GENERATIVE AI IN YOUR WORK:

DON'T ASK "IF",
RATHER WHEN AND HOW.

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THIS SESSION PRESENTS GUIDELINES AND EXAMPLES OF *GENERATIVE AI* FOCUSED ON INCREASING *WORKER PRODUCTIVITY*.

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Examples are provided of how Generative AI is already present in your companies.

We conclude with guidelines and recommendations on how to design in Generative AI and what to protect against.

Generative AI Highlights

11 model/versions with varying and improving stats.

Model	Accuracy	Hallucination Rate	Answer Rate
GPT 4	97.0 %	3.0 %	100.0 %
GPT 3.5	96.5 %	3.5 %	99.6 %
Llama 2 70B	94.9 %	5.1 %	99.9 %
Llama 2 7B	94.4 %	5.6 %	99.6 %
Llama 2 13B	94.1 %	5.9 %	99.8 %
Cohere-Chat	92.5 %	7.5 %	98.0 %
Cohere	91.5 %	8.5 %	99.8 %
Anthropic Claude 2	91.5 %	8.5 %	99.3 %
Mistral 7B	90.6 %	9.4 %	98.7 %
Google Palm	87.9 %	12.1 %	92.4 %
Google Palm-Chat	72.8 %	27.2 %	88.8 %

Simple comparison:

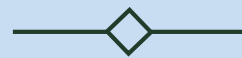Generative AI works on large language models (LLM) to create new content in text, audio, images.

Partial list of examples [2]:

- enhancing search engines,
- Chat bots for customer service and sales reps,
- writing emails, marketing content, lesson plans,
- assist in writing software.

Analytic AI works on big data (which can include text), to focus on finding patterns that inform decisions, and in some cases, predictions.

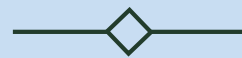One year on, how has ChatGPT changed the way we work? - Marketplace

AGENDA

GenAI is Already in Your Workplace

Manage the Challenges

GenAI Guidelines for Business Uses

GENERATIVE AI IS ALREADY IN YOUR COMPANIES

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Personal Use:

WhatsApp, Messenger, Instagram (US English) [3]

Metaverse (games, virtual tours)

Google Assistant, Bing Copilot

Business Use:

Azure OpenAI, Google Bard, ChatGPT, Anthropic's Claude

Embedded examples: Slack, Norton and Microsoft 365 Copilot [4]

[3] How Meta Plans to Connect you to AI Friends,
WSJ Interview with Meta Chris Cox, Chief Product Officer
[4] The era of generative AI: Driving transformation in banking
blog By Bill Borden, Microsoft Corp. VP of Worldwide Financial Services

Be Proactive to Focus Uses Where Needed Most

Situational Snapshot

- **Good people** do **good work** with **good focus**.

- Our job as leaders is to define their focus and help adapt it to constraints and new learnings.

- Generative AI is already in **personal use** by our people.

- Our **most inquisitive** folks are already **experimenting** with Generative AI for business uses (ChatGPT, Azure OpenAI, Vertex AI, Google Bard…).

- **Contextually relevant <u>data sets</u>** and <u>training</u> will be <u>required</u> for business uses.

Action Plan

- **Participate** in the experiments.

- Define **3 to 5 uses** that are:
  - Needed for your **growth plans**,
  - Increase productivity and thus throughput (**do more with less**),
  - Streamline operations for faster **time-to-market**,
  - Enhance your **creative and design** teams' capabilities,
  - What else do you have in mind?

- **Empower** your workers to **experiment** on **relevant uses** of Generative AI.

AI: artificial intelligence
GPT: Generative Pre-trained Transformer

Examples of GenAI Use Cases – may help you start

There many lists of possible Use Cases –

These are from McKinsey & Company, "The economic potential of generative AI: The next productivity frontier", June 2023[4]

- "About **75 percent** of the value that generative AI use cases could deliver falls across **four areas**:"
  1. customer operations,
  2. marketing and sales,
  3. software engineering, and
  4. R&D.
- This study examined across 16 business functions 63 use cases in which generative AI can address **specific business challenges** in ways that produce one or more **measurable outcomes**.

[5] "The economic potential of generative AI: The next productivity frontier" McKinsey & Company, June 14, 2023 Report

Edge Copilot's response to

"what are generative AI business use cases?".

1.**Personalized customer support and product recommendations**: Generative AI can help businesses provide personalized customer support and product recommendations by analyzing customer data and generating insights that can be used to improve customer experience [12]

2.**Optimizing repetitive tasks for staff**: Generative AI can help businesses optimize repetitive tasks for staff by automating processes and freeing up time for more complex tasks [23]

3.**Assisting in analyzing large data volumes**: Generative AI can help businesses analyze large data volumes by generating insights and identifying patterns that would be difficult for humans to detect [24]

4.**Risk mitigation**: Generative AI can help businesses mitigate risk by analyzing data and identifying potential risks before they become major issues [34]

5.**Predictive maintenance**: Generative AI can help businesses predict when equipment will fail and schedule maintenance before it becomes a problem [34]

Generative AI Challenges

- **Final Work Product Veracity:** GenAI generated content will be in sections and/or topics. The expertise of the authors must provide the training content, the goodness measures of that content, and revisions to the final work product for cohesion and accuracy.

- **Security Management:** generated content must be checked for harmful insertions, and their environments and training data sets must be secured from bad actors.

- **Plagiarism and copyright violation:** may be unavoidable in some first attempts, but in any final work product that will be used commercially or in business, then check.

- **Shadow IT:** successful POCs often evolve into production use but with no scalability, security management, governance, supporting processes and cost management.

- **GIGO:** the Internet is a data source, and it is unfiltered.

- **Discriminatory bias:** always a risk and can be mitigated. Look to examples from Meta "Improvements include 'it is tuned for safety and security and all of those things (like) it will decline to get into nasty conversations with somebody'." Chris Cox, Meta Chief Product Officer [3].

GIGO: garbage in then garbage out

[3] How Meta Plans to Connect you to AI Friends,
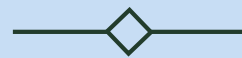WSJ Interview with Meta Chris Cox, Chief Product Officer

Guidelines for Generative AI Use Cases

- **Answer this question** "In 6-months what results or outcomes would the board of directors love to hear about your first experiments or a pilot project(s) with Generative AI?"

- From that answer:

  1. Define the target outcomes,

  2. Scope the new capabilities needed to achieve those outcomes, and then

  3. Define up to 3 use cases of how those capabilities would be used.

  4. Charter a small team(s) to experiment and provide the expert(s) to help them.

  5. If people on that team are overwhelmed with work, then one of the first uses should be to simplify their work, or make it more efficient, thus, to provide them with the needed time to experiment.

- **Get specific** on **how to use** Generative AI and the target business outcomes.

- Review and revise your governance and security **policies** to enable these new Generative AI uses.

Q & A

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You are welcome to send other questions
and connect requests via LinkedIn

linkedin.com/in/daveguevara

Following slides provide links to sites where
you can "experiment" and some reference info.

Notes

1. Hallucination Rates for Major AI Models, Paul Dughi in Stronger Content, Medium.com, Nov 15, 2023 (subscription) see link below for GitHub link.

   - https://github.com/vectara/hallucination-leaderboard, Public LLM leaderboard computed using Vectara's Hallucination Evaluation Model. This evaluates how often an LLM introduces hallucinations when summarizing a document.

2. One year on, how has ChatGPT changed the way we work? – Marketplace, Marketplace Morning Report with MIT's Erik Brynjolfsson's views of how society is being re-shaped by GenAI. Segment begins ~04:43min / 08:13min.

3. How Meta Plans to Connect you to AI Friends, WSJ Joanna Stern, Senior Personal Technology Columnist Interview with Chris Cox, Meta Chief Product Officer (Meta is parent of social-media platforms Facebook and Instagram).

4. The era of generative AI: Driving transformation in banking, blog By Bill Borden, Microsoft Corp. VP of Worldwide Financial Services.

5. "The economic potential of generative AI: The next productivity frontier", June 14, 2023 Report, © 2023 McKinsey & Company,
   - The research underpinning this report was led by Michael Chui, an MGI partner in McKinsey's Bay Area office; Eric Hazan, a senior partner in the Paris office; Roger Roberts, a partner in the Bay Area office; Alex Singla, a senior partner in the Chicago office; Kate Smaje and Alex Sukharevsky, senior partners in the London office; Lareina Yee, a senior partner in the Bay Area office; and Rodney Zemmel, a senior partner in the New York office.
   - The project team included Dmitry Gafarov, Shivani Gupta, Dan Hababou, Leila Harouchi, Sonja Lindberg, Kerin Lo, Alexandre Pons, Alok Singh, Gurneet Singh Dandona, and Wilbur Wang.

Sites to Experiment with Generative AI

- How Generative AI Tools Help Transform Academic Research, Beata M. Jones, Forbes, provides a nice summary of 16 sites for use when doing research or writing research papers.
  - Good places to experiment with how well they work for your topics of interest - even if not research related.
  - This first article read will be no cost. Additional articles will require Forbes subscription.

- DreamStudio by stability.ai, Start generating images based on your description of what you'd like to see. Expect to do several iterations as you refine or revise your description.
  - Uses SDXL 1.0 for image creation.
  - After the "free" images there will be a small charge.

- Image Creator from Microsoft Designer (bing.com), rated by some reviewers as one of the better image creation sites.
  - I found better images that were closer to what I described and was seeking here vs DreamStudio.