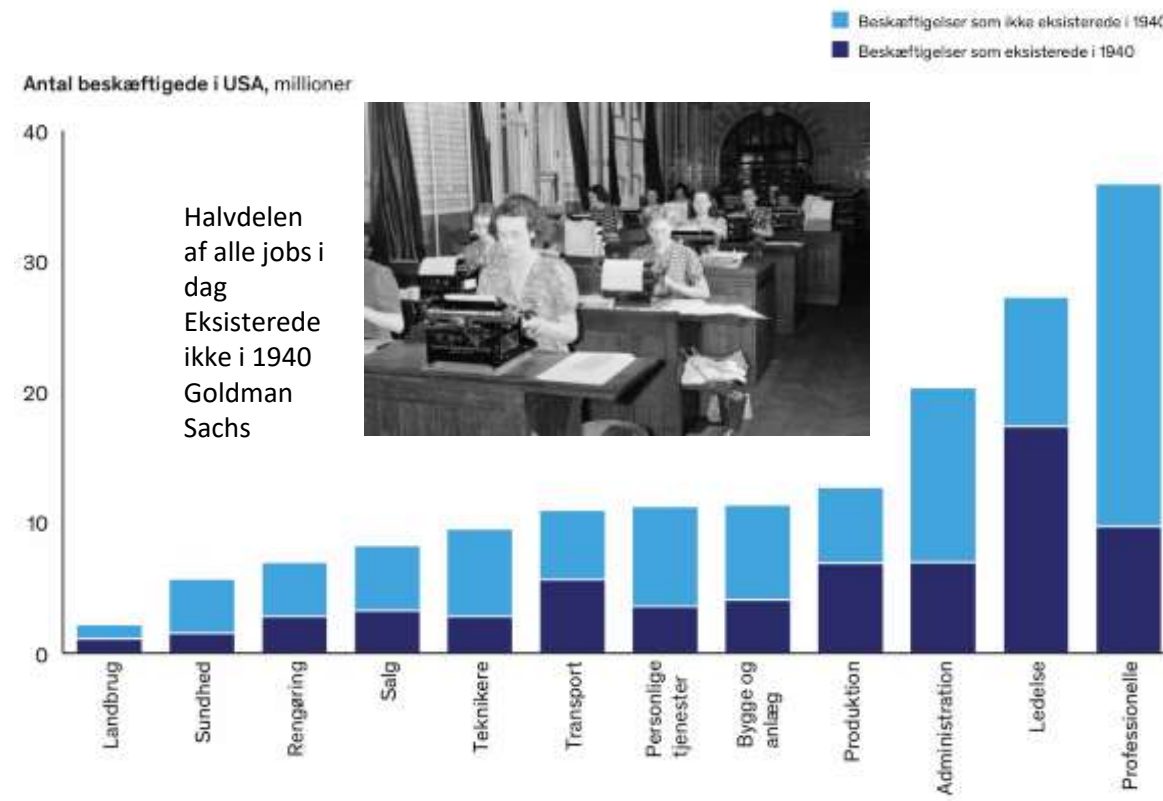
¹Actual time saved is dependent on current situation of particular health system. ²Includes documenting patient education, head-to-toe assessment, progress notes, and vital signs. ³Includes searching for individuals, information, medication, or gathering supplies and equipment. ⁴Includes scanning medicines, waiting for pharmacy to deliver medicines, and double verification. ⁵Includes updating whiteboards, audits, and reports.

Source: McKinsey 2023 Nursing Time Survey

Forskydninger..

Eksempler på nye jobs

- Reskiller
 - Understand the talents an organization requires
- AI Controller / Risk manager
 - Evaluate an AI models upbringing, looking at data and sources of bias
- AI Personality designer
 - AI Agents will need their own unique “personalities” to differentiate them from competition
- AI Input and output manager
 - Overseeing information being uploaded and outputs delivered
 - Data privacy, copyright, AI explainability and AI bias WEF / Forbes



Exercise your mind

- Our brain works in a constant loop
 - Intend, act, predict, confirm
- The more we offload to AI – the more this feedback loop is disrupted
 - Concept of learned helplessness – 1960's
- AI Thinking
 - A framework for understanding and interacting with AI systems
 - Human and machine intelligence should augment each other, rather than one replacing the other.
- We must treat our mind as a muscle that needs regular exercise. Psychology Today Cornelia C Walther, harnessing hybrid intelligence



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Risiko for at blive overmodig

- 300 managers with ChatGPT - vs peer review group without AI
- Nvidia stock price - asked to predict price in 1 months time
 - Group without AI made conservative forecast
 - ChatGPT group had more optimistic forecast
- AI causing overconfidence
 - Chat GPT may have encouraged extrapolation bias
 - ChatGPT seems confident, making initial estimates seeming inadequate
 - Lack of emotion
 - ChatGPT uncolored by anxiety, absence of fear of being wrong
 - People fall for the illusion of knowing all
- In non AI group
 - No one wants to be the person with bullish forecast
- How to use AI wisely
 - Be aware of AI illusion of knowledge
 - Dont ditch human discussion
 - Critical thinking is key - what data is forecast based on
 - Human judgment remains crucial
 - If advice comes from AI, inject some common sense HBR



Og så skal det nok gå altså sammen

Jobs with lowest applicability score

- Gefühl, menneskelighed, omsorg
- The Occupational Information Network (O*NET)
- Online database that contains hundreds of job definitions
- Microsoft Study: 40 Jobs AI Will Replace vs 40 Safe Careers
- **Phlebotomist** Medium

Table 4

Job Title (Abbrev.)					npl.
Phlebotomists					,080
Nursing Assistants					,760
Hazardous Materials Rem					,960
Helpers-Painters, Plaster					,700
Embalmers					,380
Plant and System Operato					,370
Oral and Maxillofacial Su					,160
Automotive Glass Install					,890
Ship Engineers					,860
Tire Repairers and Chang					,520
Prosthodontists	0.10	0.90	0.29	0.02	570
Helpers-Production Workers	0.04	0.93	0.36	0.02	181,810
Highway Maintenance Workers	0.03	0.96	0.32	0.02	150,860
Medical Equipment Preparers	0.04	0.96	0.31	0.02	66,790
Packaging and Filling Machine Op.	0.04	0.91	0.39	0.02	371,600
Machine Feeders and Offbearers	0.05	0.89	0.36	0.02	44,500
Dishwashers	0.03	0.95	0.30	0.02	463,940
Cement Masons and Concrete Finishers	0.03	0.92	0.39	0.01	203,560
Supervisors of Firefighters	0.04	0.88	0.39	0.01	84,120
Industrial Truck and Tractor Operators	0.03	0.94	0.28	0.01	778,920
Ophthalmic Medical Technicians	0.04	0.89	0.33	0.01	73,390
Massage Therapists	0.10	0.91	0.32	0.01	92,650
Surgical Assistants	0.03	0.78	0.29	0.01	18,780
Tire Builders	0.03	0.93	0.40	0.01	20,660
Helpers-Roofers	0.02	0.94	0.37	0.01	4,540
Gas Compressor and Gas Pumping Station Op.	0.01	0.96	0.47	0.01	4,400
Roofers	0.02	0.94	0.38	0.01	135,140
Roustabouts, Oil and Gas	0.01	0.95	0.39	0.01	43,830
Maids and Housekeeping Cleaners	0.02	0.94	0.34	0.01	836,230
Paving, Surfacing, and Tamping Equipment Op.	0.01	0.96	0.29	0.01	43,080
Logging Equipment Operators	0.01	0.95	0.36	0.01	23,720
Motorboat Operators	0.01	0.93	0.39	0.00	2,710
Orderlies	0.00	0.76	0.18	0.00	48,710
Floor Sanders and Finishers	0.00	0.94	0.34	0.00	5,070
Pile Driver Operators	0.00	0.98	0.24	0.00	3,010
Rail-Track Laying and Maintenance Equip. Op.	0.00	0.96	0.27	0.00	18,770
Foundry Mold and Coremakers	0.00	0.95	0.36	0.00	11,780
Water Treatment Plant and System Op.	0.00	0.92	0.44	0.00	120,710
Bridge and Lock Tenders	0.00	0.93	0.39	0.00	3,460
Dredge Operators	0.00	0.99	0.22	0.00	940

Note: Metrics reported as mean of user goal and AI action score.

Og så skal det nok gå altså sammen

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	0.05	0.89	0.36	0.02	44,500
	0.03	0.95	0.30	0.02	463,940
	0.03	0.92	0.39	0.01	203,560
	0.04	0.88	0.39	0.01	84,120
	0.03	0.94	0.28	0.01	778,920
	0.04	0.89	0.33	0.01	73,390
	0.10	0.91	0.32	0.01	92,650
	0.03	0.78	0.29	0.01	18,780
	0.03	0.93	0.40	0.01	20,660
	0.02	0.94	0.37	0.01	4,540
	0.01	0.96	0.47	0.01	4,400
	0.02	0.94	0.38	0.01	135,140
	0.01	0.95	0.39	0.01	43,830
	0.02	0.94	0.34	0.01	836,230
	0.01	0.96	0.29	0.01	43,080
	0.01	0.95	0.36	0.01	23,720
	0.01	0.93	0.39	0.00	2,710
	0.00	0.76	0.18	0.00	48,710
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Floor Sanders and Finishers	0.00	0.98	0.24	0.00	3,010
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Dredge Operators					

Note: Metrics reported as mean of user goal and AI action score.





Driving AI

- “With great power comes great responsibility”



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