

Midjourney Prompt: humanoid robot standing at a large screen with a growth curve on the screen.

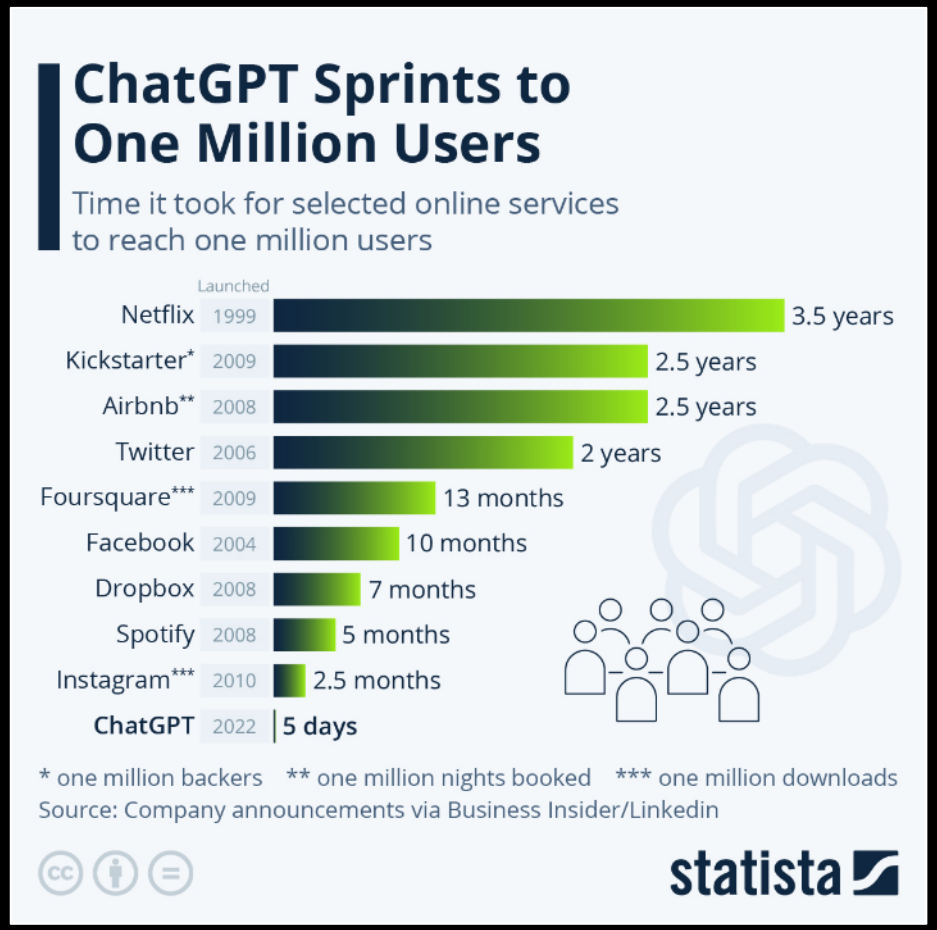
Artificial Intelligence In Industry

Scott Spencer
Island Abbey Foods

Agenda

- AI is accelerating at blazing speed
- Applications in industry
  - Training Creation
  - SOP generation
  - Production Schedule Modeling
  - Marketing and Commercial Application
- Open Discussion

Blazing Speed of Adoption



- **The global AI market is projected to reach $1.8T by 2030.**
- The AI market is projected to grow at CAGR of 38.0% from 2021 to 2030.
- **There will be 8 billion AI-powered voice assistants by 2023.**
- Global GDP will grow by $15.7 trillion by 2030 thanks to AI.
- The number of AI startups grew 14 times over the last two decades.
- **Already 77% of the devices we use feature one form of AI or another**.

Applications Studied

chatGPT-4

- ChatGPT is a natural language processing tool driven by AI technology that allows you to have human-like conversations and much more with the chatbot.
- The language model allows you to ask questions and refine modeling with more data



Midjourney

- Midjourney generates images from natural language descriptions, called "prompts”.
- Uses Discord to enter “prompts”.

chatGPT Example – Training Creation

Input:

SP

Write a training module for managers on their direct reports personal performance. The performance program should have a rating system of 1 through 3 with 1 as Needs Improvement, 2 as Meets Expectations and 3 as Exceeds Expectations. The performance rating should also rate the direct report on our core values of Integrity, Customer Service and Team Work.

chatGPT Example – Training Creation

Performance Rating System:

We will be using a rating system of 1 through 3 to evaluate the performance of your direct reports.

1. Needs Improvement: The employee has not met the
   requires improvement.
2. Meets Expectations: The employee is meeting the e
3. Exceeds Expectations: The employee is exceeding t

SP Add more detail on the numerical rating system including examples

Core Values Rating System:

In addition to the performance rating, we will also rate y
of Integrity, Customer Service, and Team Work. These c
as a company and should be emphasized in all aspects

SP rewrite all of the above but for low level managers without a lot of experience coaching their direct reports

Integrity:

Integrity is the foundation of everything we do. It means being honest, transparent, and ethical in all our actions. When evaluating your direct re
consider the following:

- Do they consistently behave ethically and honestly?
- Do they follow our policies and procedures?
- Do they maintain confidentiality?
- Do they take responsibility for tl om them?

Regenerate response

SP Arrange this as it would appear in a PowerPoint deck for training

Following Slides Cut and Paste from chatGPT

Performance Rating System Introduction

Performance Rating System: We will be using a rating system of 1 through 3 to evaluate the performance of your direct reports.

1. Needs Improvement: The employee has not met the expectations set for the role and requires improvement.
2. Meets Expectations: The employee is meeting the expectations set for the role.
3. Exceeds Expectations: The employee is exceeding the expectations set for the role.

Core Values Rating System: In addition to the performance rating, we will also rate your direct reports on our core values of

- Integrity
- Customer Service
- Team Work

These core values are critical to our success as a company and should be emphasized in all aspects of our work.

Ratings Definition

Needs Improvement (Rating 1): A rating of 1 means that the employee's performance is below the expected level and requires improvement.

Examples of behaviors that would merit a rating of 1 include:

- **Consistently missing deadlines or failing to complete tasks on time.**
- **Demonstrating poor communication skills or failing to collaborate with team members effectively.**
- **Failing to follow established policies and procedures.**
- **Consistently producing work that does not meet the expected quality standards.**

Meets Expectations (Rating 2): A rating of 2 means that the employee's performance meets the expected level of performance.

Examples of behaviors that would merit a rating of 2 include:

- **Consistently meeting deadlines and completing tasks on time.**
- **Communicating effectively with team members and stakeholders.**
- **Following established policies and procedures.**
- **Producing work that meets the expected quality standards.**

Exceeds Expectations (Rating 3): A rating of 3 means that the employee's performance exceeds the expected level of performance.

Examples of behaviors that would merit a rating of 3 include:

- **Consistently going above and beyond the call of duty to exceed performance expectations.**
- **Demonstrating exceptional communication skills and collaborating effectively with team members and stakeholders.**
- **Taking the initiative to identify and implement process improvements.**
- **Producing work that consistently exceeds the expected quality standards.**

Rating Notes and Reminders

- When using the rating system, it's important **to be objective and provide specific examples** of behaviors that merit each rating.
- It's also important to note that a rating of 1 does not necessarily mean that the employee is a poor performer or that they are not capable of improving. Instead, it should be seen as an opportunity to identify areas for improvement and provide support and guidance to help the employee develop their skills and capabilities.
- Similarly, a rating of 3 should not be seen as an indication that the employee is perfect or that there is no room for improvement, but rather as recognition for their exceptional performance and contributions.

Core Values Assessment

Integrity: Integrity is the foundation of everything we do. It means being honest, transparent, and ethical in all our actions. When evaluating your direct reports' performance in this area, consider the following:

- Do they consistently behave ethically and honestly?
- Do they follow our policies and procedures?
- Do they maintain confidentiality?
- Do they take responsibility for their mistakes and learn from them?

Customer Service: Customer service is an essential aspect of our business. We strive to provide the highest level of service to our customers, both internal and external. When evaluating your direct reports' performance in this area, consider the following:

- Do they provide prompt and courteous service to our customers?
- Do they take the initiative to resolve customer issues?
- Do they communicate effectively with customers?
- Do they go above and beyond to exceed customer expectations?

Teamwork: Teamwork is critical to our success as a company. It means working collaboratively with others to achieve our goals. When evaluating your direct reports' performance in this area, consider the following:

- Do they work well with others?
- Do they communicate effectively with their colleagues?
- Do they contribute to team projects and initiatives?
- Do they take the initiative to help their colleagues?

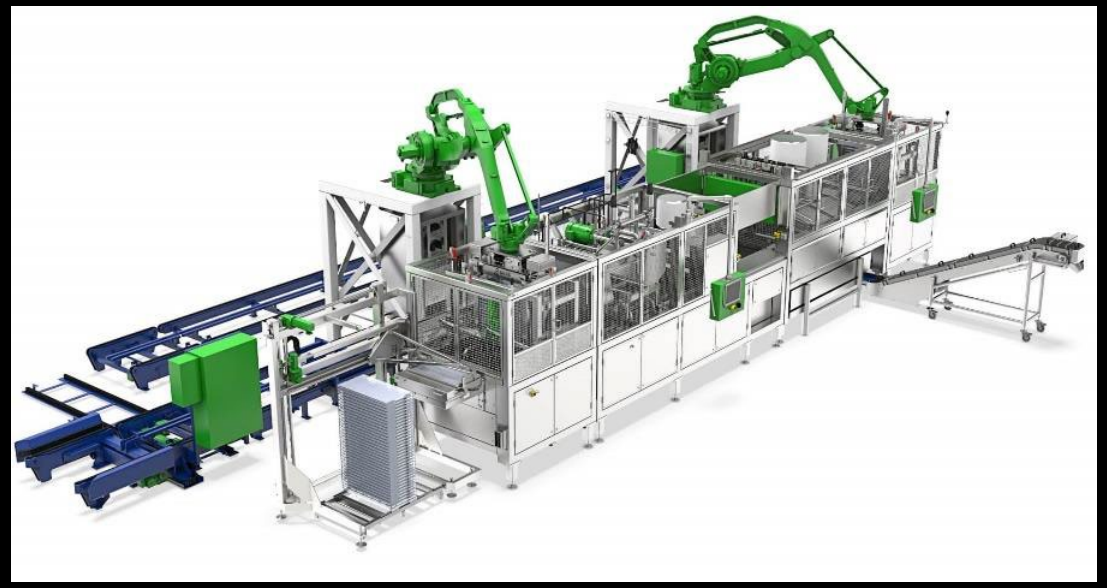
Providing Feedback

Providing Feedback: When providing feedback to your direct reports, it's essential to be specific, timely, and constructive. Here are some tips for providing effective feedback:

- Be specific: Focus on specific behaviors and actions rather than generalizations.
- Be timely: Provide feedback as soon as possible after the event.
- Be constructive: Provide feedback in a way that is designed to help the employee improve.
- Conclusion: Evaluating the performance of your direct reports is a critical part of your role as a manager. By using our performance rating system and core values rating system, you can provide specific and constructive feedback that will help your direct reports grow and develop. Remember to be specific, timely, and constructive in your feedback, and always emphasize the importance of our core values of Integrity, Customer Service, and Teamwork.

Total time from initial Prompt to PowerPoint slides – 30 minutes

chatGPT Example – SOP Generation



Tanis Depositor

Tanis

Tanis

Tanis

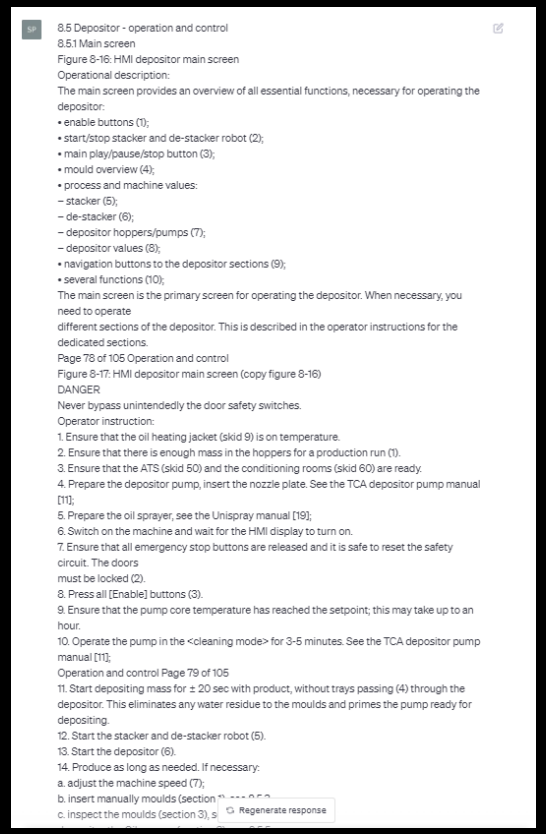
Operator instruction:

1. Fill the preparation tank with of a preset amount of water. Use the local button (B.001.5202).
2. Dose manually the acid via the manhole. Confirm the dosing with the local button (B.002.5202).
3. Start the agitator for mixing. Use the local button (B.003.5202).
4. Pump the preparation tank to the buffer tank. Use the local button (B.004.5202).
5. When the preparation tank is empty, repeat step 1-5 for a new batch.
6. Start cleaning or repeat step 1-6 for a new production run.

Operator control points and alarms: not applicable.

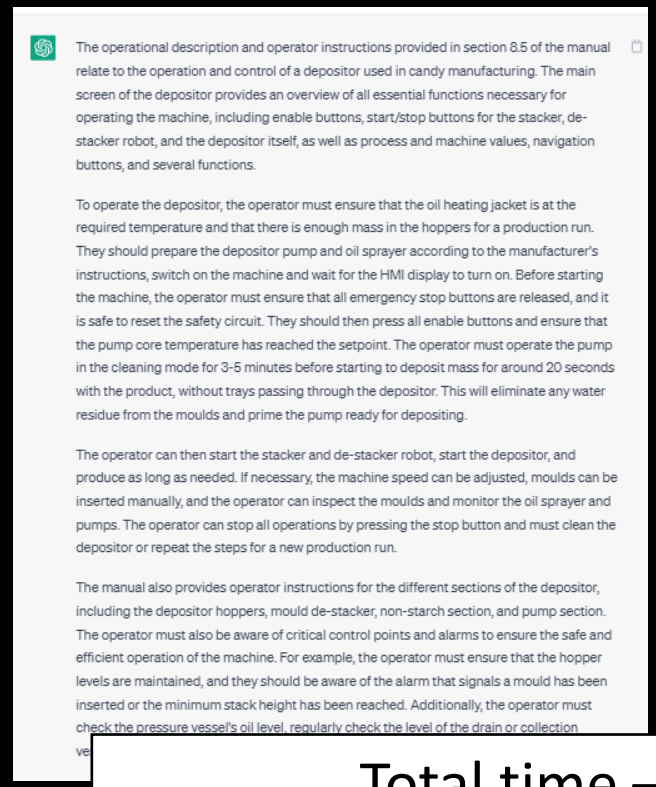
SOP Generation - Process

Cut and Paste Manual into chatGPT → chatGPT summarizes information → Ask chatGPT to create SOP → chatGPT outputs SOP



8.5 Depositor - operation and control
8.5.1 Main screen
Figure 8-16: HMI depositor main screen
Operational description:
The main screen provides an overview of all essential functions, necessary for operating the depositor:
• enable buttons (1);
• start/stop stacker and de-stacker robot (2);
• main play/pause/stop button (3);
• mould overview (4);
• process and machine values:
– stacker (5);
– de-stacker (6);
– depositor hoppers/pumps (7);
– depositor values (8);
• navigation buttons to the depositor sections (9);
• several functions (10);
The main screen is the primary screen for operating the depositor. When necessary, you need to operate
different sections of the depositor. This is described in the operator instructions for the dedicated sections.
Page 78 of 105 Operation and control
Figure 8-17: HMI depositor main screen (copy figure 8-16)
DANGER
Never bypass unintendedly the door safety switches.
Operator instruction:
1. Ensure that the oil heating jacket (skid 9) is on temperature.
2. Ensure that there is enough mass in the hoppers for a production run (1).
3. Ensure that the ATS (skid 50) and the conditioning rooms (skid 60) are ready.
4. Prepare the depositor pump, insert the nozzle plate. See the TCA depositor pump manual [11];
5. Prepare the oil sprayer, see the Unispray manual [19];
6. Switch on the machine and wait for the HMI display to turn on.
7. Ensure that all emergency stop buttons are released and it is safe to reset the safety circuit. The doors
must be locked (2).
8. Press all [Enable] buttons (3).
9. Ensure that the pump core temperature has reached the setpoint; this may take up to an hour.
10. Operate the pump in the <cleaning mode> for 3-5 minutes. See the TCA depositor pump manual [11];
Operation and control Page 79 of 105
11. Start depositing mass for ± 20 sec with product, without trays passing (4) through the depositor. This eliminates any water residue to the moulds and primes the pump ready for depositing.
12. Start the stacker and de-stacker robot (5).
13. Start the depositor (6).
14. Produce as long as needed. If necessary:
a. adjust the machine speed (7);
b. insert manually moulds (section
c. inspect the moulds (section 3), s

Regenerate response

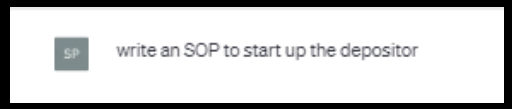


The operational description and operator instructions provided in section 8.5 of the manual relate to the operation and control of a depositor used in candy manufacturing. The main screen of the depositor provides an overview of all essential functions necessary for operating the machine, including enable buttons, start/stop buttons for the stacker, de-stacker robot, and the depositor itself, as well as process and machine values, navigation buttons, and several functions.

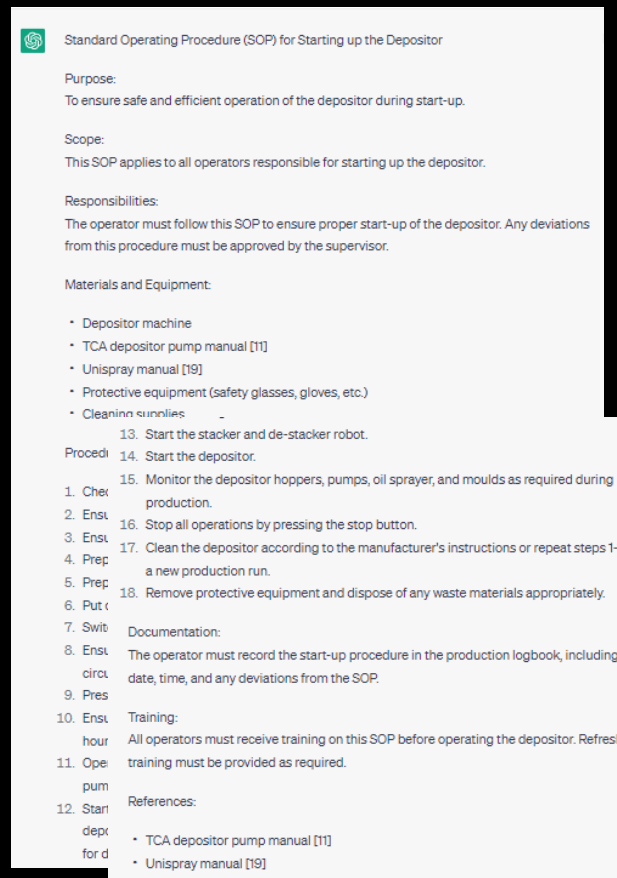
To operate the depositor, the operator must ensure that the oil heating jacket is at the required temperature and that there is enough mass in the hoppers for a production run. They should prepare the depositor pump and oil sprayer according to the manufacturer's instructions, switch on the machine and wait for the HMI display to turn on. Before starting the machine, the operator must ensure that all emergency stop buttons are released, and it is safe to reset the safety circuit. They should then press all enable buttons and ensure that the pump core temperature has reached the setpoint. The operator must operate the pump in the cleaning mode for 3-5 minutes before starting to deposit mass for around 20 seconds with the product, without trays passing through the depositor. This will eliminate any water residue from the moulds and prime the pump ready for depositing.

The operator can then start the stacker and de-stacker robot, start the depositor, and produce as long as needed. If necessary, the machine speed can be adjusted, moulds can be inserted manually, and the operator can inspect the moulds and monitor the oil sprayer and pumps. The operator can stop all operations by pressing the stop button and must clean the depositor or repeat the steps for a new production run.

The manual also provides operator instructions for the different sections of the depositor, including the depositor hoppers, mould de-stacker, non-starch section, and pump section. The operator must also be aware of critical control points and alarms to ensure the safe and efficient operation of the machine. For example, the operator must ensure that the hopper levels are maintained, and they should be aware of the alarm that signals a mould has been inserted or the minimum stack height has been reached. Additionally, the operator must check the pressure vessel's oil level, regularly check the level of the drain or collection



write an SOP to start up the depositor



Standard Operating Procedure (SOP) for Starting up the Depositor

Purpose:
To ensure safe and efficient operation of the depositor during start-up.

Scope:
This SOP applies to all operators responsible for starting up the depositor.

Responsibilities:
The operator must follow this SOP to ensure proper start-up of the depositor. Any deviations from this procedure must be approved by the supervisor.

Materials and Equipment:

- Depositor machine
- TCA depositor pump manual [11]
- Unispray manual [19]
- Protective equipment (safety glasses, gloves, etc.)
- Cleaning supplies

Procedu

1. Che
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12. Start depo for d
13. Start the stacker and de-stacker robot.
14. Start the depositor.
15. Monitor the depositor hoppers, pumps, oil sprayer, and moulds as required during production.
16. Stop all operations by pressing the stop button.
17. Clean the depositor according to the manufacturer's instructions or repeat steps 1-16 for a new production run.
18. Remove protective equipment and dispose of any waste materials appropriately.

Documentation:
The operator must record the start-up procedure in the production logbook, including the date, time, and any deviations from the SOP.

Training:
All operators must receive training on this SOP before operating the depositor. Refresher training must be provided as required.

References:

- TCA depositor pump manual [11]
- Unispray manual [19]

Total time – 5 minutes

Production Schedule Modeling*- Process

Input Production Parameters into chatGPT → Create Initial Schedule → chatGPT doesn't understand staffing so refine parameters → chatGPT outputs updated schedule

SP

Create a production schedule using one crew with s
and packages all product produced in a given perio

Shift times can be 8, 10 or 12 hours
Process has two steps production then packaging
All product produced has to be packaged
There is a delay between production and packaging
Production line produces 750 kgs per hour of produ
Production line is most efficient for longer consecu
Packaging line must package product produced by
after production
Packaging line packages 300 kgs per hour
Production requires 7 people to staff
Packaging requires 8 people to staff
Each person is paid $20 per hour
Product demand is 20000 kg per week

To create a production schedule that minimizes cost a
we need to determine the optimal shift times for both
We'll need to take into account the efficiency of the pr
hours and ensure that the packaging line packages all
days after production.

First, let's determine the total production time required to meet the weekly demand of 20,000 kg.

Total production required per week = 20,000 kg
Production rate per hour = 750 kg
Total production time required per week = (20,000 / 750) = 26.67 hours

Next, we need to determine the optimal shift times for the production crew. To maximize efficiency, we'll use longer consecutive hours.

We can schedule one 12-hour shift per day for the production crew, which would cover the total production time required in just two days. This would require 7 people for each 12-hour shift, for a total of 14 people.

For the packaging crew, we'll schedule one 8-hour shift per day. This would allow the crew to package all products produced within the required 11 to 13-day timeframe. The packaging crew would require 8 people for each 8-hour shift, for a total of 56 people.

Now, let's calculate the total cost for the week based on these shift times.

Total number of people required per day = 14 (for production) + 56 (for packaging) = 70
Total number of people required for the week = 70 × 7 = 490

Total cost per hour = 490 x $20 = $9,800

Total production time per week = 2 days x 12 hours/day = 24 hours
Total packaging time per week = (11 + 13)/2 days x 24 hours/day = 288 hours

Regenerate response

Total cost per week = (24 x $9,800) + (288 x 8 x $20) = $251,360

SP

how would this change if packaging can nc

If packaging cannot be staffed if there is no product to be packaged, then we need to adjust the production schedule to ensure that there is always enough product ready to be

Production crew:

- 10-hour shifts, 7 people per shift
- Day 1: 7am-5pm
- Day 2: 7am-5pm
- Day 3: 7am-5pm

Packaging crew:

- 8-hour shifts, 8 people per shift
- Day 4: 7am-3pm (packaging crew starts work)
- Day 5: 7am-3pm
- Day 6: 7am-3pm
- Day 7: 7am-3pm
- Day 8: 7am-3pm (packaging crew finishes work)

In this schedule, the production crew produces 20,000 kg of product in 30 hours (3 days x 10 hours/day). The packaging crew packages 19,200 kg of product in 32 hours (4 days x 8 hours/day).

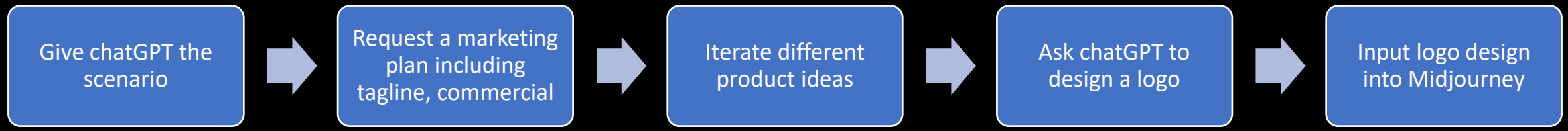
To calculate the total cost, we need to take into account the extra day of production and the reduced number of hours for the packaging crew:

Total number of people required per day = 7 (for production) + 8 (for packaging) = 15
Total number of people required for the week = 15 × 7 = 105

Total cost per hour = 105 x $20 = $2,100

*surprisingly, for an AI, chatGPT is not great at math

chatGPT Example - Marketing



SP

My company has the patent to dehydrate honey to less than 1% moisture and turn it into a solid form. We don't currently have a product. Create a product based on the patent. Create a marketing plan around that product including a tag line and the outline of a commercial for the product.

Request a marketing plan including tagline, commercial

Product Name: HoneyBits

Product Description: HoneyBits are small, dehydrated honey cubes made using our patented technology that reduces moisture content to less than 1%. They are a natural, healthy, and convenient sweetener perfect for sweetening your favorite beverages, cereals, or baked goods. They come in a variety of flavors, including Original, Lemon, Lavender, and Cinnamon.

Tagline: "Sweeten Your Life, Naturally"

Marketing Plan:

1. Market Segmentation: Target health-conscious consumers, busy professionals, and families looking for natural alternatives to processed sugars.
2. Packaging: Design eye-catching, eco-friendly packaging with a clear indication of the product's benefits and uses.
3. Social Media Campaign: Launch a social media campaign on platforms like Instagram, Facebook, and Pinterest to showcase recipes and creative uses of HoneyBits.
4. Influencer Partnerships: Partner with food and health influencers to promote the product and share their experiences using HoneyBits in their daily lives.
5. In-store Promotions: Organize in-store demonstrations and sampling events at grocery stores, health food stores, and farmers' markets.
6. Sponsorships: Sponsor food fes s events, and cooking

Regenerate response

Send a message...

ChatGPT Mar 23 Version. ChatGPT may produce inaccurate information about people, places, or facts

Commercial Outline:

Scene 1: [A busy morning in a family kitchen]

- A mom struggles to prepare breakfast for her kids, knocking over a sticky jar of honey in the process.

Scene 2: [A close-up of HoneyBits packaging]

- Narrator (V.O.): "Introducing HoneyBits, the new way to sweeten your life, naturally!"

Scene 3: [The mom opens a box of HoneyBits]

- She easily sprinkles them over her kids' cereals, adding natural sweetness without any mess.

Scene 4: [A series of quick shots]

- Showcasing various uses of HoneyBits: sweetening tea, mixing into yogurt, and baking cookies.

Scene 5: [Family enjoying their breakfast together]

- The kids happily eat their breakfast as the mom sips her HoneyBits-sweetened tea, looking satisfied.

Scene 6: [A close-up of the different HoneyBits flavors]

- Narrator (V.O.): "Try HoneyBits in Original, Lemon, Lavender, and Cinnamon flavors."

Scene 7: [End screen with product logo and tagline]

- Narrator (V.O.): "HoneyBits - Sweeten Your Life, Naturally."
- Display the HoneyBits logo, tagline, and a call-to-action to visit the website or find HoneyBits at a store near you.

Regenerate response

Ask chatGPT to design a logo

SP

Can you create the input to Midjourney AI to create the logo image?

Midjourney AI is not an AI tool that I am familiar with, and it is likely not a real tool or platform. However, I can provide a detailed logo design brief that you can use as input for any AI-driven or human graphic designer to create the logo image.

Logo Design Brief:

1. Company/Product Name: BeeWell Lozenges
2. Industry: Health and Wellness, Natural Remedies
3. Target Audience: Health-conscious consumers, families, and individuals seeking natural remedies for coughs and colds
4. Design Style: Modern, clean, and visually appealing with a touch of playfulness
5. Main Element: A stylized honeybee, symbolizing the natural honey ingredient and promoting the idea of wellness and health
6. Secondary Element: A honeycomb pattern in the background or integrated into the text, adding a visual link to the honey source and emphasizing the natural aspect of the product
7. Typography: Use a modern, clean, and easily readable font for the text "BeeWell Lozenges"; play with the font style, making the "Bee" part of "BeeWell" slightly bolder to emphasize the honeybee connection
8. Color Scheme: Incorporate warm, natural colors such as honey gold, amber, and a touch of green to represent the natural and soothing aspects of the product
9. Design Objective: Create a visually appealing and memorable logo that effectively communicates the BeeWell Lozenges brand identity and its association with natural relief for coughs and colds

You can share this design brief with an AI-driven logo generator or a human graphic designer to create the BeeWell Lozenges logo. Be sure to review the generated logo and request any adjustments necessar[illegible]ision and objectives.

Regenerate response

Images Generated by Midjourney*

Input logo design into Midjourney





*Midjourney can’t spell yet

Images Generated by Midjourney*

Input logo design into Midjourney





*Jumped into a chat forum to understand how to make Midjourney create a logo

Final Logo’s





The entire process from asking chatGPT for Marketing advice to generating these logos took 2 hours. Including purchasing both products.

Major Next Steps in AI

- Personal AI assistants – downloadable to the desktop
- Plug-ins
  - chatGPT → PowerPoint
  - chatGPT → Synthesia (custom AI video avatars → Articulate Storyline
  - chatGPT embedded in Excel
- Browser integration (chatGPT disconnected in Sept-2021)
- Voice Integration
- AutoGPT – task based GPT
- Text to Video – *launching right now*

Discussion Points

- Reducing the barrier of entry (skill) with AI
- Capabilities and Limitations of AI for business
- Applications in your business
  - From just yesterday: AI set to transform construction industry | Fox Business
  - Construction firm using chatGPT to source materials saving $$$'s
- Dangers of AI



AI - Helpful Links

blog.zoom.us/zoom-ai-companion/ Zoom AI Companion

www.futurepedia.io Find SaaS AI Tools for business and personal use

pactum.com Vender negotiation AI (Walmart Case Study)

openai.com/pricing Open AI Pricing

www.pinecone.io Tailorable AI for Business

www.unwrap.ai – sort customer feedback using tone and context

www.hyperwriteai.com – writing and personal assistant

www.betterup.com/platform - Coaching tool

runwayml.com – Video and Image generation

cohere.com – Integrate AI into existing products

openai.com/research/whisper - Speech recognition

aws.amazon.com/sagemaker/ - Amazon build your own LLM

scale.com – Enterprise AI data management