How to Use ChatGPT, Bard, and Other AI To Become a Better PPC Marketer

Frederick Vallaeys
HELLO!

I am Frederick Vallaeys
I am the Cofounder of Optmyzr

Find me on Twitter (@SiliconVallaeys), YouTube, the Optmyzr blog, or at PPC Town Hall.
Agenda

1. Generative AI’s Impact on Advertisers
2. Generate an entire campaign with GPT
3. GPT tips and tricks
4. Use GPT in Ad Scripts
Generative AI - A New Wave of Innovation

We're at the beginning of a new wave of disruptive innovation.
“We’ll have self-driving cars before we have fully automated PPC.”

- Fred Vallaey @ FoS
AI Remains Narrow

Narrow AI:
○ Solves a specific problem

General AI:
○ Solves any problem

What happens with self-driving cars when they encounter an obstacle?
○ They cannot back up! This would require an entirely new AI model...

@TaylorOgan
@SiliconVallaey
What is the future of ads?
Running a Search Engine (or Chatbot) is Expensive

GPT-3 would take 355 years to train on a single NVIDIA Tesla V100 GPU
→ Training would cost ~$5 million in compute time
ChatGPT (GPT-3.5) is estimated to cost $100k / day to operate
→ The cost of every word generated is $0.0003

Source: https://lambdalabs.com/blog/demystifying-gpt-3
Ads Pay the Bills to Run Search

- Only 1 million people use Neeva
- Only 180,000 people pay for Twitter Blue (less than 0.2% of users)
- 70% of Hulu users choose the ad-supported viewing plan
Bottom Line: Ads are here to stay
The end of Google?
SERP Comparison

Google search results for 'what does the winner of the super bowl get'

Microsoft Bing search results for 'what does the winner of the super bowl get'

$150,000
According to 3 sources

How much do winners of the Super Bowl get paid? Each member of the winning team will receive $150,000, according to the NFL's Collective Bargaining Agreement. This cash bonus is up $20,000 from last year, when the winners of the 2020 Super Bowl each took home $130,000.

How much do Super Bowl winners get paid? Each team member will receive $150,000, according to the NFL's Collective Bargaining Agreement. That's a $20,000 increase from last year's bonus when the Super Bowl-winning team took home $130,000.
The winner of the Super Bowl receives the **Vince Lombardi Trophy**, a championship ring, and a **cash bonus**.

According to the latest Collective Bargaining Agreement with the NFL, each member of the winning team will pocket **$157,000** for the Super Bowl LVI in 2023. This is more than last year, when the winners of the 2020 Super Bowl each took home **$130,000**.

The championship ring is generally valued between **$30,000** and **$50,000**, but collectors might pay much more for it. The Vince Lombardi Trophy is made of sterling silver and weighs about 7 pounds. It is worth about **$50,000**, but it is not sold or auctioned off by the NFL.

The New Bing

The first 30 days post launch of the new Bing (with ChatGPT integration):

- 45M total chats
- 1/3 of daily preview users chat daily
- 1/3 of preview users are brand new to Bing
- Bing (new and old) passes 100M DAU.
Google Bard vs OpenAI GPT

- **Prompt**: write an announcement that Fred is speaking at Friends of Search and work in the phrase that he is a friend of search.

**GPT 3**

- **Response**: We are thrilled to announce that Fred, a true friend of search, will be speaking at the upcoming Friends of Search event! With his extensive knowledge and experience in the industry, Fred is sure to deliver an insightful and engaging presentation that will leave attendees feeling inspired and informed. Don't miss out on this opportunity to hear from one of the most respected voices in search - register for Friends of Search today!

**Bard**

- **Response**: We are excited to announce that Fred, a friend of search, will be speaking at Friends of Search on March 25, 2023. Fred will be discussing the latest trends in search and how businesses can use search to improve their online presence...

  We hope you will join us for this informative and engaging presentation.

- Good at **creative writing**

- Intended to **improve search**

@Optmyzr
@SiliconVallaey
We are thrilled to announce that our very own Fred, a renowned expert in the field of digital marketing, will be a featured speaker at this year's Friends of Search conference! As a true "friend of search," Fred brings a wealth of knowledge and experience to the table, which he is eager to share with all attendees...

Mark your calendars now for this must-attend event! The Friends of Search conference will take place from April 18th to 20th, and Fred's keynote speech is scheduled for April 19th at 1:00 PM.

See you there! 🚀
Bottom Line: Search will improve across the board so more people will use it and this will benefit advertisers...

But maybe not by doing the same we’ve been doing for 20 years
Using GPT for Automating Every Aspect of PPC

Keywords → Ad Groups → Ads → Search Terms → Shopping
Find some keyword ideas to advertise the landing page at https://www.optmyzr.com/solutions/reporting/

1. Reporting automation
2. Custom reporting
3. PPC reporting
4. Performance reporting
5. Analytics reporting
6. Data visualization
7. Reporting dashboards
8. Marketing reporting
9. Report templates
10. Ad campaign reporting
11. Reporting software
12. Multi-channel reporting
13. Real-time reporting
14. Business intelligence
15. Reporting insights.
Let's Use GPT for Sheets...
Find More Keywords for an Ad Group

Using the GPT extension for Google Sheets:

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>find 5 keywords similar to these:</td>
<td>&quot;amazon ppc tools&quot;,&quot;optimize amazon ppc&quot;,&quot;amazon advertising software&quot;,&quot;amazon ads automation&quot;,&quot;amazon ppc automation&quot;,&quot;amazon ppc software&quot;,&quot;amazon ppc management tools&quot;,&quot;amazon ppc automation software&quot;,&quot;amazon ads software&quot;,&quot;amazon sponsored ads management&quot;,&quot;amazon ppc management software&quot;</td>
</tr>
<tr>
<td>1. Amazon PPC Optimization</td>
<td>1. Amazon PPC Optimization</td>
</tr>
<tr>
<td>3. Amazon Ads Optimization</td>
<td>3. Amazon Ads Optimization</td>
</tr>
<tr>
<td>4. Amazon PPC Strategies</td>
<td>4. Amazon PPC Strategies</td>
</tr>
<tr>
<td>5. Amazon Sponsored Ads Automation</td>
<td>5. Amazon Sponsored Ads Automation</td>
</tr>
</tbody>
</table>

@Optmyzr
@SiliconVallaes

© 2023 Optmyzr Inc. All rights reserved.
Keyword Classifier

Here's a suggested categorization:

**PPC (Pay-Per-Click):**
- pay to click ads
- ppc
- ppc management tools
- ppc tools
- pay per click
- ppc campaign management tools
- pay per click platforms
- ppc bid management tools
- ppc automation
- pay per click ads
- pay per click advertising
- ppc traffic
- ppc advertising firm

**Automation:**
- automate click with clickseo
- automated email marketing
- automate website actions
- facebook ads automation tools
- facebook marketing automation software
- payment automation solutions
- automated ads
Create new headlines from scratch

write a few ad headlines of 30 characters or less for those keywords and that landing page

1. Boost PPC ROI with Automated Reporting
2. Customize Your Reports & Impress Clients
3. Streamline Your PPC Reporting Today
4. Unlock Insights with Performance Reports
5. Visualize Your Data for Better Decisions
6. Get a Bird's Eye View with Dashboards
7. Transform Your Marketing Reporting
8. Save Time with Report Templates
9. Optimize Ad Campaigns with Analytics
10. Track Multi-Channel Campaigns Easily.
Create descriptions similar to others you’ve used

| suggest 2 ad descriptions like these | 1. Automate your strategies or use proven pre-built strategies to improve ad performance  
2. Automatically adjust bids to make the right bid at the right time on the right keywords  
3. Automatically pause or enable ads based on your inventory levels and seasonality  
4. Outperform your competitors on Amazon with automated campaign, bid & budget management.  
5. Get the most out of your ad budget with automated optimization and targeting.  
6. Maximize your ad performance with automated bidding and budgeting strategies. |

@Optmyzr  
@SiliconValleys  

© 2023 Optmyzr Inc. All rights reserved.
Translate Ad Text

Text to translate: Optmyzr is a ppc management software that helps advertisers save time and get more results from search marketing

| English to Dutch | Optmyzr is een ppc-beheerssoftware die adverteerders helpt tijd te besparen en meer resultaten te behalen uit zoekmarketing. |
| English to Spanish | Optmyzr es un software de gestión de PPC que ayuda a los anunciantes a ahorrar tiempo y obtener mejores resultados de la publicidad en motores de búsqueda. |
| English to Finnish | Optmyzr on ppc-hallintaohjelmisto, joka auttaa mainostajia säéstämään aikaa ja saamaan enemmän tuloksia hakumarkkinoinnista. |
Create a table of all the keywords in this list and sort them from most to least relevant for a company that sells PPC management software:

- pay per click programs
- pay per click affiliate programs without website
- ppc management
- best ppc management tools
- quartile advertising
- software ppc
- marketing automation software
- ppc management for small business
- pay to click
- ppc campaign management tools
- ppc bid management tools
- ppc automation
- pay per click affiliate programs south africa
- ptc lab pay per click platform
- digital marketing ki
- ppc firm
- ppc
- facebook ads automation tools
- pay per click ads
- automate website actions
- facebook marketing automation software
- scale insights
- payment automation solutions
- ads click bot
- pay per click advertising
- automated ads

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Relevance Score (1-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPC management software</td>
<td>10</td>
</tr>
<tr>
<td>PPC management</td>
<td>9</td>
</tr>
<tr>
<td>Pay per click programs</td>
<td>9</td>
</tr>
<tr>
<td>Best PPC management tools</td>
<td>8</td>
</tr>
<tr>
<td>PPC campaign management tools</td>
<td>8</td>
</tr>
<tr>
<td>PPC bid management tools</td>
<td>8</td>
</tr>
<tr>
<td>PPC automation</td>
<td>8</td>
</tr>
<tr>
<td>PPC platform</td>
<td>8</td>
</tr>
<tr>
<td>Pay per click platforms</td>
<td>7</td>
</tr>
<tr>
<td>Automated advertising platforms</td>
<td>7</td>
</tr>
<tr>
<td>Marketing automation platforms</td>
<td>7</td>
</tr>
<tr>
<td>Adtomic</td>
<td>7</td>
</tr>
<tr>
<td>PPC keyword tool</td>
<td>7</td>
</tr>
<tr>
<td>Optmyzr</td>
<td>7</td>
</tr>
<tr>
<td>Adspy</td>
<td>7</td>
</tr>
<tr>
<td>PPC software</td>
<td>7</td>
</tr>
<tr>
<td>PPC traffic</td>
<td>6</td>
</tr>
<tr>
<td>PPC advertising firm</td>
<td>6</td>
</tr>
<tr>
<td>PPC management for small business</td>
<td>6</td>
</tr>
<tr>
<td>Pay per click advertising</td>
<td>6</td>
</tr>
<tr>
<td>Automate website actions</td>
<td>4</td>
</tr>
<tr>
<td>Facebook marketing automation software</td>
<td>4</td>
</tr>
<tr>
<td>Scale insights</td>
<td>4</td>
</tr>
<tr>
<td>Payment automation solutions</td>
<td>4</td>
</tr>
<tr>
<td>Ads click bot</td>
<td>4</td>
</tr>
<tr>
<td>Automated feed ads dpa</td>
<td>4</td>
</tr>
<tr>
<td>Ads clicker bot</td>
<td>4</td>
</tr>
<tr>
<td>Affiliate marketing platform</td>
<td>4</td>
</tr>
<tr>
<td>Online campaign apps management platform</td>
<td>4</td>
</tr>
<tr>
<td>Marketing automation module for perfex crm</td>
<td>4</td>
</tr>
<tr>
<td>CPABuild self click</td>
<td>3</td>
</tr>
<tr>
<td>Social media automation marketing software</td>
<td>3</td>
</tr>
<tr>
<td>Best accounts payable automation</td>
<td>3</td>
</tr>
<tr>
<td>Pay per click advertisers</td>
<td>3</td>
</tr>
<tr>
<td>Pay per click affiliate programs in nigeria</td>
<td>3</td>
</tr>
<tr>
<td>Auto posting tools</td>
<td>3</td>
</tr>
<tr>
<td>PPC AI</td>
<td>3</td>
</tr>
</tbody>
</table>
Shopping Feed Cleanup

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>what's the brand of the product on the page</td>
<td>Nespresso</td>
</tr>
<tr>
<td>what's the product on the page</td>
<td>Nespresso Vertuo Next Premium Coffee &amp; Espresso Maker with Frother</td>
</tr>
<tr>
<td>what's the category of the product on the page</td>
<td>Kitchen Appliances</td>
</tr>
</tbody>
</table>
what is the topic of this page, in 5 words or less
https://www.optmyzr.com/solutions/integrations/
→ Integrations Solutions

what is the topic of this page, in 5 words or less
https://www.optmyzr.com/solutions/reporting/
→ PPC Reporting Solutions
Audience Development

what characteristics or attributes of a hotel would a budget conscious traveler care about? Things such as the following: “cheap price clean rooms”

A budget-conscious traveler would typically look for the following characteristics or attributes in a hotel:

1. Affordable price: The most important factor for budget-conscious travelers is finding a hotel that offers a reasonable price for their budget. They want to get the most value for their money.
2. Location: Budget-conscious travelers may prioritize a hotel that is centrally located or

For each of these, can you suggest some related search keywords and put them in a table

Sure! Here’s a table with some related search keywords for each characteristic or attribute:

<table>
<thead>
<tr>
<th>Characteristic/Attribute</th>
<th>Related Search Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable price</td>
<td>budget hotels, cheap hotels, low-cost accommodations, discounts, deals, offers</td>
</tr>
<tr>
<td>Location</td>
<td>central location, public transportation, proximity to attractions, walkability, accessibility</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>clean rooms, hygiene, sanitation, housekeeping, spotless</td>
</tr>
</tbody>
</table>

Ads using audience targeting must comply with the [Personalized advertising](#) guidelines that serve all. All campaigns are subject to the Google Ads advertising policies and

Include people who match any of the following interests or behaviors:

- People with any of these interests or purchase intentions
- People who searched for any of these terms on Google
- Only on campaigns running on Google properties. On other campaigns,
GPT Tips and Tricks
GPT Settings - Temperature Determines Creativity

How creative do you want GPT to be with its responses?

1 - Creative, but possibly not true

0 - Deterministic, more likely to be true

Temperature is a value between 0 and 1 that essentially lets you control how confident the model should be when making these predictions. Lowering temperature means it will take fewer risks, and completions will be more accurate and deterministic. Increasing temperature will result in more diverse completions.
Temperature

temperature is more important when you request longer answers.

→ Keywords
  not very impactful

→ Descriptions
  more impactful

"I have a Google Ads ad group.

Find 5 more keywords for this ad group like this:

● "pay per click software"
● "paid search campaign management"
● "ppc management platform"
● "ppc management tool"
● "ppc reporting software"
● automated ppc
● "ppc ad campaign management software"
● "ppc software"
● "ppc automation"
● ppc automation tools
● "ppc bid management tools"
● "ppc management software"
The prompt determines the output

***Prompt 1:***

suggest 2 ad descriptions like these
Automate your strategies or use proven pre-built strategies to improve ad performance, Automatically adjust bids to make the right bid at the right time on the right keywords, Automatically pause or enable ads based on your inventory levels and seasonality, Outperform your competitors on Amazon with automated campaign, bid & budget management.

1. Maximize your ad performance with automated strategies and pre-built strategies. Easily adjust bids to get the most out of your campaigns and optimize your budget.
2. Get ahead of the competition with automated campaign, bid & budget management. Automatically pause or enable ads based on your inventory levels and seasonality for maximum efficiency.

→ Excessively long suggestions

***Prompt 2:***

Suggest 2 ad descriptions like these
1. Automate your strategies or use proven pre-built strategies to improve ad performance
2. Automatically adjust bids to make the right bid at the right time on the right keywords
3. Automatically pause or enable ads based on your inventory levels and seasonality
4. Outperform your competitors on Amazon with automated campaign, bid & budget management.
5. Get the most out of your ad budget with automated optimization and targeting.
6. Maximize your ad performance with automated bidding and budgeting strategies.

→ More appropriate length of suggestions
No need to be wordy

1. Additional detail may not help get a better response

Here are five new keywords that could be added to the ad group:

1. PPC bid optimization: This keyword targets users who are looking for a tool that can help them optimize their PPC bids for maximum return on investment.
2. AdWords automation: This keyword targets users who are looking for a tool that can help them automate their AdWords campaigns.
3. PPC campaign analysis: This keyword targets users who are looking for a tool that can help them analyze their PPC campaigns to improve performance.
4. Keyword research tool: This keyword targets users who are looking for a tool that can help them research and select the best keywords for their PPC campaigns.
5. Performance reporting: This keyword targets users who are looking for a tool that can help them track and report on the performance of their PPC campaigns.

The ad group already contains the keywords:
- “pay per click software”
- “paid search campaign management”
- “ppc management platform”
- “ppc management tool”
- “ppc reporting software”
- automated ppc
- “ppc ad campaign management software”
- “ppc software”
- “ppc automation”
- ppc automation tools
- “ppc bid management tools”
- “ppc management software”

The top search queries matching the ad group are:
- pay to click ads
- ppc management tools
- ppc tools
- pay per click
- automate click with clicksee
- pay per click programs
- pay per click affiliate programs without websites
- ppc management
- automated email marketing
- best ppc management tools

The ads in this group contain text like this:
- Optmyzr - PPC Tool for Experts
- Grow PPC Revenue with Optmyzr
- Powerful optimizations to help agencies and marketing teams of all sizes manage PPC faster
- PPC Users in 30+ Countries
- PPC Management Software
- Trusted by 75K+ Advertisers
- PPC Management Tool
- PPC Software
- Automate PPC Ads with Optmyzr
- Rated 4.7+ on Top Review Sites
- Automate tedious PPC tasks & spend less time managing campaigns, more time driving growth
- Pay Per Click Software
- Easily manage multiple PPC accounts & campaigns with greater control over any bid strategy
- Optmyzr for PPC Automation
- 75K+ Users Across the Globe
- Audit accounts, manage keywords, search queries, ads, budgets, bids, placements & more

The ads direct to this landing page:
- https://www.optmyzr.com/
Suggest 5 new keywords for a Google Ads ad group.

The ad group already contains the keywords

- "pay per click software"
- "paid search campaign management"
- "ppc management platform"
- "ppc management tool"
- "ppc reporting software"
- automated ppc
- "ppc ad campaign management software"
- "ppc software"
- "ppc automation"
- "ppc automation tools"
- "ppc bid management tools"
- "ppc management software"

The top search queries matching the ad group are:

- pay to click ads
- ppc management tools
- ppc tools
- pay per click
- automate click with clickwo
- pay per click programs
- pay per click affiliate programs without website
- ppc management
- automated email marketing
- best ppc management tools

The ads in this ad group contain text like this:

- Optmyzr – PPC Tool for Exports
- Grow PPC Revenue with Optmyzr
- Powerful optimizations to help agencies and marketing teams of all sizes manage PPC faster
- PPC Users in 30+ Countries
- PPC Management Software
- Trusted by 75K+ Advertisers
- PPC Management Tool
- PPC Software
- Automate PPC Ads with Optmyzr
- Rated 4.7+ on Top Review Sites
- Automate tedious PPC tasks & spend less time managing campaigns, more time driving growth
- Pay Per Click Software
- Easily manage multiple PPC accounts & campaigns with greater control over any bid strategy
- Optmyzr for PPC Automation
- 75K+ Users Across the Globe
- Audit accounts, manage keywords, search queries, ads, budgets, bids, placements & more

The ads direct to this landing page:

- https://www.optmyzr.com/

No need to be wordy

1. Don't make your list too long or GPT is likely to drift.
2. GPT knows what a campaign and an ad group is so no need to explain this
3. This prompt confused GPT about what output you expected

Here are five new keywords that could be added to the ad group:

1. PPC bid optimization: This keyword targets users who are looking for a tool that can help them optimize their PPC bids for maximum return on investment.
2. AdWords automation: This keyword targets users who are looking for a tool that can help them automate their AdWords campaigns.
3. PPC campaign analysis: This keyword targets users who are looking for a tool that can help them analyze their PPC campaigns to improve performance.
4. Keyword research tool: This keyword targets users who are looking for a tool that can help them research and select the best keywords for their PPC campaigns.
5. Performance reporting: This keyword targets users who are looking for a tool that can help them track and report on the performance of their PPC campaigns.
Same inputs but optimized prompt

The prompt has all the same data as last slide but ends with a list of keywords. The system continues the flow and now produces useful keyword suggestions.
You Can Ask GPT for Data in Tables

categorize the following keywords and put them in two columns, the first column is the keyword, the second column the categorization:

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Categorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>ppc advertising firm</td>
<td>PPC management</td>
</tr>
<tr>
<td>marketing automation platforms list</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>ppc ai</td>
<td>PPC</td>
</tr>
<tr>
<td>efficient email marketing software</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>best accounts payable automation</td>
<td>Automation</td>
</tr>
<tr>
<td>marketing automation module for perfex crm</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>cpabuild self click</td>
<td>PPC</td>
</tr>
<tr>
<td>ppc management software</td>
<td>PPC management</td>
</tr>
<tr>
<td>email marketing tools</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>adcash pay per click</td>
<td>PPC</td>
</tr>
<tr>
<td>pay per click advertisers</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>crm and marketing automation platforms</td>
<td>Automation</td>
</tr>
<tr>
<td>ppc ninja</td>
<td>PPC</td>
</tr>
<tr>
<td>kdp automation tool</td>
<td>PPC management</td>
</tr>
<tr>
<td>google ppc campaign management</td>
<td>Marketing Automation</td>
</tr>
<tr>
<td>pay per click affiliate programs in nigeria</td>
<td>PPC</td>
</tr>
<tr>
<td>marketing automation b2b</td>
<td>PPC</td>
</tr>
</tbody>
</table>

@Optmyzr
@SiliconVallaeys
Optimize the prompt to save cost

GPT usage is based on number of tokens in the prompt and response

Fine-tuning a model is cheaper when your prompts need to be long to get the right response

source: https://clive-gomes.medium.com/pre-training-large-language-models-at-scale-d2b133d5e219
GPT + Ad Scripts
GPT Ad Script

1. Find RSAs with missing headlines
2. Use GPT to suggest new variations

<table>
<thead>
<tr>
<th>Campaign</th>
<th>Ad Group</th>
<th># Headlines</th>
<th>Ad Strength</th>
<th>Headline 1</th>
<th>Headline 2</th>
<th>Headline 11</th>
<th>Headline 12</th>
<th>Description 1</th>
<th>Description 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optmyzr - Brand</td>
<td>Optmyzr - Brand</td>
<td>15</td>
<td>AVERAGE</td>
<td>Optmyzr - PPC Tool Grow PPC Revenue 1 Platform for 4 A Trusted by 75K+ Advertisers</td>
<td>75K+ Users Across PPC Users in 30+ c 4.7+ On Top Helping marketing P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optmyzr - Brand</td>
<td>Optmyzr - Brand</td>
<td>11</td>
<td>POOR</td>
<td>Optmyzr for PPC - Optmyzr for PPC &amp; Free Trial - Get Start Simplify PPC Management</td>
<td>Streamline Your PI Save Time with Au Revolutionize Your Power your PPC campaign</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optmyzr - Brand</td>
<td>Optmyzr - Brand</td>
<td>15</td>
<td>AVERAGE</td>
<td>Optmyzr for PPC &amp; Optmyzr for PPC &amp; Start Free Trial - Get Start 14 Days Free Trial Now</td>
<td>PPC Users in 30+ c 4.7+ On Top Trusted by 75K+ A Helping marketing P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - GA Google Ads</td>
<td>Generic Kwds - GA Google Ads</td>
<td>13</td>
<td>AVERAGE</td>
<td>Google Ads Auto Set Conditional Google 75K+ Users Across PPC Users in 30+ Countries</td>
<td>Rated 4.7+ On Top Maximize ROI with Boost PPC Perform Google ads autom A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - GA Google Ads</td>
<td>Generic Kwds - GA Google Ads</td>
<td>12</td>
<td>POOR</td>
<td>Designed for Goog Tool for Paid Adve Free Trial - Get Start Try Optmyzr for Free</td>
<td>Boost PPC Perform Maximize Google Streamlined Ads Go Google ads autom A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - GA Google Ads</td>
<td>Generic Kwds - GA Google Ads</td>
<td>11</td>
<td>AVERAGE</td>
<td>Google Ads Auto Set Conditional Google Try Optmyzr for Fr Automate Your Ad Campaign</td>
<td>Maximize Your Go Effortlessly Manage Streamline Your Google ads autom A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - PP PPC Kwds</td>
<td>Generic Kwds - PP PPC Kwds</td>
<td>12</td>
<td>AVERAGE</td>
<td>Per Click Softv PPC Software 75K+ Users Across Rated 4.7+ On Top Review Sites</td>
<td>Boost PPC Success Optimize PPC Cam PPC Made Easy with Automate tedious P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - PP PPC Kwds</td>
<td>Generic Kwds - PP PPC Kwds</td>
<td>12</td>
<td>AVERAGE</td>
<td>Per Click Softv PPC Software Start Free Trial - Fr Free Trial - Get Started Today</td>
<td>Maximize PPC ROI Boost Profits with Optimize PPC Ads Automate tedious P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic Kwds - PP PPC Kwds</td>
<td>Generic Kwds - PP PPC Kwds</td>
<td>15</td>
<td>GOOD</td>
<td>Per Click Softv PPC Software 1 Platform for 4 At that Experts Use &amp; Trust</td>
<td>Start Free Trial - Fr Start 14 Days Free Trial - Get Start Automate tedious P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon - Compet Amazon - Sellifics</td>
<td>Amazon - Compet Amazon - Sellifics</td>
<td>15</td>
<td>GOOD</td>
<td>Sellifics alternative Trusted alternative Optmyzr Trusted Rated 4.7+ On top review sites</td>
<td>PPC users in 30+ c 75K+ users across Trusted by 75K+ a Get Optmyzr &amp; ads A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon - Generic Amazon PPC Kwds</td>
<td>Amazon - Generic Amazon PPC Kwds</td>
<td>15</td>
<td>GOOD</td>
<td>Amazon PPC Softv Amazon PPC tools Get control over a Start free trial - Full access</td>
<td>Start 14-day free t Free trial - Get start Try Optmyzr for frn Automate your str</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Write a Google Ads Script in GPT-4

To create a Google Ads script that generates a report of all keywords with over 100 impressions in the last 30 days and saves it to a Google Sheet, follow the steps below:

1. Make sure you have enabled the Google Sheets API in your Google Ads account.
2. Create a new Google Sheet where the data will be saved.
3. Replace "YOUR_SPREADSHEET_URL" in the code below with the URL of the Google Sheet you created in step 2.
4. Copy and paste the following script into the Google Ads Scripts Editor and click "Preview" to check.
Thanks

Frederick Vallaey (@SiliconVallaey)

Connect with me on LinkedIn

Try Optmyzr’s 2-week free trial (we use GPT)
How to Use GPT

chat.openai.com
- Free or $20/month for premium
- Uses GPT-3.5
- Tuned for conversations (context is carried forward)

GPT Playground
- Requires paid API key
- Try any model GPT-1...
- Pay $20/mo to get priority access to GPT-4

GPT for Sheets and Docs
- Use GPT in tools you already use

Jasper.ai
- Multi-LLM
- Templates

MS Edge
- Chat integrated in search
- Content generation tools accessible from browser

Optmyzr
- GPT integrated in existing toolset to help advertisers
AI Needs Us for Guidance

Narrow AI solves PPC problems, but humans need to guide it with what to solve for...

1. Connect Business Data to PPC
   Feeds Assets

2. Turn Business Goals into PPC Targets
   Account Structure
   tCPA or tROAS

3. Quantify Business Results from PPC
   Leads → Customers
   Sales → Profits
Is it more noise

Optmyzr cuts through it
History of GPT

Lorem Ipsum
Lorem ipsum dolor sit amet, consectetur adipiscing.

Generate Text
Creative ways to get text answers to text prompts

Conversational
Have a chat where the system remembers context from what was discussed so far

Multi-Modal
Show a picture of your fridge and get recipe ideas written in the style of Rudolph Van Veen

GPT-4
Our most advanced model, available to Plus subscribers.
GPT-4 excels at tasks that require advanced reasoning, complex instruction understanding, and more creativity.

Default (GPT-3.5)
Optimized for speed, currently available to Plus users
Reasoning
Speed
Conciseness
Other Applications of OpenAI

Vector scoring

This is Optmyzr’s model but it can be done with OpenAI as well
How GPT Works
GPT: Generative Pre-trained Transformer
Transformers in AI - Invented by Google Brain

Figure 1: The Transformer - model architecture.

https://proceedings.neurips.cc/paper/2017/file/3f5ee243547dee91fbd053c1c4a845aa-Paper.pdf
Training vs Tuning

source: https://clive-gomes.medium.com/pre-training-large-language-models-at-scale-d2b133d5e219
Fine Tuning

Provide curated examples of prompts and expected responses

- example interactions of your support team
- example FAQs
- examples with no answer (stop GPT from guessing)

Q: Who is Batman?
A: Batman is a fictional comic book character.

Q: What is torsalplexity?
A: ?

Q: What is Devc9?
A: ?

Q: Who is George Lucas?
A: George Lucas is American film director and producer famous for creating Star Wars.

Q: What is the capital of California?
A: Sacramento.
Large Language Models and Moore’s Law

Exponential Growth

source: https://hanlab.mit.edu/projects/efficientnlp_old/
The winner of the Super Bowl LVII was the Kansas City Chiefs. They defeated the Philadelphia Eagles 38-35 in a thrilling game at State Farm Stadium in Glendale, Arizona on February 12, 2023.

The Chiefs, led by star quarterback Patrick Mahomes, who was named the MVP, came back from a 10-point deficit in the fourth quarter and scored 17 unanswered points to clinch their second Super Bowl title in four years. Mahomes threw two touchdown passes and ran for 26 yards on the game-winning drive before Harrison Butker kicked a 27-yard field goal with 8 seconds left to seal the victory.
The ability to perform multi-step arithmetic (left), succeed on college-level exams (middle), and identify the intended meaning of a word in context (right) all emerge only for models of sufficiently large scale. The models shown include LaMDA, GPT-3, Gopher, Chinchilla, and PaLM.

source: https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html?m=1
Models that use standard prompting directly provide the answer to a multi-step reasoning problem. In contrast, chain of thought prompting teaches the model to deconstruct the problem into intermediate reasoning steps, better enabling it to reach the correct final answer.

source: https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html?m=1
Transformers were introduced in 2017 by a team at Google Brain[1] and are increasingly the model of choice for NLP problems,[2] replacing RNN models such as long short-term memory (LSTM). The additional training parallelization allows training on larger datasets. This led to the development of pretrained systems such as BERT (Bidirectional Encoder Representations from Transformers) and GPT (Generative Pre-trained Transformer), which were trained with large language datasets, such as the Wikipedia Corpus and Common Crawl, and can be fine-tuned for specific tasks.[3][4]

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Parameter count</th>
<th>Training data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPT-1</td>
<td>12-level, 12-headed Transformer decoder (no encoder), followed by linear-softmax.</td>
<td>0.12 billion</td>
</tr>
<tr>
<td>GPT-2</td>
<td>GPT-1, but with modified normalization</td>
<td>1.5 billion</td>
</tr>
<tr>
<td>GPT-3</td>
<td>GPT-2, but with modification to allow larger scaling.</td>
<td>175 billion</td>
</tr>
</tbody>
</table>
Prometheus Model
Keyword Cluster

Analyze keywords and group them into related clusters based on their semantic similarity and relevance to each other.

Keywords

- German engineering
- Electric cars
- Sedans
- SUVs
- Sports cars
- Innovative technology
- Driving experience
- Horror movies
- Thrillers
- Scary films
- Suspense
- Haunted
- Gothic
- Psychological horror
- Supernatural
- Terror
- Dark comedy
Gordon Moore who coined Moore's Law and whose predictions about computing power held. Processors got faster and data storage cheaper. With these 2 factors combined, we are now in a world with unimaginable computing power and lots of data it can use to learn. Hence Machine Learning was able to take off, a subset of AI that has made search better. Just look at how humans are now conversing with AI like ChatGPT and soon Bard. And what it means to be an advertiser has been affected as well. We rely more on AI automations and less on button-pushing to achieve great results.
20 Years of AI in Google Ads

- **Large Language Models (GPT)**
  - Lorem ipsum dolor sit amet, consectetur adipiscing. Donec risus dolor, porta venenatis neque sit amet, pharetra luctus felis.

- **Similar Audiences**
  - Lorem ipsum dolor sit amet, consectetur adipiscing. Donec risus dolor, porta venenatis neque sit amet, pharetra luctus felis.

- **Smart Bidding (eCPC, tCPA, tROAS)**
  - Lorem ipsum dolor sit amet, consectetur adipiscing. Donec risus dolor, porta venenatis neque sit amet, pharetra luctus felis.

- **Matching Broad Match Keywords to Queries**
  - Lorem ipsum dolor sit amet, consectetur adipiscing. Donec risus dolor, porta venenatis neque sit amet, pharetra luctus felis.

- **Predicted CTR and Quality Score**
  - Lorem ipsum dolor sit amet, consectetur adipiscing. Donec risus dolor, porta venenatis neque sit amet, pharetra luctus felis.
Optimize the prompt to save cost

Multiple models, each with different capabilities and price points. Prices are per 1,000 tokens. You can think of tokens as pieces of words, where 1,000 tokens is about 750 words. This paragraph is 35 tokens.

208 chars = 35 tokens
6000 chars = 1000 tokens
You need fewer examples for familiar tasks. For this classifier, we don't provide any examples. This is because the API already has an understanding of sentiment and the concept of a Tweet. If you're building a classifier for something the API might not be familiar with, it might be necessary to provide more examples.
GPT-3.5 vs GPT-4


Welcome to Casa de las Hamacas: Your Dream Vacation Home in Punta de Mita!

Trees Experience tropical luxury in this stunning oceanfront villa 🌴

View of the luxurious Casa de las Hamacas with its lush gardens and private pool area

Step into paradise at Casa de las Hamacas, a breathtaking oceanfront vacation home located in the exclusive Punta de Mita, Mexico. This luxurious villa offers everything you need for an unforgettable vacation experience, surrounded by vibrant gardens and spectacular ocean views.

Luxurious Living 🏡

Casa de las Hamacas is designed with your comfort in mind, featuring stylish interiors, spacious living areas, and lavish accommodations for up to 10 guests. With five beautifully decorated bedrooms, each with an en-suite bathroom, you'll have plenty of space to relax and unwind after a day spent exploring the area.

Escape to paradise and experience luxury at its finest in our stunning home in Punta de Mita. Nestled in the gated community of Real del Mar Hamacas is the ultimate tropical oasis.

With breathtaking ocean views and exquisite architecture, this 4-bedroom villa is perfect for families, couples, or a group of friends seeking luxury. Lounge in the expansive outdoor living area, complete with a sparkling pool, surrounded by lush palm trees and vibrant tropical gardens.

Indoors, you'll find elegant furnishings, high-end appliances, and all the comforts you need for a comfortable stay. Each bedroom boasts its own ensuite bathroom, and the spacious master suite features a private balcony with panoramic Ocean views.
RSA Script

Here's a Google Ads script to create a Google Spreadsheet with RSA ads that have less than X headlines or Y descriptions. Please make sure you've enabled the Google Sheets API in your Google Ads Scripts by following the instructions in this guide:

https://developers.google.com/google-ads/scripts/docs/features/google-sheets

```javascript
function main() {
  // Input Settings
  var SPREADSHEET_URL = ''; // If blank, create a new spreadsheet. If not blank, use this URL.
  var SHEET_NAME = 'RSA Ads';
  var INCLUDE_PAUSED = false; // Change to true if you want to include paused ads.
  var MAX_HEADLINES = 15;
  var MAX_DESCRIPTIONS = 4;

  // Spreadsheet setup
  var spreadsheet;
  if (SPREADSHEET_URL === '') {
    spreadsheet = SpreadsheetApp.create('RSA Ads Spreadsheet');
    SPREADSHEET_URL = spreadsheet.getUrl();
  } else {
```

© 2023 Optmyzr Inc. All rights reserved.
in that same script, if the RSA has fewer than 15 headlines, could you use the GPT API to suggest new headlines and add those in the same spreadsheet?

To integrate GPT API in the Google Ads script, you'll first need to deploy a simple proxy using Google Cloud Functions or another serverless service to call the OpenAI API. Due to restrictions in Google Ads scripts, you cannot directly call external APIs with authentication headers.

Once you have set up a serverless function, you can use the URL in your Google Ads script to make requests.

Here's the updated script with GPT API integration to suggest new headlines and add them to the spreadsheet:

```javascript
// Other parts of the script remain the same

// Add this function to call the GPT API
function callGPTApi(prompt) {
    // Call the GPT API here
}
```
What are chores a 9 year old could do to earn an allowance?

About 1,040,000 results (0.67 seconds)

Age-appropriate chores 8-9 year olds

- Loading dishwasher.
- Emptying dishwasher.
- Helping with dinner (e.g. peeling carrots)
- Hoovering.
- Raking leaves.

Pocket Money Chores List – A Parent’s Guide

Related questions

What are reasonable chores for a 9 year old?
What is a good allowance for a 9 year old?
Do kids do chores for allowance?

There are many age-appropriate chores that a 9-year-old can do to earn an allowance. Here are some examples:

1. Making their bed every morning
2. Putting away their clean laundry
3. Sweeping or vacuuming the floor
4. Dusting the furniture
5. Setting the table for meals
6. Washing dishes or loading the dishwasher
7. Taking out the garbage or recycling
8. Watering plants or helping with yard work
9. Feeding and caring for pets
10. Helping with grocery shopping by making a list or carrying items

Of course, the specific chores will depend on the individual child’s abilities and interests, as well as the family’s needs and expectations. It’s important to communicate clearly with your child about what is expected of them and how much they will earn for completing each chore. This will help them develop a sense of responsibility and work ethic, as well as an understanding of how money is earned and managed.
Different Queries, Different Need for Ads

Low
What is 1cm in inches
→ no ads
Ads can’t add much value to this factual answer which gives little indication about who the user is or commercial intents

Mid
BMI calculator
→ audience-list member
Someone who searches this may not care to see ads but they may be interested in weight loss which could be a great audience signal

High
hotels in Amsterdam
→ lots of ads
Ads can help the user choose a hotel they like
New skill you need: Prompt Design

Source: Tweeted by Andrej Karpathy on June 18, 2020
Which result do you prefer?

Here are some hotels in Santiago, Chile that you might be interested in. I have sorted them by their ratings and hotel classes. You can click on the links to see more details and book your stay.

- **Hotel Cumbres Lastarria**: A 4-star hotel in the trendy Lastarria neighborhood with a rating of 9 out of 10 from Tripadvisor. The top comment says: "Lastarria itself is a safe and vibrant neighborhood with fantastic restaurants and bars."

- **NH Collection Plaza Santiago**: A 5-star hotel with a rating of 9 out of 10 from Tripadvisor. The top comment says: "Love to stay at the Radisson."

- **Radisson Blu Hotel**: A 4-star hotel with a rating of 8 out of 10 from Booking.com. The top comment says: "Unimart across road and near great parks and an excellent mall."

- **Hotel Altiplanico Bellas Artes**: A 3-star hotel with a rating of 8.6 out of 10 from Booking.com. The top comment says: "Agree, a lovely boutique hotel in a great central location."

- **Hotel Pullman Santiago Vitacura (ex Atton)**: A 3-star hotel with a rating of 9 out of 10 from Tripadvisor. The top comment says: "Great for business - located in the beautiful upscale section of Santiago."

- **Four Points by Sheraton Santiago**: A 4-star hotel with a rating of 8 out of 10 from Tripadvisor. The top comment says: "The reception staff were excellent with a perfect command of English and always offering help."

**DoubleTree by Hilton Hotel Santiago - Vitacura**
Reasonable Expectations

GPT output needs fact checking and human review

Think of it as a research assistant intern

● good at summarizing complex data
● good for ideation

The things we don’t like about GPT are the same qualities we dislike in humans (we trained it!)
Top P

An alternative to temperature.

How confident to be in the next word selected.

→ e.g. 0.3 means it will only consider the top 30% of probable next tokens

0 (consider few options) … ... 1 (consider all options)
Regenerate the response

Temperature and P-level can control how similar new responses will be