



AFP Complimentary Webinar

The Future of Fundraising: Machine Learning, GPT and AI Assistants

Presented by Tim Paris



About me

- PhD in neuroscience
- CEO/Co-founder of Dataro
- Lover of fundraising data
- Recently moved to San Francisco

👋 Currently at Bridge Conference in D.C.



Agenda

 AI masterclass

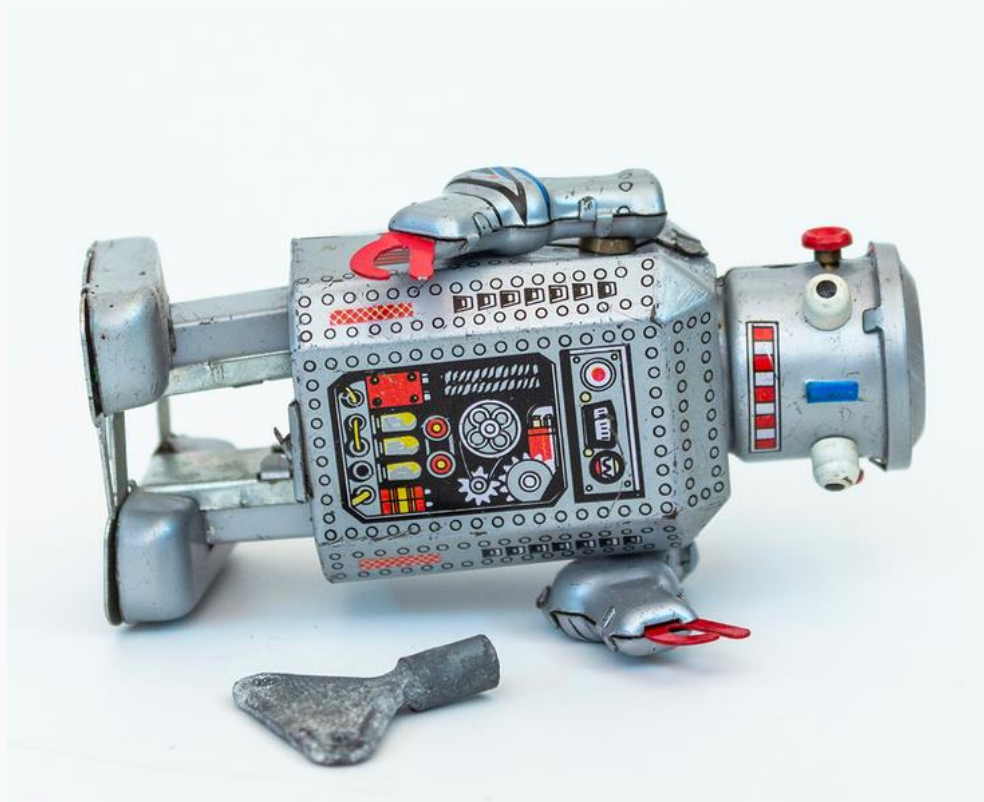
 What should you (not) do with it?

 Share real world examples

 Help you get started



What is the future of AI?



"Nothing can replace me"



"Humans need not apply"

The 4 W's (and H) of fundraising

Who

When

Why

How

What



The 4 W's (and H) of fundraising

Who	Donor 123
When	Now, Next year, Thursdays?
Why	Prospect, Upgrade, Convert?
How	Mail, Phone, Email, SMS?
What	Emotional, Actionable, etc



How often do you use AI (like Chat GPT?)

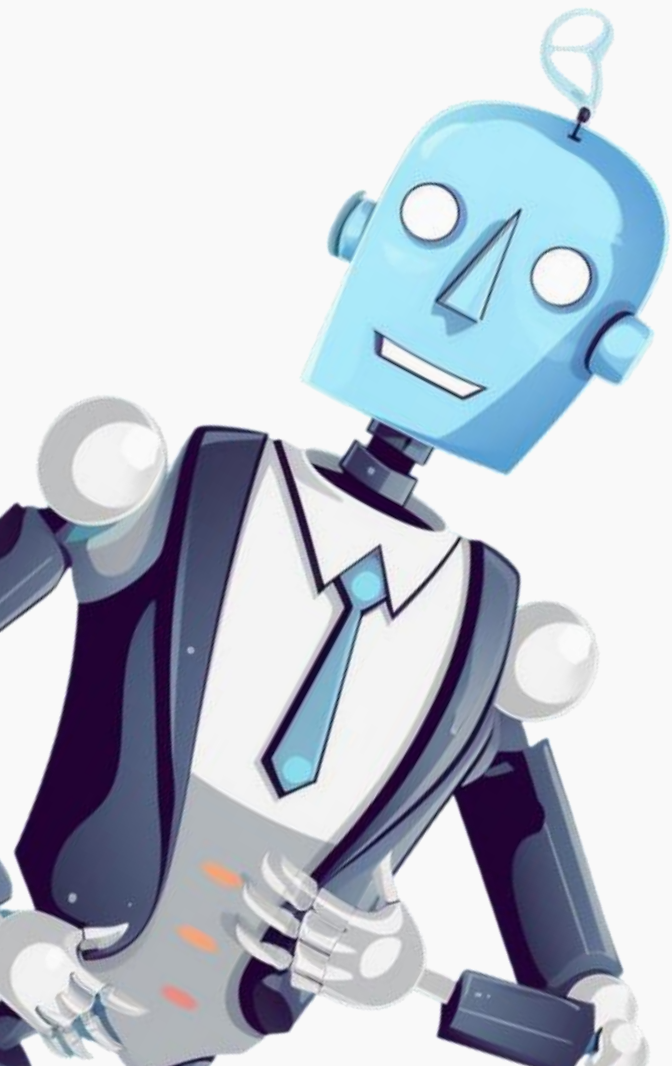
- Every week
- Every month
- One or twice
- Never



Our fundraising community



73% of fundraisers
are using ChatGPT in their
fundraising work

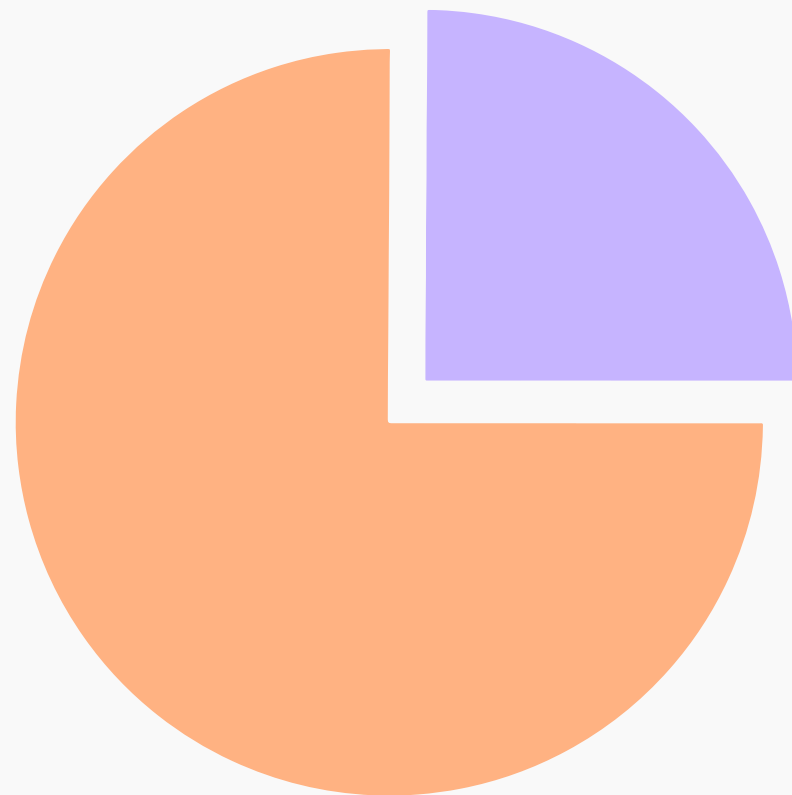


Are you making the most of AI in fundraising?

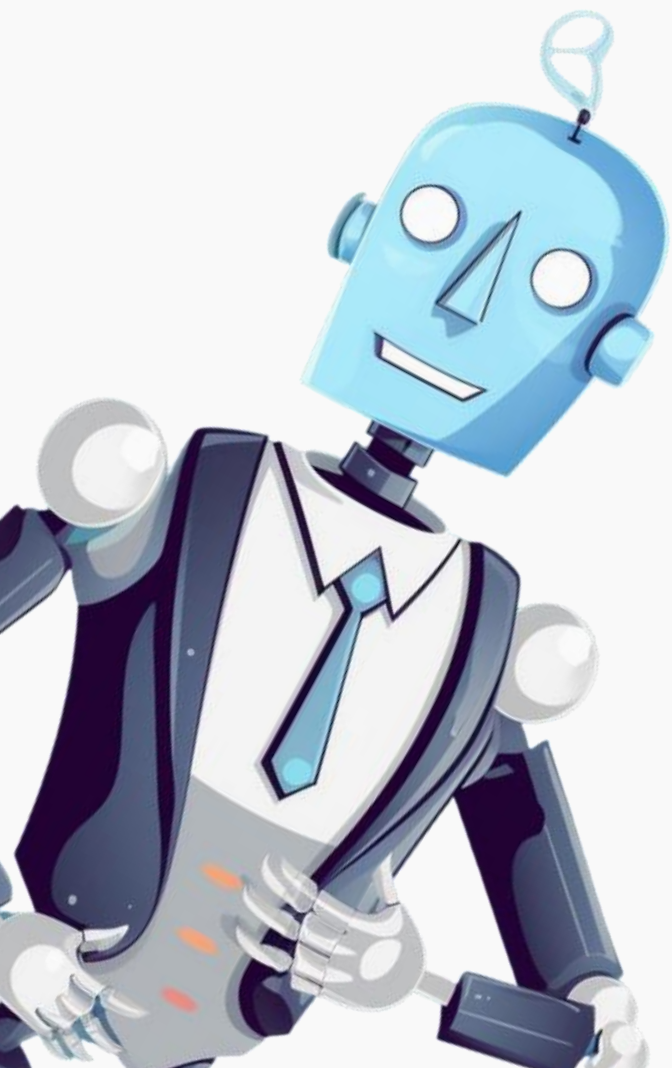
- Yes - I'm confident!
- Not sure / maybe
- No
- I don't use it enough to know



Our fundraising community



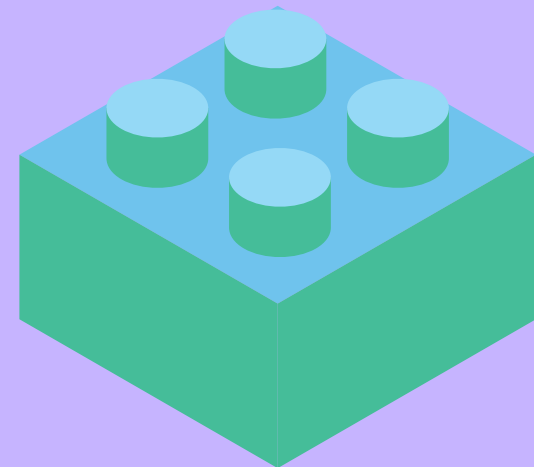
Only 25% are confident
in their use of ChatGPT for
fundraising work



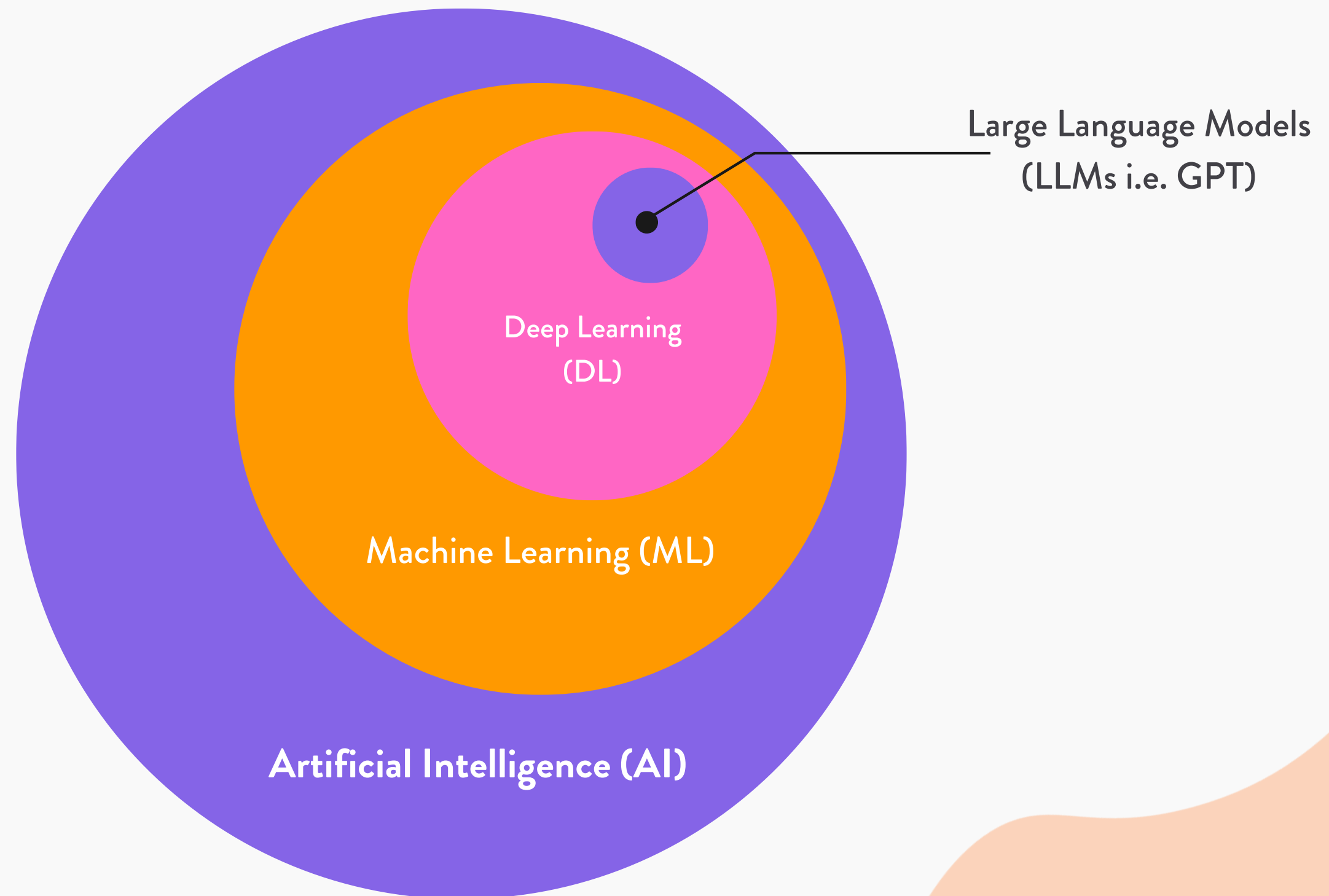


PART ONE

10x AI principles
(in 10 minutes or less)



1. AI is like an onion



2. Two types of AI

Predictive AI

- Generates predictions
- Requires lots of data
- Learns from your data
- Better for tasks that require accuracy

Generative AI

- Generates new content
- Requires only user input
- Already learnt from other data
- Better for tasks that require creativity or speed



3. Predictive AI

=

**Machine Learning
(ML)**

=

Pattern analysis



4. Input to ML is historical data

To predict which donor is likely to give to an appeal...
a machine learning model will:

- Look at their entire donor journey (eg acquisition channel, age gender, payment methods, giving history etc)
- Look at patterns of events leading up to giving (eg commonly gives at end of year)
- Use these patterns or 'model' to predict future behaviour (eg they are likely to give again at end of year)



5. Output of ML is future predictions



6. Generative AI

=

**Large Language Models
(LLM)**

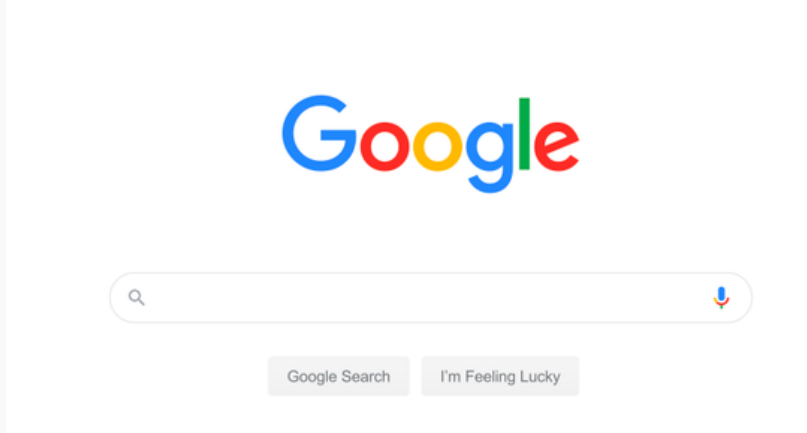
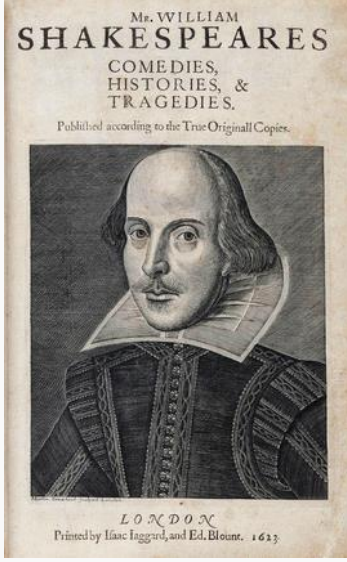
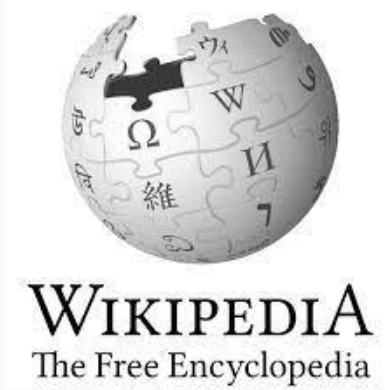
=

Chat GPT

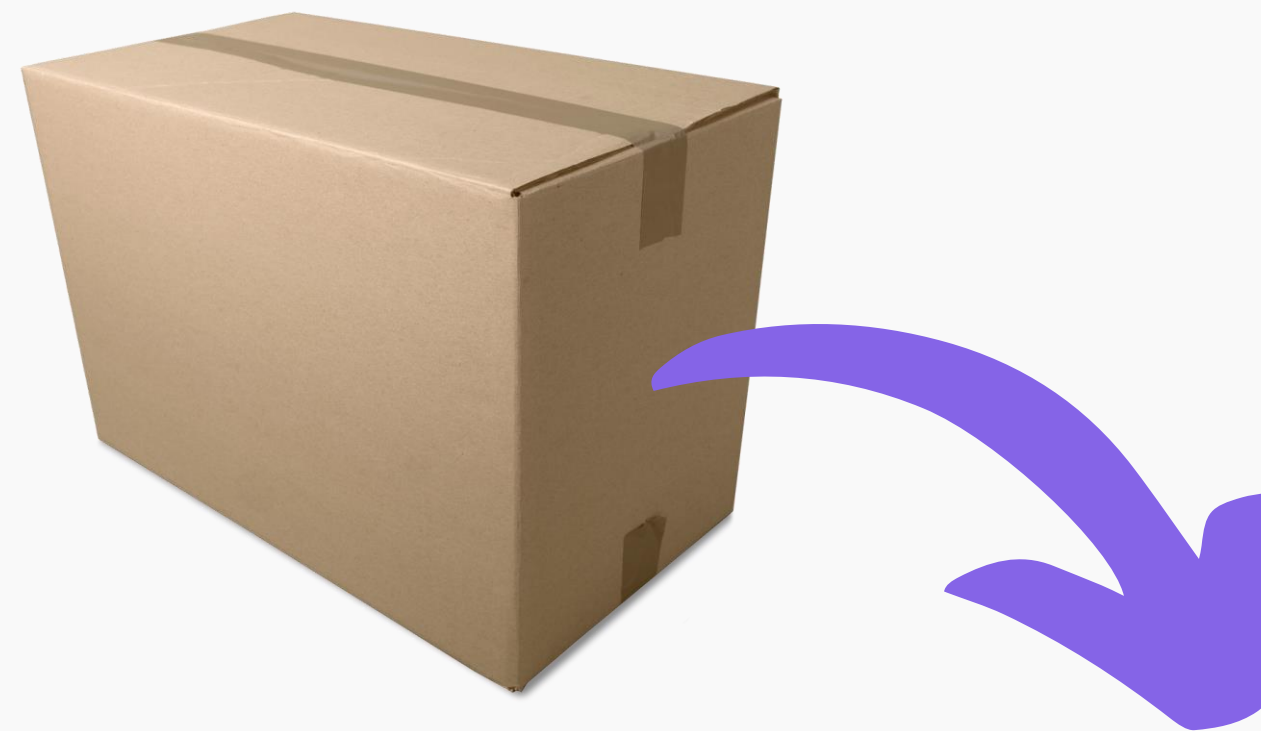


7. ~~Large~~ Huge Language Models

+100s GB words



8. LLMs are predicting the next word



What is the next word in this _____



9. It can model more than the next word



Describe a fundraising campaign that batman would gladly give to



As a character, Batman, or Bruce Wayne, is driven by a strong sense of justice and a deep desire to improve the lives of the people of Gotham. So, a fundraiser that Batman might contribute to would likely align with his values of justice, empowerment, and community improvement.



1. **Gotham City Orphans Fund:** This fundraising campaign aims to better the lives of orphans and vulnerable children in Gotham City, providing resources for their education, healthcare, and general well-being. The campaign resonates with Batman's personal history as he himself became an orphan at a young age and understands the importance of providing a safety net for these children.



...it can also represent images



Midjourney Bot ✓ BOT Today at 19:32

slr batman selling cakes at a bake stand as part of an event to raise funds for the Gotham City Orphans Fund - Image #3 @paristj



... and audio



... and video

(not yet)



10. If AI were students?

Predictive AI

The student who has studied just 1 subject and takes the test over and over again to keep getting better...

Generative AI

The student who reads all the text books but never went to class....
so doesn't always know what is right and wrong!





PART TWO

Using AI in fundraising



Answering the 4 W's (and H)

Who

When

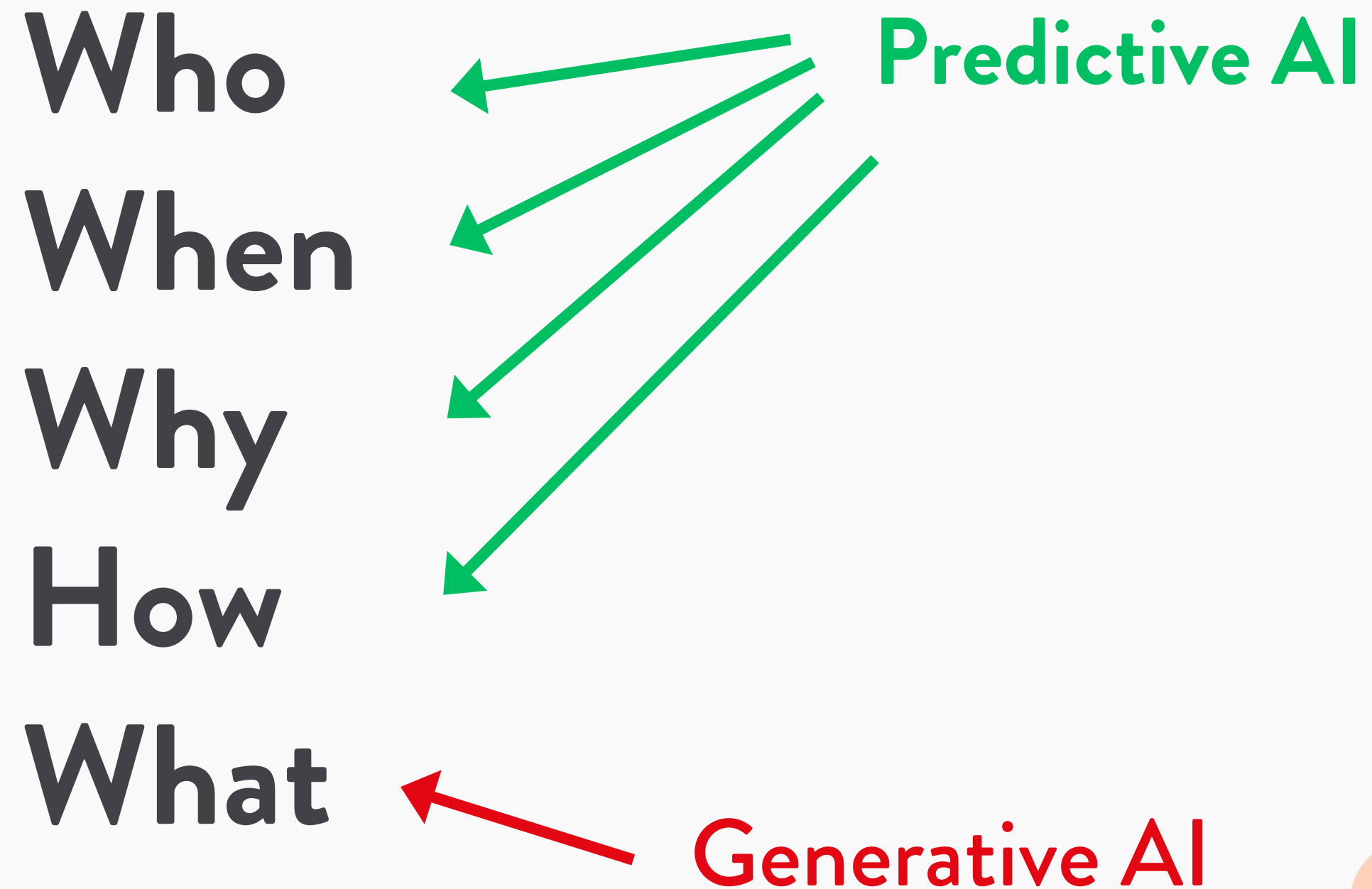
Why

How

What



Answering the 4 W's (and H)



Current fundraising programs treat the donor like a segment



Current fundraising programs treat the donor like a segment



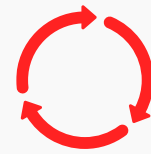
Gave a gift in past 3 months



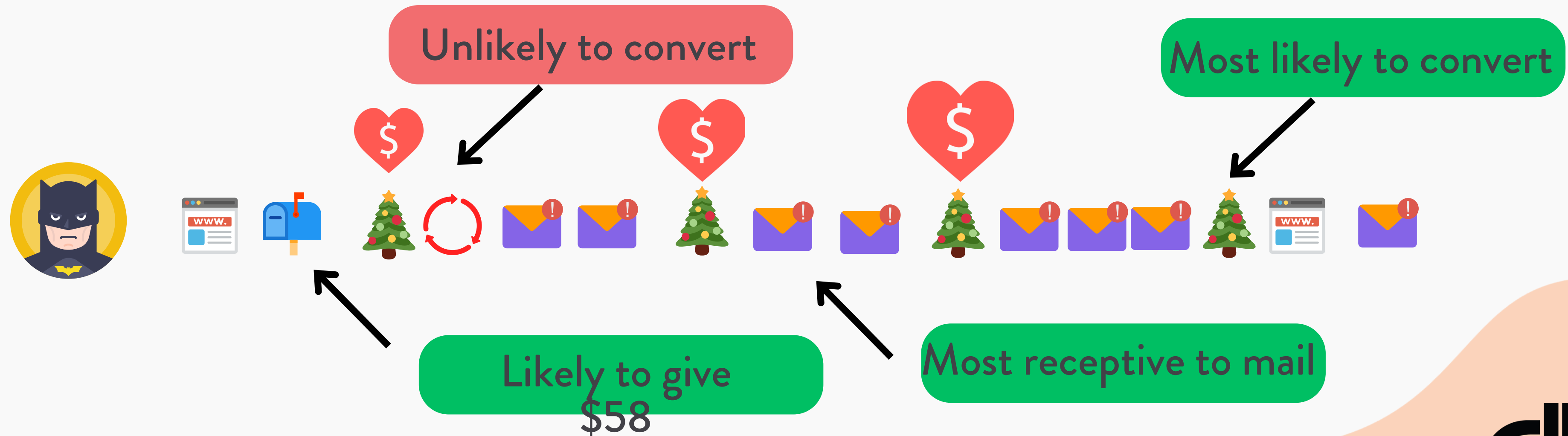
Current fundraising programs treat the donor like a segment



Let's treat them like individuals

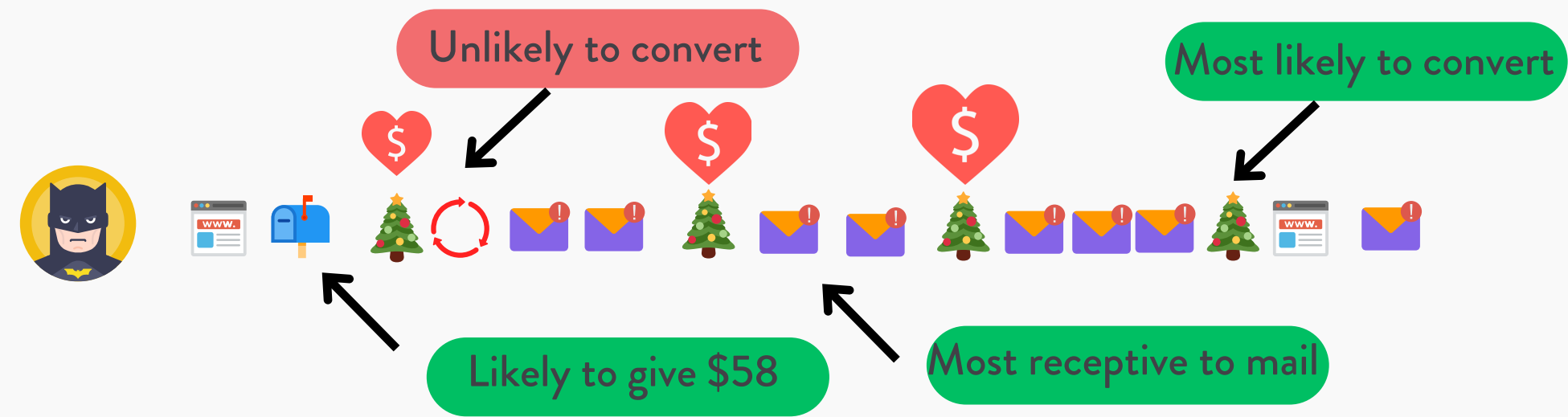


Let's treat them like individuals





from this...



...to this



ML in the wild



DM Appeal ⁱ

78%

Likely to give

Rank:
1,287th

DM Appeal >\$500 ⁱ

<1%

Likely to give >\$500

Rank:
300,079th

RG Upgrade ⁱ

<1%

Likely to upgrade

Rank:
47,930th

RG Churn ⁱ

92%

Likely to churn

Rank:
69th

Ask Amount (Single) ⁱ

\$58

Channel Recommendation ⁱ

Mail



The 4 W's (and H)

Who

Bruce

Predictive AI

When

Now!

Why

Give a gift

How

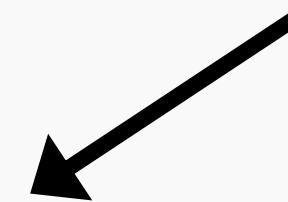
Email with \$50 ask

What

?



Likelihood to
give



10 ways to use Predictive AI

- Who will give to your next **appeal**?
- Who will become a **mid-value** donors?
- Who is a good **major donor** prospect?
- Who is likely to convert to a **monthly donor**?
- Who will leave a **legacy** gift?
- Who will **upgrade** their gift?
- Who will **reactivate**?
- How much is the best **gift amount**?
- Which **channel** will they most likely respond to?
- What is the optimum **campaign size**?



The 4 W's (and H)

Who

Bruce

Predictive AI

When

Now!

Why

Give a gift

How

Email with \$50 ask

What

?

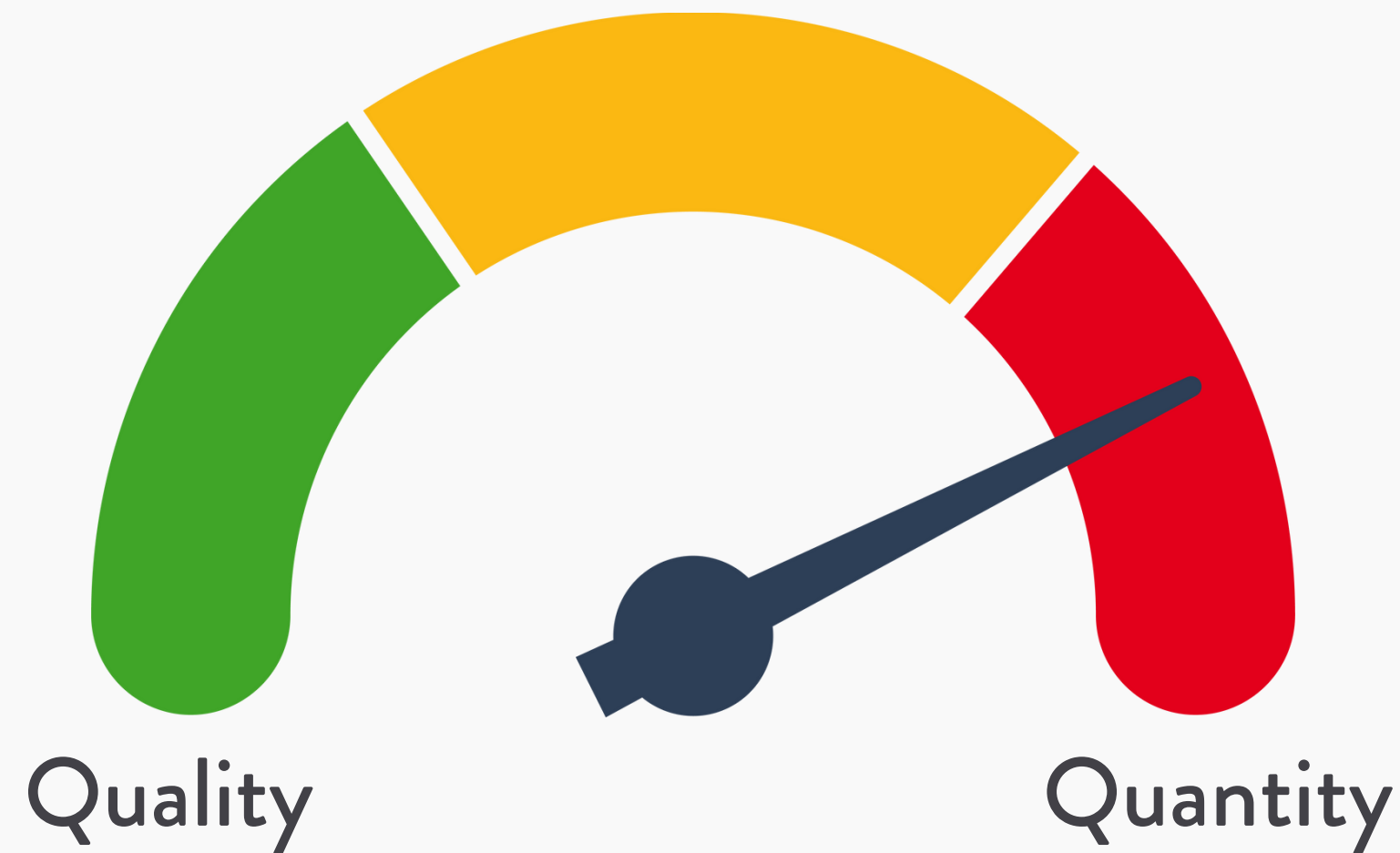
Generative AI



Likelihood to
give



Marketing automation has lead to an increase in quantity of communications, but it has not improved quality



To improve "what" we say, we need to solve these two problems

- Good communication takes time
- Good communication is targeted



**The most popular use of
generative AI
is in creating new content**



Create Content

Organization name ⓘ
Save the Children
17/500

Organization cause ⓘ
Save the Children was the first global movement for children, boldly
105/500

Key statistic highlighting challenge to tackle ⓘ
A total 45 million people are on the brink of famine across 43 count
125/500

Story of the beneficiary ⓘ
After 8-year-old Zainab* and her 10-year-old brother Ahmad* lost both of their parents when their home in Syria was bombed, supporters like you helped provide the care they needed to heal from this unimaginable trauma and continue their education
279/5,000

Appeal Ask ⓘ
Give \$50
8/500

What is the impact? ⓘ
brighter future to millions of children and their families around the w
92/500

Who is this appeal from? ⓘ
Jane Smith, CEO
15/500

Organization specific language ⓘ
none

Generate



Create Content

Organization name ⓘ
Save the Children 17/500

Organization cause ⓘ
Save the Children was the first global movement for children, boldly 105/500

Key statistic highlighting challenge to tackle ⓘ
A total 45 million people are on the brink of famine across 43 count 125/500

Story of the beneficiary ⓘ
After 8-year-old Zainab* and her 10-year-old brother Ahmad* lost both of their parents when their home in Syria was bombed, supporters like you helped provide the care they needed to heal from this unimaginable trauma and continue their education 279/5,000

Appeal Ask ⓘ
Give \$50 8/500

What is the impact? ⓘ
brighter future to millions of children and their families around the w 92/500

Who is this appeal from? ⓘ
Jane Smith, CEO 15/500

Organization specific language ⓘ
none

Generate

AI Assist Output



Dear [Donor Name],

Did you know that right now, an appalling number of children - more than 50% of Syria's children population - are suffering the devastating consequences of war and conflict? Their lives are upturned; homes destroyed, education disrupted and childhood innocently stolen.

One such story is of Zainab and Ahmad. At the tender ages of 8 and 10, they witnessed unspeakable horrors when their home in Syria was bombed, claiming the lives of their beloved parents. "We lost our home... our parents... everything in one dreadful night," laments Zainab. Their story is a stark reminder of the havoc conflict wreaks on innocent lives; especially children.

At Save the Children, we work tirelessly to reach children like Zainab and Ahmad. Our mission is to provide emotional and educational support, nurture them back to health, and give them hope for a better future. With the help of our supporters, we have been able to provide relief, care and education to thousands of children who have been victims of war-related traumas.

However, if we don't act today, countless children like Zainab and Ahmad face a grim and unsafe future — a future where they are deprived of their basic rights and a chance of a life beyond the shadows of war. The situation is urgent; the risks of inaction, catastrophic.

This is your chance to make an immediate impact. [Please join our cause and donate \$50 today! (www.savethechildren.org/donate)]



Tailor to different channels

Existing Content ⓘ

Dear [Donor Name],

Did you know that right now, an appalling number of children - more than 50% of Syria's children population - are suffering the devastating consequences of war and conflict? Their lives are upturned; homes destroyed, education disrupted and childhood innocently stolen.

One such story is of Zainab and Ahmad. At the tender ages of 8 and 10, they witnessed unspeakable horrors when their home in Syria was bombed, claiming the lives of their beloved parents. "We lost our home... our parents... everything in one dreadful night," laments Zainab. Their story is a stark reminder of the havoc conflict wreaks on innocent lives; especially children.

At Save the Children, we work tirelessly to reach children like Zainab and Ahmad. Our mission is to provide emotional and educational support, nurture them back to health, and give them

2,100/5,000

Desired elements (select up to 3) ⓘ

SMS, Facebook post, Donation page

Generate

SMS



Dear [Donor Name], 50% of Syria's children suffer due to war. Like Zainab and Ahmad who lost everything. Stand with us at Save The Children and donate \$50 today, your help is transformative. Reply STOP to opt out.

Facebook post



Imagine being 10, losing your home, your parents, and your childhood in one dreaded night. ❤️ Zainab and Ahmad, Syrian children, had their world shattered by conflict. At #SavetheChildren, we hope to mend their broken spirits and restore their childhood. But, we need your help. [Please join us and donate \$50](www.savethechildren.org/donate) today. Your gift is a lifeline that rekindles hope and rescues children from the shadows of war. 🕊️ Be the beacon in their dark times. #HelpSyrianChildren #DonateNow

Donation page



Headline: Save Lives Today: Your Donation Can Transform the Future of Syria's Children

Our Impactful Story: Facing Unimaginable Horrors: The Lifeline You Provide



Tailor to donor segments

Existing content ⓘ

Dear [Donor Name],

Did you know that right now, an appalling number of children - more than 50% of Syria's children population - are suffering the devastating consequences of war and conflict? Their lives are upturned; homes destroyed, education disrupted and childhood innocently stolen.

One such story is of Zainab and Ahmad. At the tender ages of 8 and 10, they witnessed unspeakable horrors when their home in Syria was bombed, claiming the lives of their beloved parents. "We lost our home... our parents... everything in one dreadful night," laments Zainab. Their story is a stark reminder of the havoc conflict wreaks on innocent lives; especially children.

At Save the Children, we work tirelessly to reach children like Zainab and Ahmad. Our mission is to provide emotional and educational support, nurture them back to health, and give them

2,100/5,000

Target segment ⓘ

Lapsed donor

Generate

Recommendations



Suggestion: Change "Did you know that right now" to "You may recall from your previous involvement".

Reason: This reminds lapsed donors of their prior connection with the cause and reestablishes connection.

Suggestion: Change "Our mission is to provide" to "Our continued mission is to provide".

Reason: The use of the word "continued" reaffirms the organization's constancy, subtly addressing potential concerns about lack of impact.

Suggestion: Change "With the help of our supporters" to "With the help of dedicated supporters like you".

Reason: Personalizing the statement re-establishes emotional ties with the recipient, reminding them of their important role in the past.

Suggestion: Change "[Please join our cause and donate \$50 today]" to "[Will you renew your support and contribute today]".

Reason: This frames the call-to-action as a renewal of past support, offering a clear reengagement opportunity.

Suggestion: Remove "On behalf of Zainab and Ahmad, and the countless other children who are desperate for a lifeline, I thank



What else can you do?

Create content drafts or craft entire multi-channel journeys for:

- Thank you messages
- Monthly donor conversion, upgrade and reactivation journeys
- Mid-donor stewardship
- Annual/Appeal asks

Enhance existing fundraising communications:

- Find errors
- Translate between languages
- Tailor to segments
- Convert to other channels





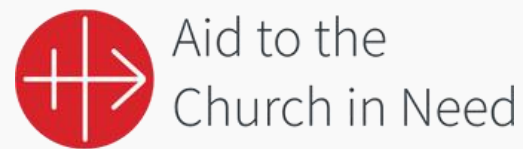
PART THREE

Real world examples

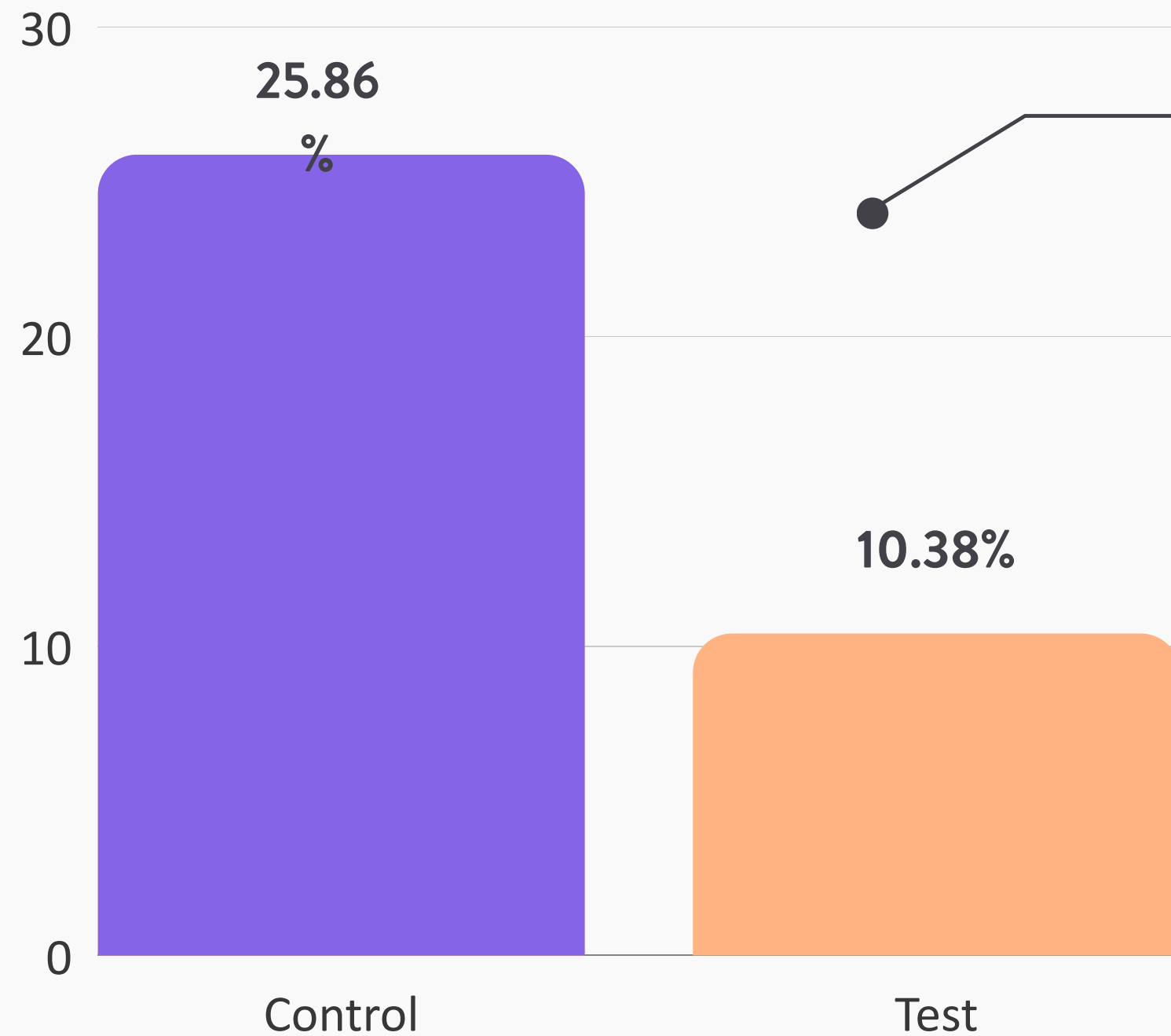


dataro

We've deployed AI at hundreds of nonprofit organizations



Reducing monthly donor churn

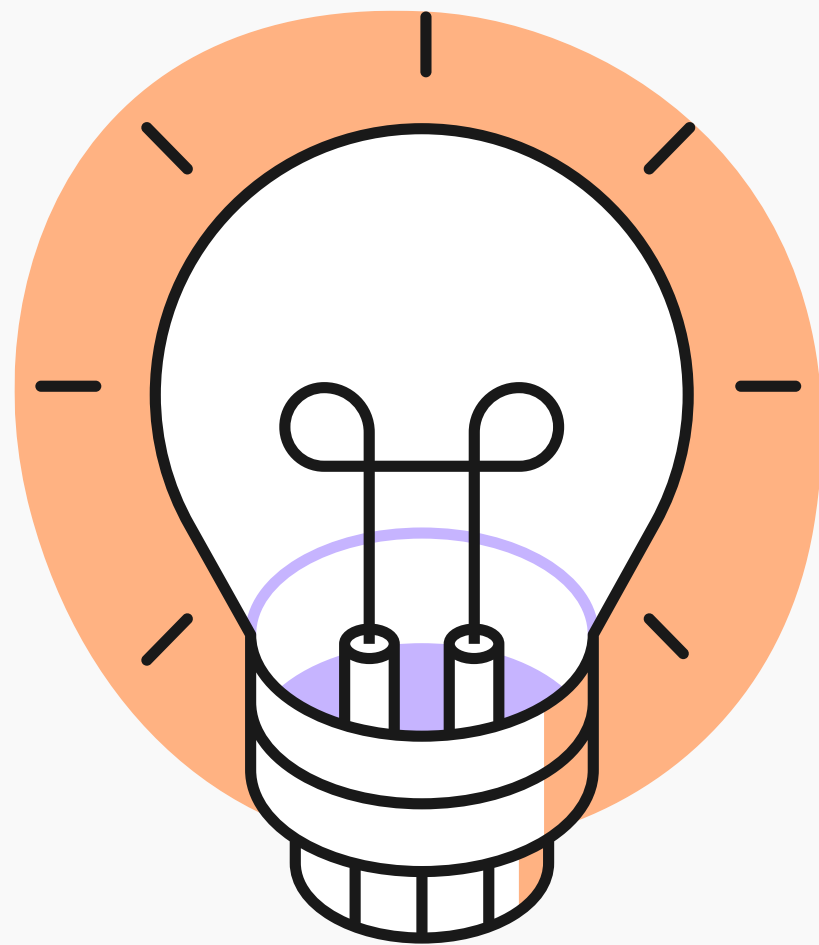


Case study

GREENPEACE

- Experiment to study the effect of pro-active retention calling
- Thank you phone call to donors most likely to churn
- Over 9 month period 2.5 times more likely to cancel their recurring gifts if not called
- ROI of 10.58x





FROM THE FRONT LINES OF A RETENTION CAMPAIGN

"I just spoke to [Amy] and she made a point of saying that we are the only charity who rang her throughout COVID and thanked her for her generosity and support. [Amy] donates to multiple charities who have all rung her and asked for more money.

She said because of that, she has cancelled her support of other charities and continued to support [our charity]"



Case study highlights

By using predictive AI, organisations can achieve results like:

- Receiving >\$500k additional gifts for Appeals program over 12months
- Decreasing monthly donor churn by 15%
- Identifying additional \$266k of mid-value donations in a single appeal
- Increasing monthly donor conversion response by 2x
- Increasing monthly donor reactivation rates by 2.5x
- Increasing major donor revenue by 15%





RESPONSES TO OUR GENERATIVE AI

"OMG! In 2 mins we have 90% of what we need. With only have to put 10% of the effort"

"It came up with some really lovely wording, definitely something in every version that was lovely and I would use"



In Summary

Predictive AI

- Generates predictions
 - Requires lots of data
 - Learns from your data
 - Better for tasks that require accuracy
- + **More efficient campaigns**
 - + **More gifts**
 - + **Less wastage**
 - + **Happier donors**

Generative AI

- Generates new content
 - Requires only user input
 - Already learnt from other data (typically)
 - Better for tasks that require creativity or speed
- + **Save time**
 - + **More relevant content**
 - + **Happier donors**





PART FOUR

How to get started



There are 1000's of AI tools

THE 2023 MAD (MACHINE LEARNING, ARTIFICIAL INTELLIGENCE & DATA) LANDSCAPE

The 2023 MAD (Machine Learning, Artificial Intelligence & Data) Landscape is a comprehensive grid of logos organized into several main categories:

- INFRASTRUCTURE:** Includes STORAGE (AWS, Google Cloud, IBM), MPP DBs (Teradata, Vertica), DATA LAKES / LAKEHOUSES (Dremio, Databricks), DATA WAREHOUSES (AWS, Snowflake), STREAMING / IN-MEMORY (Kafka, Flink), RDBMS (Oracle, PostgreSQL), NoSQL DATABASES (MongoDB, Redis), NewSQL DATABASES (CockroachDB, Yugabyte), REAL TIME DATABASES (InfluxDB, TimescaleDB), GRAPH DBS (Neo4j, Dgraph), GPU DATABASES (Kinetica), DATABASE ABSTRACTION (DuckDB), VECTOR DATABASES (Pinecone, Weaviate), and DATABASE GOVERNANCE & CATALOG (Alation, Collibra).
- ANALYTICS:** Includes BI PLATFORMS (Looker, Tableau), VISUALIZATION (Tableau, Power BI), DATA SCIENCE NOTEBOOKS (Jupyter, Databricks), DATA SCIENCE PLATFORMS (DataRobot, H2O), ENTERPRISE ML PLATFORMS (Databricks, SAS), DATA ANALYST PLATFORMS (Alteryx, Tableau), CUSTOMER DATA PLATFORMS (Salesforce, Oracle), DATA GENERATION & LABELING (Scale AI, Hive), MLOPS (Weights & Biases, DVC), COMPUTER VISION (OpenCV, TensorFlow), SPEECH (Siri, Amazon Alexa), NLP (OpenAI GPT, Google Gemini), HORIZONTAL AI / AGI (Anthropic, OpenAI), AI HARDWARE (NVIDIA, Intel), GPU CLOUD (Paperspace, Lambda), CLOSED SOURCE MODELS (OpenAI GPT, Google Gemini), and QUERY ENGINE (Dremio, Snowflake).
- MACHINE LEARNING & ARTIFICIAL INTELLIGENCE:** Includes DATA SCIENCE NOTEBOOKS, DATA SCIENCE PLATFORMS, ENTERPRISE ML PLATFORMS, DATA GENERATION & LABELING, MLOPS, COMPUTER VISION, SPEECH, NLP, HORIZONTAL AI / AGI, AI HARDWARE, GPU CLOUD, CLOSED SOURCE MODELS, and QUERY ENGINE.
- APPLICATIONS - ENTERPRISE:** Includes SALES (Gong, Clari), MARKETING (HubSpot, Marketo), CUSTOMER EXPERIENCE (Salesforce, Oracle), HUMAN CAPITAL (Gigamonks, Workday), AUTOMATION & OPERATIONS (UiPath, Automation Anywhere), DECISION & OPTIMIZATION (Palantir, Alteryx), LEGAL (Clio, Lexipol), PARTNERSHIPS (PwC, Deloitte), REGTECH & COMPLIANCE (Comply Advantage, OneTrust), and FINANCE (BlackRock, Fidelity).
- APPLICATIONS - HORIZONTAL:** Includes CODE & DOCUMENTATION (GitHub, GitLab), TEXT (OpenAI GPT, Google Gemini), AUDIO & VOICE (OpenAI Whisper, Google Gemini), IMAGE (OpenAI DALL-E, Google Gemini), VIDEO EDITING (Runway, Pictory), ANIMATION & 3D (Blender, Unreal Engine), and SEARCH (Elasticsearch, Algolia).
- APPLICATIONS - INDUSTRY:** Includes FINANCE & INSURANCE (Kenshco, Upstart), HEALTHCARE (Tempus, Flatiron), LIFE SCIENCES (Moderna, AstraZeneca), TRANSPORTATION (Uber, Tesla), AGRICULTURE (John Deere, John Deere), INDUSTRIAL & LOGISTICS (Siemens, Bosch), and GOVT & INTELLIGENCE (Palantir, Alteryx).

OPEN SOURCE INFRASTRUCTURE, FRAMEWORKS & LIBRARIES, AI MODELS & LANGUAGES, SEARCH, LOGGING & MONITORING, VISUALIZATION, and COLLABORATION.

DATA MARKETPLACES & DISCOVERY, FINANCIAL & MARKET DATA, AIR / SPACE / SEA, PEOPLE / ENTITIES, LOCATION INTELLIGENCE, ESG, DATA & AI CONSULTING, and various consulting firms like Deloitte, IBM, and Accenture.


Dataro is the only software
built specifically for nonprofit fundraising
that contains both
Predictive and Generative AI



Get started for free www.app.dataro.io

● ■ ▲

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Fundr**AI**se smarter.

Save time.
Raise more.

Dataro's fundraising platform has the AI and analytics tools you need to deepen donor relationships and raise more funds for your cause.

"Dataro is completely reinventing how we use data in our fundraising. These guys are one of the most exciting things to happen in the fundraising industry for years."

- Liesha Hanekroot, Fundraising Manager, GREENPEACE

Sign up free

First Name

Last Name

Work Email

Phone Number

Password

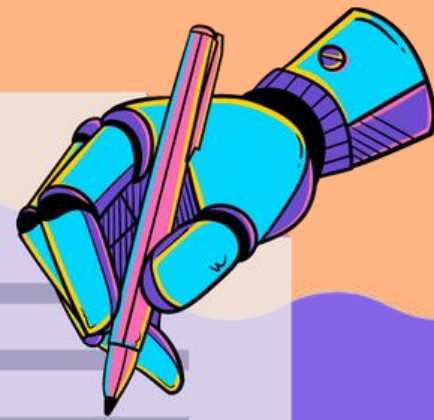
[Create Account](#)

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**7 DAYS
FREE**

**Helping you
do more
fundraising**



AI Assist

(Generative AI)

- Generate new ideas
- Write first drafts
- Email subject lines
- Personalize donor comms

Recommendations



Predictive AI

- Predictive AI needs lots of data (at least 10,000 donors (total, not active) and >2 years of historical data).
- Predictive AI requires oversight and should not be left unchecked. Lean on support if you are not confident in this

Generative AI

- Generative AI can hallucinate things that are not real / true. Be sure to fact check
- Generative AI can mirror society's biases (inc racial, gender etc). Check output for bias.
- Some things unresolved (incl attribution and copyright)





Final thoughts

"AI can accurately predict the next step on your donors journey so you know who to reach out to, when, why, how and what to say!"

Thank you!

Tim Paris
tim@dataro.io

Try for free
www.app.dataro.io

Dataro Predict
(Predictive AI)



AI Assist
(Generative AI)



Bonus: AI in fundraising (coming soon)

Powerful technology I wouldn't recommend deploying (yet)



Image creation

- Instant stock photos with brand
- Images tailored to donors interests



Donor chat (online, voice, sms)

- Chatbots using real voices to cut costs and increase engagement
- Online Q&A for donor support



Video generation

- Create custom brand and impact videos quickly and easily

Bonus: AI in fundraising (coming soon)

Analyze your donor data in natural language

Your burning analytics questions ⓘ

What is my RG churn rate this year compared to last year? What are the biggest driving factors behind churn?

Analytics Answer



Notes:

- RG churn rate refers to the percentage of recurring donors who did not renew their support this year
- Assuming "biggest driving factors behind churn" refers to the reasons why recurring donors did not renew their support

Question:

In year to date (January 1, 2023 - May 1, 2023), what is my RG churn rate compared to last year? What are the biggest driving factors behind churn?

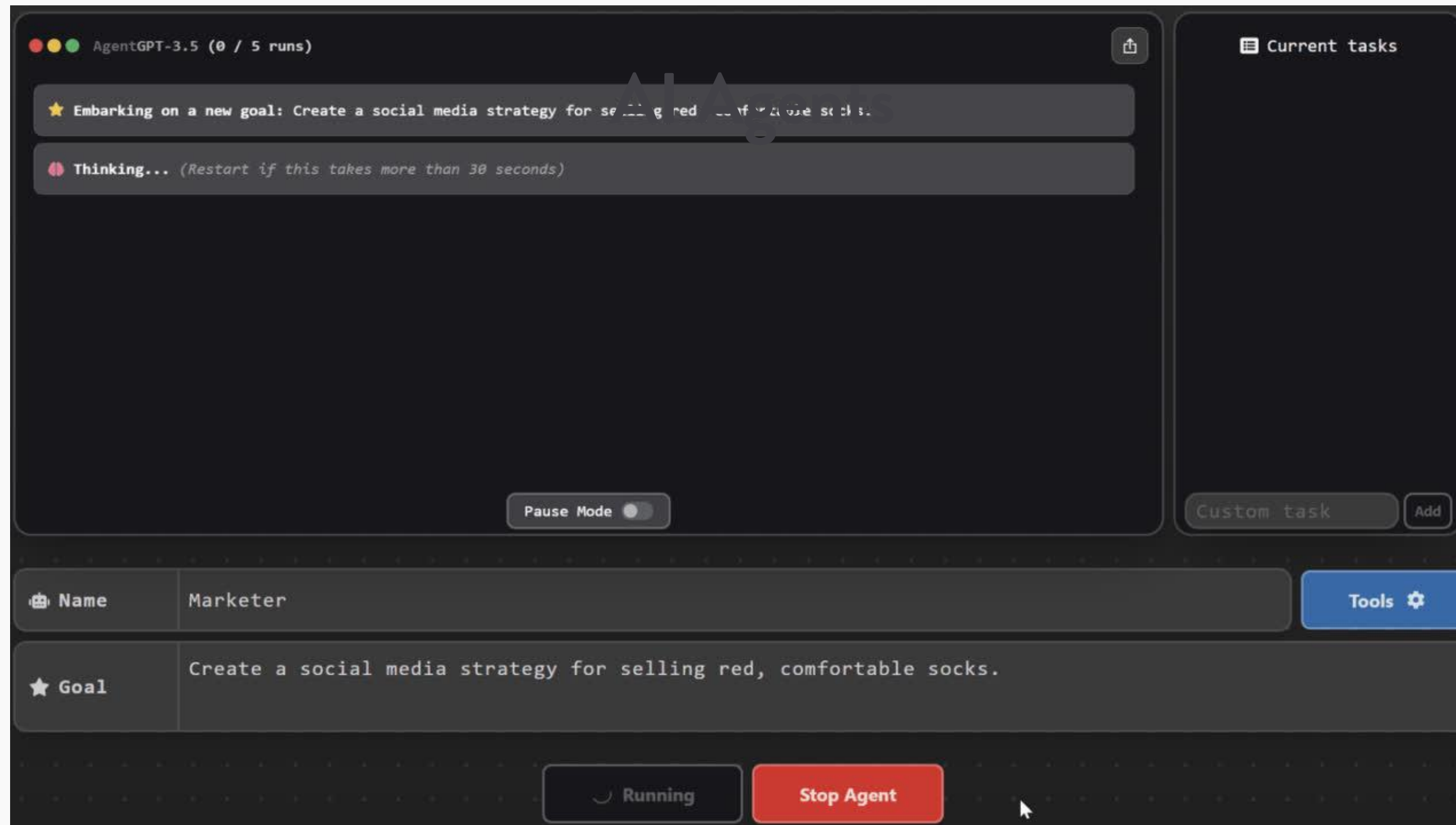
Answer:

This year, your RG churn rate is 23%. In comparison, last year the RG churn rate was 18%. The biggest driving factors behind churn this year were lack of engagement (45%), financial difficulties (30%), and moving or change in contact information (25%).



Bonus: AI in fundraising (coming soon)

Agents you can give goals to achieve, not tasks to complete



The screenshot displays the AgentGPT-3.5 interface. At the top, it shows 'AgentGPT-3.5 (0 / 5 runs)' with a share icon. The main area contains two messages: a star icon followed by 'Embarking on a new goal: Create a social media strategy for selling red, comfortable socks.' and a brain icon followed by 'Thinking... (Restart if this takes more than 30 seconds)'. Below these is a 'Pause Mode' toggle switch. On the right, there is a 'Current tasks' panel with a 'Custom task' input field and an 'Add' button. At the bottom, a table shows the agent's configuration:

Name	Marketer	Tools
Goal	Create a social media strategy for selling red, comfortable socks.	

At the bottom of the interface, there are two buttons: 'Running' and 'Stop Agent'.

