jampp

BOOSTING MOBILE SALES

Quick intro to Jampp

We help advertisers boost their mobile sales

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BACKGROUND

About us

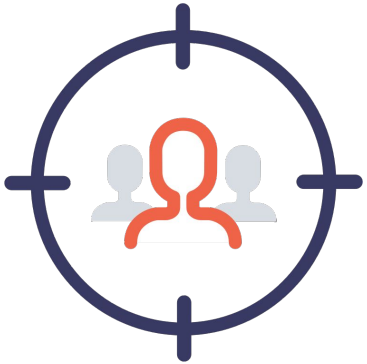
Jampp is a performance marketing platform for acquiring and engaging mobile customers. The company combines behavioral data with predictive and programmatic technology to generate revenue for advertisers by showing personal, relevant ads that inspire consumers to purchase for the first time, or more often.

Founded in 2013, our team serves a global client base from offices in San Francisco, London, Berlin, São Paulo, Singapore, Cape Town and, of course, our sunny home, Buenos Aires.

Real time bidding

Introduction

Jampp is a mobile app marketing platform that uses programmatic ads to:



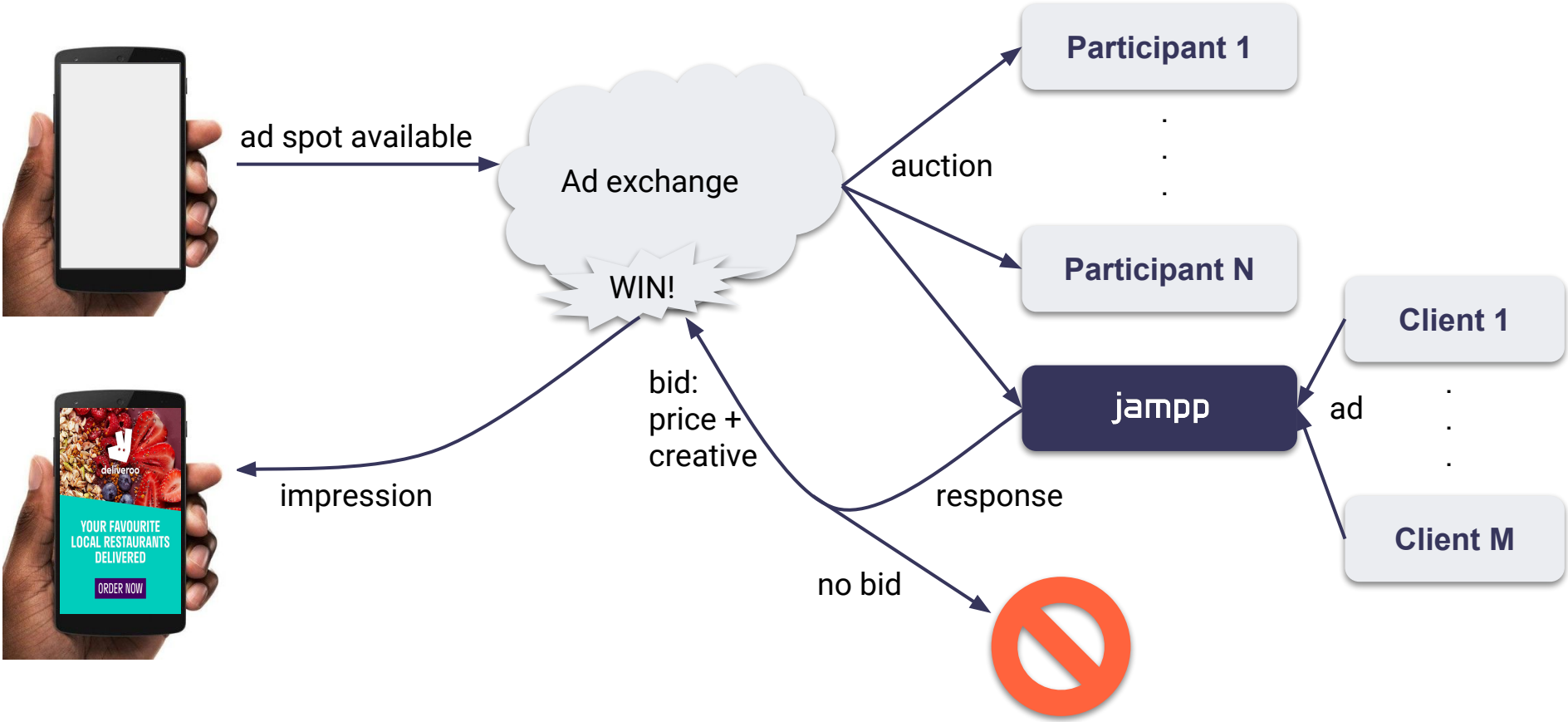
User Acquisition

Get new potential customers to install your app

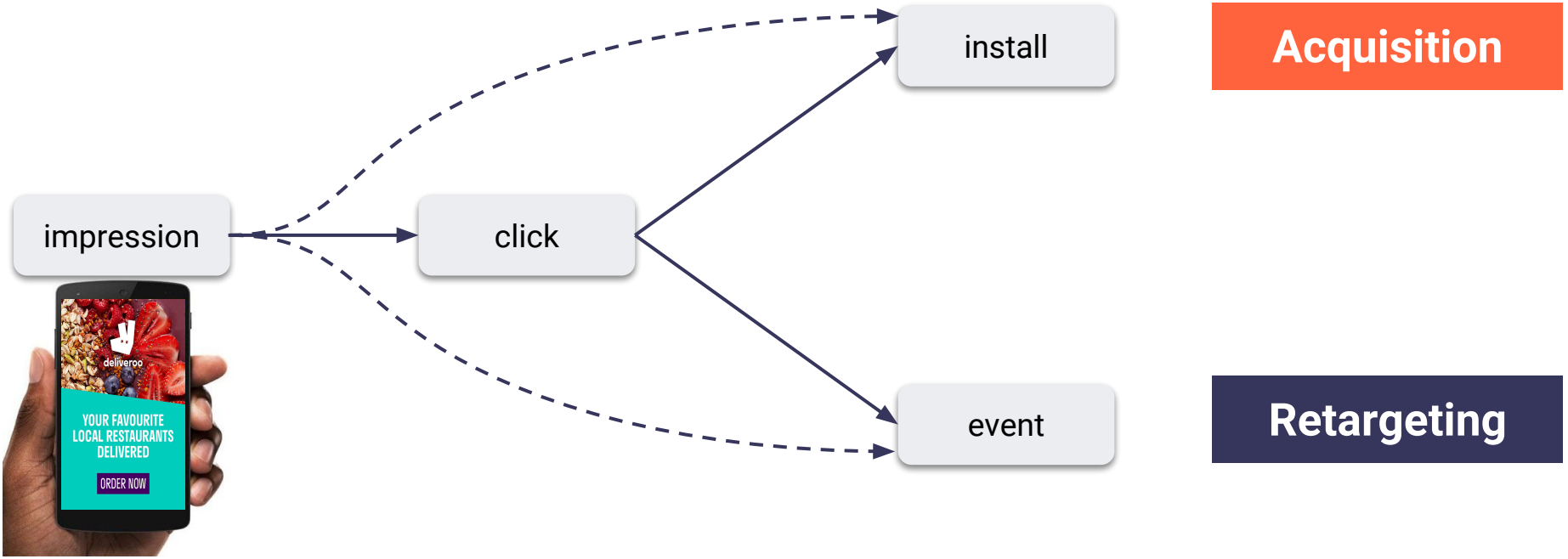
Retargeting

Encourage first-time purchases or repeat purchases

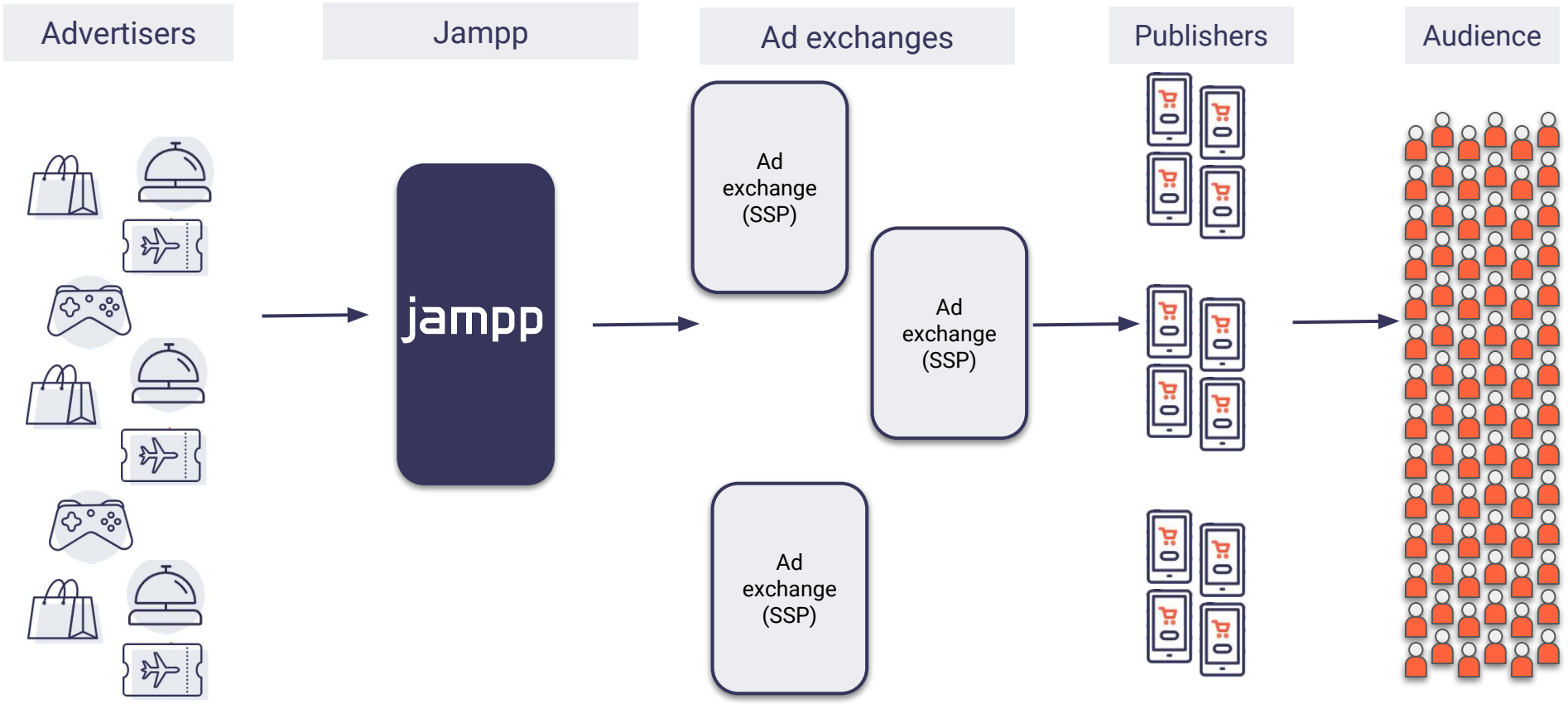
Introduction to real-time bidding (RTB)



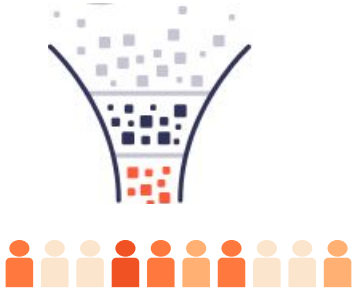
Transaction lifecycle: possibilities after impression



The big picture



Jampp's perspective: Receiving auction to bidding



Receive auction

Classify user

?

New user? Frequent buyer?
Knowing this helps make better decisions for our clients.

Identify clients looking for this type of user

?

For each client:
How likely is the user to convert?
What would be the revenue?

Choose
client, price, and creative
to bid

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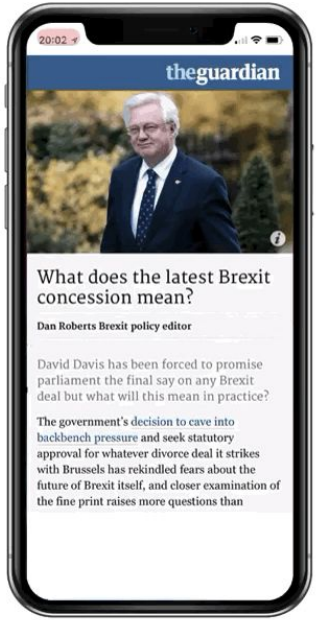
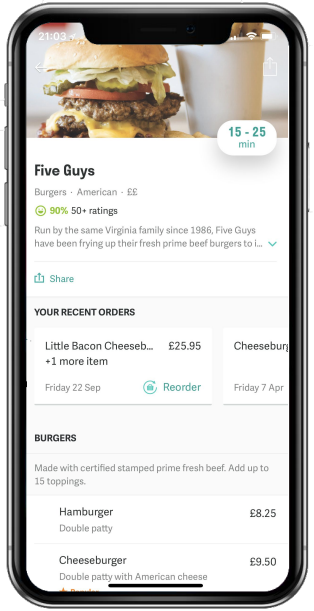
Customer’s perspective: Relevant and seamless

Users get to a product page but then leave the app before completing a purchase.



While using another app, they see a custom ad displaying the product they saw last.



When they click on the ad, they are deep-linked straight into the app, right where they left off.

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Technology stats

100% Programmatic

We process

100+ TB
of data per day

(25,000,000 mp3 or 100,000 episodes of Game Of Thrones)

20+ billion
in-app events per month

700,000+
auctions per second

500+
servers analyzing bids simultaneously

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Technological challenges of programmatic bidding

Speed

Must reply in **under 70ms**. The ML systems in place must have very fast computation times.

Scalability

We participate in **700K+ auctions** per second, so all systems must work at scale.

Coordination

We coordinate the interaction of distributed systems, both online and offline.

Constant up-time

Our systems are spending money **24/7/365** days a year.

Risk of overspending

You *really* don't want your automated systems making bad decisions.

Rapidly changing data

The underlying distributions continuously shift so we must keep **estimators up-to-date**.

Data Landscape

TRANSACTIONAL

Generated from RTB landscape and transactions.

- Lots of data
- Market-related
- Fast-changing distribution
- Contextual

ORGANIC

Generated by user behavior inside apps.

- Less data
- Behavioral, app, and UX related
- Slow-changing distribution

EXTERNAL

Data that does not fall into the other two groups.

- Unstandardized format
- Shared with us in different ways
- Slow-changing distribution

Data Landscape

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Transactional data is generated by the RTB landscape

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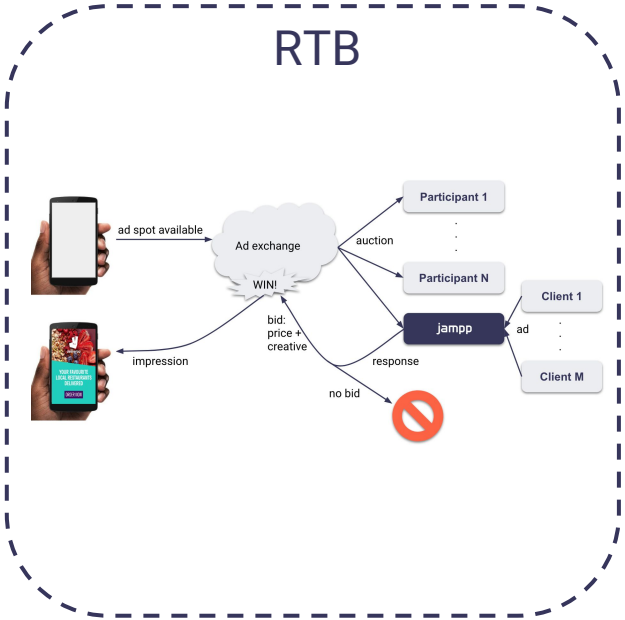
impressions

clicks

installs

events



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Data Landscape

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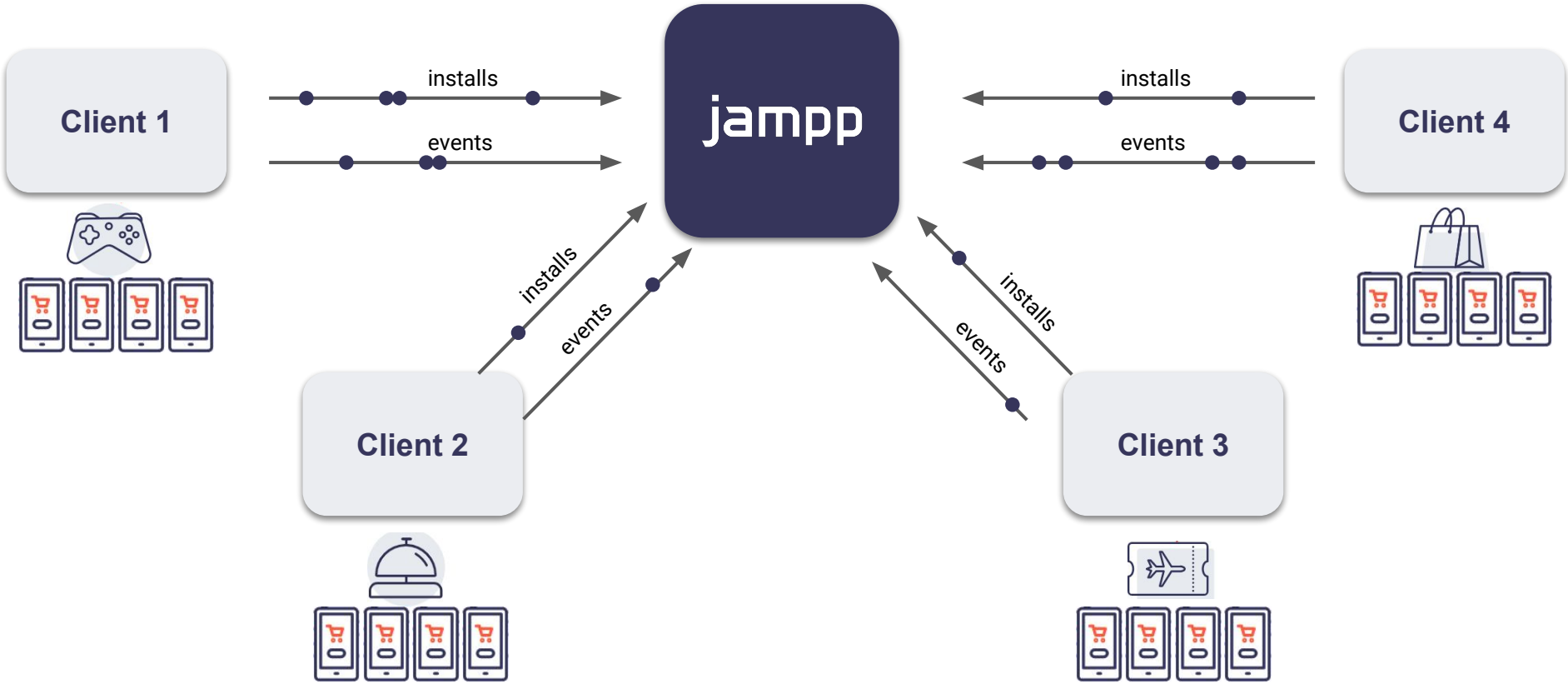
Organic data is generated by user behavior in our clients' apps



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USER SEGMENTATION

Solution Overview

PREDICTIVE SEGMENTS

Mixes contextual and behavioral data to **predict conversion probabilities** and group users based on these predictions.

LOOKALIKE SEGMENTS

Use in-app event data to train a *supervised* model to identify users who perform behavior X.

Use **trained model as a distance metric to generate "lookalike" segments**.

BEHAVIORAL CLUSTERS

Use in-app event data and transactional data to train an ***unsupervised* model which returns clusters of users**.

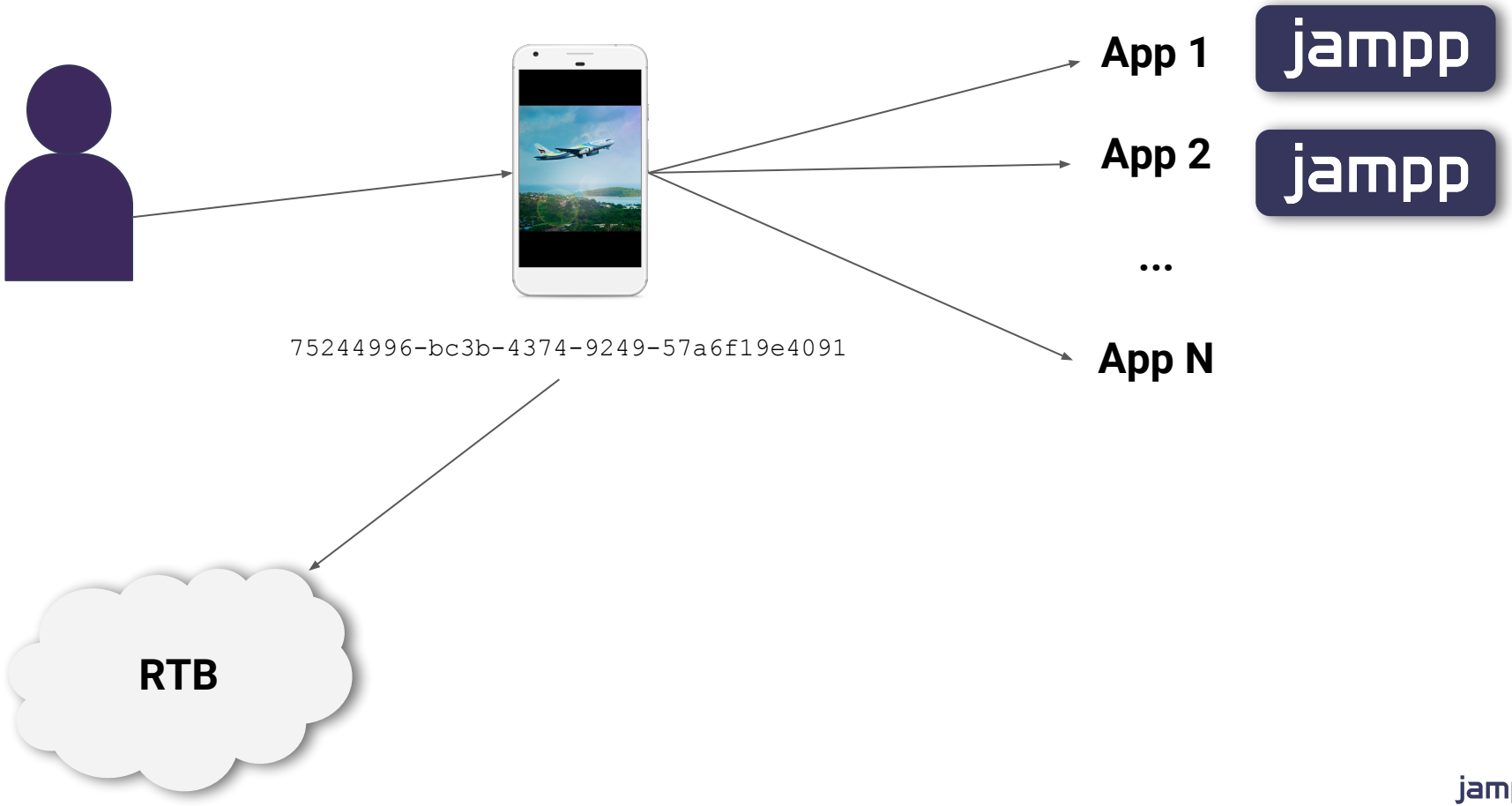
The clusters may be used by the account managers to target similar groups of users.

Challenge 7506

Problema

- Evitar saturar usuarios
- Saber **cuándo** apostar por un usuario
- Saber cuándo **vamos a poder** apostar por un usuario

Problema


App 1
jampp
App 2
jampp
...
App N
75244996-bc3b-4374-9249-57a6f19e4091
RTB

Tiempo hasta aparición

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Tiempo hasta nueva conversión

Datos

- Datos de subastas RTB
- Instalaciones de aplicaciones
- Clicks de publicidades mostradas
- Eventos dentro de aplicaciones

Nota: los datos están anonimizados

Salida esperada

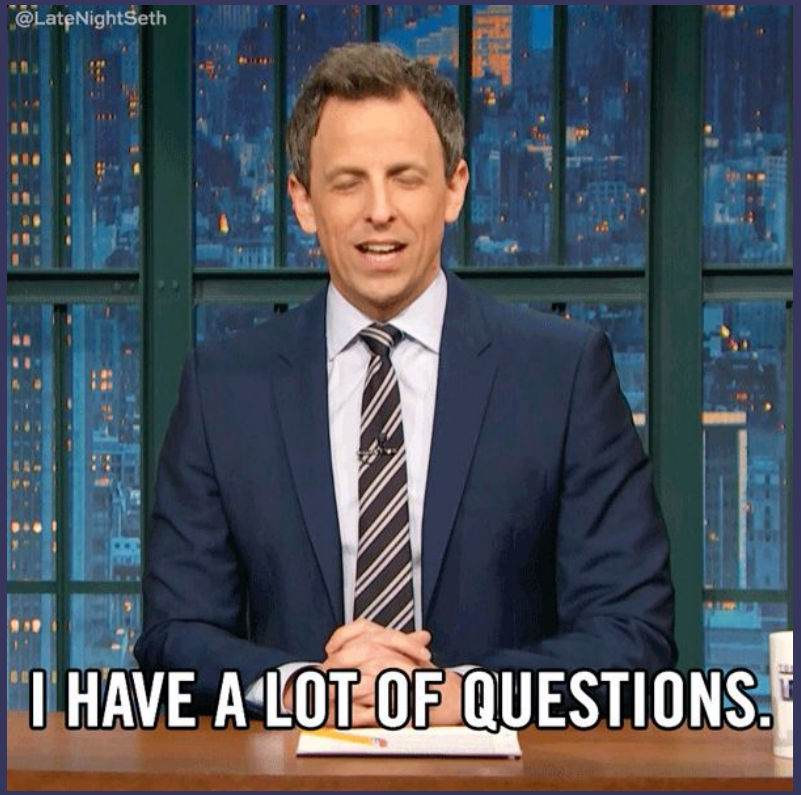
- $St(d)$ el tiempo hasta que un dispositivo d aparezca de vuelta en una subasta RTB
- $Sc(d)$ el tiempo hasta que un dispositivo d convierta

Se toma un máximo de 3 días como ventana de espera

Survival analysis

Conjunto de técnicas para analizar datos donde la variable objetivo es el tiempo hasta que ocurra un evento de interés.

Gracias! Preguntas?


@LateNightSeth
I HAVE A LOT OF QUESTIONS.