# Creating Practical Workflows with Al

Bernie Goldbach & Filipe Santos

On behalf of RUN-EU

#### **O. Your Facilitators**





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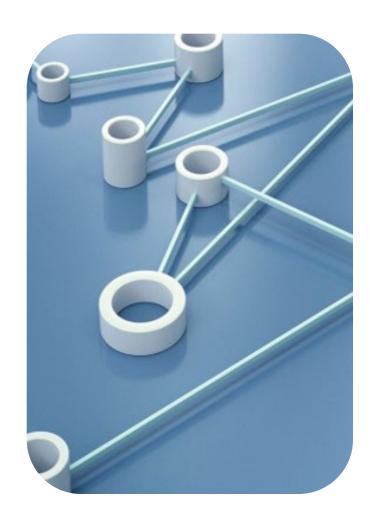


#### **Bernie Goldbach**

Public Service Technologist

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# **Today's Session Outline**

0. Background information.

DEMO: Microsoft Copilot creates an outline. So does ChatGPT.

**BREAKOUT: Burning Questions** 

1. What is digital transformation?

2. The Four-P Framework For Successful Digital Transformation

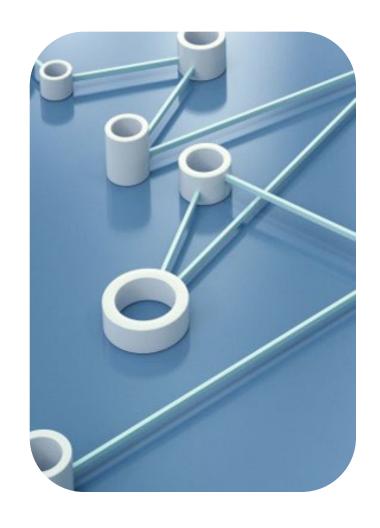
DEMO: Copilot browses for intelligent info.

DEMO: Claude writes BlueSky content.

HANDS-ON: Use ChatGPT to create avatar selfie.

HANDS-ON: Enhance avatar selfie with more context.

3. Perspectives and Recap



# **Today's Tasks**

- 1. Join the Flickr Digital Transformation Group
- 2. Upload avatar selfie to the 02 images folder with your name as part of the file name.
- 3. Save Tuesday evenings for Zoom Room 3861743369
- 3. Know how to reach Bernie Goldbach and Filipe Santos.



#### **0. Learning Outcomes**

- **Understand** how to implement AI into personal and professional workflows to enhance productivity.
- **Learn** how to leverage generative AI through prompts that generate relevant text and images.
- Know the purpose and use cases of several tools that are enhanced with AI functionality.
- **Appreciate** the human factors and workplace impacts associated with AI and digital transformation.
- Know the fundamental requirements for improved personal digital effectiveness.

## 0. Background: Pro Tips

- Learn to do more than generate content. Do it sustainably.
- Process-based outcomes are foundations of digital transformation.
- Use AI for personal productivity.
- Appreciate EU Al Act.



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Join at slido.com #1191199

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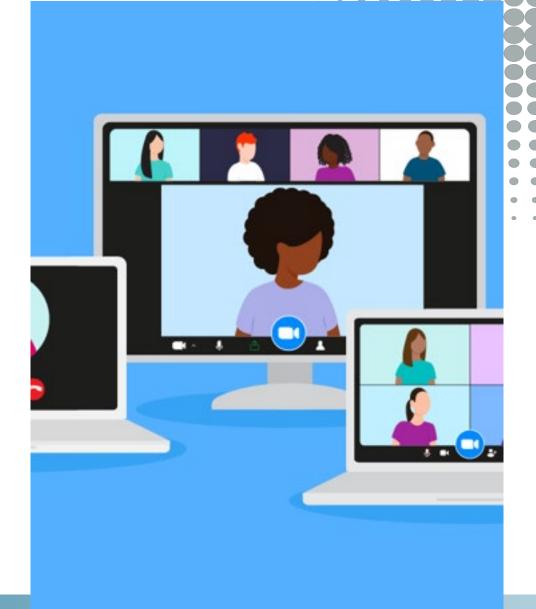
## **0. Background Information**

This training incorporates business intelligence since 2010 in the fields of traditional data processing, work psychology, and machine learning. We have been actively using automated processes since 2013.

#### **Breakout 1**

Let's have a small group discussion.

- 1. What digital tools are you using?
- 2. What's your burning questions around digital transformation?
- 3. What concerns you about using AI?



# 0. This course spotlights productivity tips

- 12. **3D modeling**: Spline AI, 3DFY.ai, and Meshcapade are some of the best AI tools for 3D modeling 1
- 13. **Al agents**: Al Agent, AgentGPT, and HyperWrite are some of the best Al tools for creating Al agents
- 14. **Automation**: Zapier is an Al tool that can help you automate your workflows 1.

Generative AI tools like Microsoft 365 Copilot, Google Duet AI, Zoom IQ, SlackGPT, and GrammarlyGO can also help you work more efficiently and productively <sup>2</sup>. AI can automate manual and repetitive tasks, freeing up human resources for more complex and creative tasks. For example, AI can be your personal assistant — scheduling meetings, managing routine emails, organizing your calendar, and reviewing or approving work where you have supervisory responsibilities

#### 0. Questions We Will Answer

- What is Generative AI?
- How does it relate to personal digital transformation (DX)?
- How do digital transformation and AI affect people?
- What skills, attitudes & behaviours do we need to develop?
- What tools and apps can help our workflows?



Generative Pre-trained Transformer



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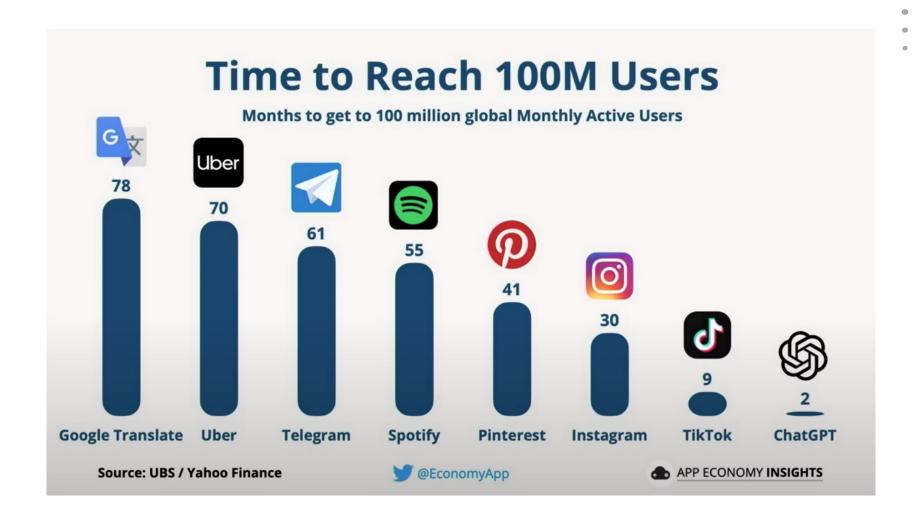
# How often do you use tools like ChatGPT now?

<sup>(</sup>i) Start presenting to display the poll results on this slide.

#### 0. About ChatGPT

- You can talk to ChatGPT with your natural language.
- Advanced versions offer multimodal input and output, meaning it can interpret images, create diagrams, and process code.
- Its Pro versions can retain info across sessions via customisable memory so you get greater personal relevance over time.





August 2024, ChatGPT is said to have over 200m weekly active users.

## **0. About Microsoft Copilot**

- Integrates seamlessly with the Microsoft
  365 ecosystem
- Enterprise-Grade Security and Compliance
- Advanced Personalization and Contextual Understanding



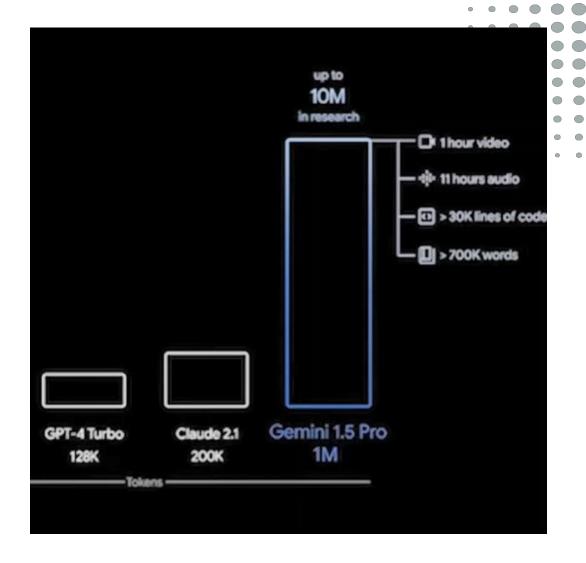
## **0. About Perplexity.ai**

- Lists its sources up front.
- Side panel can be set up with Project and Spaces.
- Easily create and modify public pages from your search results.



# 0. Google GeminiHas Biggest ContextWindow

If you have Gmail or you routinely use Google Search, you should add Gemini to your tool box.



#### 0. Claude.ai

- Claude.ai uses a unique safety technique called
  Constitutional AI.
- Its models have extremely large context windows and that means it can process large documents or complex codebases in one go.
- Writers cite its human-like content.



### 0. Getting an Al

- Most people **know Chat GPT from OpenAI**. Chat GPT5 has custom GPTs inside that perform like apps.
- Many RUNEU campuses have Microsoft 365 with Microsoft Copilot. Copilot is powered by OpenAI.
- You can also get Al apps for your phones and desktops.
  We show paid versions of several Al apps in this course.
- We also demo services that power Al in web browsers.
  They are often available inside GPT5.



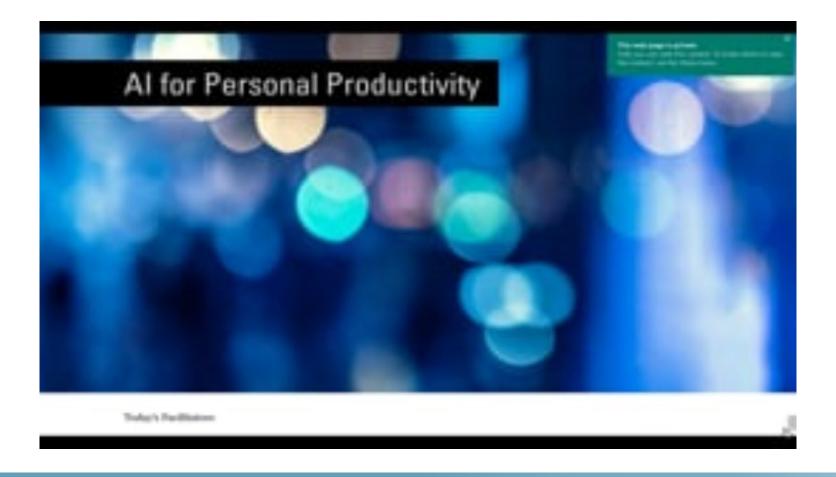


#### 0. Two Demos with Content

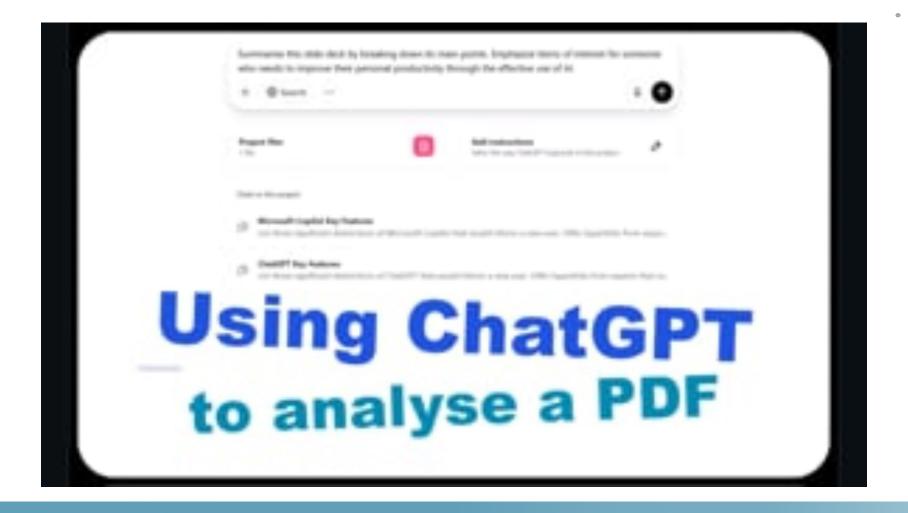
You need to use the Edge browser to efficiently access Microsoft Copilot.

- 1. We used Copilot using a web page in the first example.
- 2. We used ChatGPT with a PDF in the second example.

# 0. DEMO: Copilot creates an outline



#### 0. DEMO: ChatGPT Creates Content



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# What burning question about digital transformation do you want answered?

# 1. Digital Transformation

#### 1. Digital Transformation (DX)

- Developing digital-based skills becoming digitally mature
- It is a key performance indicator for hundreds of businesses.
- Embracing digital technologies is crucial for a university graduate.

## 1. Personal Digital Transformation is...

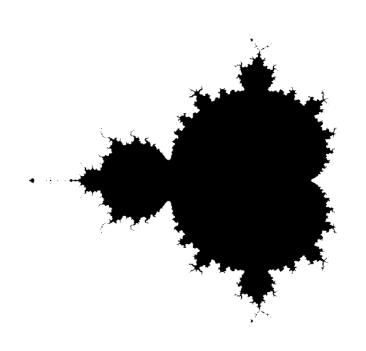


- 1. ... **leveraging technology** to improve your productivity, knowledge, skills, and abilities.
- ... harnessing the power of digital tools to inform the decision-making process.
- 3. .... using digital technologies to allow us, our people, and organisations develop and grow.

#### 1. Digital Transformation is

"In essence, digital transformation is about an organisation and their people's ability to adapt to rapid changes caused by evolving digital technologies.[...] Digital transformation is about becoming more digitally mature as an organisation."

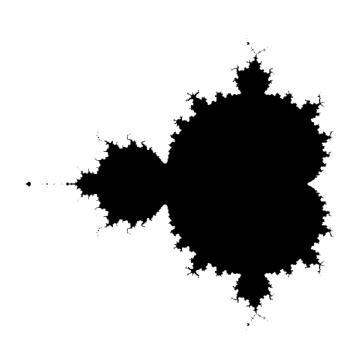
#### 1. Be Aware of Complexity



"Long-term forecasting is almost impossible for chaotic systems, and dramatic change can occur unexpectedly; as a result, flexibility and adaptiveness are essential for organisations to survive".

- David Levy, 1994

#### 1. Be Aware of Complexity



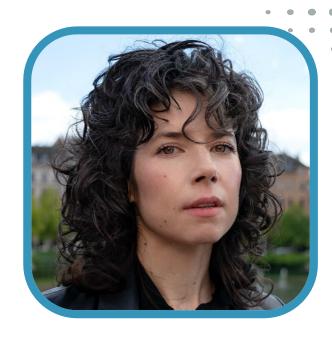
- There are patterns to the data, but also large gaps between the data points.
- Data cannot always predict the strength and direction of this change.
- We don't know what's coming.
- Stay skeptical but curious and flexible.

#### 1. Digital Transformation – Trust

- Deep Fakes
- Al generated articles & reports
- Propaganda
- Misinformation/Disinformation
- Hype: both positive & negative
- Control in the hands of only a few

"AI's biggest risk isn't 'consciousness'—it's the corporations that control them."

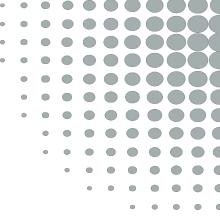
Meredith Whittaker | CEO Signal | Al Now Institute



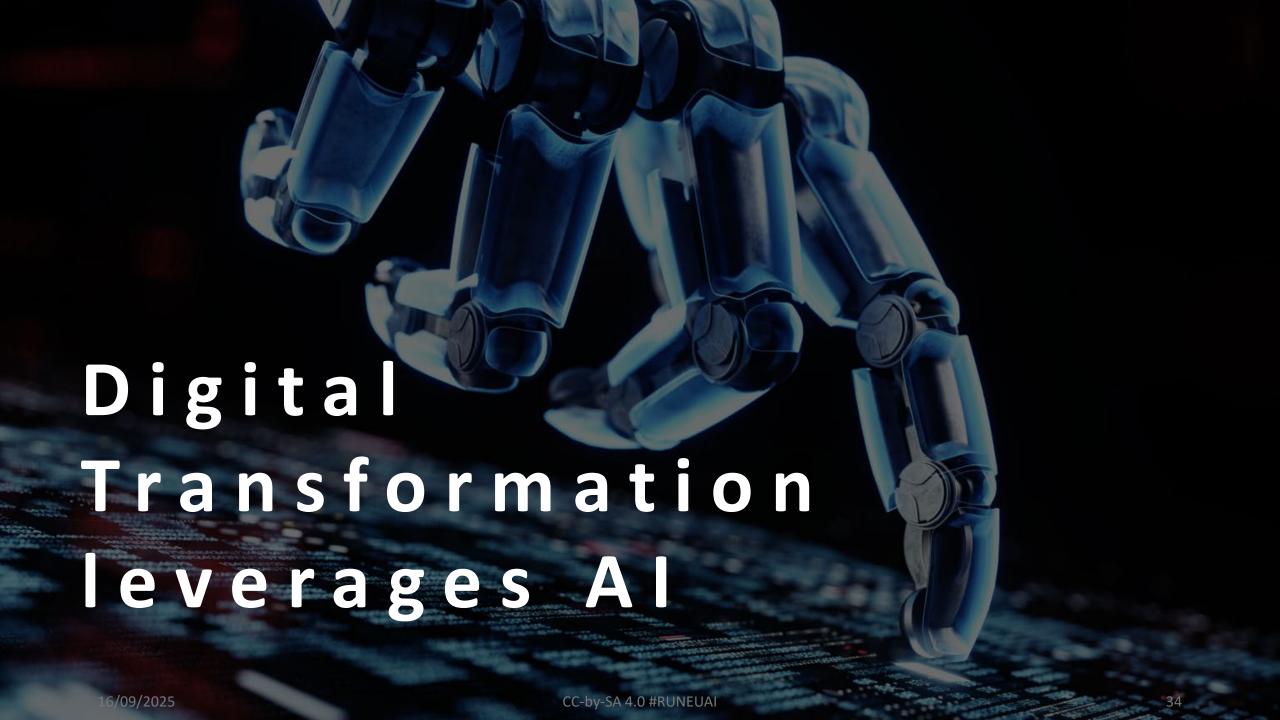
31

# 2. Four-P Framework

#### 2. The Four-P Framework



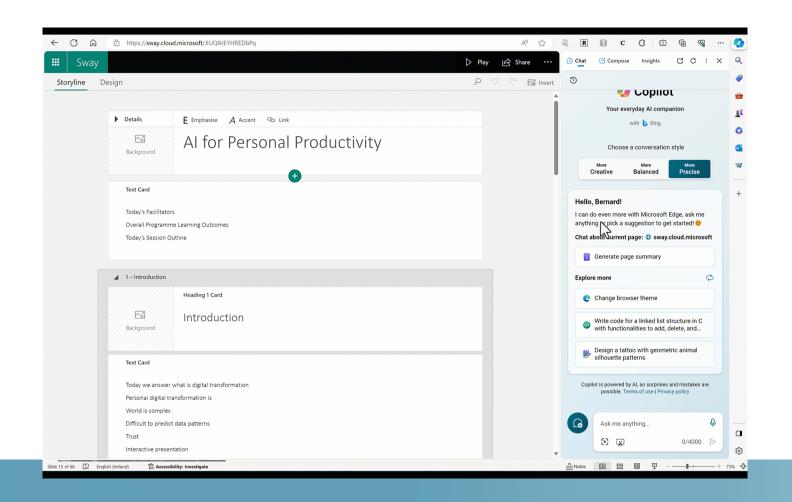
- A. Purpose
- B. Programs
- C. People
- D. Protocols



# How about using AI to crosscheck this presentation?

You can download this deck as a PDF and ask Microsoft Copilot questions.

#### **DEMO:** Browse with Al Summaries



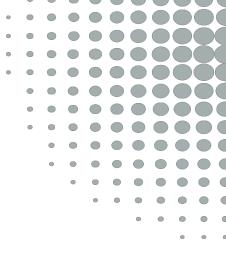
## **Purposeful Transformations**

- Filtering information
- Prioritising notifications
- Generating drafts for text responses
- Quickly producing actionable meeting minutes





# **Using AI to Create Content**



# **Use Case**

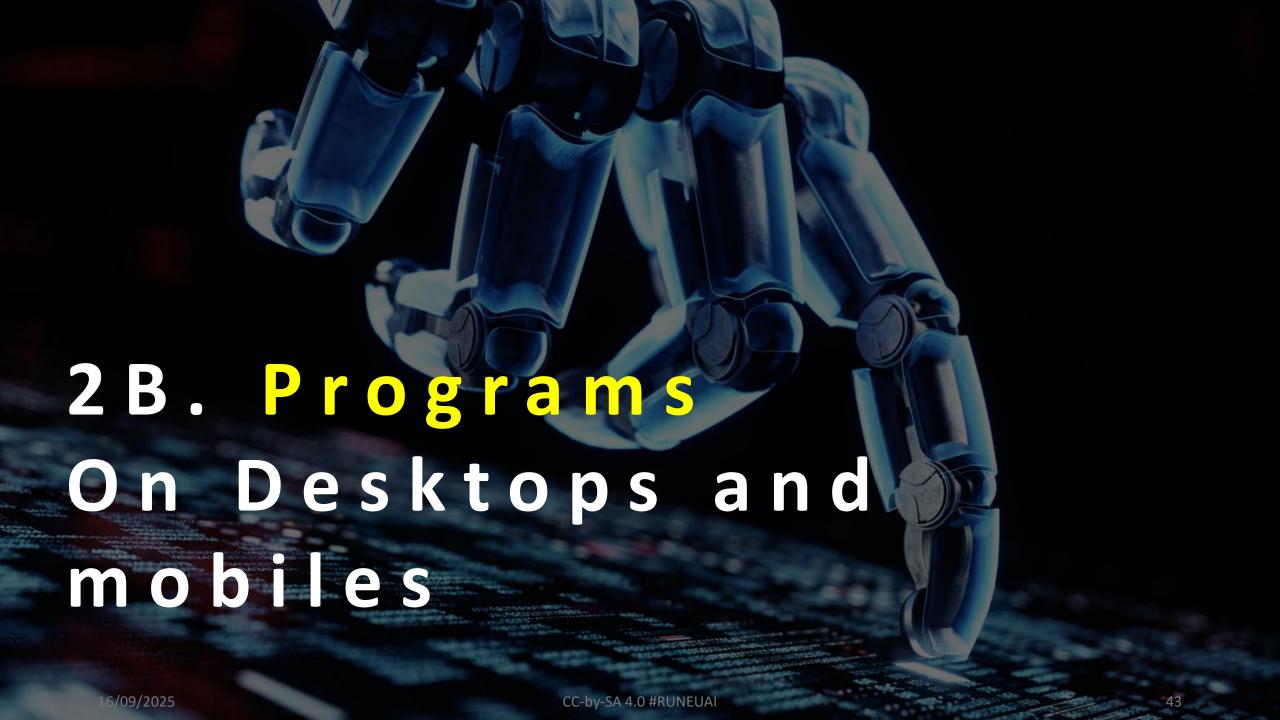
Using Claude. Al to generate content and cross-publish

### **DEMO Claude Creates Tailored Content**

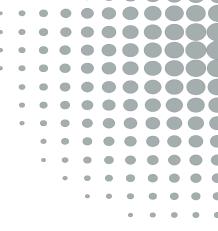
- 1. Assume you need a post for your Bluesky account.
- 2. Start with an idea—you can ask your Al for help.
- 3. Produce a text plug.
- 4. Paste into Claude.

- 5. Add an image.
- 6. Post with share sheet.
- 7. Review result.

makes content makes content Claude.ai makes content makes content



### 2B. The Four-P Framework



- A. Purpose
- B. Programs
- C. People
- D. Protocols

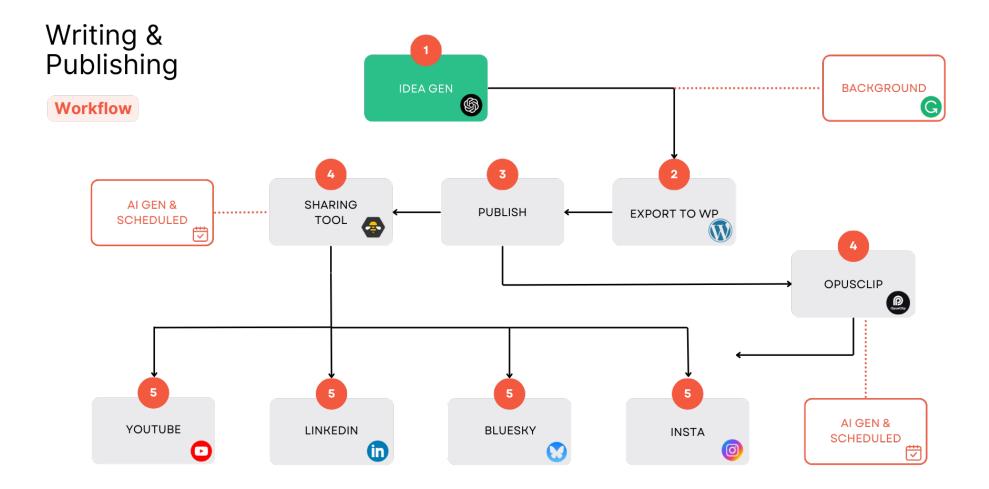
## What Tools And How Will They Integrate?

Let's look at some tools, programmes & applications

- For personal digital transformation
- For collaboration with people
- For content creation



# **Leveraging AI Tools**



# Speakers at home or in work

We've been training AI with natural language since 2014 or even earlier

- Apple Siri
- Amazon Alexa
- Google Assistant



### **These Tools Are Not New**



- Siri launched in Oct 2011
- Google & Bing Search are Als
- Supermarket apps are Als
- Social networks run Als
- Spotify, Apple Music, etc. run Als
- Predictive text on your phone is an AI



# Personal LLM as your Program

- Your university may opt to build its own sandboxed Large Language Model (LLM).
- Or use a trusted enterprise service LLM.



### **Energy Usage of LLMs**

- A ChatGPT query takes 100x more energy to execute than a Google search query
- When training Llama 2 (modelled after ChatGPT), Meta burned
  539 metric tons of CO<sub>2</sub>
- Larger language models use more energy during their deployment



Let's see what Al knows about Bernie.

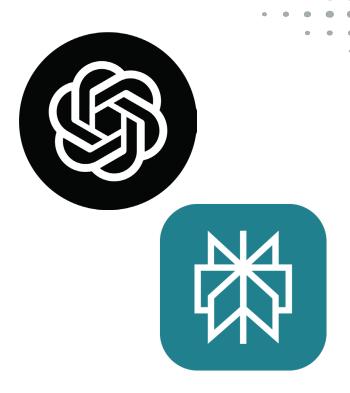
### **USE CASE**

- We need an "about" page.
- Let's use ChatGPT and Perplexity.ai to create the content.
- Consider using a prompt that specifies the result with hyperlinked facts and the result should include an image.

53

# **Chat GPT and Perplexity.ai**

- Two different companies using the same GPT-4 Large Language Models.
- Use them in browsers or with their apps.
- Chat GPT's apps are better.
- You can restrict the Enterprise version of ChatGPT to your own data server.



### **Demo: Ask ChatGPT about Bernie**

.....





#### ChatGPT

#### About Bernie Geldback: Navigating the Digital Frontier

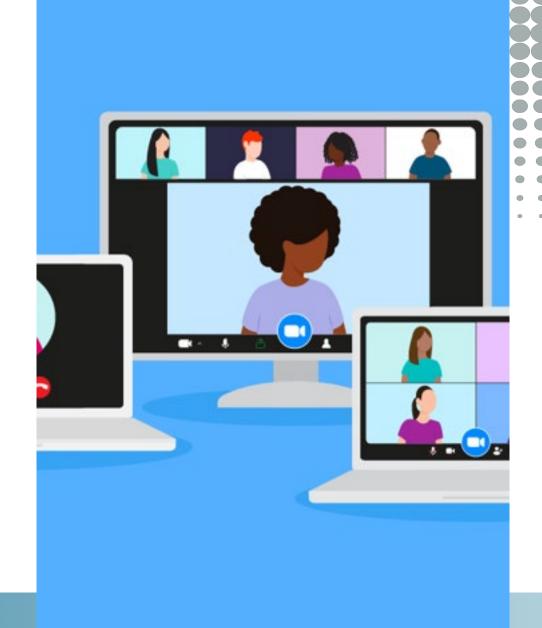
Welcome to the digital realm, where innovation meets transformation, and Bernie Goldsach stands as a seasoned guide through the ever-evolving landscape. With a pession for technology and an unyleiding suriosity, Bernie has become a luminary in the realm of digital transformation, seamlessly blending his expertise with a genuine enthusiasm for the possibilities that lie shead.

Bernie's journey into the world of digital transformation has been nothing short of extraordinary. Armed with a deep understanding of the intricate interplay between technology and business, he has enverged as a thought leader, strategist, and advocate for the transformative power of digital solutions.

Having honed his skills over decades, Bernie possesses a keen insight into the rapidly changing dynamics of the digital era. His ability to decipher complex technological.

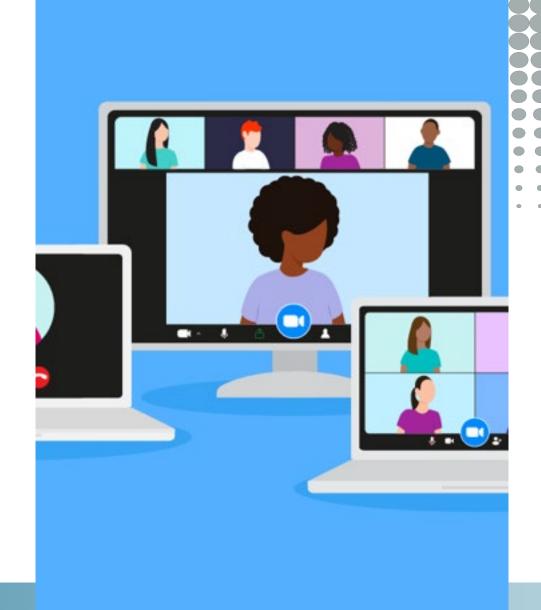
### **Breakout 2-1**

- 1. Use Microsoft Copilot in Edge to create an avatar selfie.
- 2. Record your prompt.
- 3. Upload your prompt and your image you to Zoom chat.
- 4. Upload your image to Google Drive 02 images folder. Include your name in the file name.



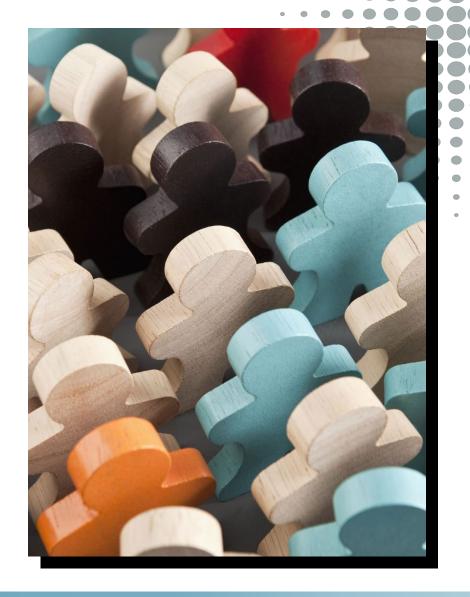
### **Breakout 2-2**

- 1. Use Google Gemini Nano Banana to modify your avatar selfie.
- 2. Record your prompt.
- 3. Upload your prompt and your image to Zoom chat.
- 4. Upload your image to Google Drive 02 images folder. Include your name in the file name.



### **2C. Four Part Framework**

- A. Purpose
- B. Programs
- C. People
- D. Protocols



#### What is "Artificial" Intelligence?

- Intelligence is more than cognition (Gardner MI, Kaufman 4Cs, Sternberg Success)
- Al reads and creates text, numbers, images (predefined parameters)
- Apps are efficient and fast (cognitive)
- Apps are not autonomous (yet)
- Apps need instructions from humans



On the question of digital transformation...

"The answer is less technological than you may think."

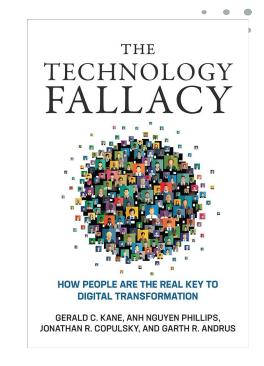
Kane et al., (2019) <u>The Technology Fallacy: How People are</u> the Real Key to Digital Transformation



### 2C. Some Key Findings of Kane's Research

A collaboration between MIT Sloan & Deloitte Digital found that...

- 1. Digital maturity is more about people than technology.
- 2. A culture that embraces change, measured risk-taking, and innovation is vital for survival and growth.
- 3. Continuous learning and adaptability are necessary.
- 4. Organisations should encourage experimentation.
- 5. New digital technologies disrupt established business models.
- 6. Flexibility in organisational and individual responses to digital changes is crucial



### AI and Jobs

#### New Report Predicts Over 100,000 Legal Jobs Will Be Lost To Automation

The loss may be offset, however, by the development of better-skilled and better-paid nonlegal roles handling the new technology.

EDITORS' PICK

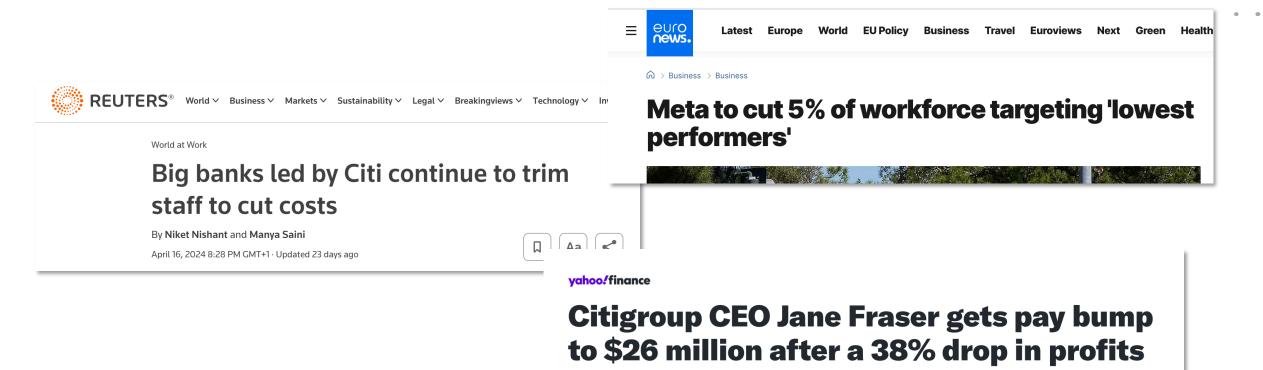
Goldman Sachs Predicts 300 Million Jobs Will Be Lost Or Degraded By Artificial Intelligence





### AI and Jobs

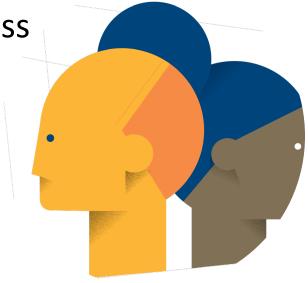
It's not always AI itself that forces change.



#### Staff Skills & Traits Needed for DX

- Coping with change engage them in the process
- Selection & Assessment -
- Learning & Development
- Leadership & Decision Making

Source: The Future of Work Institute



According to EU AI Guidelines, trustworthy AI should be:

- 1. Lawful respecting all applicable laws and regulations
- 2. Ethical respecting ethical principles and values
- 3. Robust both from a technical perspective while taking into account its social environment

Source: 7 Key Requirements of AI Systems European Commission



#### **Ethics guidelines for trustworthy AI**

"Al systems should empower human beings, allowing them to make informed decisions and foster their fundamental rights. At the same time, proper oversight mechanisms need to be ensured, which can be achieved through human-in-the-loop, human-on-the-loop, and human-in-command approaches"

Source: 7 Key Requirements of Al Systems European Commission

#### The Al Act

- Address risks specifically created by AI applications.
- Prohibit AI practices that pose unacceptable risks.
- Determine a list of high-risk applications.
- Set clear requirements for AI systems for high-risk applications.
- Define specific obligations deployers and providers of high-risk AI
- Conformity assessment before a given AI system is put into service.
- Enforcement after a given AI system is placed into the market.
- Establish a governance structure at European and national level.



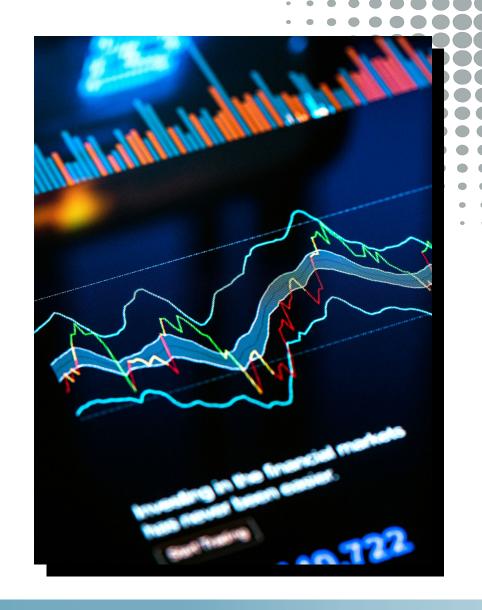
Source: The AI Act EU Commission

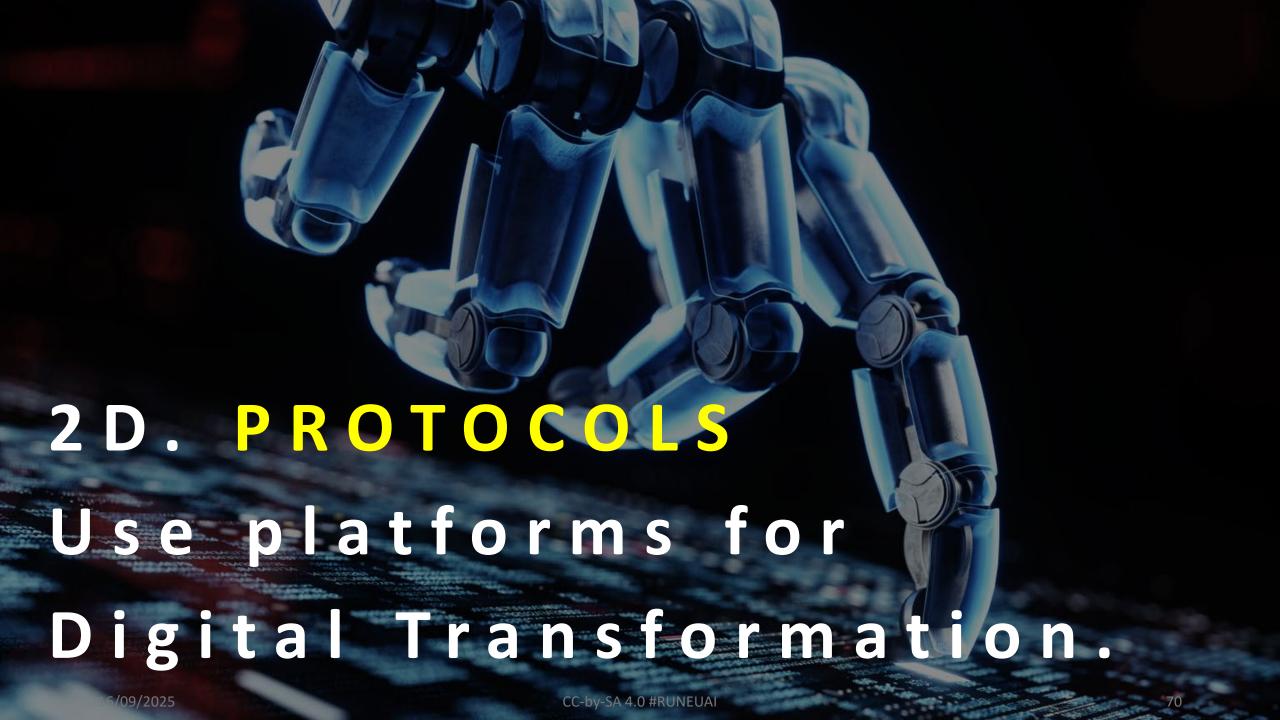
### **EU AI Act Will Collide with USA**

- US government uses AI to lay off people and to reduce on-site quality controls.
- Al is replacing funded American scientific research.
- Streamlined national agencies now using chatbots to replace call centre staff, algorithms to replace personnel while laying off tens of thousands of federal workers, technologists, scientists, and civil servants.

### **2D. Four Part Framework**

- A. Purpose
- B. Programs
- C. People
- **D.** Protocols







### **Protocols**

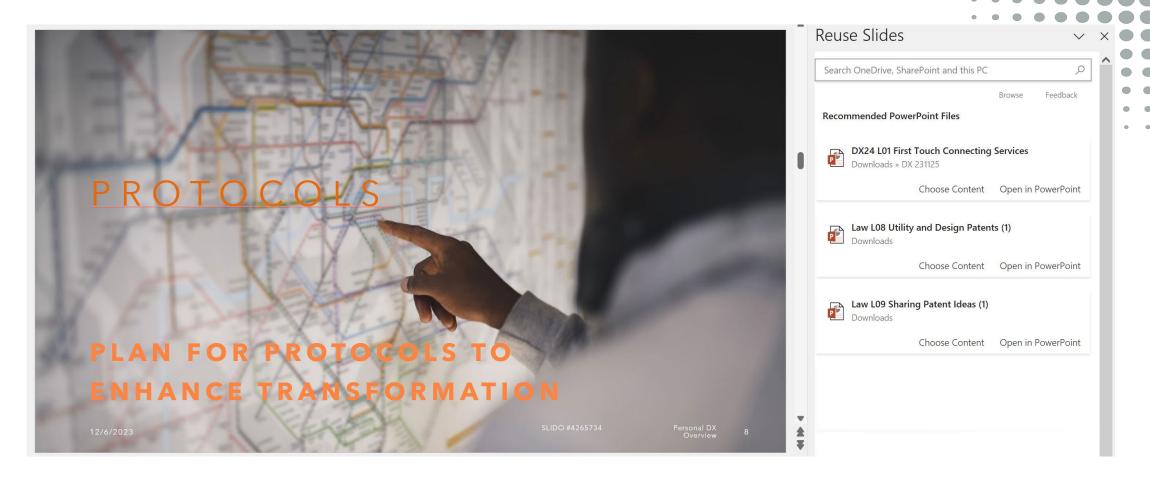
- Sophisticated Digital Transformation leverages Application
  Programming Interfaces.
- Expect data transfer between apps.
- This is happening fast.
- Future RUNEUAI sessions offer specifics.

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## Rank what you want to learn with an Al tool

#### **Protocols Made This Deck**



# 3. Perspectives and Recap

# Innovation often happens at the edge of chaos.

### A college kid's fake, Al-generated blog fooled tens of thousands. This is how he made it.

"It was super easy actually," he says, "which was the scary part."

# An Al that writes convincing prose risks mass-producing fake news

AI-Generated Fake 'Drake'/'Weeknd' Collaboration, 'Heart on My Sleeve,' Delights Fans and Sets Off Industry Alarm Bells

#### **Bots Outnumber Humans Online**



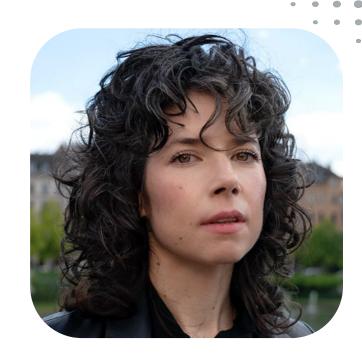
#### Announcing Persona's \$200M Series D | Persona

We've raised \$200M at a \$2B valuation to build the verified identity layer for an agentic Al world. Learn what that means and what's next for Persona.

#### 3. Perspective

"Generative AI is definitely a bubble."

-- Meredith Whittaker, President of Signal



#### 3. Bias Beware



- Every AI can generate biased results.
- Google now permits under-13s to use Gemini.
- You have oversight and supervisory responsibilities.

#### 3. What we did today

- 1. Saw Copilot and ChatGPTs create outlines from a web page.
- 2. Learned about five common AI tools.
- 3. Saw Claude.ai write localised content.
- 4. Used Microsoft Copilot to create selfie avatar.
- 5. Revised selfie avatar with Gemini.
- 6. Questioned the role of AI for productivity.



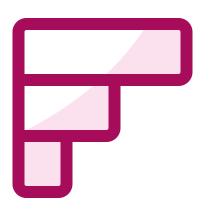
#### 3. Tools Mentioned

- 1. Sway running in the Edge Browser
- 2. Chat GPT4o
- 3. Claude.ai
- 4. Copilot using Edge Browser
- 5. Google Gemini
- 6. <u>Perplexity.ai</u>
- 7. Obsidian.md
- 8. Slido





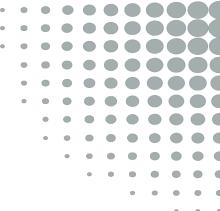
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Move the items you want to learn more about to the top.

<sup>(</sup>i) Start presenting to display the poll results on this slide.

#### 3. Primary Sources



Kane et al., (2019) The Technology Fallacy: How People are the Real Key to Digital Transformation

Levy, D. (1994). Chaos theory and strategy: Theory, application, and managerial implications. Strategic management journal, 15(S2), 167-178.

<u>Digital transformation in organisations and people functions</u>. CIPD. (n.d.).

Our work. Institute for the Future of Work. (n.d.). <a href="https://www.ifow.org/our-work">https://www.ifow.org/our-work</a>

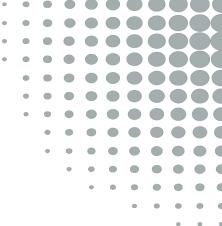
#### 3. Links to Videos

Innovation through Digital Transformation

**How Transformers Work** 

Tools that enhance productivity

Ask ChatGPT about Bernie

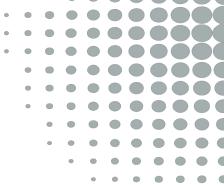






- Experiment
- Automate tasks
- Get insights
- Enhance creativity
- Make people central in the process
- Remain skeptical, yet curious & flexible

#### Thank you!



See you next Tuesday 23 September 2025.



A presentation for RUNEU.