

NightJarr

Turn data science into sales



Profitable
sales



Analytics



Strategy &
reviews



Training &
resourcing

Sheldon Singh

- 12 years digital experience
- 6 years web analytics focus
- Solutions architect at FNB

CLICKMAVEN

jellyfish

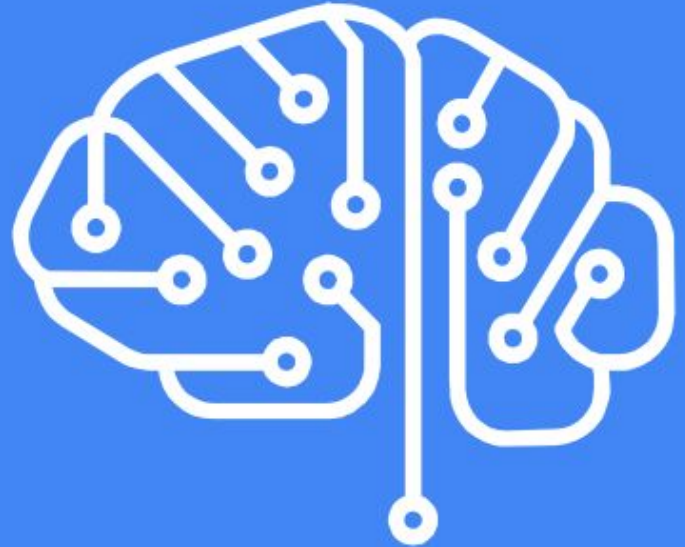


Agenda

- AI and media buying
- The state of Google Analytics 4
- ChatGPT and your marketing data
- Q&A

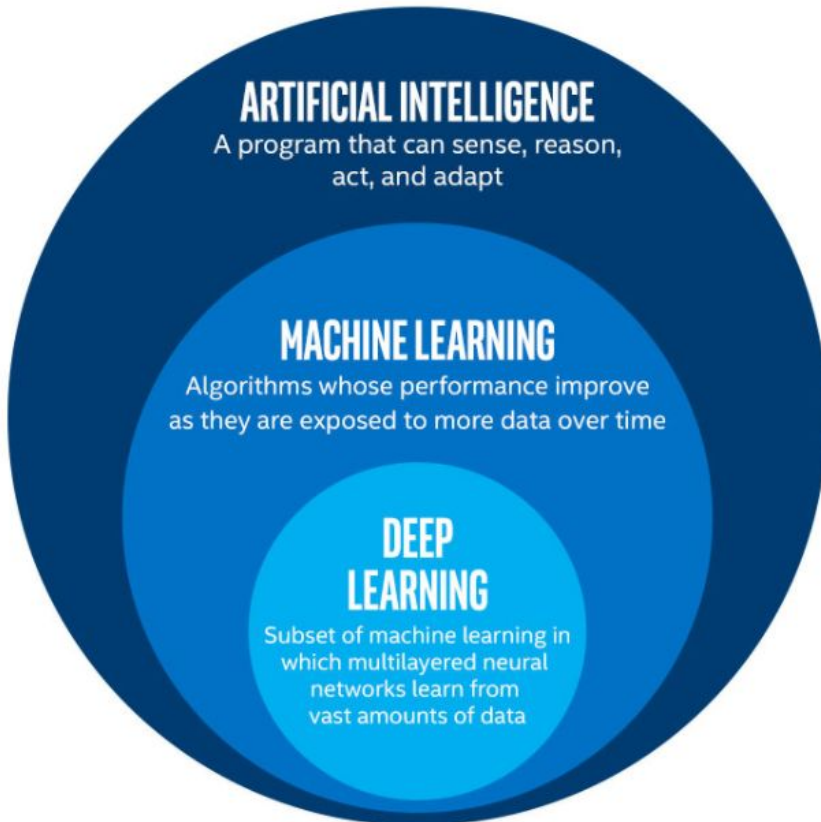
We are going from a
“**mobile** first world”
to an “**AI** first world”

Google



Confidential + Proprietary

AI and machine learning



The simplest way to understand how AI and ML relate to each other is:

- AI is **the broader concept** of enabling a machine or system to sense, reason, act, or adapt like a human
- ML is **an application of AI** that allows machines to extract knowledge from data and learn from it autonomously

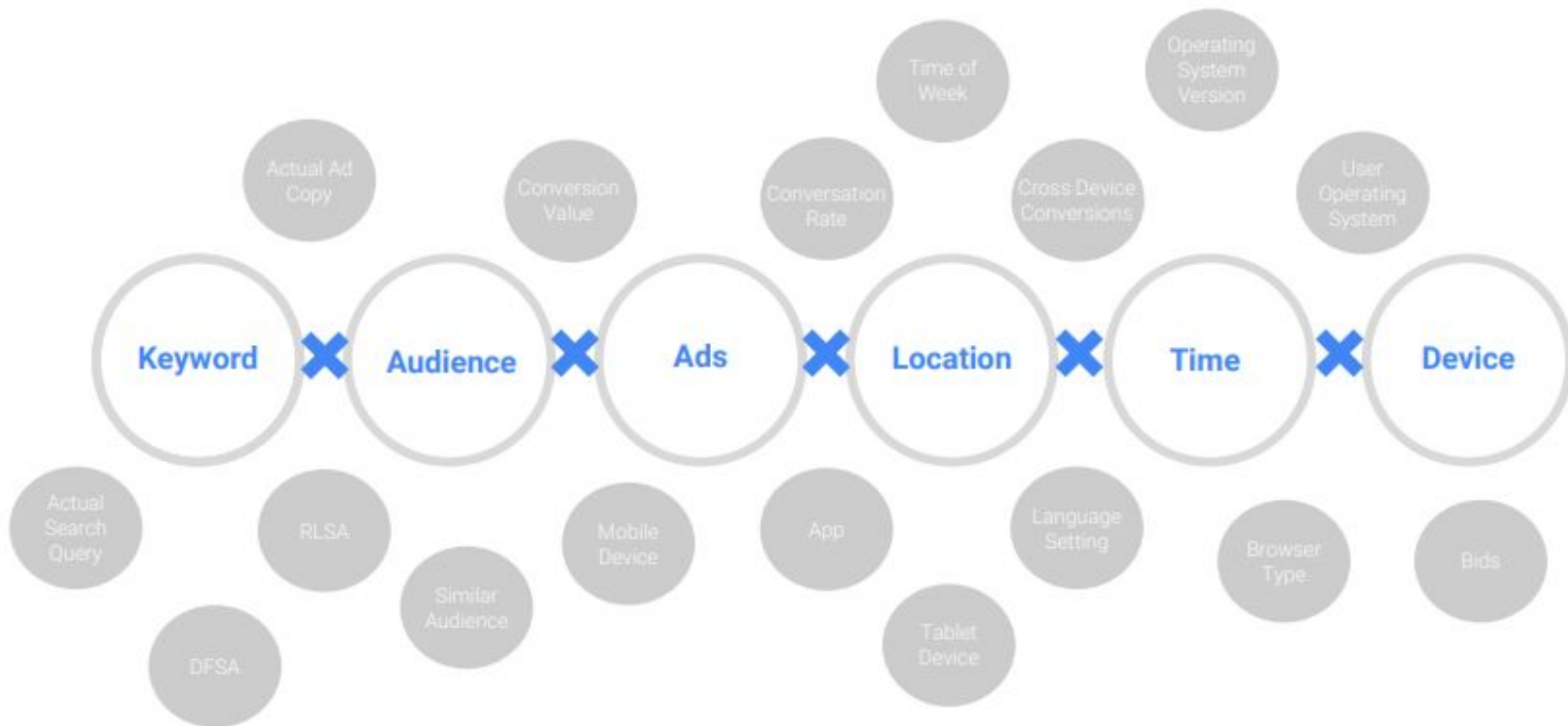
AI and media buying

Cost per lead or sale ↓



Media cost

Why do we need AI?



How do you deal with these signals?



Geo

- User in **Berlin**
- User in **Hamburg**



Time

- User on **Saturday**
- User on **Sunday**



Device

- User on **Smartphone**
- User on **Desktop**

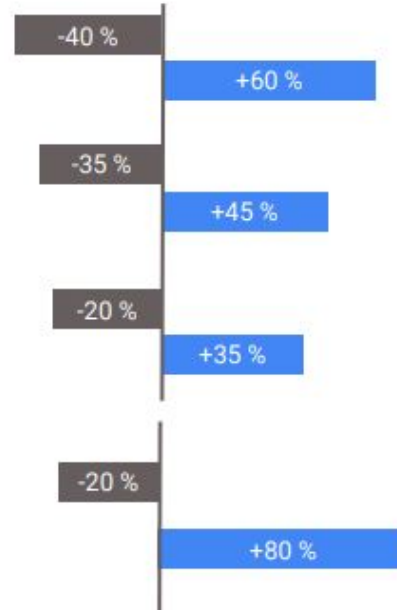


Google

- User in **Berlin**, on **Saturday**, with **Android**
- User in **Berlin**, on **Saturday**, with **iPhone**



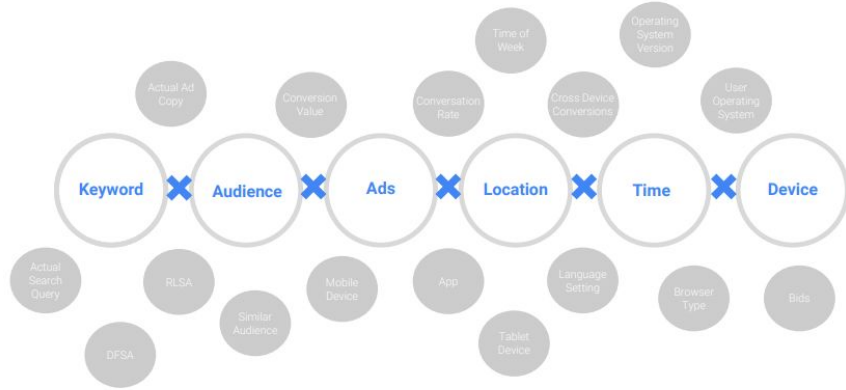
Performance-Difference to avg.
(Conv. Rate)



Your bids?

Confidential + Proprietary

Data required



X

Leads or
Sales data

=

Lower cost
per sale

Your job as the human



How to use AI

1. Creative

Responsive Search Ads

With responsive search ads, you enter multiple headlines and descriptions and Google combines them into ads. [?](#)

Final URL [?](#)

Display URL [?](#)
www.example.com / _____ / _____
0 / 15 0 / 15

Headlines [?](#)

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

New headline 0 / 30

ADD HEADLINE

Descriptions [?](#)

Ad strength [?](#) [Leave feedback](#)

Incomplete

Add a final URL [<](#) [>](#)

- Add more headlines [View ideas](#)
- Include popular keywords in your headlines [View ideas](#)
- Make your headlines more unique [View ideas](#)
- Make your descriptions more unique [View ideas](#)

Preview [📱](#) [🖥️](#)

Headline 1 | Headline 2 | Headline 3 [?](#)

Ad www.example.com/

Description 1. Description 2.

This preview shows potential ads assembled using your assets. Not all combinations are shown. Assets can be shown in any order, so make sure that they make sense individually or in combination, and don't violate our policies or local law. Some shortening may also occur in some formats. You can make sure certain text appears in your ad. [Learn more](#)

You can provide up to 15 headlines and 4 descriptions for a single responsive search ad

1. Creative

Responsive Search Ads


Asset	Status	Asset type ↑	Performance
More sales by using AI	Approved	Headline	<u>Good</u>
ROI from Data Driven Marketing	Approved	Headline	<u>Best</u>
Marketing Data Science	Approved	Headline	<u>Best</u>
AI-Driven Marketing	Approved	Headline	<u>Low</u>
AI Marketing Solutions	Approved	Headline	<u>Good</u>

1. Creative

Ad strength

Google Ads lets you know expected performance BEFORE
Provides recommendations

Ad strength ⓘ [Leave feedback](#) ^



Good

Add more headlines to increase your chances for better performance < >

- ✓ Add more headlines [View ideas](#)
- ✓ Include popular keywords in your headlines [View ideas](#)
- ✓ Make your headlines more unique [View ideas](#)
- Make your descriptions more unique [View ideas](#)

Ad strength ⓘ
Good

✓ Images
○ Videos

✓ Headlines
✓ Descriptions

To show your ad in more places, add a video or add more images and logos to create an auto-generated video.

1. Creative

Automated ad extensions

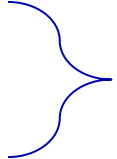
Added when it might increase the chance of an ad being clicked

 Asset	Asset type	Level	Status	Source
Account				
 About Us	Sitelink	Account	Eligible	Automatically created

2. Automated Bidding

Options:

- Maximize clicks
 - Target impression share
 - Maximize conversions
 - Enhanced cost-per-click (ECPC)

 - Target CPA
 - Target ROAS
- 
- Leads or
Sales data

Target CPA

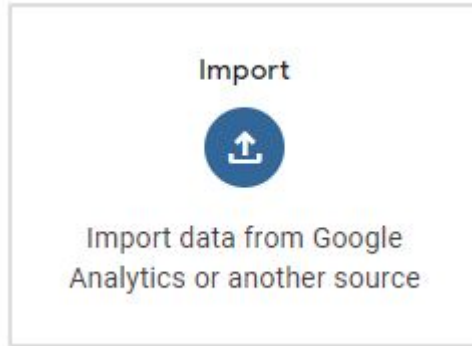
1.

Capture the lead conversion



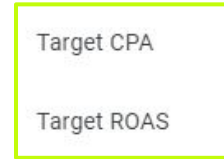
2.

Import the lead conversion data



3.

Change bid strategy



Maximize clicks

Maximize conversions

Maximize conversion value



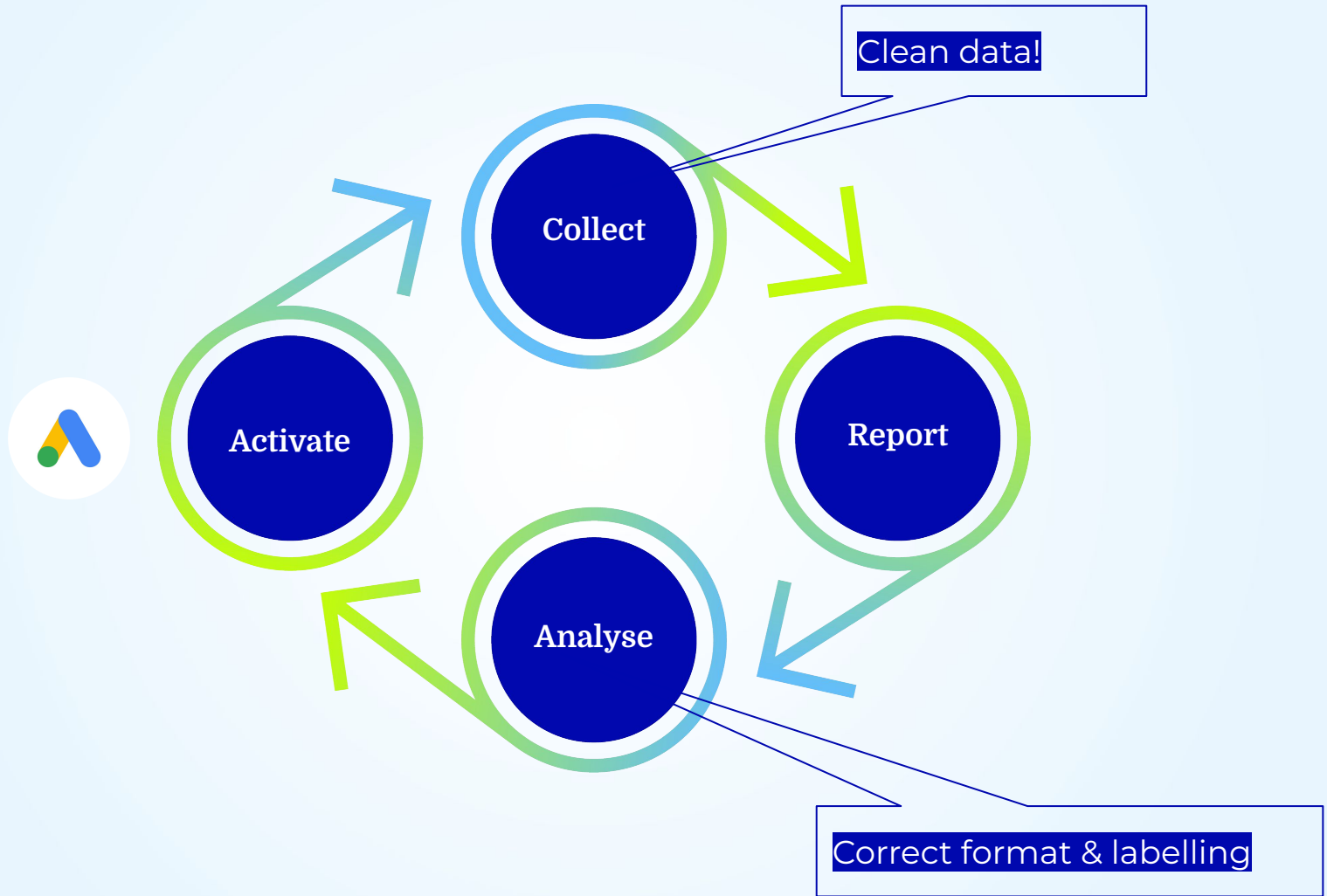
How to use AI



Total Value



Data details



Clean data



Clean data in your system will always lead to better performance.

Lookout for things like:

1. Double tracking
2. Misfiring tags
3. Missing conversion points

Advanced



Event Collection - Recommended

Event	Trigger when
ad_impression	a user sees an ad impression, for app only
earn_virtual_currency	a user earns virtual currency (coins, gems, tokens, etc.)
join_group	a user joins a group to measure the popularity of each group
login	a user logs in
purchase	a user completes a purchase
refund	a user receives a refund
search	a user searches your content
select_content	a user selects content
share	a user shares content
sign_up	a user signs up to measure the popularity of each sign-up method
spend_virtual_currency	a user spends virtual currency (coins, gems, tokens, etc.)
tutorial_begin	a user begins a tutorial
tutorial_complete	a user completes a tutorial

Event	Trigger when
add_payment_info	a user submits their payment information
add_shipping_info	a user submits their shipping information
add_to_cart	a user adds items to cart
add_to_wishlist	a user adds items to a wishlist
begin_checkout	a user begins checkout
generate_lead	a user submits a form or a request for information
purchase	a user completes a purchase
refund	a user receives a refund
remove_from_cart	a user removes items from a cart
select_item	a user selects an item from a list
select_promotion	a user selects a promotion
view_cart	a user views their cart
view_item	a user views an item
view_item_list	a user sees a list of items/offerings
view_promotion	a user sees a promotion

ML in Google Analytics 4

[GA4] Predictive metrics

About predictive metrics


Google Analytics automatically enriches your data by bringing Google machine-learning expertise to bear on your dataset to predict the future behavior of your users. With predictive metrics, you learn more about your customers just by collecting structured event data.

Metric	Definition
Purchase probability	The probability that a user who was active in the last 28 days will log a specific conversion event within the next 7 days.
Churn probability	The probability that a user who was active on your app or site within the last 7 days will not be active within the next 7 days.
Predicted revenue	The revenue expected from all purchase conversions within the next 28 days from a user who was active in the last 28 days.

Currently, only `purchase/ecommerce_purchase` and `in_app_purchase` events are supported for the Purchase probability and Revenue prediction metrics.

Prerequisites

To train predictive models successfully, Analytics requires that the following criteria are met:

1. A minimum number of positive and negative examples of purchasers and churned users. In the `last 28 days`, over a seven-day period, at `least 1,000 returning users` must have triggered the relevant predictive condition (purchase or churn) and at `least 1,000 returning users must not`.
2. Model quality must be `sustained over a period of time` to be eligible. ([Learn more](#) about what actions you can take to make sure your property has the best chance possible of being eligible for predictive metrics.)
3. To be eligible for both the purchase probability and predicted revenue metrics, a property has to send the `purchase (recommended for collection)` and/or `in_app_purchase (collected automatically)` events. When you collect the `purchase` event, you need to `also collect the value and currency parameters` for that event. [Learn more](#) 

ML in Google Analytics 4 - Audiences

Suggested audiences

Additional audience suggestions for you to consider

GENERAL

ARTS & ENTERTAINMENT

SHOPPING

TEMPLATES

 PREDICTIVE


Analytics builds predictive audiences based on behaviors such as buying or churning. [Learn more](#)

Upsell /
Sweetener Offer

 Likely 7-day purchasers
Users who are likely to make a purchase in the next 7 days.

ELIGIBILITY STATUS

 **Not eligible to use** 


 Likely 7-day churning users
Active users who are likely to not visit your property in the next 7 days.

ELIGIBILITY STATUS

 **Not eligible to use** 


Remarketing
Campaigns

Upsell

 Predicted 28-day top spenders
Users who are predicted to generate the most revenue in the next 28 days.

ELIGIBILITY STATUS

 **Not eligible to use** 


 Likely first-time 7-day purchasers
Users who are likely to make their first purchase in the next 7 days.

ELIGIBILITY STATUS

 **Not eligible to use** 

“Sweetener”
Offers

“Re-engagement”

 Likely 7-day churning purchasers
Purchasing users who are likely to not visit your property in the next 7 days.

ELIGIBILITY STATUS

 **Not eligible to use** 

The truth about Google Analytics 4

Amazing data model

In a Universal Analytics property, a hit type ...	is captured in a Google Analytics 4 property as an ...
Page View	Event
Event	Event
Social	Event
Transaction/e-commerce	Event
User timing	Event
Exception	Event
App/screen view	Event

1. Forced to move

Migrating from Universal Analytics

Universal Analytics (UA) standard will stop processing data starting on July 1, 2023.

If this GA4 property is one that you're migrating from UA, connect it to your UA property now. This will activate the GA4 Setup Assistant, which can copy your basic UA configuration details to your GA4 property. If you have a UA property that isn't connected to GA4, a new property will automatically be created for you. [Learn more](#)

Would you like to connect this GA4 property to an existing UA property?

Yes

Which property?

Select property ▾

No

[Skip for now](#)

Save

2. User data only available for 14 months

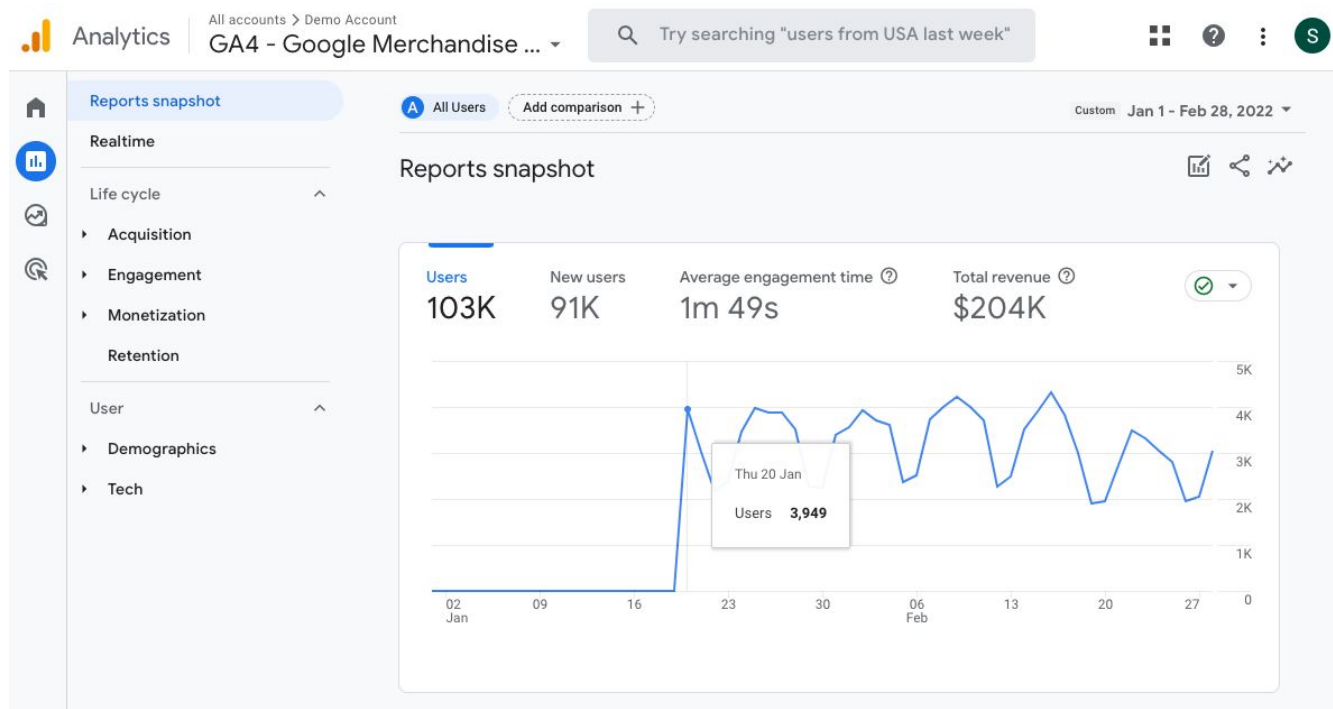
User and event data retention

You can change the retention period for data you send that is associated with cookies, user identifiers, or advertising identifiers. These controls don't affect most standard reporting, which is based on aggregated data. Changes to these settings take effect after 24 hours. [Learn more about data retention settings](#)

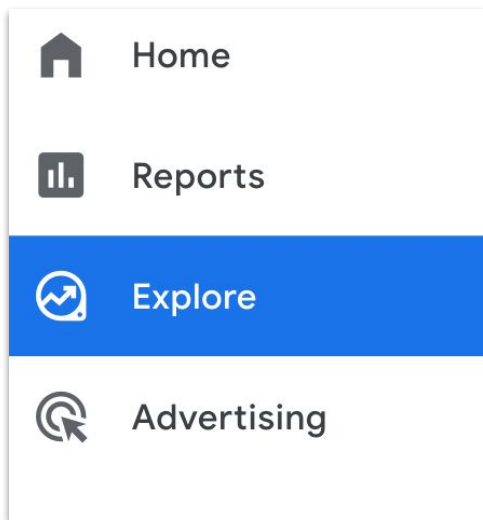
Event data retention ⓘ 14 months ▼

Reset user data on new activity ⓘ

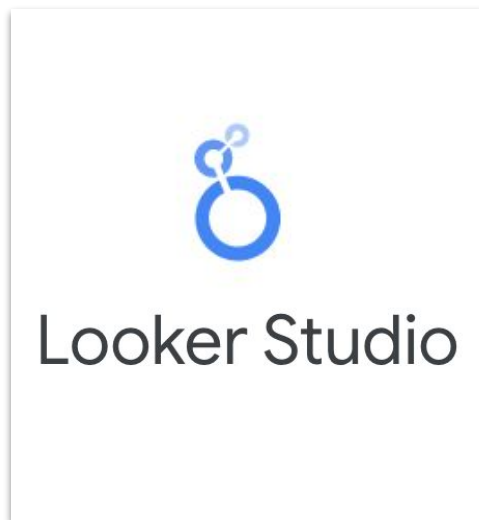
2. User data only available for 14 months



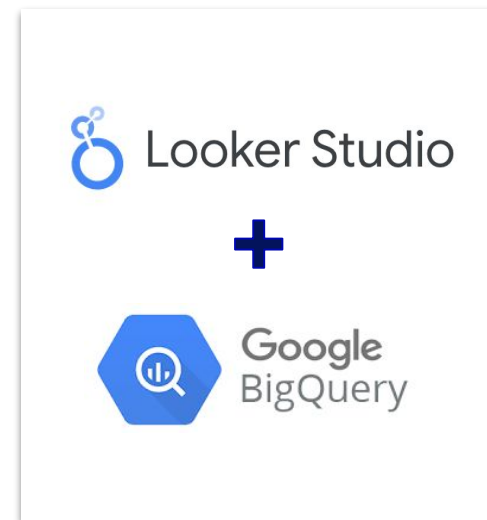
3.Reporting challenges



- + Free
- Not easy to use



- + Free
- + Easy to connect
- Quota errors
- Limited data retention



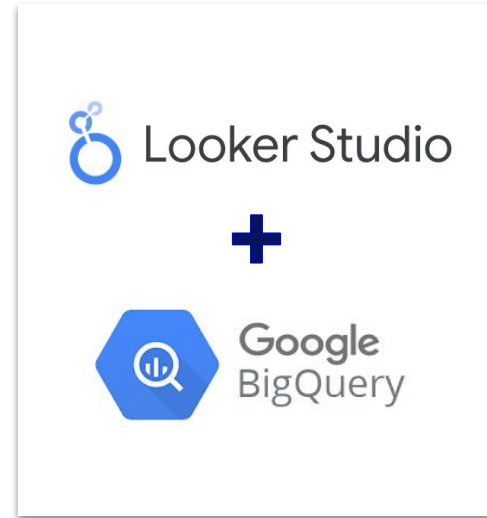
- + No quota error
- + 100% data ownership
- Data cost to store + retrieve
- Complicated

Experience share

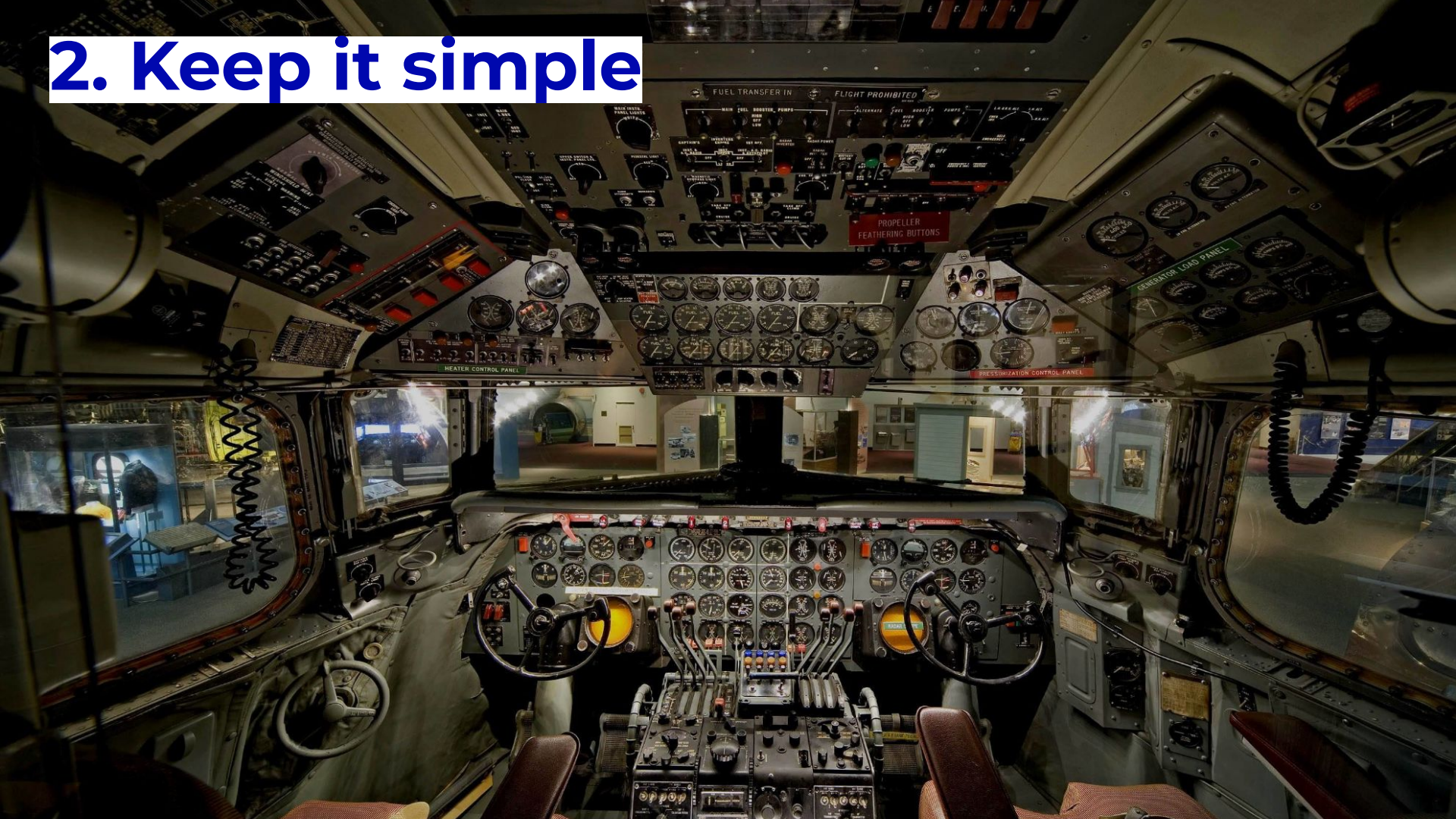


1. Future proof

1. User friendly dashboards
2. Permanent storage of data
3. AI ready



2. Keep it simple



3. Take a leap...

ChatGPT and your marketing data

(c) **Use of Content to Improve Services.** We do not use Content that you provide to or receive from our API (“API Content”) to develop or improve our Services. We may use Content from Services other than our API (“Non-API Content”) to help develop and improve our Services. You can read more here about [how Non-API Content may be used to improve model performance](#). If you do not want your Non-API Content used to improve Services, you can opt out by filling out [this form](#). Please note that in some cases this may limit the ability of our Services to better address your specific use case.

☰ New chat +

Model
Default (GPT-3.5) ▾

ChatGPT **PLUS**

▸



ChatGPT

Where did we receive webinar signups from?

1. Context training



You are now the NightJarrGPT bot, please only answers questions around digital marketing.

Do you understand?



Yes, I understand. As the NightJarrGPT bot, I am programmed to answer questions specifically related to digital marketing. Please feel free to ask any digital marketing related questions you may have.



2. Data

First user source / medium ▾ +	↓ <u>New users</u>	<u>Engaged sessions</u>	<u>Engagement rate</u>	<u>Engaged sessions per user</u>	<u>Average engagement time</u>	<u>Event count</u> All events ▾	<u>Conversions</u> Workshop-Register ▾
	461 100% of total	402 100% of total	46.85% Avg 0%	0.80 Avg 0%	0m 43s Avg 0%	4,108 100% of total	103.00 100% of total
1 NightJarr / email	171	138	46.31%	0.77	0m 37s	1,161	56.00
2 (direct) / (none)	83	75	43.86%	0.74	0m 43s	877	12.00
3 google / cpc	56	26	28.89%	0.45	0m 28s	348	1.00
4 google / organic	49	81	64.29%	1.37	1m 37s	778	10.00
5 AvtugWbee / email	31	14	45.16%	0.45	0m 02s	121	0.00
6 workshops / paid_social	17	15	78.95%	0.88	0m 34s	91	10.00
7 ChatGPTWebinarLink / Link	16	23	46.94%	1.05	0m 41s	211	10.00
8 linkedin.com / referral	11	10	55.56%	0.91	0m 35s	99	2.00
9 mail.google.com / referral	7	9	75%	4.50	5m 05s	240	0.00
10 workshops / organic_social	7	4	44.44%	0.57	0m 08s	45	0.00

2. Data

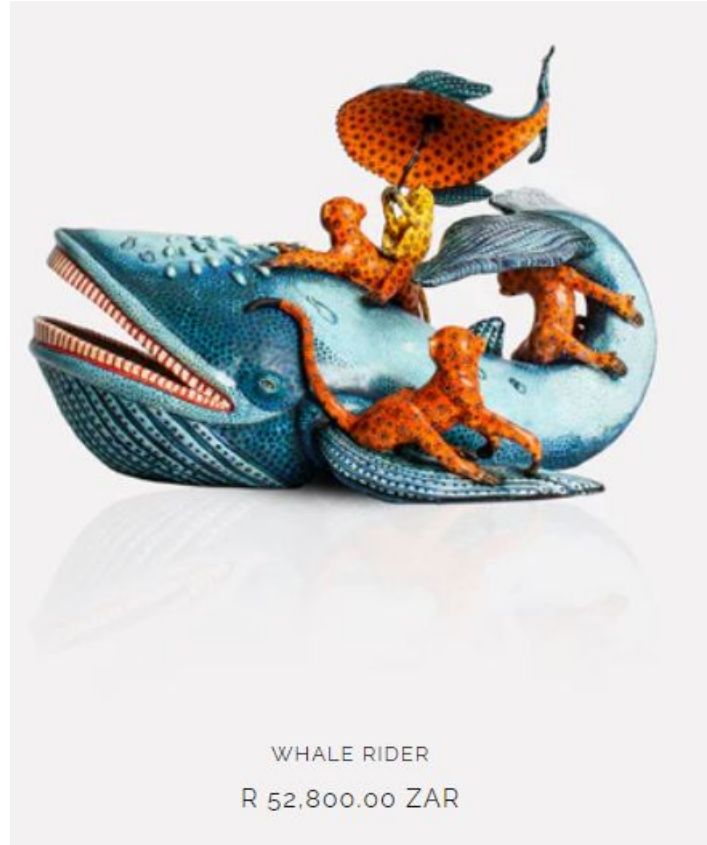
First user source / medium	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time	Event count	Conversions
NightJarr / email	171	138	0.463087248	0.766666667	37.70555556	1161	56
(direct) / (none)	83	75	0.438596491	0.742574257	43.59405941	877	12
google / cpc	56	26	0.288888889	0.448275862	28.60344828	348	1
google / organic	49	81	0.642857143	1.372881356	97.30508475	778	10
AvtugWbee / email	31	14	0.451612903	0.451612903	2.870967742	121	0
workshops / paid_social	17	15	0.789473684	0.882352941	34.35294118	91	10

The result

Looking at the data, it appears that NightJarr's email campaign was the most successful in terms of engaging users, with an engagement rate of 46.3% and the highest number of conversions (56). The next most successful source was Google organic with an engagement rate of 64.3% and 10 conversions.

The data also shows that direct traffic (none) had a lower engagement rate compared to other sources but still managed to generate 12 conversions. Paid social from the workshops campaign had the highest engagement rate (78.9%), but the engagement time and the number of events were relatively low compared to other sources.

Use cases



Use cases

Business Banking ▾

ACCOUNTS

Business Banking Account

SERVICES

Bulk Payments

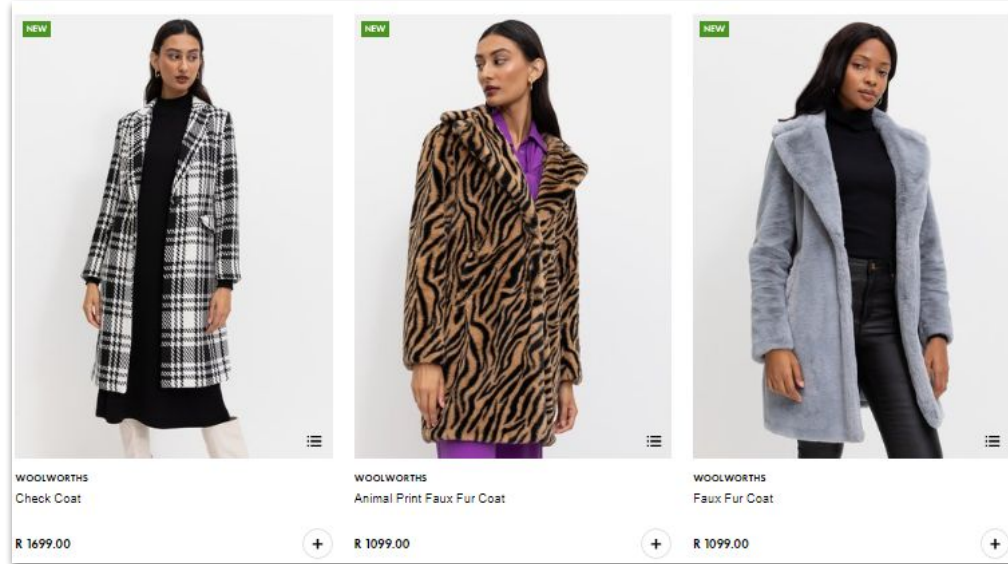
TymePOS

SAVE & EARN

GoalSave

Rewards

Use cases



WOOLWORTHS

Next workshop

Leverage ChatGPT-4 for Marketing Success: Strategies and Techniques

- What is new in ChatGPT-4 for marketers
- How to apply it to marketing strategies
- How to apply it in marketing operations
- Q&A

[Reserve your spot](#)



Ferdie Bester - Founder NightJarr

Q&A

Turn data science into sales



Profitable
sales



Analytics



Strategy &
reviews



Training &
resourcing