



Search Advertising driven by Machine Learning



Michaela Woloszczak

Search Audience & Formats,
Central Europe

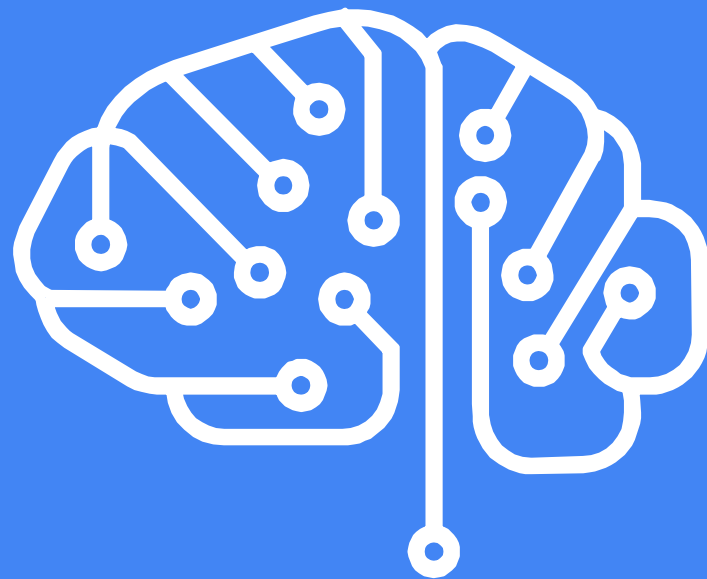
Denis Dautaj

Search Automation,
Central Europe

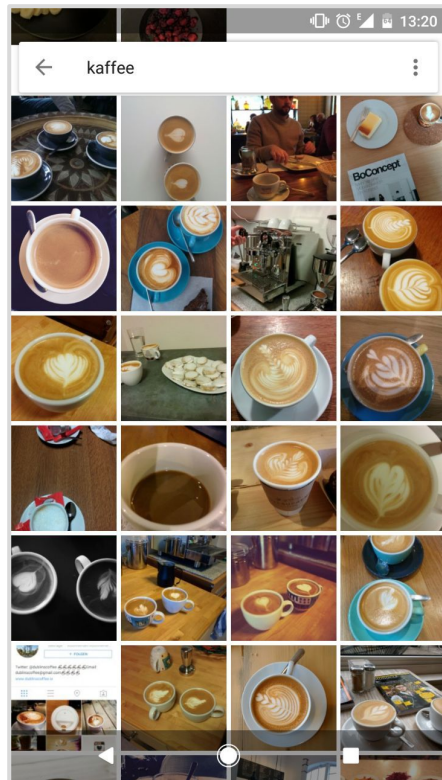
1. How Machine Learning can help you
2. Automation framework to success
3. Key takeaways to grow your business

- 1. How Machine Learning can help you**
2. Automation framework to success
3. Key takeaways to grow your business

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



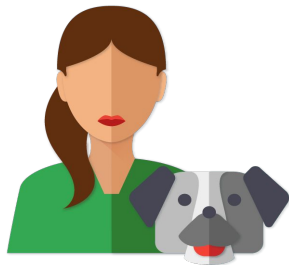
Machine Learning helps us in our private lives already



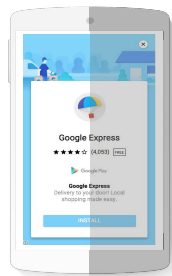
Machine Learning helps us in advertising, too



Smart Bidding



Targeting



Formats

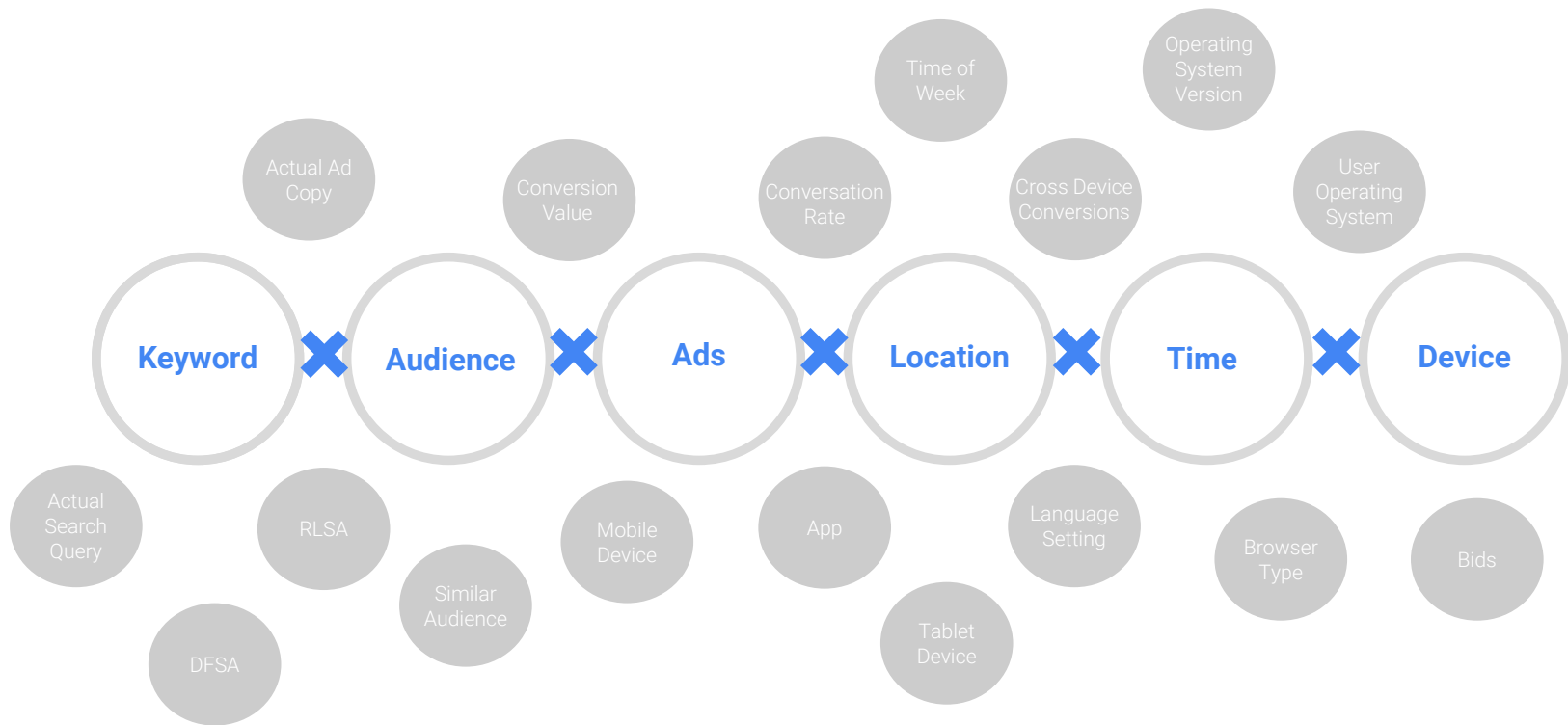


Attribution

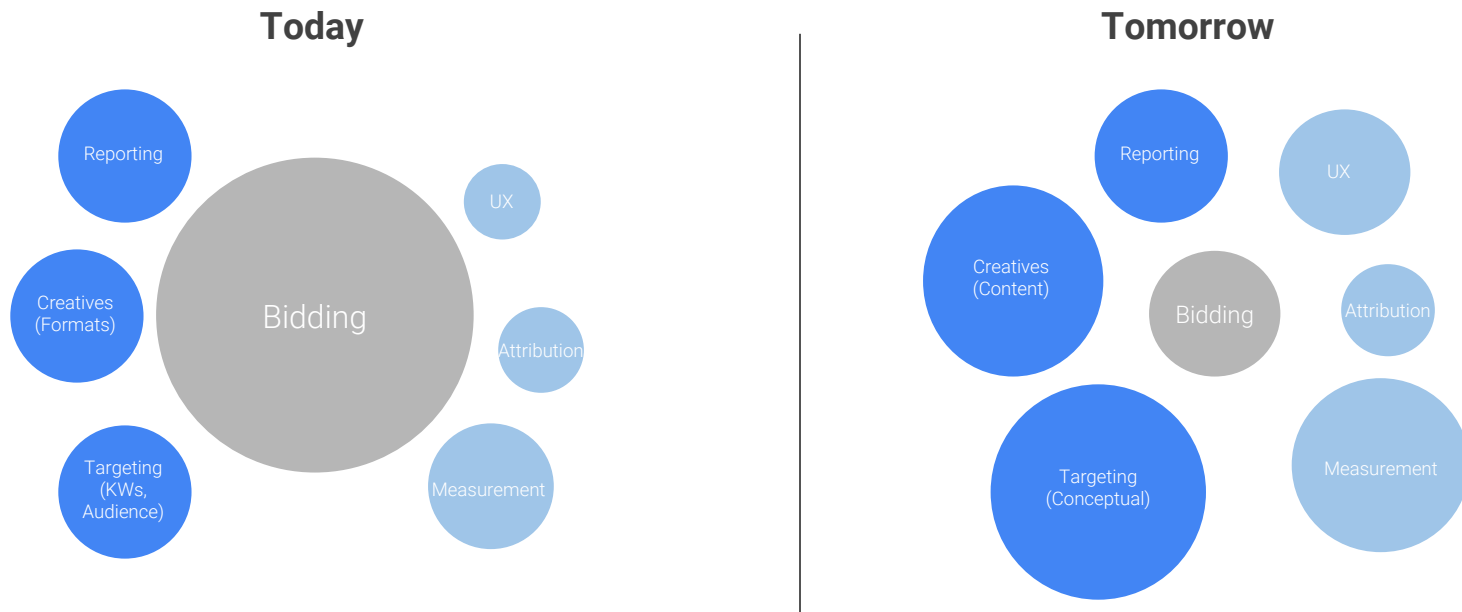
Why do we need ML for advertising?



Why do we need ML for advertising?



Machine Learning can help us focus on the things where we can add value



BCG: Cutting Complexity, Adding Value (2013): we spend 80% of our time on manual, low-value tasks

Bubble size representing the avg. amount of time spent on certain tasks

1. How Machine Learning can help you

2. Automation framework to success

3. Key takeaways to grow your business

1 Leverage
Smart Bidding

2 Feed in all
Audience Signals

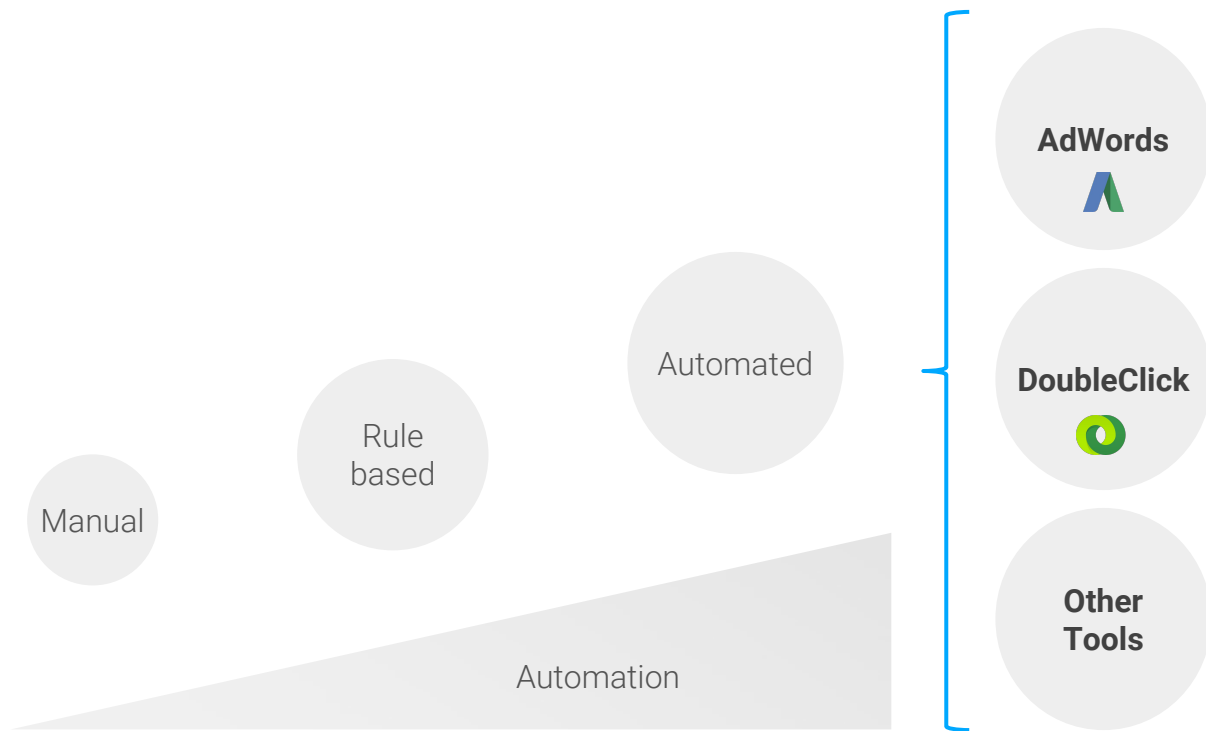
3 Show most
relevant Creatives

1 Leverage
Smart Bidding

2 Feed in all
Audience Signals

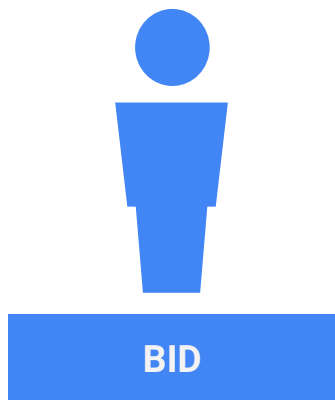
3 Show most
relevant Creatives

There are many automated bidding options on the market

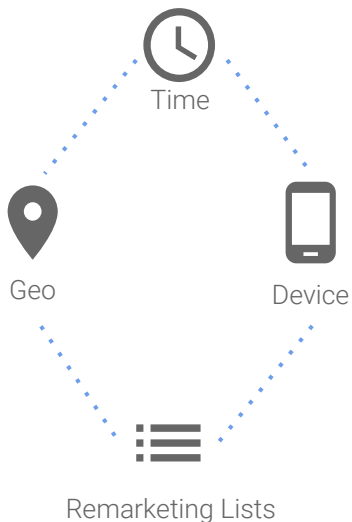


True auction-time bidding – powered by exclusive signals

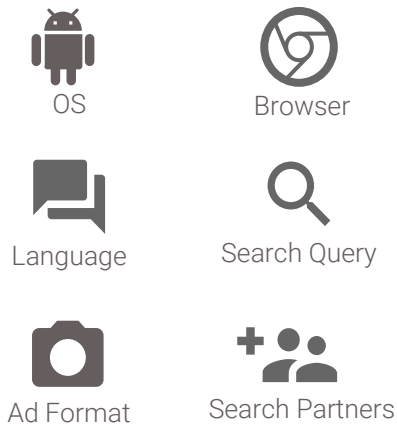
User-specific bids
through auction-time bidding



**Combination
of signals**



Exclusive signals



**Only available with
Adwords Smart Bidding**

How do you deal with these signals?



Geo

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



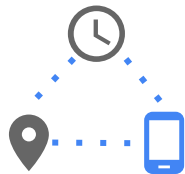
Time

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



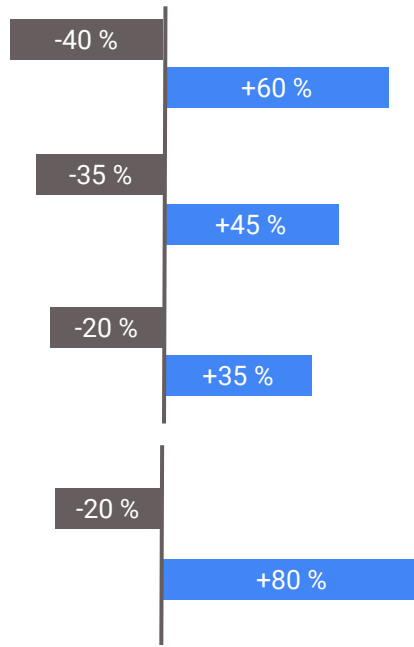
Device

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



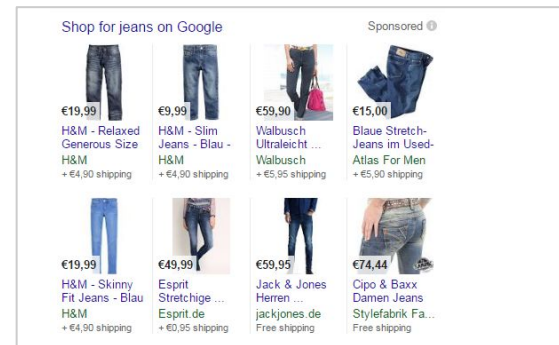
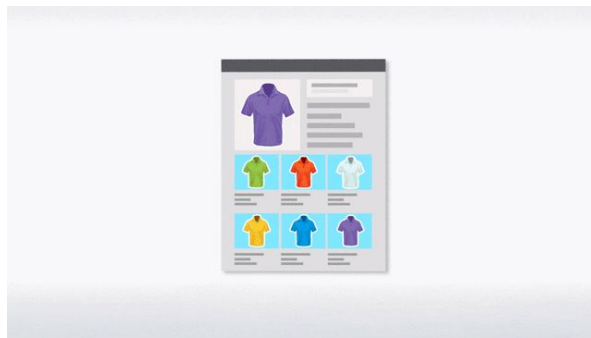
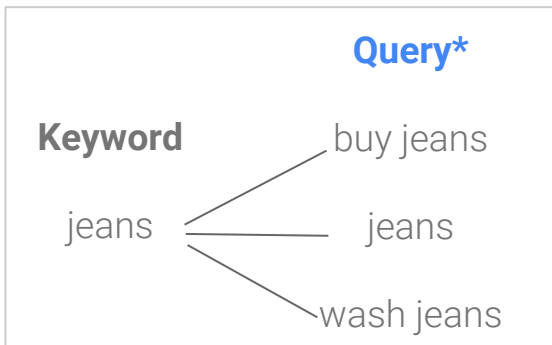
- User in **Berlin**, on **Saturday**, with **Android**
- User in **Berlin**, on **Saturday**, with **iPhone**

Performance-Difference to avg.
(Conv. Rate)



Your
bids?

Get the most of your campaigns with query-level bidding



Keywords (Broad, Phrase)

Manual: **keyword**-level

Smart Bidding: **query**-level

Dynamic Search Ads (DSA)

Manual: **category**-level





Smart Bidding: **query**-level

Google Shopping

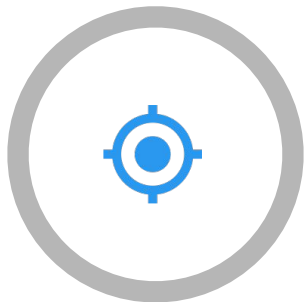
Manual: **product**-level

Smart Bidding: **query**-level

AdWords Smart Bidding options, aligned to your goals

	Campaign Goal	Recommended Strategy
No conversion tracking	 VISIBILITY	Target Outranking Share Target Search Page Location
	 WEBSITE CLICK	Maximize Clicks
Basic	 CONVERSIONS / SALES	eCPC (semi-automated)
Advanced		tCPA
Excellence	 REVENUE	tROAS

Newest features for even stronger results



Better target
accuracy

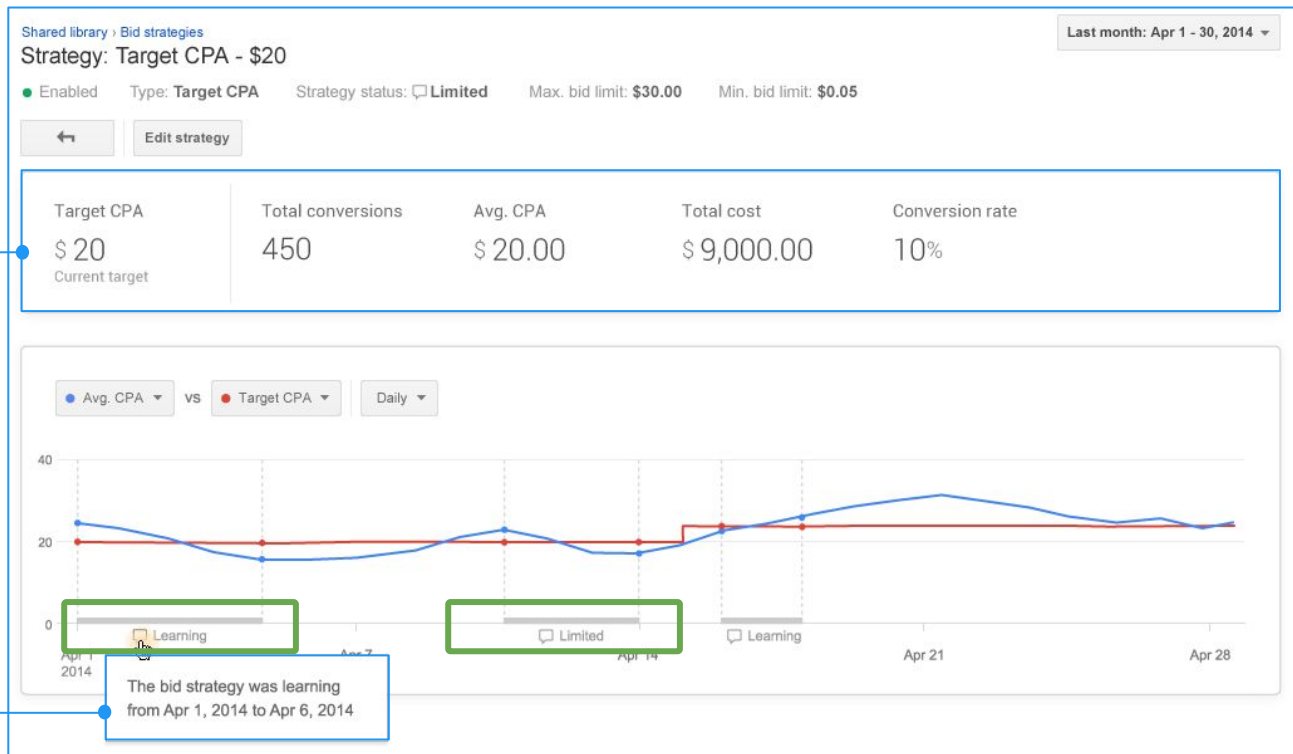


More predictive
signals

Transparency and control via the shared library

Monitor the performance of flexible bid strategies key **KPIs** and watch how it improves over time

Understand the strategy **status** and potential limitations, then take action



Your road to success with a clean pre/post test

1. Opt-in Target CPA Bid Strategy

CPA Target = 30-day CPA avg.
Minimum 30 conversions

2. Pre-Post evaluation

(Ignore “learning” week and most recent week)

Control Period
2+ weeks

Learning
1+ week

Run Test
2-4 weeks

Conversion Delay
~1 week

Evaluate / Adjust

Ignore in evaluation!

Check campaign status column

Ignore in evaluation!

3. Potential target adjustment

(within +/- 20%)

Or via A/B testing with Drafts & Experiments

Enter a specific date range

Determine the portion of traffic you want to go through the experiment

Assess performance





<div>Experiment: New_Name</div> <div>Status: Running Original campaign: Holiday Travel Experiment dates: 5/1/14 - 5/31/14 Edit</div> <div>Apply changes... May 1, 2014 - May 31, 2014</div>						
Traffic share	Cost	Clicks	Cost per click	Conversions	Cost per conversion	Avg. position
Experiment 50%	\$7000 ^	5000 ^	\$2.00 ^	130 ◇	\$2.50 v	1.8 ^
Original 50%	\$6000	4000	\$1.50	121	\$2.60	1.7

Ad groups Settings Ads Keywords Audiences Ad extensions Auto targets Display Network

All ad groups Segment Filter Columns

+ AD GROUP Edit Details Bid strategy Automate Labels

Finding suitable campaigns for a test

Campaign Goal		Recommended Strategy	Recommended Conversions*
	VISIBILITY	Target: Outranking Share Search Page Location	
	WEBSITE CLICK	Maximize Clicks	
	CONVERSIONS / SALES	eCPC (semi-automated) tCPA	- >30
	REVENUE	tROAS	>50

We can help you identify campaigns for a tCPA test

We create **estimates using your account's** Bid Simulator **data**.
Bid Simulator looks at the **specific auctions your accounts participated in** during a recent past week to estimate these performance gains.

Campaign 1	100 CURRENT CONVERSIONS	+30 SIMULATED CONVERSION UPLIFT	+30% SIMULATED CONVERSION UPLIFT %	+0% SIMULATED CPA CHANGE
Campaign 2	82 CURRENT CONVERSIONS	+19 SIMULATED CONVERSION UPLIFT	+23% SIMULATED CONVERSION UPLIFT %	+0% SIMULATED CPA CHANGE
...

1 Leverage
Smart Bidding

2 Feed in all
Audience Signals

3 Show most
relevant Creatives

Audience is a key signal for Smart Bidding

singlespeed bikes



Time



OS



Browser



Device



Language



Search Query



Audience

Visited product detail
site 5 days ago



Geo



Ad Format



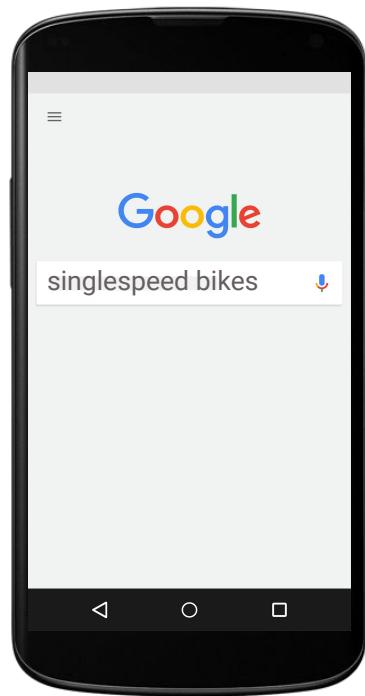
Search Partners

bid down

bid up



The Search Audience suite has grown over the years



Your Data

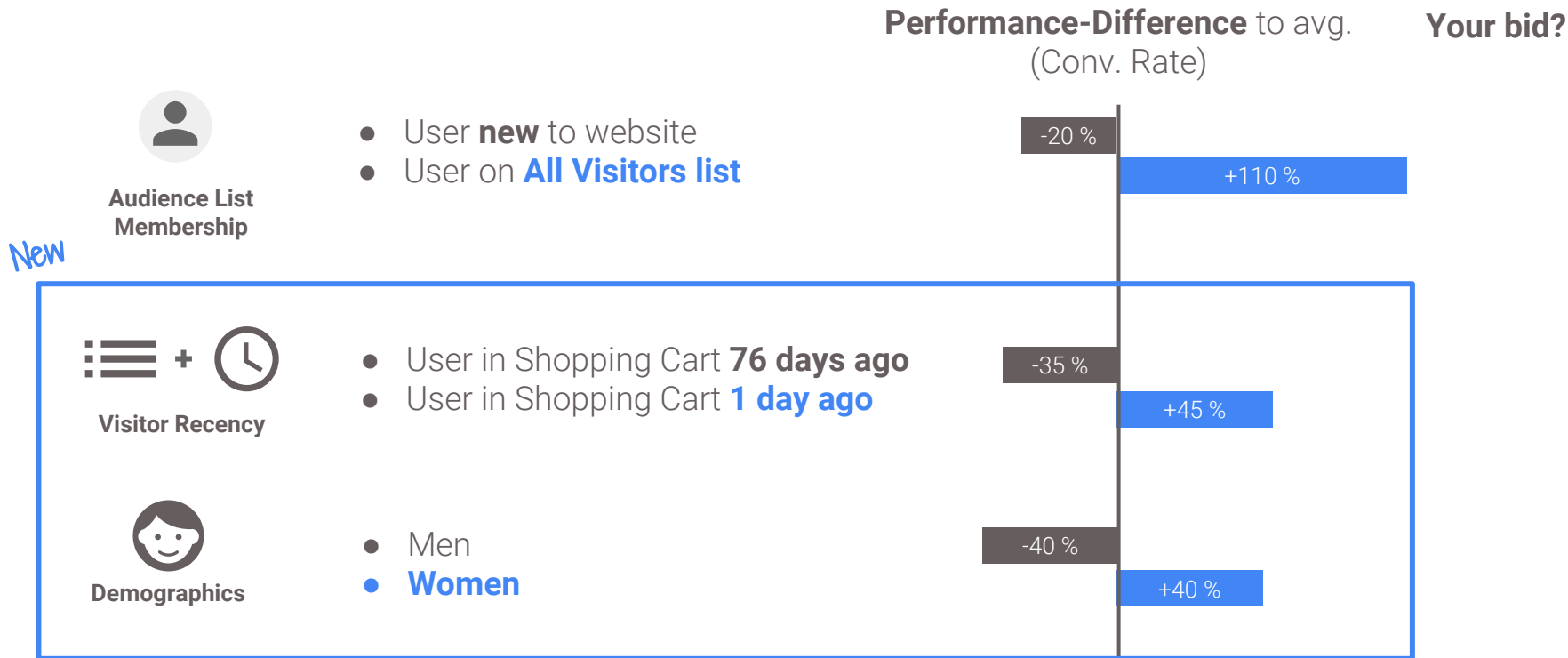
Remarketing Lists for Search Ads (RLSA) – (2013)
Customer Match (2015)



Google Data

Similar Audiences (2017)
Demographics for Search Ads (2016)

Smart Bidding now uses even richer Audience Signals



How to feed in Audience Signals for maximum success

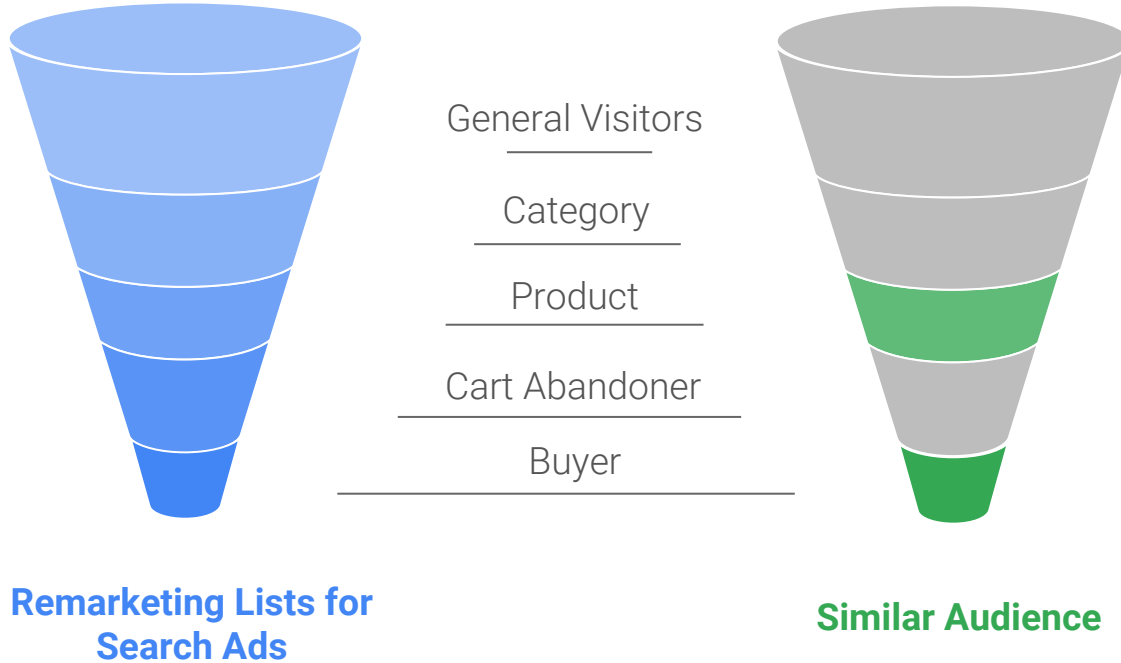
1

Target all
relevant users

2

Apply to
**all search
campaigns**
(including DSA &
Shopping)
with bid only &
campaign-level

Segment Search Audience for success



How to feed in Audience Signals for maximum success

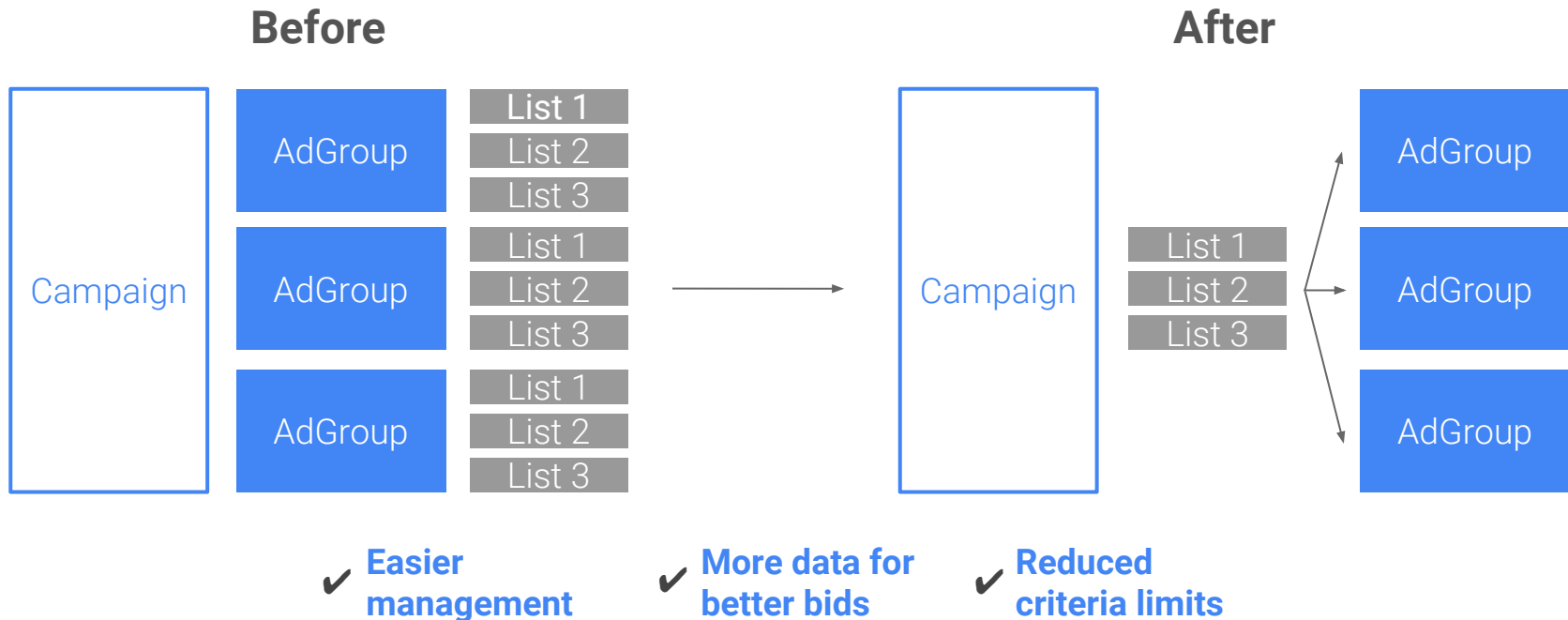
1

Target all
relevant users

2

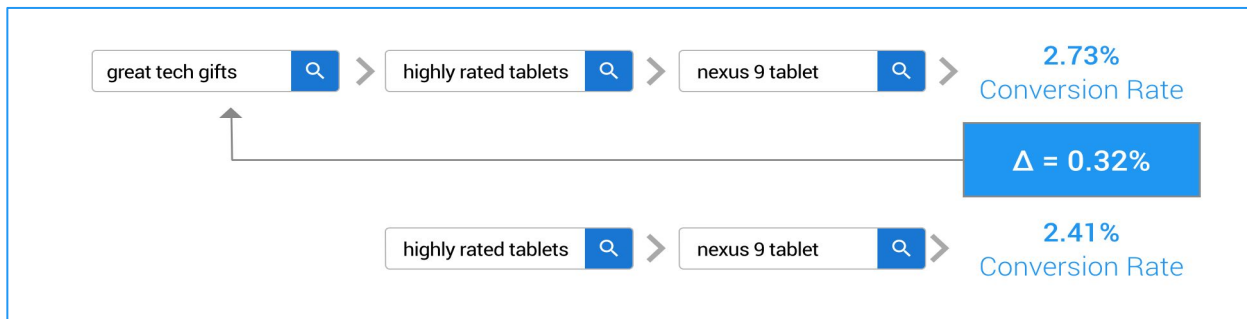
Apply to
**all search
campaigns**
(including DSA &
Shopping)
with bid only &
campaign-level

Simplify management with Campaign-Level Audiences



Really using all audience signals for Smart Bidding with Data-driven Attribution

Data-driven
model



✓ **Cross-device
touch-points**

✓ **More data for
smarter bids**

1 Leverage
Smart Bidding

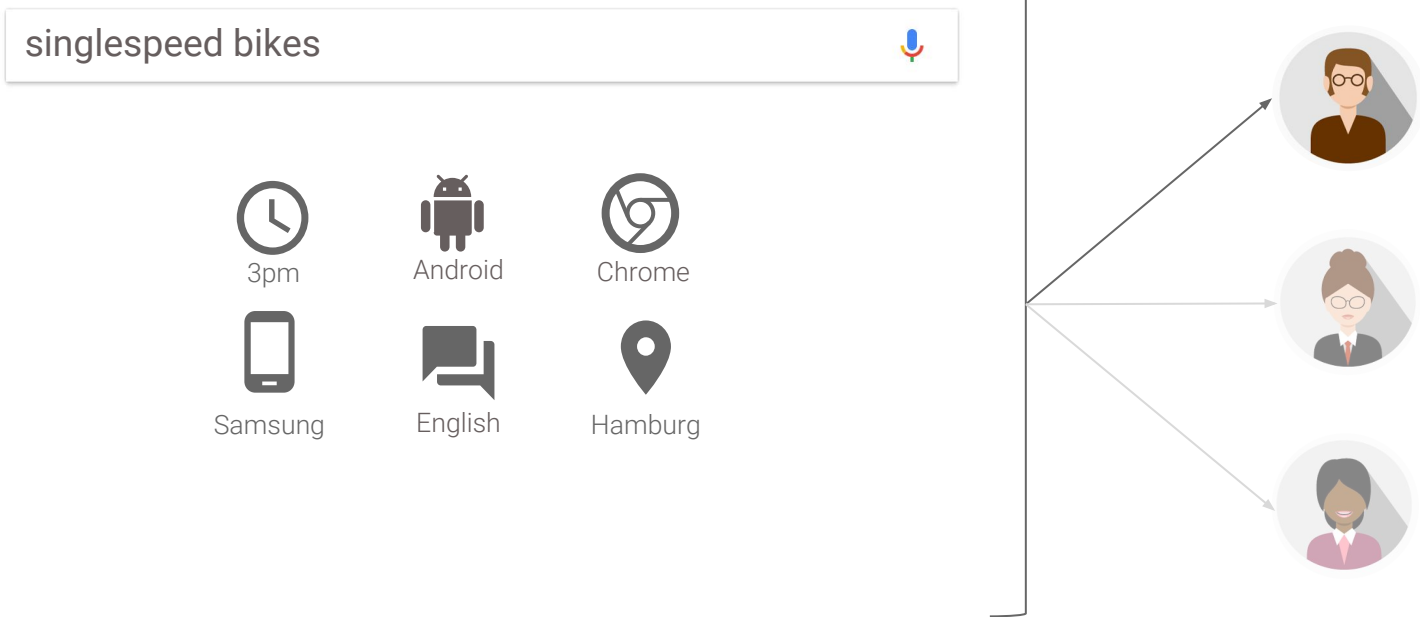
2 Feed in all
Audience Signals

3 Show most
relevant Creatives

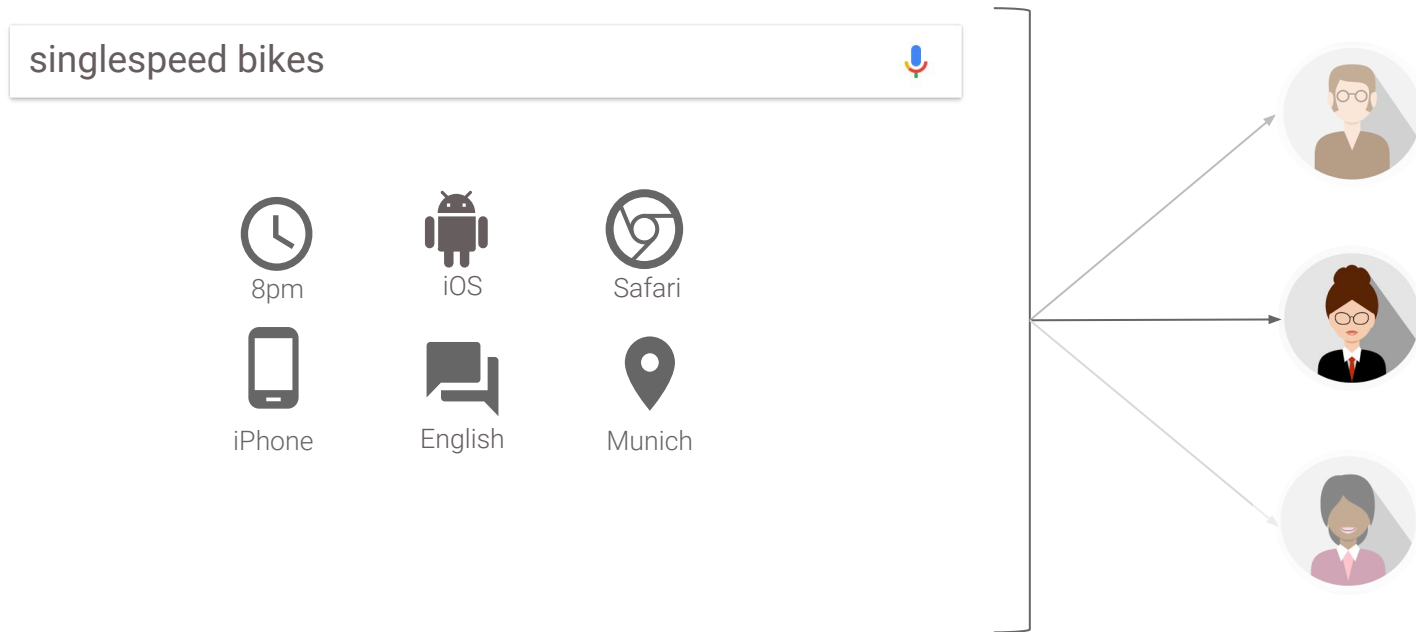
Which one is the best ad?

a	<p>Single Speed Bike - Women's Classic Collection ⓘ</p> <p>Ad bike-example.com/speed_bike/women</p> <p>Shop the latest collection online. Next day delivery guaranteed.</p>		<p>CTR: 8%</p> <p>CR: 5%</p> <p>CPA: €20</p>
b	<p>Single Speed Bike - Get 50% off ⓘ</p> <p>Ad www.bike-example.com/speed_bike</p> <p>Check out our wide collection and discounts. Buy online or find a shop nearby.</p>		<p>CTR: 10%</p> <p>CR: 2%</p> <p>CPA: €22</p>
c	<p>Single Speed Bike - Great range ⓘ</p> <p>Ad bike-example.com/speed_bike/discounts</p> <p>Check out our wide collection online. 50% discounts for men, women and kids.</p>		<p>CTR: 12%</p> <p>CR: 1%</p> <p>CPA: €40</p>

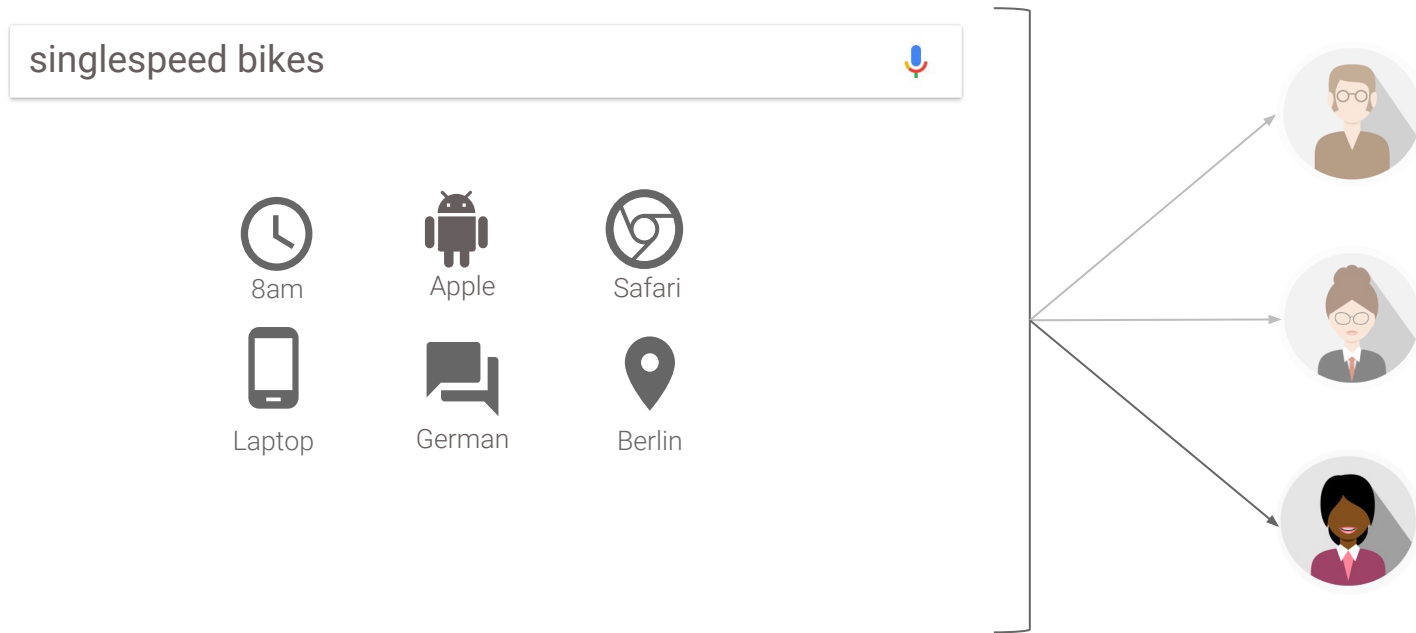
Each search has a different context



Each search has a different context



Each search has a different context



Leverage Machine Learning to show the best ad for every query

Single Speed Bike - Women's Classic Collection ⓘ
[Ad] bike-example.com/speed_bike/women

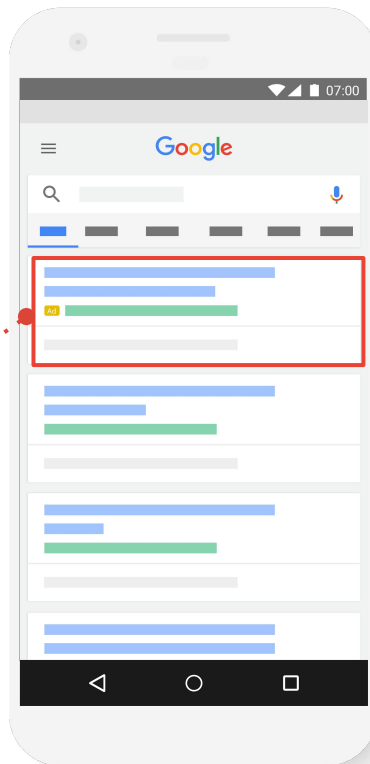
Shop the latest collection online. Next day delivery guaranteed.

Single Speed Bike - Get 50% off ⓘ
[Ad] www.bike-example.com/speed_bike

Check out our wide collection and discounts. Buy online or find a shop nearby.

Single Speed Bike - Great range ⓘ
[Ad] bike-example.com/speed_bike/discounts

Check out our wide collection online. 50% discounts for men, women and kids.



Ad groups with **3 or more high-quality** ads may receive **up to 15% more clicks***, compared to ad groups with only 1 or 2 ads.

*when running on optimized ad rotation

Personalize ads at scale with IF Functions

singlespeed bikes



Single Speed Bike - Great Range

Ad www.bike-example.com/Sale

Come back for 60% off. Next day delivery guaranteed.

Single Speed Bike - Great Range

www.bike-example.com/Sale

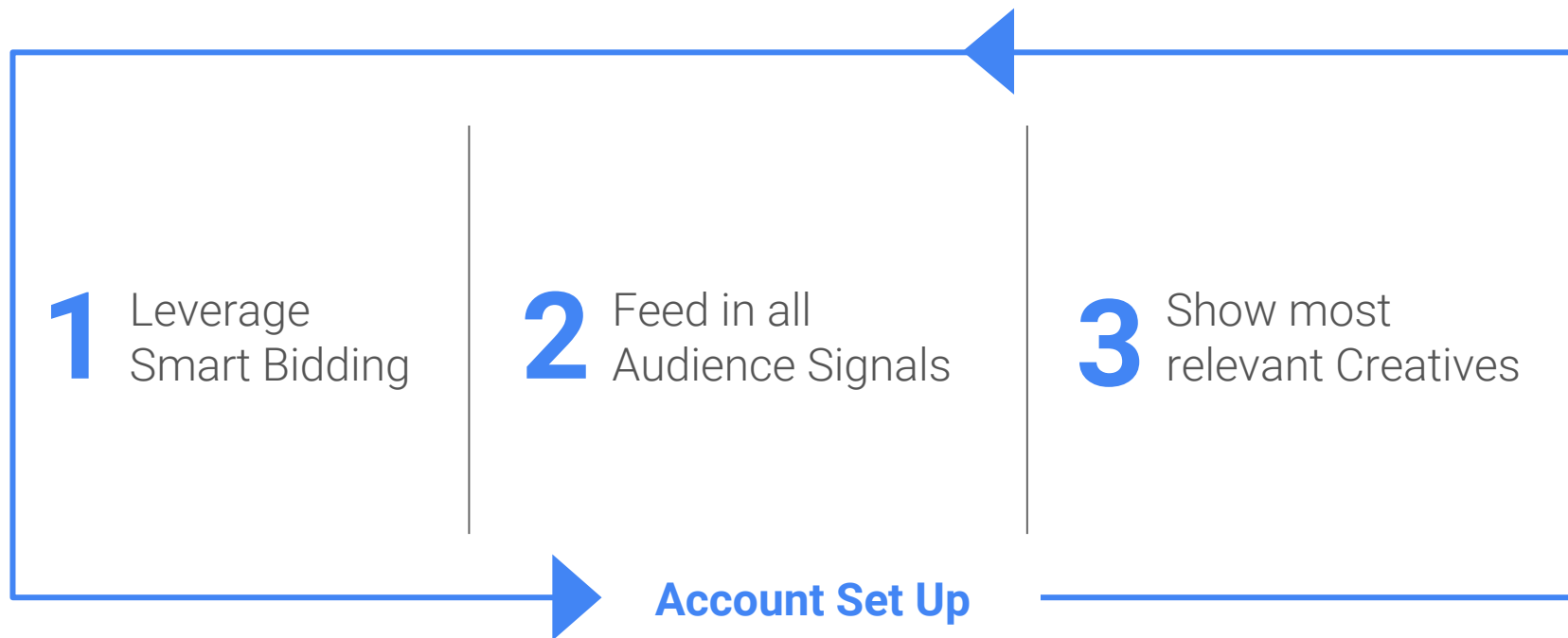
{=IF(audience IN (Converters - 540 days), Come back for 60% off): Free shipping on your first order}. Next day delivery guaranteed.



Single Speed Bike - Great Range

Ad www.bike-example.com/Sale

Free shipping on your first order. Next day delivery guaranteed.



Simplify your accounts for an AI first world

Manual Bidding

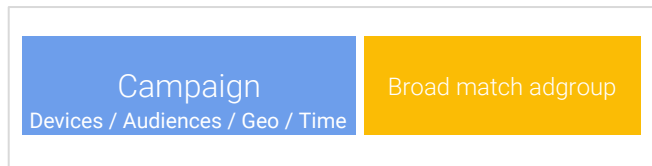
Example of granular, duplicated campaigns based on matchtype, device, RLSA and DSA for manual bidding.

matchtype	Broad Match Campaign	adgroup
		adgroup
		adgroup
	Exact Match Campaign	adgroup
		adgroup
		adgroup
	Phrase Match Campaign	adgroup
		adgroup
		adgroup
device	Mobile Campaign	adgroup
		adgroup
		adgroup
	Desktop Campaign	adgroup
		adgroup
		adgroup
	Tablet Campaign	adgroup
		adgroup
		adgroup
RLSA	10 day (RLSA) Campaign	adgroup
		adgroup
		adgroup
	20 day (RLSA) Campaign	adgroup
		adgroup
		adgroup
	30 day (RLSA) Campaign	adgroup
		adgroup
		adgroup
DSA	Dynamic Search Ads	adgroup
		adgroup
		adgroup

Smart Bidding



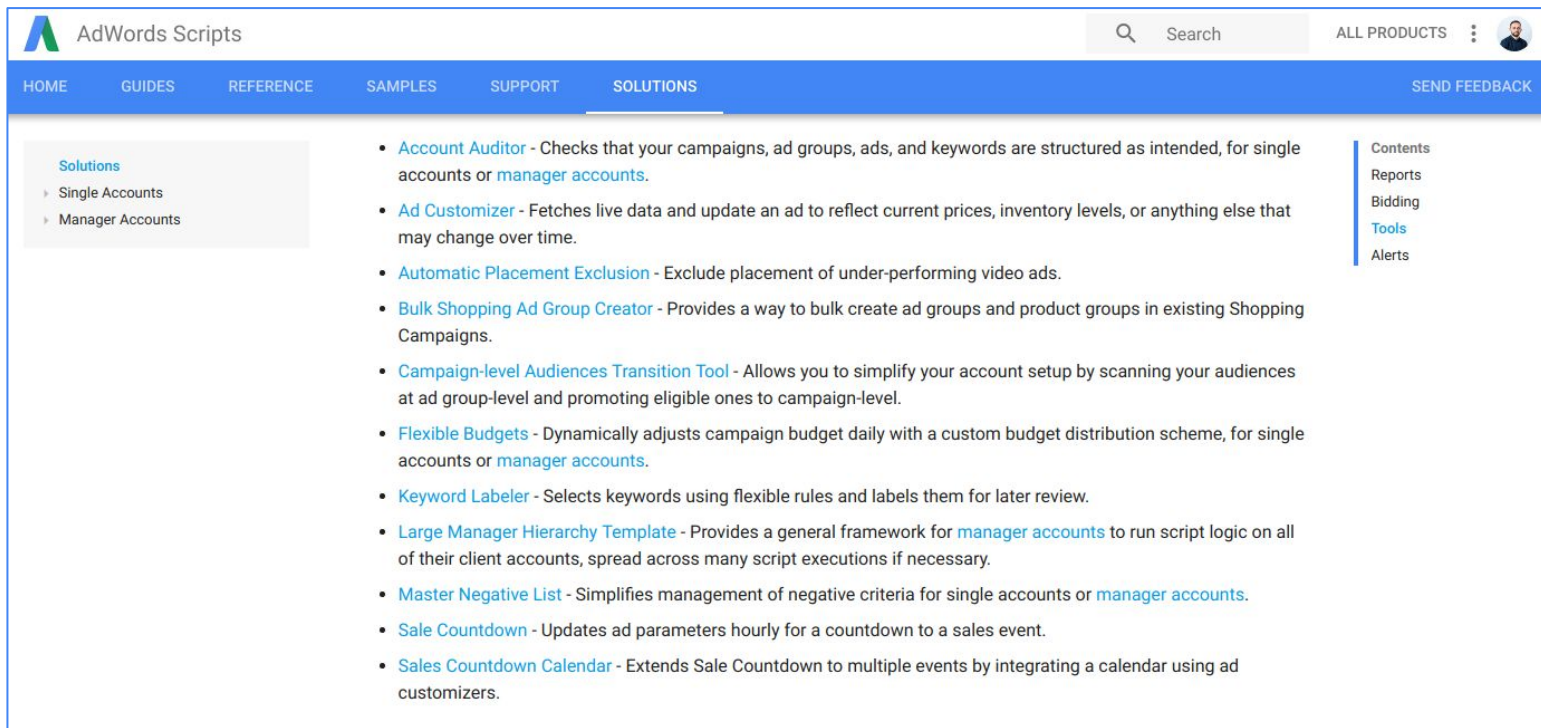
Consolidated campaign structure supercharging Smart Bidding with broad match types and DSA.



Or



And utilize scripts for quick and easy implementation



The screenshot shows the AdWords Scripts website. The header includes the AdWords Scripts logo, a search bar, and links for ALL PRODUCTS and a user profile. The navigation bar has links for HOME, GUIDES, REFERENCE, SAMPLES, SUPPORT, and SOLUTIONS (which is highlighted). A 'SEND FEEDBACK' link is also present. On the left, under 'Solutions', there are links for 'Single Accounts' and 'Manager Accounts'. The main content area lists 11 scripts with their descriptions. On the right, there is a sidebar with links for Contents, Reports, Bidding, Tools (highlighted), and Alerts.

AdWords Scripts

HOME GUIDES REFERENCE SAMPLES SUPPORT SOLUTIONS SEND FEEDBACK

Solutions

- Single Accounts
- Manager Accounts

- [Account Auditor](#) - Checks that your campaigns, ad groups, ads, and keywords are structured as intended, for single accounts or [manager accounts](#).
- [Ad Customizer](#) - Fetches live data and update an ad to reflect current prices, inventory levels, or anything else that may change over time.
- [Automatic Placement Exclusion](#) - Exclude placement of under-performing video ads.
- [Bulk Shopping Ad Group Creator](#) - Provides a way to bulk create ad groups and product groups in existing Shopping Campaigns.
- [Campaign-level Audiences Transition Tool](#) - Allows you to simplify your account setup by scanning your audiences at ad group-level and promoting eligible ones to campaign-level.
- [Flexible Budgets](#) - Dynamically adjusts campaign budget daily with a custom budget distribution scheme, for single accounts or [manager accounts](#).
- [Keyword Labeler](#) - Selects keywords using flexible rules and labels them for later review.
- [Large Manager Hierarchy Template](#) - Provides a general framework for [manager accounts](#) to run script logic on all of their client accounts, spread across many script executions if necessary.
- [Master Negative List](#) - Simplifies management of negative criteria for single accounts or [manager accounts](#).
- [Sale Countdown](#) - Updates ad parameters hourly for a countdown to a sales event.
- [Sales Countdown Calendar](#) - Extends Sale Countdown to multiple events by integrating a calendar using ad customizers.

Contents
Reports
Bidding
Tools
Alerts

[Link to AdWords scripts library](#)

1. How Machine Learning can help you
2. Automation framework to success
- 3. Key takeaways to grow your business**

5 key takeaways to grow your business

- 01 **Automation allows us to shift time** to important tasks and **grow your business**
- 02 **Leverage Smart Bidding** to handle infinite data signals for user-specific bids
- 03 **Incorporate audience data everywhere** to make Smart Bidding even smarter
- 04 **Automate your creatives** for most relevant messaging
- 05 **Simplify your account setup** and **utilize scripts** for more efficient implementation



Thank you!

Michaela Woloszczak | Denis Dautaj



Slides & Feedback

<https://goo.gl/forms/1ariaYsZmQv17X7H3>



APPENDIX

tCPA worked well for CosmosDirekt

“Durch Smart Bidding sind wir unabhängiger, weil der Automatisierungsgrad gestiegen ist. Wir schaffen es nun überwiegend Inhouse zu arbeiten und uns auf strategische und taktische Themen zu konzentrieren, als uns mit operativer Kampagnenarbeit aufzuhalten.”



- Dennis Brill, Online Marketing Manager SEA bei CosmosDirekt

Mobile CPA
- 5%

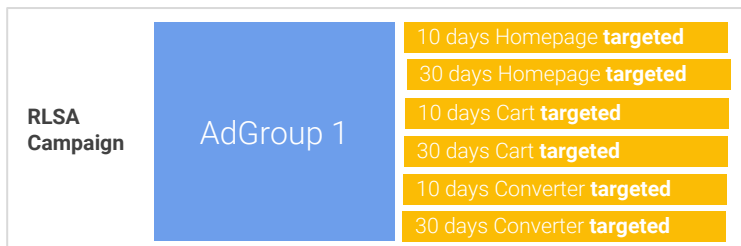
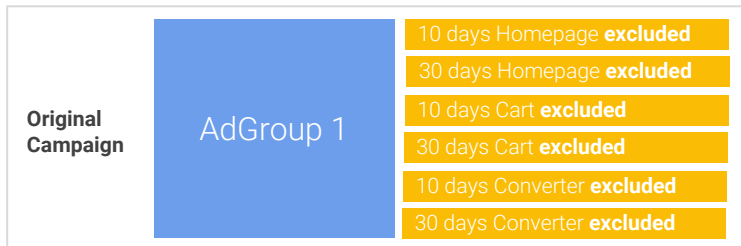
Share of Mobile
budget now 25 %

Conversions
+ 100%

Simplify your Search Audience Strategy for success

Many accounts look like this...

Running separate RLSA campaigns as target & bid



This is what an excellent setup looks like

Leveraging Search Audience signals in every search campaign with bid only and at campaign-level

