



# OK, But How Do I USE AI - AI 101

**Jenny Bristow**, CEO, Hedy & Hopp

**Mark Brandes**, Director of Data & Technology, Hedy & Hopp



# Mark Brandes

## Director of Data & Technology of Hedy & Hopp

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I'm the Director of Analytics and Decision Sciences at Hedy and Hopp, a healthcare marketing agency. I've been in the marketing analytics world for over 10 years and have experience in Google Analytics, Adobe Analytics, Piwik, and the list goes on.

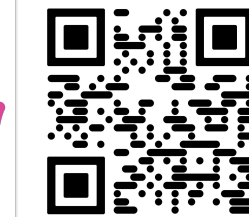
My happy place is typically working inside of Google Tag Manager, inside an excel spreadsheet, or creating a measurement strategy for a client. Typically in my experience, analytics tends to come last in the marketing conversation and I've made it my mission to help people understand why it should come first.

I was born and raised in mid-Missouri and currently live in Saint Louis with my wife and son. In my free time you can catch me tinkering with something around my house, working outside in my garden, playing with my son, or attending a STLCitySC soccer game.



# Jenny Bristow

## CEO of Hedy & Hopp



Podcast



Hedy & Hopp is a full-service, fully healthcare agency that works with payors and providers across the country.

Prior to starting H&H 9 years ago, Jenny launched, grew, and sold a digital agency in Seattle and worked at Amazon.

H&H was named Fastest Growing Company in St. Louis by *Small Business Monthly* in 2018 and 2019 and the #1 Fastest Growing Company in St. Louis by the *St. Louis Business Journal* in 2019. Jenny was named a St. Louis Titan (one of the 100 most influential people in St. Louis) in 2021, and a top female business owner in 2023. H&H acquired iHealthSpot in 2023.

She loves teaching others about the more technical aspects of healthcare marketing, making it easy to understand, and fun!

Finally, she is a reluctant healthcare privacy expert.

(Jenny is also the host of this podcast)





# We Aim to Bring the Results—and the Joy!

We're an Independent, Women-Owned, Full-Service Marketing Agency

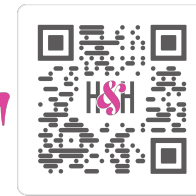
- Founded in 2015 and based in St. Louis, MO

We're 100% Healthcare Focused

- Our team has a deep mix of experience in patient, provider, payer, pharma, and direct-to-consumer healthcare marketing

We're Audience First and Data Forward—Always

- Roots in digital, data analytics, and performance marketing
- Sweet-spot in helping healthcare organizations connect with their audience in the right place, at the right time, with the right message, and with measurable impact
- Go beyond marketing to help healthcare marketers navigate the ever-changing privacy guidelines (HIPAA, OCR/HHS, state laws, etc.)



Website



"Harmony in Chaos" by Katie Mertz  
2024 Artist in Residence

*Learn more about our  
annual A.I.R. program*



Society for Health Care  
Strategy & Market  
Development™

# Our Work Is Happening Nationwide



Some H&H  
Accolades:



# Today's Learning Objectives

1. Understand the primary AI platforms (right now), their differentiators, and examples of different tasks where they shine
2. Learn the 6 Healthcare Marketing AI Tenants to guide you and your team as you begin implementing AI into your daily workflow
3. Discover real examples of ways to start using AI in your day-to-day work - let's get our hands dirty!

# How Today Will Flow

First  $\frac{2}{3}$  of today's Workshop will be lecture-style learning. We want to present foundational education around what AI is, how it works, and present concepts about how to leverage the technology.

The final  $\frac{1}{3}$  will be getting our hands dirty! We sent a pre-session email with homework, but if you didn't complete it, it's ok! We will take a 5 min break before we transition into this section so you can catch up.

1. Download ChatGPT app to your phone
2. Open browser, go to Claude.ai and create free Claude account
3. Open browser and go to Perplexity.ai
4. Open browser and go to copilot.microsoft.com

Let's get started!

AI Won't Replace Humans  
— But Humans With AI  
Will Replace Humans  
Without AI.

-Karim Lakhani, Harvard Professor

JUNE 24, 2024

Most adults aren't using ChatGPT regularly

**Frequency With Which Adults Worldwide Use  
ChatGPT, by Age, April 2024**

% of respondents in each group

	18-24	25-34	35-44	45-54	55+
Daily	9%	6%	4%	3%	1%
Weekly	18%	13%	8%	6%	3%
Monthly	12%	8%	7%	5%	2%
Once or twice	17%	15%	14%	13%	9%
<b>Ever used</b>	<b>56%</b>	<b>43%</b>	<b>33%</b>	<b>28%</b>	<b>16%</b>

Note: n=12,217 in Argentina, Denmark, France, Japan, the UK, and the US; numbers may not add up to total due to rounding

Source: Reuters Institute for the Study of Journalism at the University of Oxford, "AI and the Future of News: What Does the Public in Six Countries Think of Generative AI in News?" conducted by YouGov, May 28, 2024

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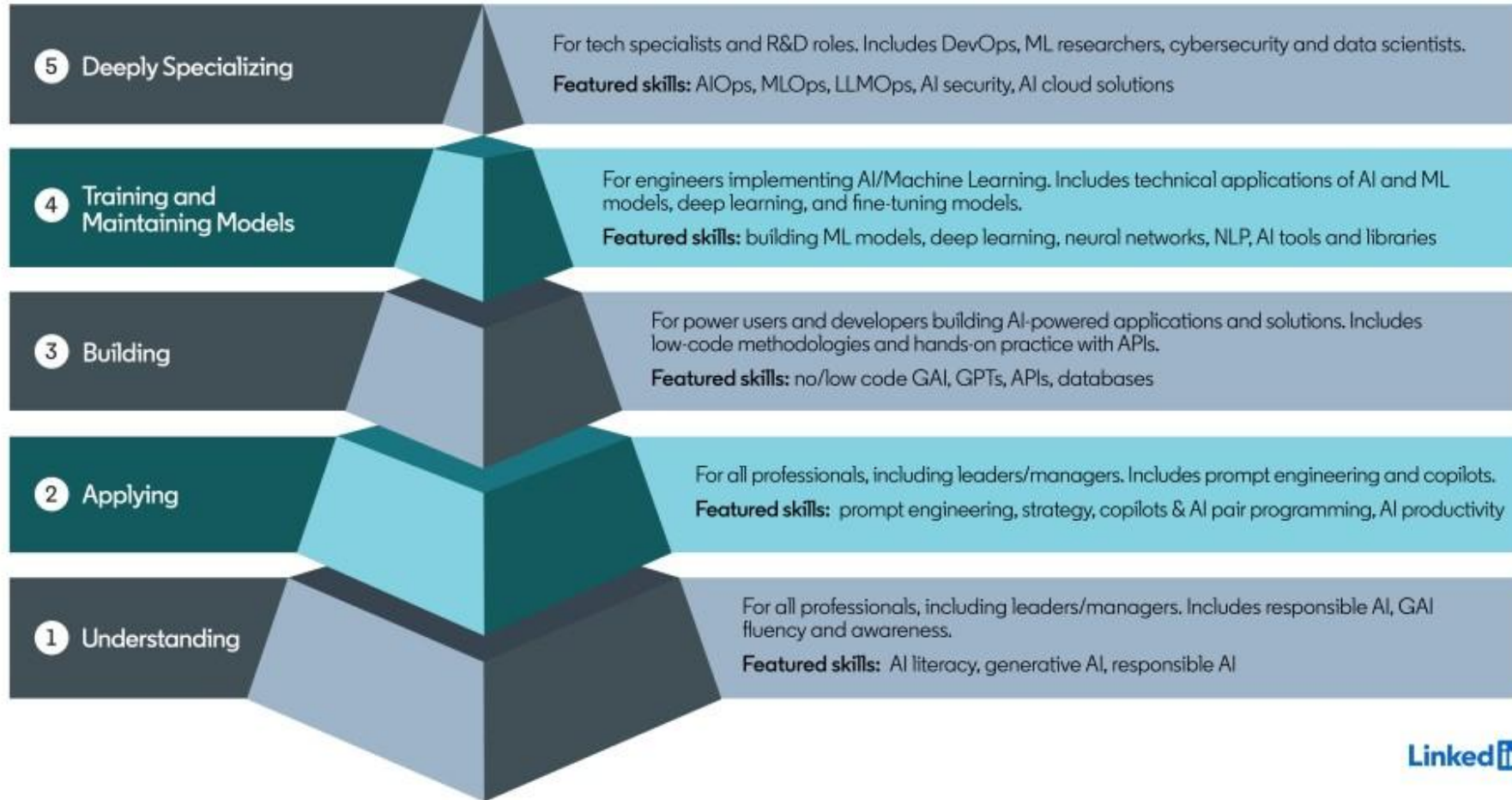
**EM** | EMARKETER

**Key stat:** 56% of adults 18 to 24 in select countries have used ChatGPT, but that number decreases as people get older, according to April 2024 data from YouGov and Reuters Institute for the Study of Journalism at the University of Oxford.



# AI Upskilling Framework

Build business-critical AI skills at every level of your organization



LinkedIn



# AI Tools, An Overview

# But Wait, What about Compliance???

Today, still wild west.

Europe is again leading the charge with EU AI Act.

Estimated roll-out in 2026.

Ensures AI is used in a safe and approved manner, specifically looking at areas like -

## Unacceptable Risk Systems

These systems are deemed too risky to even be permitted at all and are banned outright. This includes systems designed for:

- ✓ The manipulation of human behavior to circumvent free will
- ✓ The exploitation of any of the vulnerabilities of a specific group of people
- ✓ Untargeted scraping of facial data for the creation of facial recognition databases
- ✓ Social scoring
- ✓ Emotion recognition in workplaces or educational settings
- ✓ Biometric categorization systems based on certain characteristics, such as political, religious, and philosophical beliefs; sexual orientation; and race.



### Linguistic Creativity

#### ALL-Purpose Text Generation



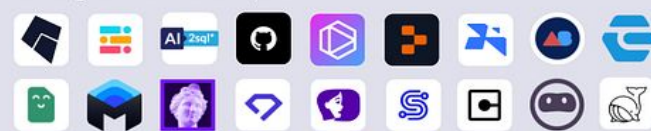
#### Marketing & Sales Copy



#### Text Optimization



#### Coding & Web Development



### Musical Creativity

#### Sound & Music Generation

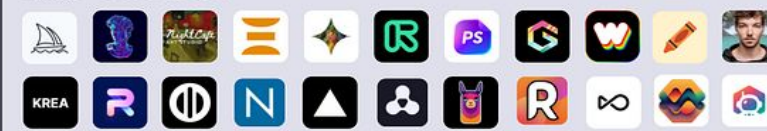


#### Voice Synthesis



### Visual & Artistic Creativity

#### Image Generation



#### Video Generation



#### Design



### Scientific Creativity



### Other

#### Knowledge Management & Search



#### Customer Support & Automation



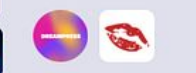
#### Characters



#### Gaming



#### Erotica



#### Market Intelligence



Source Ness Labs (<https://nesslabs.com/artificial-creativity>)



# But, What Kind of AI Is It?

## 1. Narrow AI (Weak AI)

- **What it is:** This type of AI is designed to do one thing really well.
- **Example:** Think of Siri or Alexa. They can answer your questions and follow commands, but they can't do everything a human can do.

## 2. General AI (Strong AI)

- **What it is:** This type of AI would be able to do anything a human can do, like learn new things, solve different problems, and understand emotions.
- **Example:** Imagine a robot that can play any game, cook any meal, and even have a deep conversation with you. We don't have this type of AI yet.

## 3. Superintelligent AI

- **What it is:** This AI would be smarter than the smartest human in every way.
- **Example:** Picture a super-brain that can solve problems we can't even imagine. This type of AI is still just science fiction.

# But, How Does the AI Learn?

## 1. Supervised Learning

- **What it is:** The AI learns by being shown examples with the right answers.
- **Example:** If you were teaching an AI to recognize cats, you'd show it lots of pictures of cats labeled "cat" and it would learn to identify them.

## 2. Unsupervised Learning

- **What it is:** The AI looks at lots of data and finds patterns on its own.
- **Example:** Imagine giving the AI a bunch of different animal pictures without telling it what they are. It would figure out the differences and similarities by itself.

## 3. Reinforcement Learning

- **What it is:** The AI learns by trying things out and getting rewards or penalties.
- **Example:** Think of training a dog. If it does a trick correctly, it gets a treat. If it doesn't, it doesn't get anything. The AI learns to do the right things to get rewards.

# But, What Can the AI Do?

## 1. Expert Systems

- **What it is:** These AIs are like experts in a specific field.
- **Example:** A medical AI that can help doctors diagnose diseases.

## 2. Natural Language Processing (NLP) AI

- **What it is:** This type of AI understands and talks in human language.
- **Example:** Chatbots that you can talk to online or on the phone.

## 3. Computer Vision AI

- **What it is:** This AI can see and understand images and videos.
- **Example:** Facial recognition software that can identify people in photos.

## 4. Robotics AI

- **What it is:** This AI controls robots to do physical tasks.
- **Example:** Robots that can assemble cars in a factory.

# What Type of Interaction/Interface?

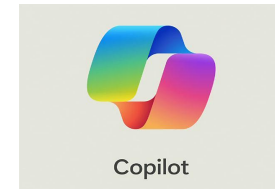
1. Build your interface, using existing models
  - a. Select a pre-trained model that fits your use case. Popular choices include:
    - i. For Text Generation: OpenAI GPT-3, GPT-4, Google BERT, Facebook's RoBERTa
    - ii. For Image Generation: OpenAI DALL-E, GANs (Generative Adversarial Networks)
    - iii. Setup Dev Environment, Access the model through an API, develop interface, Integrate API, create front-end, test and refine!
  - b. <https://colab.research.google.com/>  
*"This is like having a rich uncle who doesn't mind letting you use his mansion to have fun"*
2. Use an "out of the box" solution
  - a. Today's focus!



# When We Talk about AI, Let's Be Clear.

- All tools we are discussing are Narrow AI, specifically Natural Language Processing AI.
- Some Generative AI tools move beyond generating new text content into image or music editing, but today we will focus on tools that are built to understand and generate human language.

Today we are focusing on  
Generative AI - specifically  
NLP AI!



## Key Facts

Developed by OpenAI

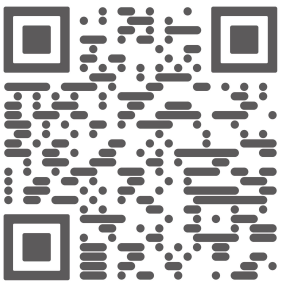
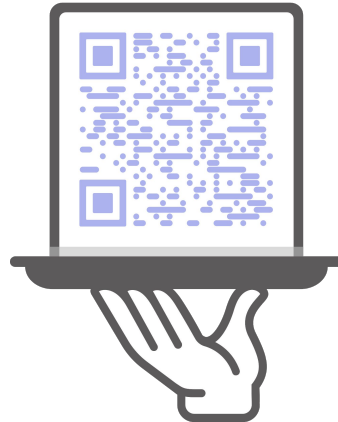
Officially launched on  
November 30, 2022

Can use the tool **without**  
logging in

4o model is free to use -  
can also currently use  
DALI-3 for 2 free  
images per day

\$20-30/user/  
month for PLUS with  
more features

<https://chatgptiseatingtheworld.com>



## Key Facts

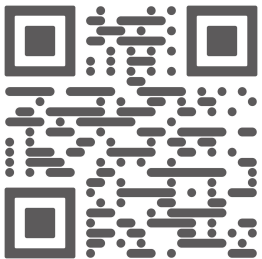
Combo of two tools  
developed by Google -  
Duet AI and Bard

Officially rebranded on  
February 21st, 2024

Login required to  
interact with the tool

After login the base  
model is free to use

“Gemini Advanced”  
accesses a better  
model and integrations  
for \$20/user/month



## Key Facts

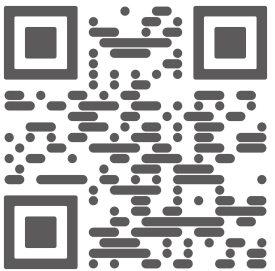
Owned by Microsoft  
and runs on OpenAI's  
GPT-4 LLM

Launched February  
2023 replacing Cortana  
and Bing Chat

Can use the tool **without**  
logging in

Limited to 5 queries per  
day without logging and  
the tool is free to use  
after logging in

Paid version that  
integrates within  
Microsoft 365 products  
for \$30/user/month





## Key Facts

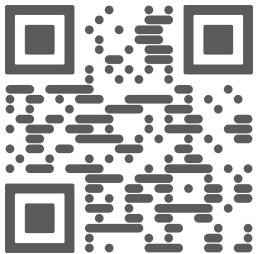
Privately owned by its 4 co-founders

Founded and launched in 2022

Can use the tool **without** logging in

Leverages OpenAI's GPT-3.5 models and Microsoft's Bing search engine

Paid version upgrades the model for \$20/user/month



## Key Facts

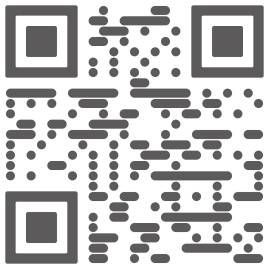
Owned by Anthropic  
which was started by  
former members of  
OpenAI

Founded in 2021 and  
their first model was  
released in March 2023

Login required to  
interact with the tool

Claude AI uses a  
unique approach called  
“Constitutional AI”

Paid version adds  
additional features for  
\$20-25/user  
/month





# 6 Tenets of Using AI in Healthcare Marketing

# #1- Approach AI Results with Heavy Skepticism

how accurate is the information you share with me? do you ever provide hallucinations?



The accuracy of the information I provide is based on the training data I received up until my last update in October 2023. I aim to provide reliable and accurate information, but there can be limitations:

1. **Training Data:** My responses are generated based on patterns and data available up to 2023. If there have been significant changes or new information after this date, I might not be aware of it.
2. **Hallucinations:** While I strive to give accurate responses, there can be instances where my output includes incorrect or fabricated information, known as "hallucinations." This can happen due to ambiguities in the data or the inherent complexities of language models.

For critical or sensitive information, it's always a good idea to cross-check with reliable and up-to-date sources. If you have specific questions or need real-time data, I can use browsing capabilities to provide more current information.

Yep.

Even ChatGPT knows it lies sometimes.





# #2 - Do Not Use AI Outputs As-Is

It's just not....great.



Subject: 🌟 Share Your Thoughts and Win! 🌟

Dear Valued Customers,

We hope this email finds you in the pink of health! 🌸

At HealthSpark Marketing, we're passionate about promoting wellness, spreading smiles, and making healthcare sparkle ✨. But enough about us—let's talk about YOU! 🌟

We'd love to hear your thoughts on our services. Did our healthcare marketing campaigns make your heart skip a beat? Did our newsletters give you a dose of inspiration? Or maybe our social media posts had you doing a happy dance? 💃

Share your feedback with us, and you could win a virtual high-five (redeemable anytime, anywhere) or even a unicorn hug (terms and conditions apply—unicorns not included). 🦄🤗

How to Share Your Sparkling Thoughts:

1. Reply to this email with your feedback (bonus points for emojis! 🤗).
2. Visit our website and click the "Feedback" button (it's like a secret handshake, but digital).

**Why Your Feedback Matters:** Your insights help us fine-tune our magic potions (aka marketing strategies) and sprinkle more joy across the healthcare universe. Plus, every feedback form completed unlocks a pixelated rainbow 🌈 on our office wall. 🎨

So go ahead, hit that reply button or visit our website—it's time to spread some cheer! 🌟

Remember, at HealthSpark, we believe that laughter is the best medicine (and a side effect might be snorting coffee through your nose). ☕😂

Wishing you a day as bright as a vitamin D supplement,

*Dr. Joy McSmiles Chief Happiness Officer HealthSpark Marketing*

P.S. If you're feeling extra adventurous, share your feedback in haiku form. 🌸📝

# #3 - Do Not Have AI Create Marketing Deliverables

It's a direct liability for your brand/employer!

1. **Legality** - As mentioned in a few of the tools, there is legal concern around tools like Chat GPT and it's unclear how and if that legal concerns is passed on to companies using the tool. There is also an outside chance that a tool like Chat GPT would be shut down in which case other tools would need to be considered (this likely wouldn't be a huge issue but needed to be said).
2. **Accuracy** - "Hallucinations" continue to plague these tools. This happens when the tool creates something that isn't factual in order to answer a user's questions. It's also often difficult to easily see these especially with examples of making up laws or statutes.
3. **Bias** - Along the same lines, AI tools can learn bias from the data and training its submitted too. Recently Gemini was under heavy scrutiny for having too much bias with its image generation and then attempts at a fix caused even more problems.
4. **Attribution and Authoring** - Along with aforementioned legal issues, if these tools are used to create things that are put into production, there may be issues around authoring or attribution (such as citations) that need to be considered.

# #4 - Be Clear in Your Ask

Give AI clear directions, ask it to play a role, use specific language, ask for multiple versions, etc. The more information you give in the prompt, the better the result will likely be.

- Coursera - Prompt Engineering Specialization (Free!)
  - <https://www.coursera.org/specializations/prompt-engineering>
- Udemy - Master AI with Prompt Engineering (\$65)
  - <https://www.udemy.com/course/promptengineering>
- LinkedIn Learning has lots of great sources
  - <https://www.linkedin.com/business/talent/blog/learning-and-development/new-framework-for-ai-ups-killing>
- But also lots of influencers sharing great education on YouTube and social media sharing small tips and ideas to leverage AI

Note that strong prompting skills is important now, but NLP AI will likely move beyond this quickly and help you design a strong prompt within the user interface.

# #5 - Ask for Sources!

Remember to ask it to give you a confidence level along with its response.

You can also ask it to provide sources and citations for the information in its result.

thank you, that's wonderful! Can you also share links to the source information online?



Searched 2 sites

Certainly! Here are the references and links to the source information online for the various types of AI:

## 1. Reactive Machines

- Example: IBM's Deep Blue
  - Source: [Deep Blue - IBM Research](#)

## 2. Limited Memory AI

- Example: Autonomous vehicles
  - Source: Goodfellow, I., Bengio, Y., & Courville, A. (2016). *Deep Learning*. MIT Press.  
[Book link](#)

# #6 - Keep Privacy a Priority

Remember HIPAA?

Yeah, don't share anything that you wouldn't publish on a billboard.





# Ready to Get Started?



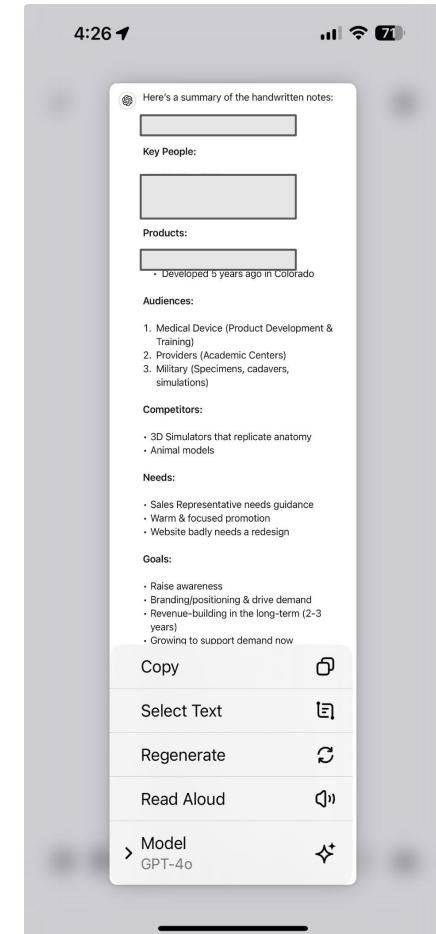
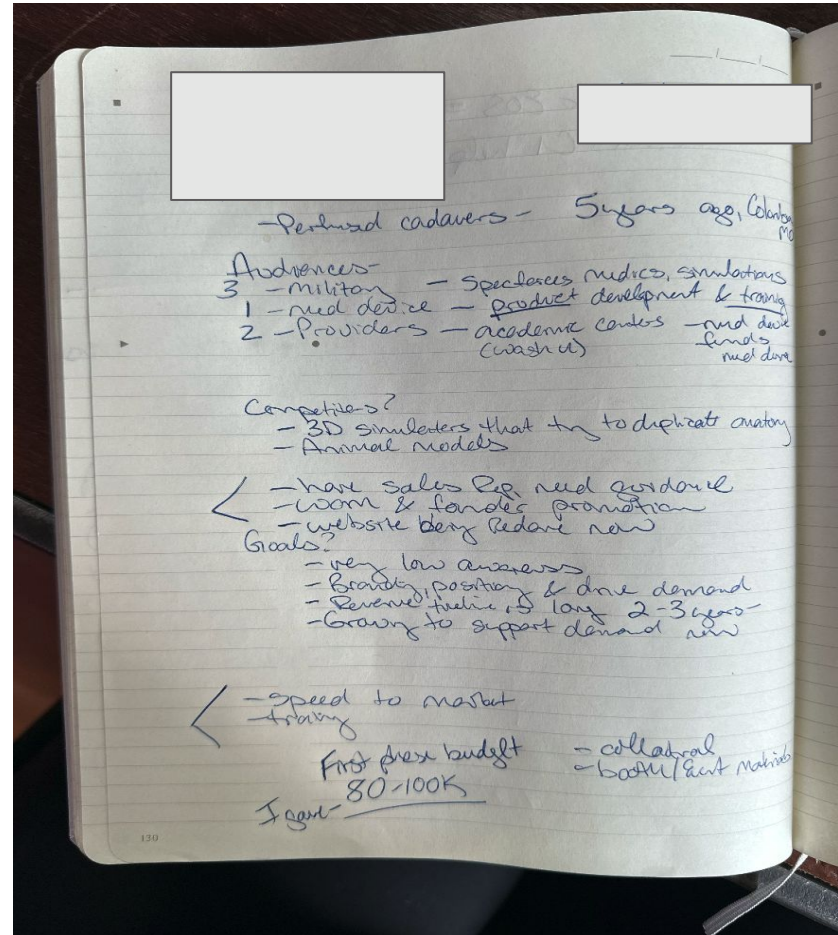


# Workshop #1: Transform Written Notes into Text

## Takeaway

HUGE time saver.

A great way to start using ChatGPT daily. Save time and build comfort with the tool!



# Let's Try!

Save time by transforming hand-written notes into text:

1. Get out your phone, open ChatGPT
2. Take a photo of your hand-written notes
3. Viola!

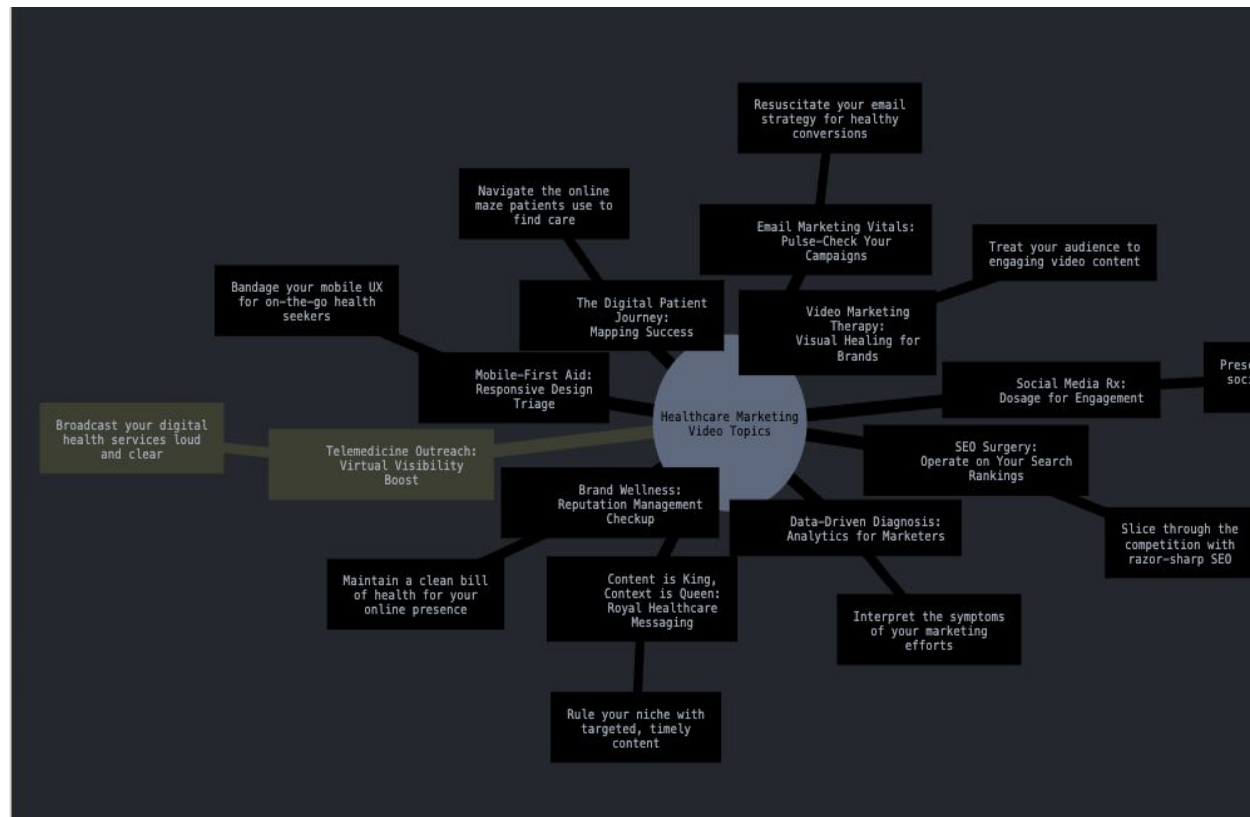
# Workshop #2: Use AI for Content Brainstorming

1. Open your browser to Claude.ai
2. Prompt (customize this to your needs)

*You're the chief **producer for my podcast, We Are, Marketing Happy.** We create concise, educational videos for healthcare marketers.*

*Please create a visual mind map for all of the video topics I could write on about **healthcare marketer for providers and payors.** Please include the article title and a short summary for each topic. Make the title and summary punchy and use lessons from David Ogilvy to craft them.*

# Workshop #2 - Output



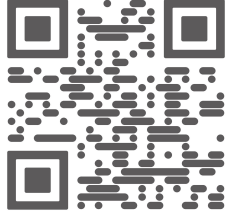
I've created a mind map with 10 compelling video topics for healthcare marketers, focusing on providers and payors. Each topic includes a catchy title and a short, punchy summary inspired by David Ogilvy's advertising principles. Here's a breakdown of the topics:

1. "The Digital Patient Journey: Mapping Success"
  - This topic explores how patients navigate online to find healthcare services.
2. "Social Media Rx: Dosage for Engagement"
  - Focuses on creating an effective social media strategy for healthcare.
3. "Content is King, Context is Queen: Royal Healthcare Messaging"
  - Emphasizes the importance of targeted, timely content in healthcare marketing.
4. "SEO Surgery: Operate on Your Search Rankings"
  - Covers techniques to improve search engine rankings for healthcare websites.
5. "Email Marketing Vitals: Pulse-Check Your Campaigns"
  - Discusses strategies to improve email marketing effectiveness in healthcare.
6. "Video Marketing Therapy: Visual Healing for Brands"
  - Explores the use of video content in healthcare marketing.
7. "Mobile-First Aid: Responsive Design Triage"
  - Focuses on the importance of mobile-friendly design in healthcare websites.
8. "Telemedicine Outreach: Virtual Visibility Boost"
  - Covers marketing strategies for telemedicine services.
9. "Data-Driven Diagnosis: Analytics for Marketers"
  - Explores the use of data analytics in healthcare marketing.
10. "Brand Wellness: Reputation Management Checkup"
  - Discusses online reputation management for healthcare providers and payors.

These topics cover a wide range of essential areas in healthcare marketing, from digital patient journeys to brand reputation management. The titles and summaries are crafted to be memorable and intriguing, following Ogilvy's principle of using powerful headlines and clear, benefit-focused copy.

Would you like me to expand on any of these topics or suggest additional ones?

# Workshop #3 - Market Research



1. Open CoPilot
2. Prompt (customize for your needs):

*I want to open an urgent care facility in Saint Louis, MO where my customers can get quick and easy access to care at a standard rate. Act as a market researcher and give me information on the demographics of people most likely to use urgent care in Saint Louis—including age groups, income, education, gender, and specific location.*

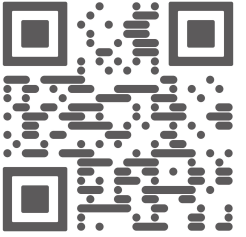
# Thoughts?

For queries like this, you might get back a lot of information you already know. You are in marketing after all!

But what it does do is:

1. Hopefully adds perspective you might have missed
2. Maybe uses some language that the community uses?
3. Challenges bias the team may have developed internally?
4. Find sources for you that are more likely relevant to your goal





# Workshop #4 - Privacy

1. Open Perplexity.AI
2. Prompt (customize for your needs):

*Please tell me the privacy and user concerns a healthcare business would have using Facebook Pixel on their website considering the most recent HIPAA guidance.*

# Helpful?

Should you take this as gospel? Absolutely not! However, what this does is summarizes a lot of the issues around this topic in one tidy bundle. So now you can

1. Check into the sources this answer found
2. Learn some legal terms or issues you need to research
3. Help you start a knowledgeable conversation with your other teams like legal, compliance, analytics, and development.

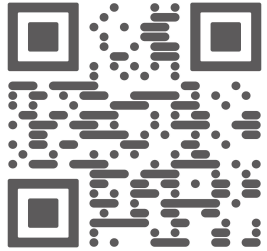
# Workshop #5 - Communication

1. Open Perplexity.AI
2. Prompt (customize for your needs):

*How do we speak about <service line or disease> with the public? What is common (non-technical) terminology used and what are the biggest concerns we should address?*

*I think my business needs server side Google Tag Manager? Can you explain that to me and help explain it to the others on my team?*

*We are interested in media mix modeling? What are some of the pros and cons of this that I should be discussing within my organization?*



# Output

Something like this not only can help you understand the ins and outs of certain topics and discussions but it can also help you tap into a lexicon that can bridge the communication gap between other areas of the business who may know more (or less) about that subject.

This can help you level up or level down you conversation so that everyone understands and can speak the same language.



# Wrap Up

# What Is Coming? Beyond NLP AI

- Marketing Campaign Optimization
- AI-based Analytics Analysis and Reporting
- Creative Asset Development



# Wrap Up

1. Lots of tools and techniques out there and the hardest part can just be getting started!
2. Tenets and guiding principles can help with getting buy in within your organization.
3. The use cases for generative AI go well beyond text generation. Explore the free options within these tools to do your own testing!



## Questions?

Please be sure to complete the session evaluation on the mobile app!

**Jenny Bristow**

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