thinkperformance
with Google

Machine Learning
Как машинное обучение меняет бизнес и маркетинг

Aprajita Jain,
Google Executive Summits Evangelist

PORTRAIT
CAUCASIAN
MALE
FACIAL HAIR
30-40 YEARS OLD
DARK CLOTHING
COLLAR
WEARING A HAT
FACING TO THE RIGHT

A step back to get the definitions right

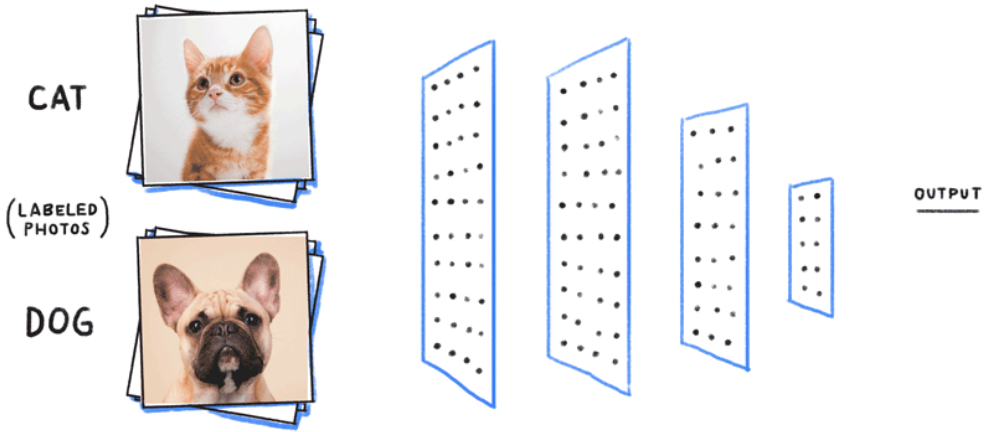
A step back to get the definitions right

Artificial Intelligence: Broad term for getting computers to perform **human tasks**; the science of making things smart.

Machine Learning: A method of AI in which algorithms are used to autonomously learn from **examples** rather than explicit **rule-based** programming.

Deep Learning: A technique of machine learning where algorithms are arranged in layers that **mimic the human brain's learning patterns** (**neural nets**).

How does it work?



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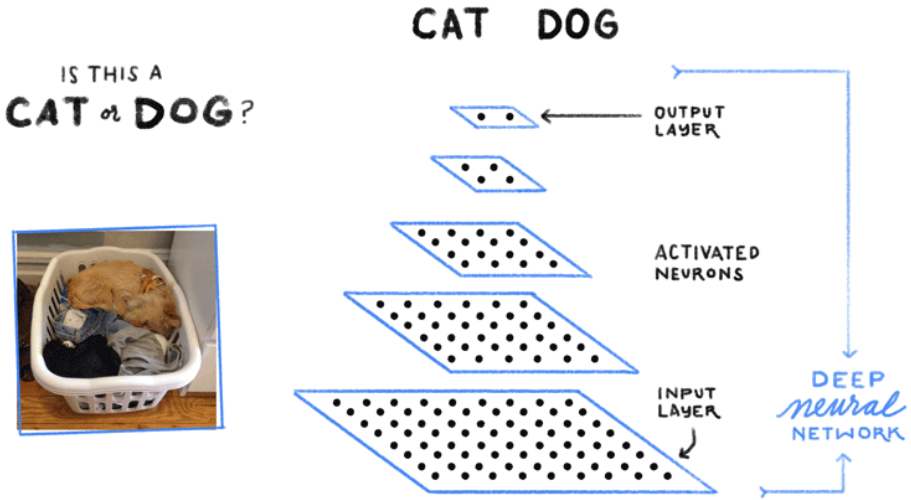
How does it work?



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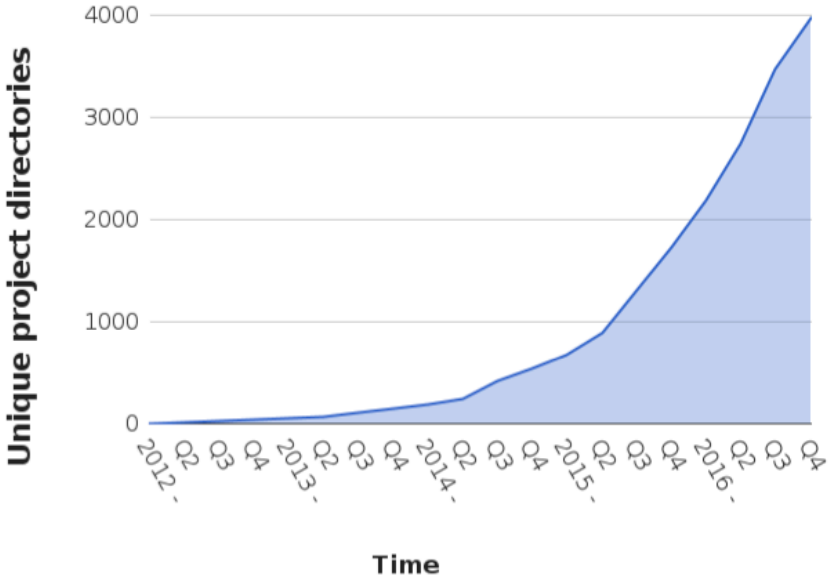
MACHINE LEARNING AT ALPHABET

Growing Use of Machine Learning at Alphabet

of directories
containing
model
description files



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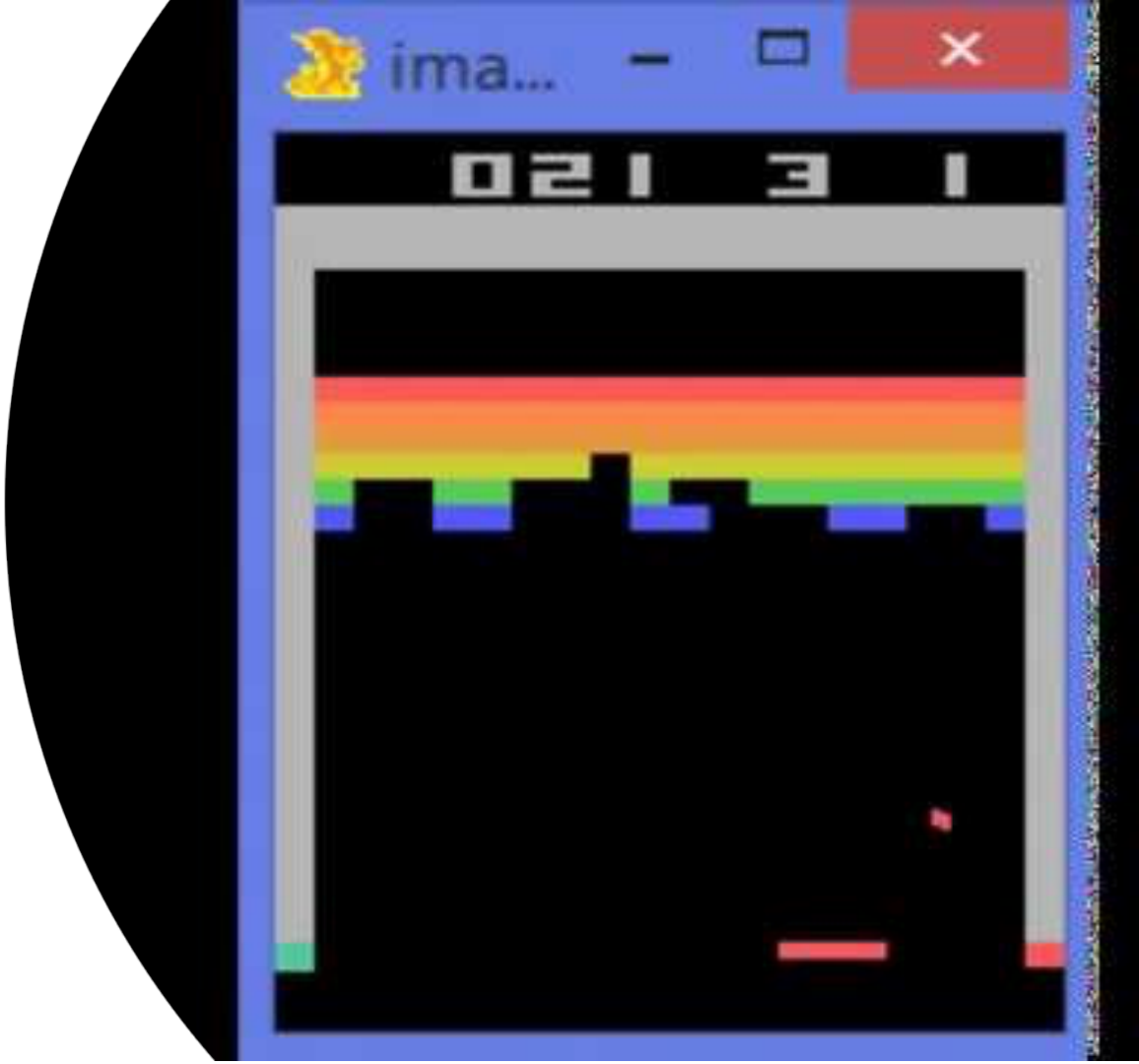
DeepMind mastering Atari games



10^{80}

10^{80}

AlphaGo

10^{170}

MACHINE LEARNING IN GOOGLE PRODUCTS

Machine Learning at Google

Search
Search ranking
Speech recognition

Gmail
Smart reply
Spam classification

Photos
Photos search

Translate
Text, graphic and speech translation

Android
Keyboard & speech input

Drive
Intelligence in Apps

YouTube
Video recommendations
Better thumbnails

Cardboard
Smart stitching

Play
App recommendations
Game developer experience

Chrome
Search by image

Maps
Street view image
Parsing local search

Ads
Richer text ads
Automated bidding

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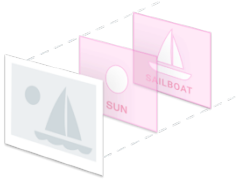
TRANSLATE - Machine Learning @Google

Machine Learning for All

Vision API



Speech API

Translate API

Tensor Flow

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MACHINE LEARNING IN GOOGLE ADVERTISING PRODUCTS

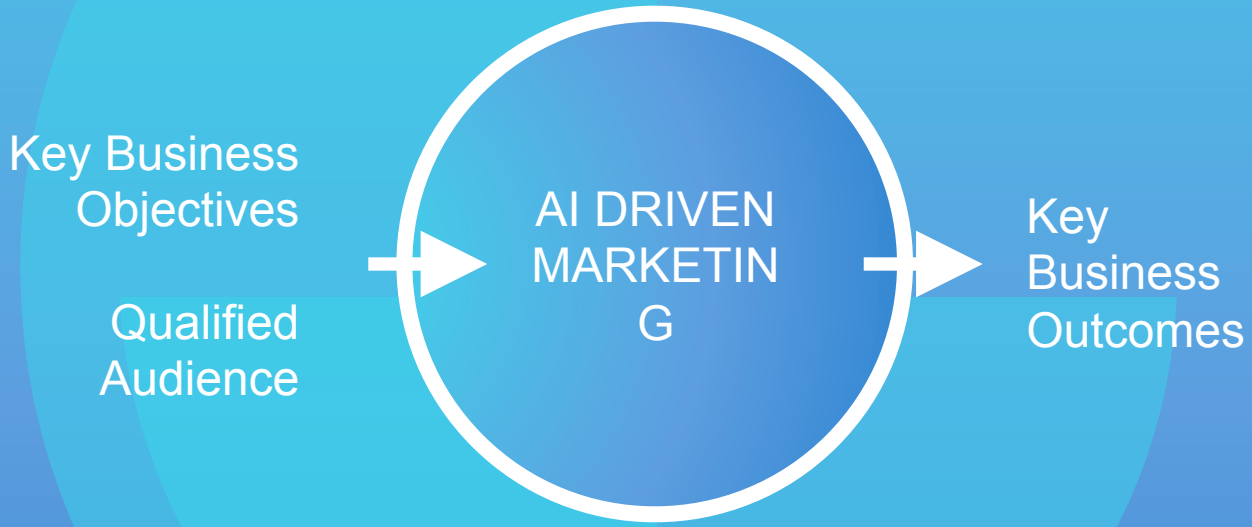
HOW DO YOU KEEP UP WITH CONSTANTLY EVOLVING **Consumer Behavior?**

HOW DO YOU ENSURE THAT YOU GET THE BEST OUT OF **Every Marketing Dollar** YOU SPEND?

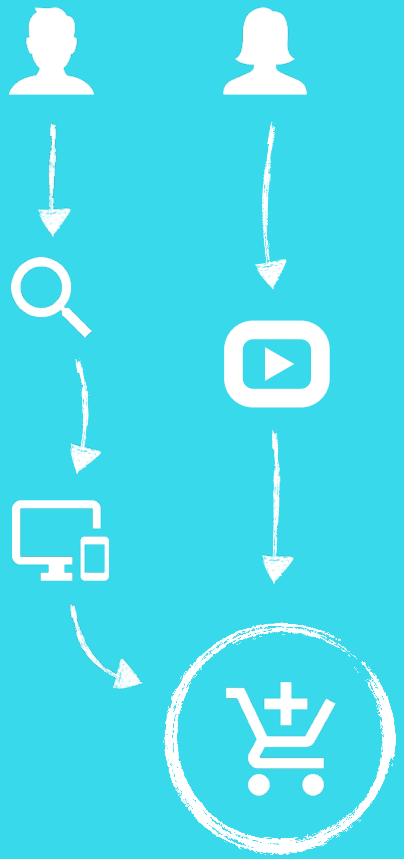
HOW DO YOU STAY FOCUSED ON THE **Right Things?**

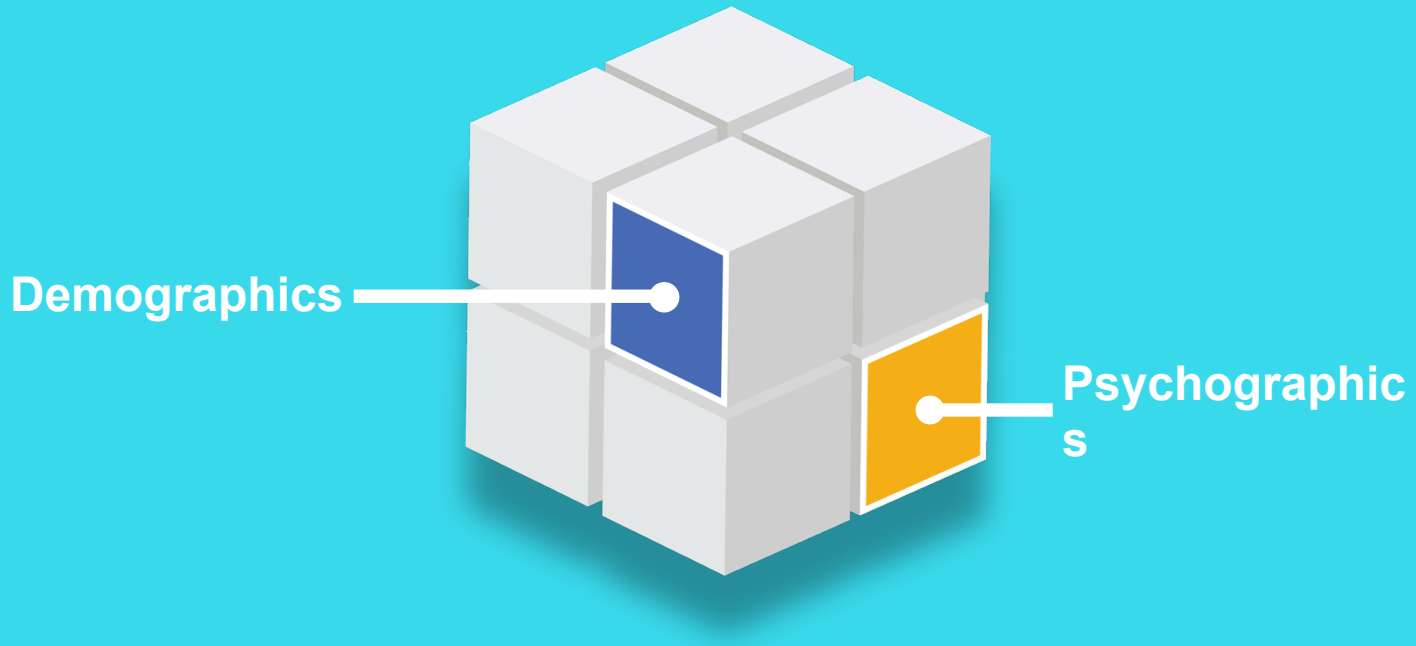
OBJECTIVES
1
SEGMENTS
2
INSIGHTS
3
TARGET
4
REACH
5
PERSONALIZE
6
CONVERT
7
MEASURE
8
DEMAND MARKETING PROCESS

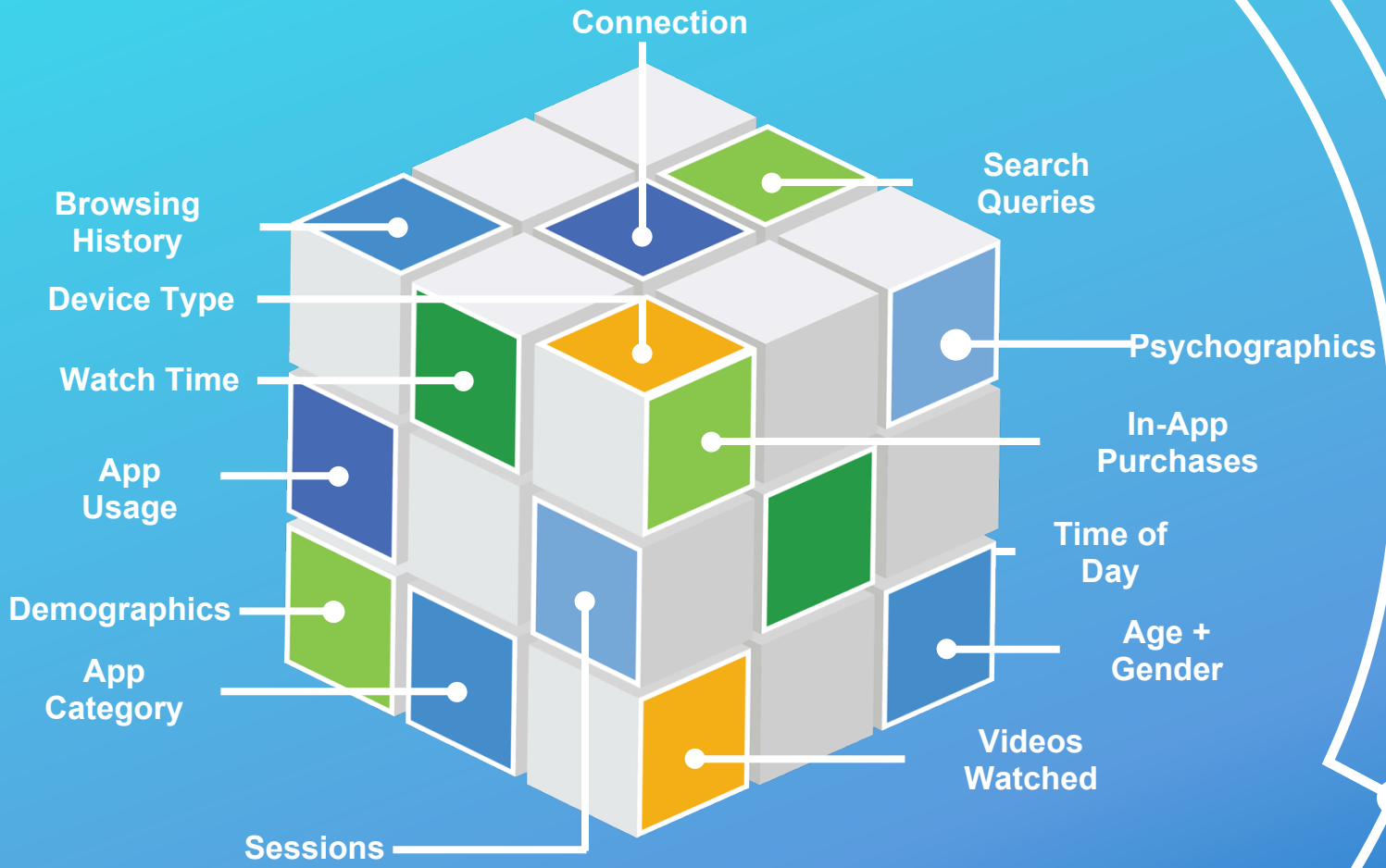
Demand Marketing Process in AI/Digital World



Smart **Bidding**



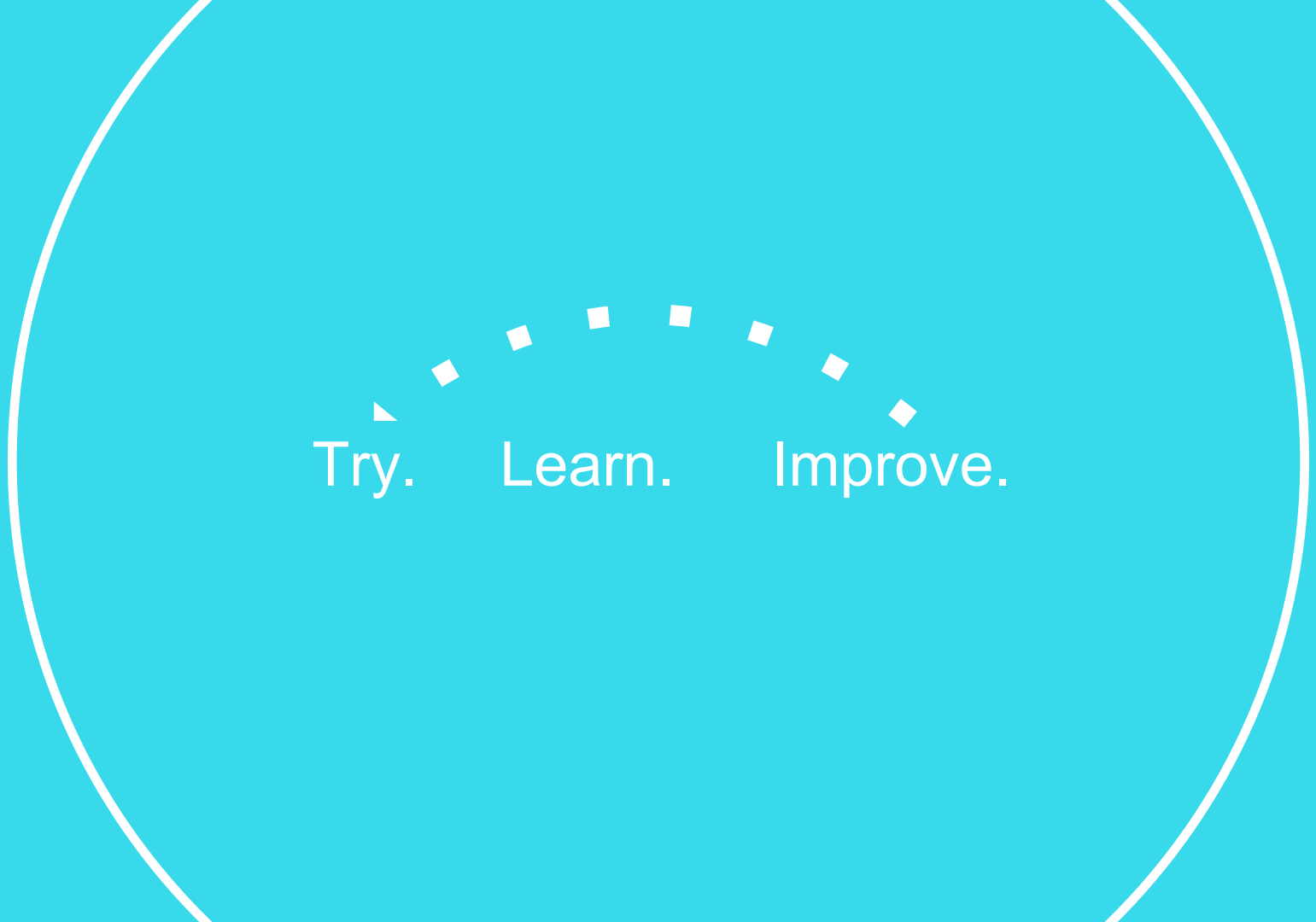

Demographics
Psychographics


Connection
Search Queries
Browsing History
Device Type
Psychographics
Watch Time
In-App Purchases
App Usage
Time of Day
Demographics
Age + Gender
App Category
Videos Watched
Sessions

DECLINING SALES

ビーチでノドがカラカラな女の子にはコーラを。

The rain stopped!
Time for a take out?
お持ち帰りチョイス
意外にもテイクアウトではボリューム満点の


Try. Learn. Improve.

Спасибо!