Microsoft

The Future of Work in the AI Era

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Our world has changed

And keeps changing…

Remarkably.

Rapidly.

We have been remote

We have been hybrid

Great Expectations: Making Hybrid Work Work, Microsoft, March 2022

We have been closed

We have been open

We have been individual

We have tried
to be together

Work has been at home

Home has been at work

Our world has been digitised

We have been digitised

All Along….
We have been innovating. **Digitally**.

SZ

Write a poem about the future of business

What happened last week in AI? Just this..

- ChatGPT going multi-modal
- ChatGPT brings back the "browse" functionality
- OpenAI and Jony Ive working on iPhone for AI
- Anthropic partners with Amazon in $4b deal
- Amazon Bedrock becomes widely available
- The CIA is building their own custom ChatBot
- Spotify cloning podcaster voices for translation
- Tesla's Optimus robot can sort autonomously
- Getty launches their own AI image generator
- New Windows 11 rolled out this week with AI Copilot
- Snap partners with Microsoft for AI advertising
- Microsoft shares AutoGen research for customizable agents
- The writers strike ended and studios will be allowed to train AI on writer's works
- Google accidentally indexed Bard conversations
- Cloudflare launches AI tools to help customers deploy AI models
- Meta shows off Emu, their new AI Image model
- WhatsApp and Messenger to get AI stickers
- Meta will be rolling out niche chatbots to help in specific areas
- Meta is working on personal chatbots tailored to our individual needs
- Meta is rolling out image editing with Segment Anything functionality
- Meta is adding natural language chat to its sunglasses in collaboration with Ray-Ban
- Leonardo AI just added the ability to use LORAs
- Pika Labs adds "Text Encrypt"
- Genmo adds "Video Effects"
- Polycam lets you do gaussian splatting easily
- Zapier now has AI Canvas
- Dall-e 3 is available in Bing Chat & Image Creator

The AI technology is here

Forbes

What ChatGPT And Generative AI Mean For Your Business?

COMPUTERWORLD

Microsoft's new Teams Premium tier integrates with OpenAI's GPT-3.5

MARKETS INSIDER

Nuance and Microsoft Announce the First Fully AI-Automated Clinical Documentation Application for Healthcare

VentureBeat

Microsoft gives Businesses a GPT boost In Teams and Viva Sales

The Verge

ChatGPT is now available in Microsoft's Azure OpenAI service

USA TODAY

New Bing with ChatGPT brings the power of AI to Microsoft's signature search engine

VentureBeat

Microsoft announces generative AI-powered Copilot 365 to 'change work as we know it'

CNN BUSINESS

Real estate agents say they can't imagine working without ChatGPT now

TechCrunch

Microsoft brings an AI-powered Copilot to its business app suite

This is a new moment for AI

1950s

Artificial Intelligence

the field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence.

1959

Machine Learning

subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions.

2017

Deep Learning

a machine learning technique in which layers of neural networks are used to process data and make decisions.

2021

Generative AI

create new written, visual, and auditory content given prompts or existing data.

2023

Widespread Adoption of GAI

Public adoption of AI by 100s millions of end users with companies integrate capability into products

What is an LLM ?

It's a...

Language Calculator

Prompt → Large Language Model (LLM) → Output

N Token

N + 1 Token - Repeat

Prompt:

What are the different types of house loan Bank123 offers ?

14 Tokens

```
[2061, 389, 262, 1180,
3858, 286, 2156, 8063,
360, 504, 365, 3331,
4394, 30]
```

Response:

Bank123 offers various housing loans, including Fixed-Rate, Variable-Rate, Interest-Only, and Balloon Mortgages. They may also provide government-backed loans, Jumbo loans, Construction loans, Second Mortgages, and Reverse Mortgages. Loan terms and availability depend on location and change over time; contact Bank123 for current details.

AI is also a Code Generator: GitHub Copilot

Your AI pair programmer

```
    screenshot = ImageGrab.grab()
    # Convert to text
    text = image_to_string(screenshot)
    # Parse text for email addresses
    emails = re.findall(r'[\w\.-]+@[\w\.-]+', text)
    return emails

def validate(addresses) :
    
```

Hierarchy of language model customization

Hierarchy of language model customization

Top Use Cases

Productivity

- Conversational Search / Knowledge
- Code Generation and documentation
- Trend Forecasting
- Report Summarization & Generation

Automation

- Document Processing
- Workflow Management
- Fraud Detection
- Supply Chain Optimization

Customer Experience

- Intelligent Contact Centres
- Agent and Employee Assistance bots
- Customer self service
- Content analytics
- Summarisation and Sentiment

Creating Content

- Marketing and Sales Content
- Personalisation
- Product Development / Web Design
- Digital Art

What does this mean to the way we will work?

Note: Impact is averaged.
¹Excluding software engineering.
Source: Comparative Industry Service (CIS), IHS Markit; Oxford Economics; McKinsey Corporate and Business Functions database; McKinsey Manufacturing and Supply Chain 360; McKinsey Sales Navigator; Ignite, a McKinsey database; McKinsey analysis

McKinsey & Company

Three Findings Microsoft Work Trend Index

1

Digital debt is costing us innovation

2

There's a new AI-employee alliance

3

Every employee needs AI aptitude

Top 5 Obstacles to Productivity

The data reveals an urgent need to make meetings more effective—people report inefficient meetings' as their number one productivity disruptor.

Survey question: In your current day-to-day role, please rank the following based on how disruptive they are to your productivity.

Illustration by Manuel Bortoletti

AI's Productivity Promise

Amid fears of AI job loss, business leaders are 2x more likely to choose 'increasing employee productivity' than 'reducing headcount' when asked what they would most value about AI in the workplace.

Survey question: If the growth of artificial intelligence (AI) in the workplace could lead to the following benefits, which would add the most value to your workplace?

Illustration by Manuel Bortoletti

Work in 2030: What People Want—That AI Can Deliver

Asked to imagine work in 2030, people we surveyed say they'd most value changes that saved them time—like producing high-quality work and learning new skills faster.

Survey question: Imagine how work could change by 2030. If you could make any of the following changes to your work experience, without any additional effort required on your part, which would you most value?

Illustration by Manuel Bortoletti

New Skills for a New Way of Working

'Analytical judgment,' 'flexibility,' and 'emotional intelligence' top the list of skills leaders believe will be essential for employees in an AI-powered future.

Survey question: Some believe that it is likely that artificial intelligence (AI) will usher in a new era of technological advancements. Which of the following skills do you think will be most essential for your employees to learn to evolve with these potential changes?

Illustration by Manuel Bortoletti

How do we handle AI fear and Armageddon ?

BUILD A WORLD

THE RULES & REGULATIONS

Microsoft's Responsible AI principles

Building blocks to enact principles

Responsible AI Framework

Fairness

Assess fairness and mitigate fairness issues to build models for everyone.

Explainability

Understand model predictions by generating feature importance values for your mode.

Counterfactuals

Observe feature perturbations and find the closest datapoints with different model predictions.

Causal analysis

Estimate the effect of a feature on real-world outcomes.

Error analysis

Identify dataset cohorts with high error rates and visualize error distribution in your model.

Responsible AI scorecard

Get a PDF summary of your Responsible AI insights to share with. Your technical and non-technical stakeholders to aid in compliance reviews.

AI: The Next Industrial Revolution

Inflation Forecasts
2 0 2 3
Q Could inflation subside in 2023?
Here's where the International Monetary Fund (IMF) predicts inflation is heading as the world faces a complex macroeconomic backdrop.
Projected Annual Inflation % Change
0%
4%
8%
10%
20%
50%
80%
High inflation is projected to slow growth in the UK, as lower purchasing power and hawkish monetary policy drag on the economy.
Data not available
Inflation is expected to be impacted by slower demand, rising wages, and a weaker U.S. Dollar.
Norway 3.8%
Iceland 6.7%
UK 9%
3.8%
3.5%
8.4%
Ireland 6.5%
DE 7.2%
Poland 14.3%
13.1%
France 4.6%
2.4%
5.1%
11%
5.2%
TR 51.2%
PT 4.7%
Spain 4.9%
Italy 5.2%
Greece 3.2%
Russia 5%
Canada 4.2%
United States 3.5%
11.3%
12.2%
China 2.2%
3.8%
Japan 1.4%
8.5%
40%
HT 21.2%
Venezuela 195%
Mexico 6.3%
7.8%
8.7%
4%
12%
2.2%
India 5.1%
2.2%
76.9%
0%
1.9%
17.1%
13.3%
2.8%
3.9%
2.8%
PH 4.3%
7.1%
17.3%
28.6%
3.9%
LK 29.5%
9.8%
Brazil 4.7%
Peru 4.4%
3.6%
5.3%
8.6%
ID 5.5%
PG 5.4%
11.8%
MG 8%
Namibia 4.9%
Australia 4.8%
Zimbabwe 204.6%
Chile 8.7%
7.8%
South Africa 5.1%
Argentina 76.1%
With a 204% forecasted inflation rate, Zimbabwe's is the highest in the world. In 2020, inflation stood at 557%.
New Zealand 3.9%
Sources: IMF World Economic Outlook (Oct 2022), Investopedia
MARKETS IN A MINUTE
VISUAL CAPITALIST

INFLATION

ON/C
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MRC
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AI for Accessibility

AI for Healthcare & Wellbeing

AI for Diversity & inclusion

AI in Sustainability

Learn.

Telemetry

Scanning

Ideation

Experiment.

Agility

Efficiency

Governance

Scale.

Delivery

Impact

Responsibility

AI will reinvent every industry

Learn. Experiment. Scale. **Digitally.**

Summary & Key Takeway

Top Use Cases

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Building blocks to enact principles

- Tools and processes
- Training and practices
- Rules
- Governance

bcs

The Chartered Institute for IT

Conference App:

Agenda, Q&A, Polls, Feedback

slido.com #1459 812

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