



# Programmatic Advertising

Steve Thompson  
Digital Media Consultant

@thompsondigital

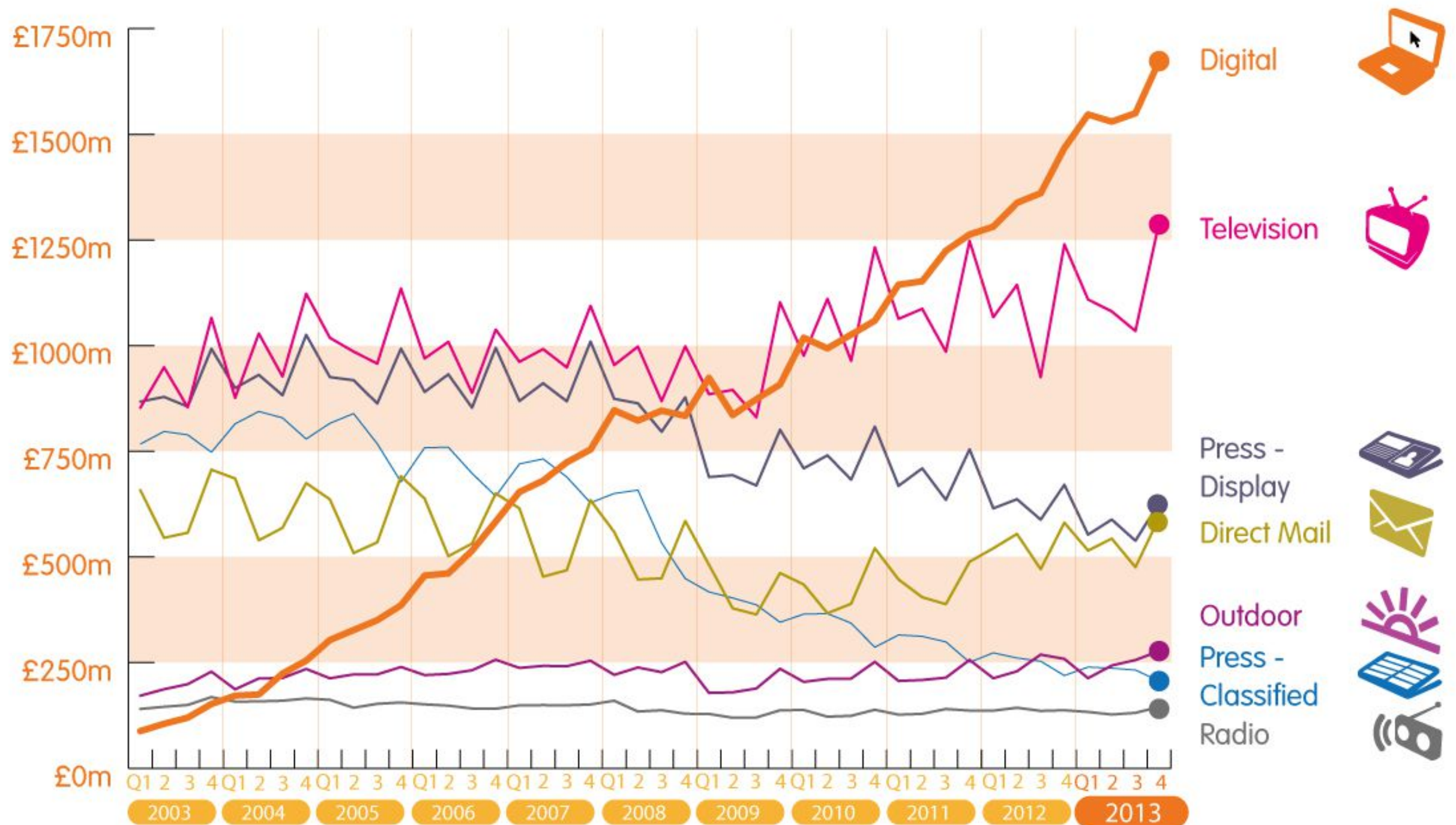
# Agenda

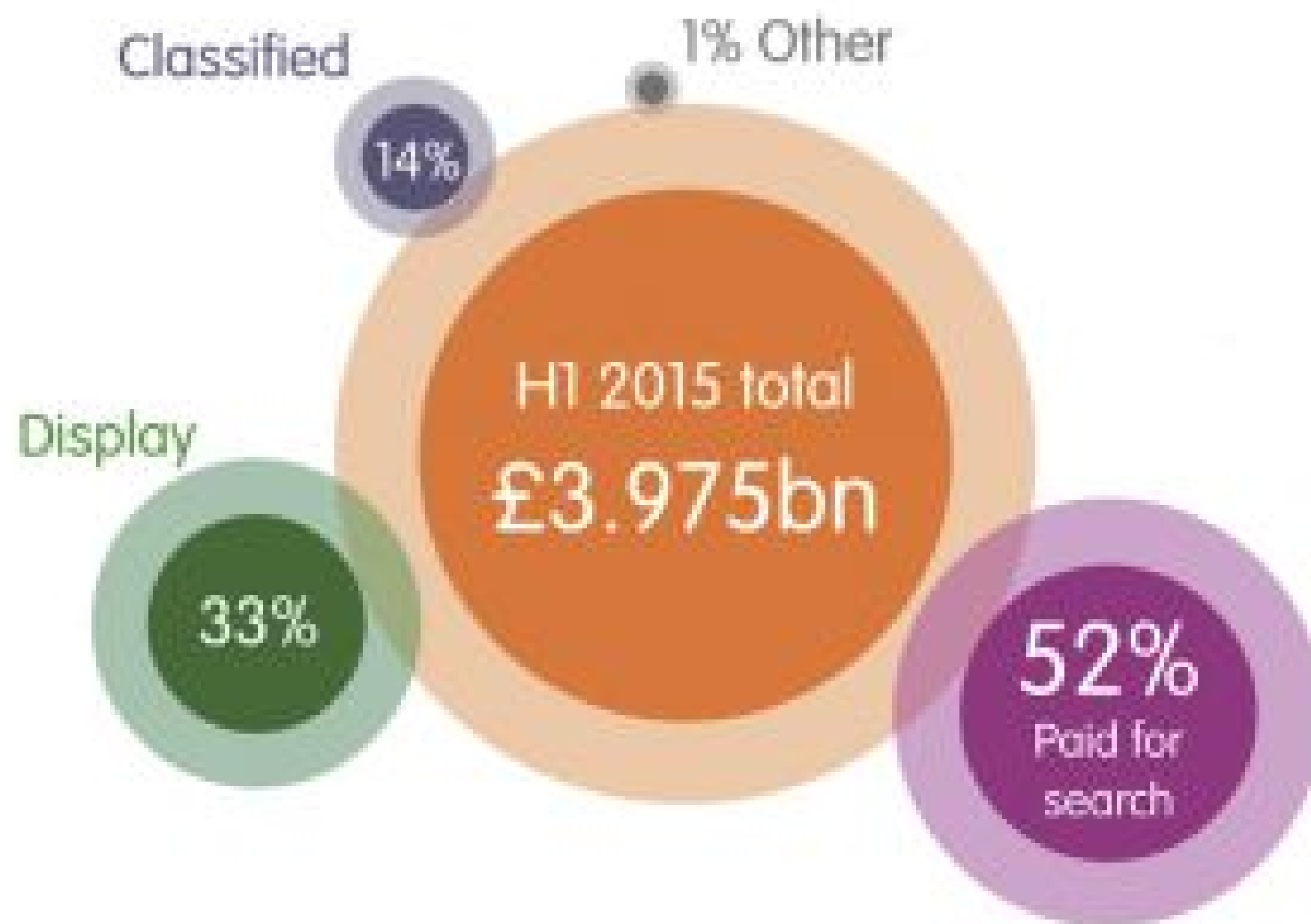
1. Evolution of programmatic advertising
2. Principles of programmatic
3. Targeting audiences
4. Development of programmatic
5. Q&A

# Evolution of programmatic advertising



# Digital Advertising Marketplace

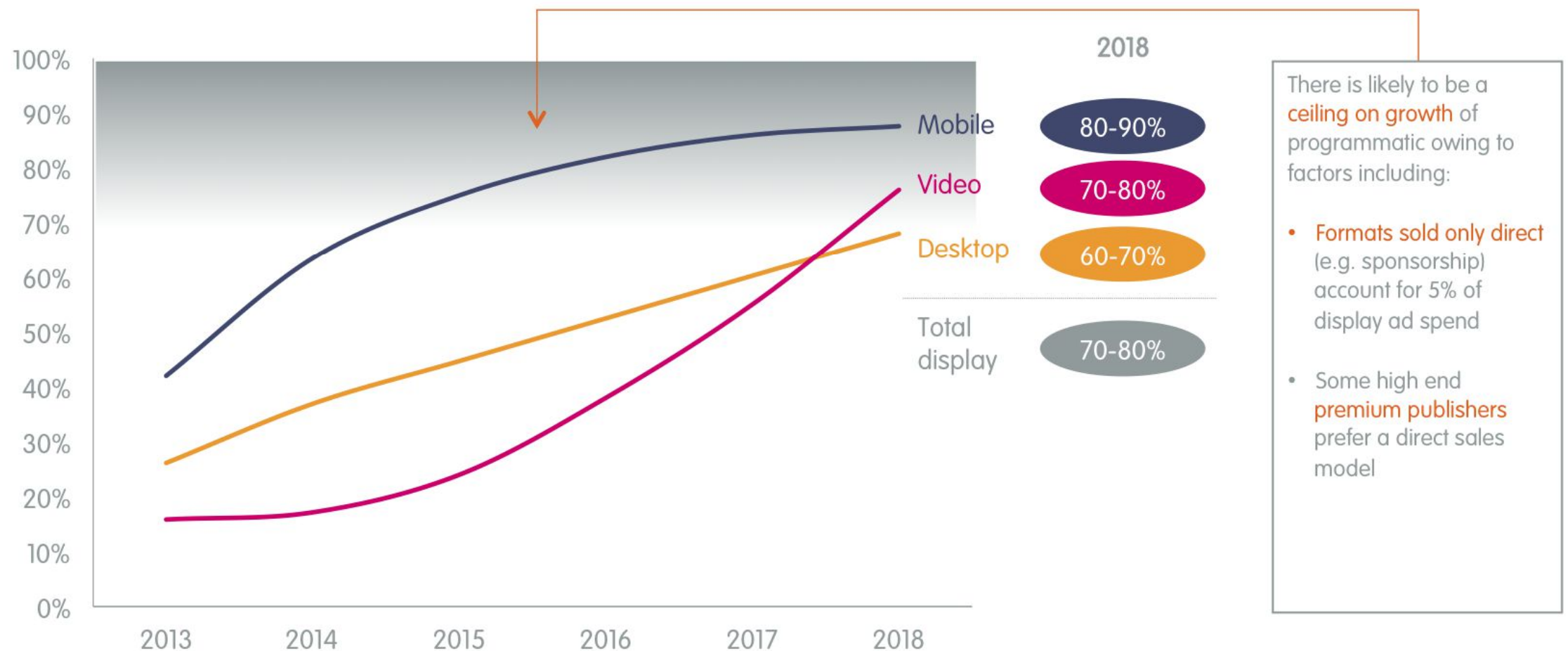




# Projections

iab

Programmatic is expected to grow rapidly, accounting for 70-80% of display ad spend in 2018





## Data Suppliers

CACI Scholten Bisnode comSCORE EQUIFAX Experian Axiom Nielsen Dunhumby AlmondNet

## Data Management Platforms

Krux Lotame Rubicon Audience Science Turn eyeota Bluekai Enreach Exelate Demdex

## Data Exchanges

Adatus Exelate Quantcast Datavantage eyeota Weborama

## Sales Houses

TECH-ORION FOCUS YAHOO! FOX  
InteractiveMedia SanomaMedia  
addoor Telefonica BOB 24/7  
United Information Axel Springer Citivoxento  
AD2ONE BURSTMEDIA HYPERZON MEDIA  
advertising Legadive hi-media  
ADVERTISING STREAM

## SSP &amp; Private Ad Exchanges

IMPROVE DIGITAL Admeld rubicon  
ADMETA PubMatic

## Delivery Systems, Tools &amp; Analytics

doubleclick adspirit IMPROVE DIGITAL  
ADTECH appnexus SAS  
OpenX weborama OMNITURE  
adhesa Nielsen ADDITION  
Google ZED 24/7  
adigital adlogix  
TEALIUM  
AdDynamics Jemmediate MAXIFIER  
ge\*edge comScore  
Crystal Semantics PEER endlighten

## Verification &amp; Privacy

DoubleVerify TRUSTE Crystal Semantics  
adsafe EVIDON

## Ad Networks

ad pepper Microsoft Advertising Edconion Upavalue  
Aim Media Click District cpx interactive crimtan FOX  
PUBLIC IDÉES Ligatus adtiger Yahoo! Aol.  
Simply 12 QUANTUM MEDIA GMA plista adyard Glam Media  
hi-media Digitize Google sunamis AD-DYNAMO  
Casale VERTICAL NETWORK marimedia AcNetwork AP  
ValueClick MATOMY TREMOR VIDEO ETARGET AutClick  
VIBRANT shark zanox. rwttr-bis BLinkDR  
TradeCoubler Meta Network netAPPLICATIONS Ludango Ybrant  
TVMedia Oadsmanet affilinet Wemagaine  
ebuzzing DRUG JACOBS Clear Channel Media  
vitrodo.de AdSpet Lifestreet Jemm hitpool

## Audience Targeting / Re-Targeting

crteo struq Audience Science nextperformance  
interclick retarget media myThings Simplifi  
xplosion collective phorm weborama vazu  
Visual DNA grapeshot 13 media  
data drives display IGNITION ONE

## Ad Exchanges

Microsoft Advertising hi-media doubleclick  
pulsapoint OpenX adcloud RIGHT MEDIA adbroker

## Demand Side Platforms

MediaMath [x+] ON DEMAND TURN  
DataXO invite media Click District  
appnexus adnetik RELIANCE

## Agency Trading Desks

CADREON next premium affiPerf  
vivaki m  
XAXIS Accuen iProspect

## Trading Desks

infectious mexad  
TRAFFIC  
mediamind rocketfuel  
revenuecloud matiro LTD  
sociomantic Avert media  
adsimilis bluemanad  
adbroker LowCost Media  
M-IQ Efficient Frontier  
B sitescout exchangeads

LeGolas medici optimal  
AdLantic MEDIA science Connected

## Agencies

WPP Omnicom Media Group  
HAVAS dentsu IPG  
A M E D I A

## Delivery Systems, Tools &amp; Analytics

doubleclick appnexus 24/7  
ADTECH atlas smart  
weborama ignition nielsen  
adspirit adologies.com  
infectious PEER mediamind  
Mediaplex Crystal Semantics  
rocketfuel Google AD ACCESS  
adform comScore  
ge\*edge ADMETA OMNITURE

## Verification &amp; Privacy

MediaTrust TRUSTE adsafe  
DoubleVerify  
HitTraffic EVIDON ADXPOSE

## Published by

IMPROVE DIGITAL

# What is programmatic advertising?

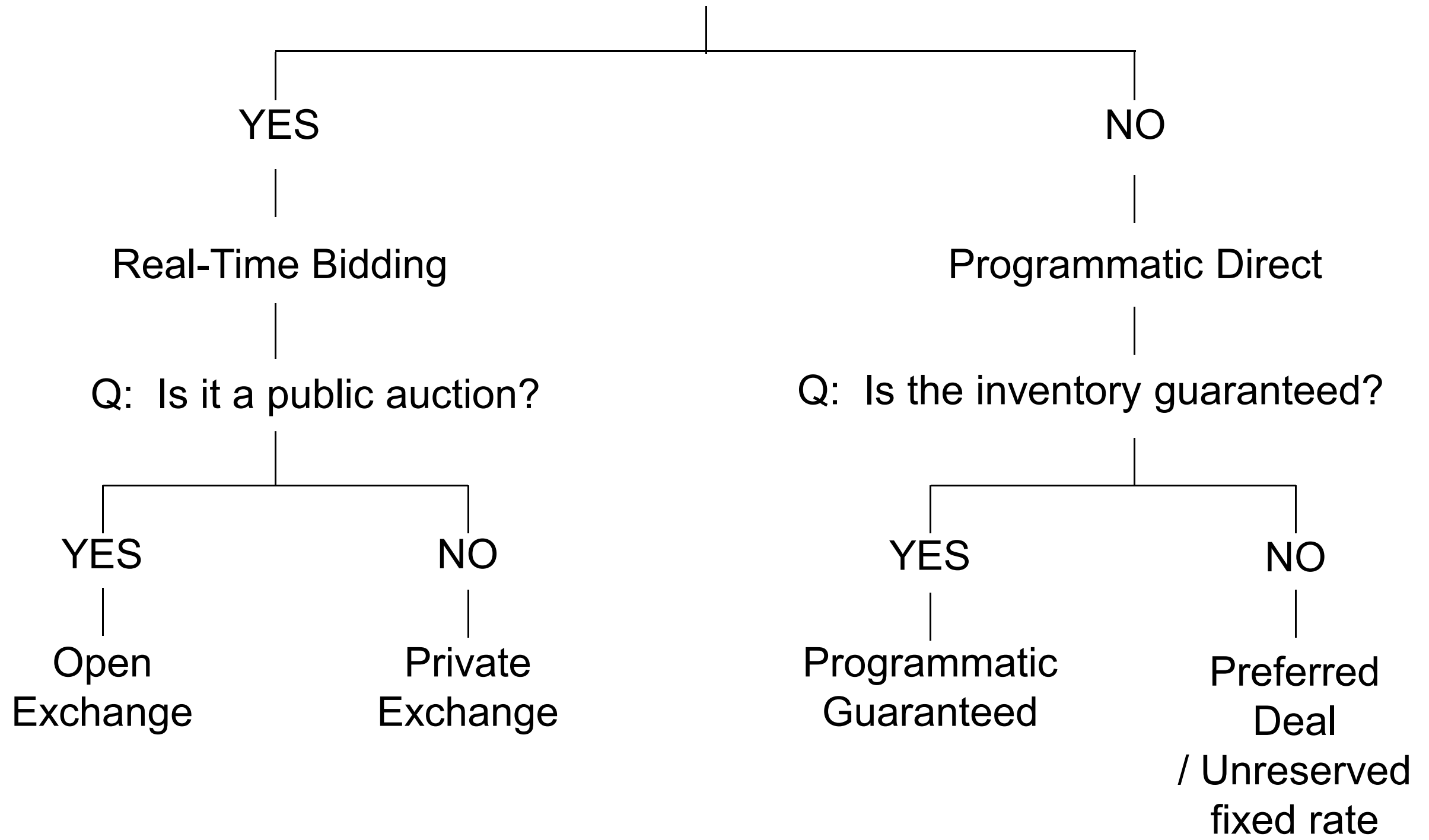
Programmatic advertising (also known as programmatic buying, or, programmatic trading) is the use of automated systems and processes to buy, sell and fulfill advertising inventory

This includes, but is not limited to, trading that uses real-time bidding auctions



# From the buyers perspective

Q: Is the inventory being auctioned?

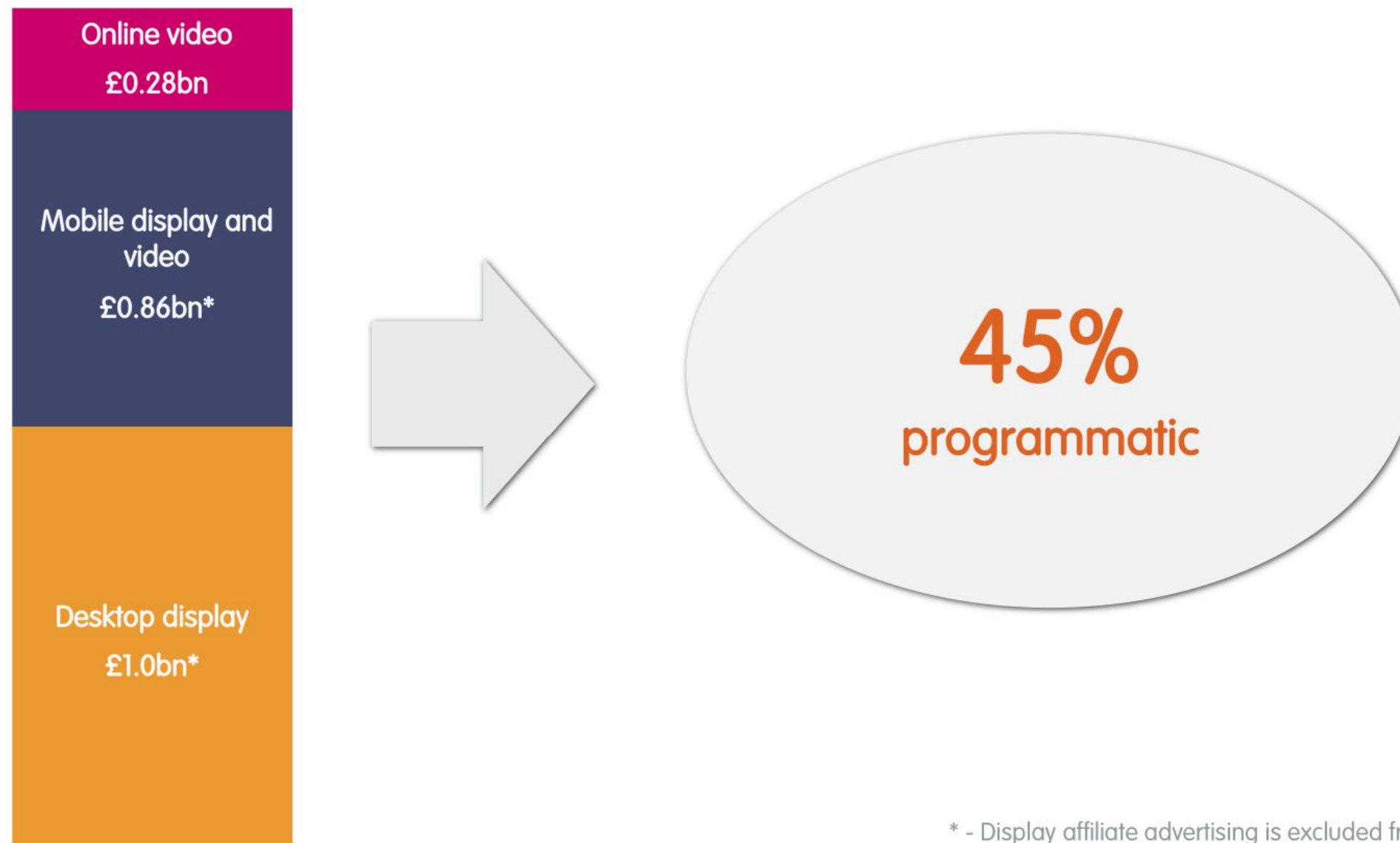


# From the media owners perspective

Channel	Direct	<b>Direct sales</b> Inventory bought at fixed prices directly from media owners through in-house or external sales teams, using insertion orders and manual processes to book and run the campaign	<b>Programmatic direct (e.g. private marketplaces)</b> Inventory bought from a particular media owner using automated processes, where a direct relationship exists between the buyer and media owner in the form of pre-existing deal terms (e.g. exclusive access and price floors)
	Indirect	<b>Networks</b> Inventory bought at fixed prices from a third-party offering packages which aggregate supply across multiple media owners	<b>Programmatic indirect (e.g. open RTB exchanges)</b> Inventory bought on an impression-by-impression basis in real-time through an open, unreserved auction
		Traditional	Programmatic
		Technique	

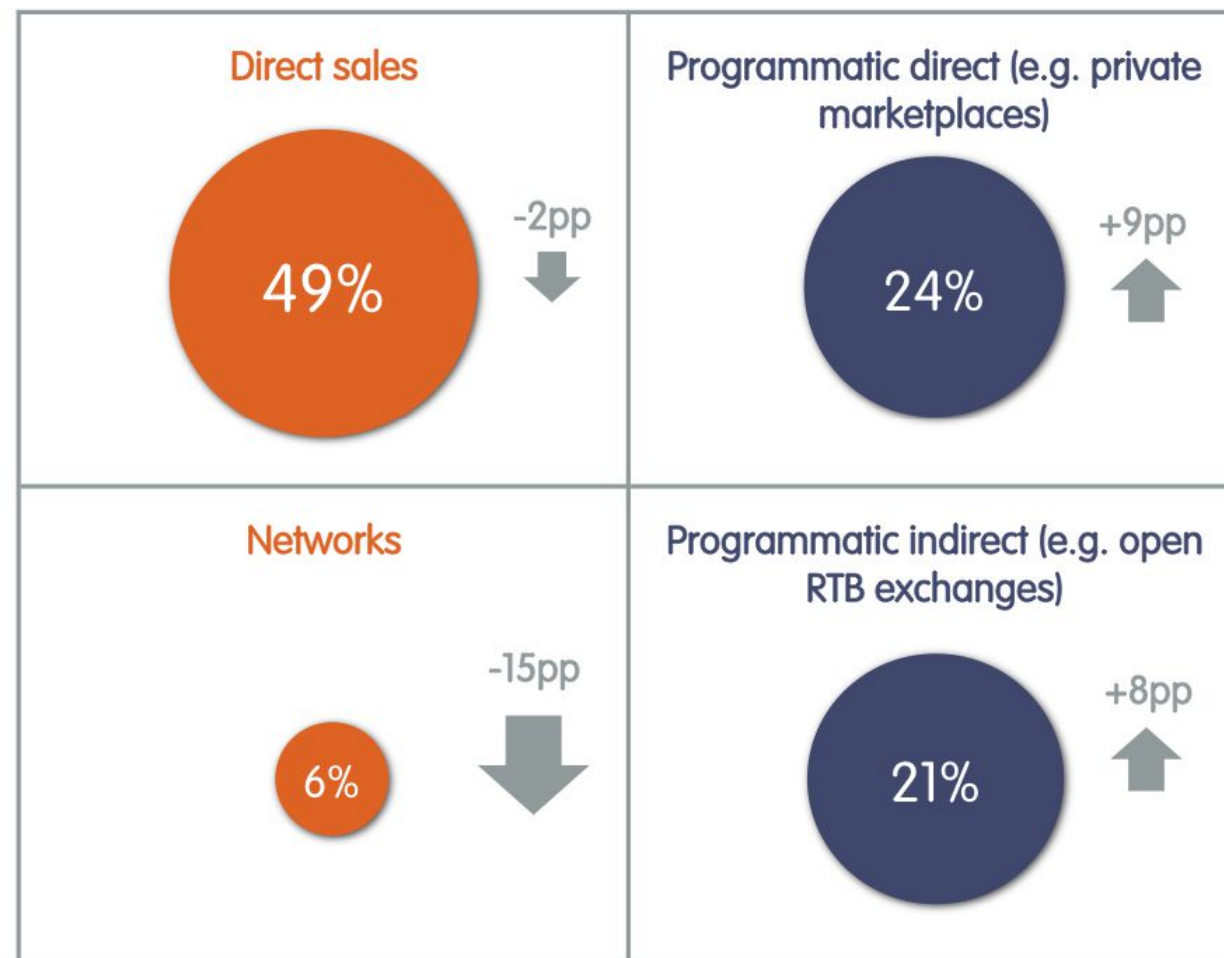
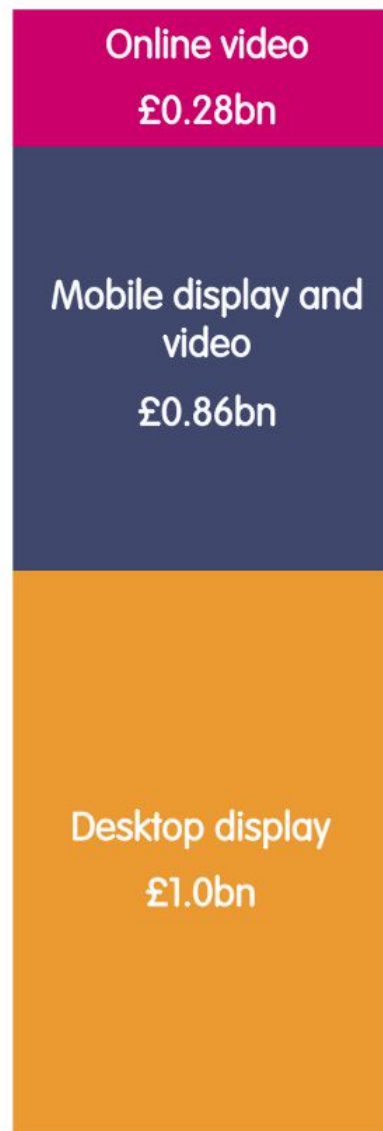
It is increasingly hard to draw firm boundaries between different types of media sales. Following feedback from industry participants, we have made refinements to our allocation of some types of media sales to these four categories. Therefore, comparisons with 2013 data should be treated as indicative.

# The programmatic marketplace



# The programmatic marketplace

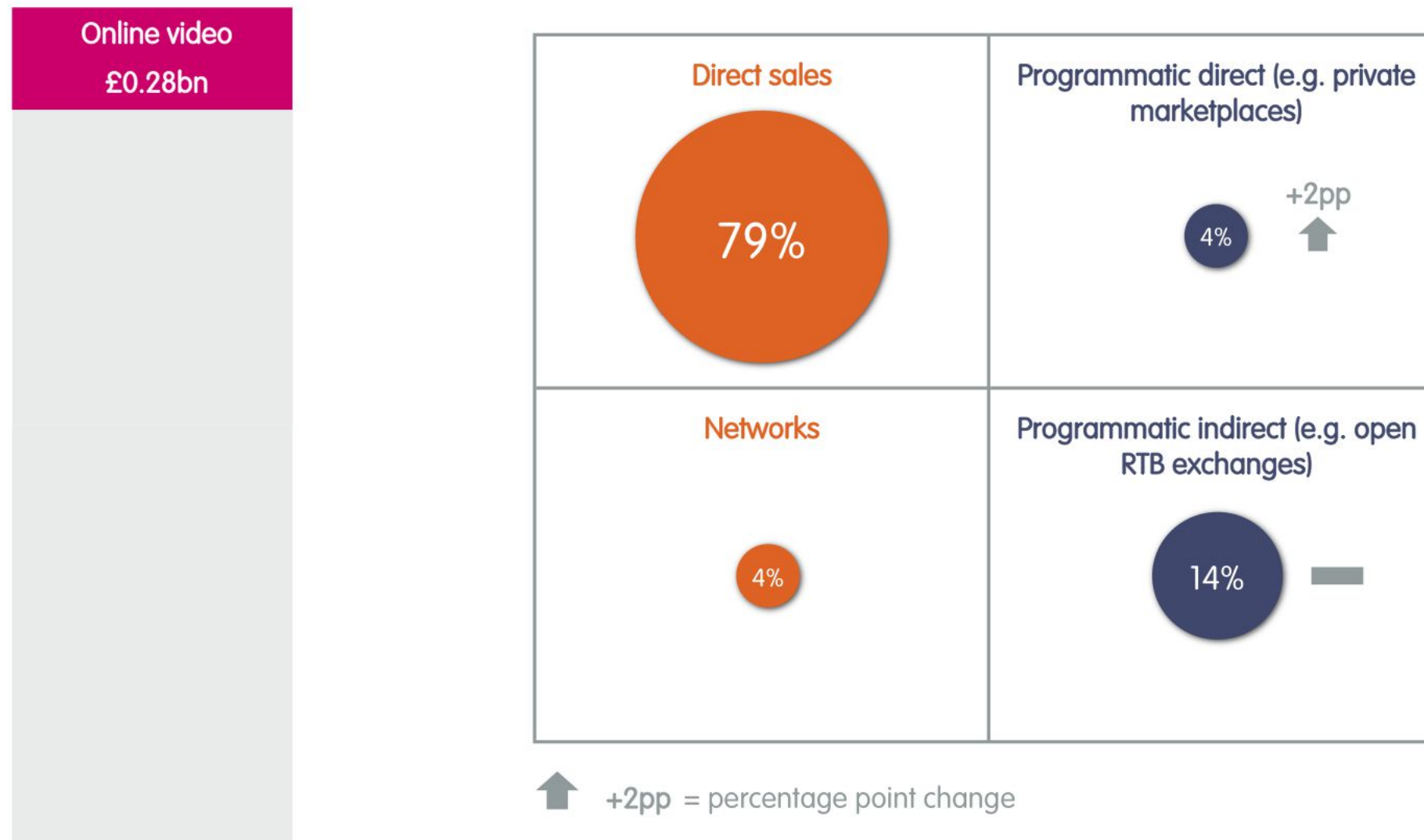
Overall, direct sales still account for 49% of the market – programmatic direct has grown strongly to 24%



↑ +2pp = percentage point change

# The programmatic marketplace

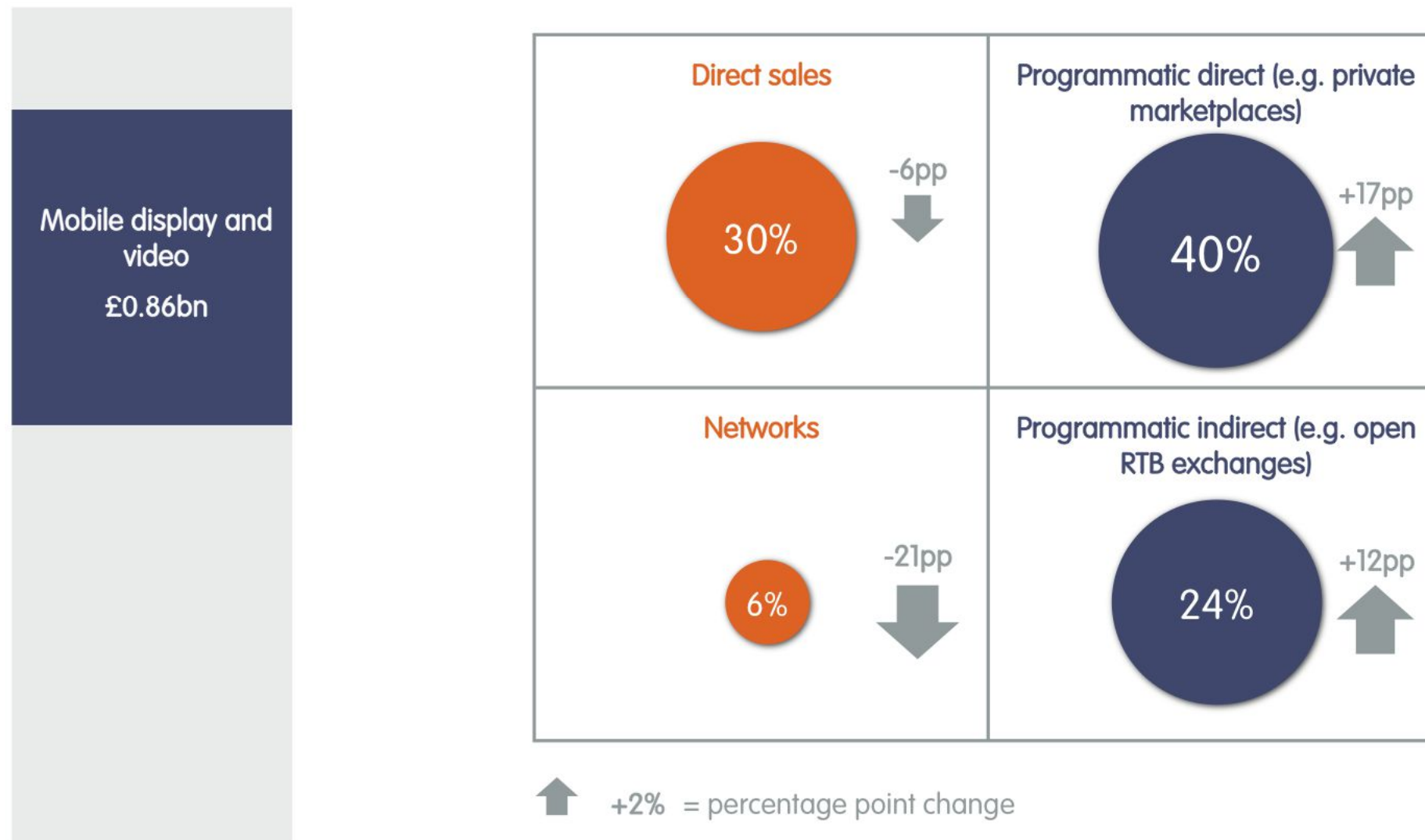
Online video sales remain largely direct and non-programmatic





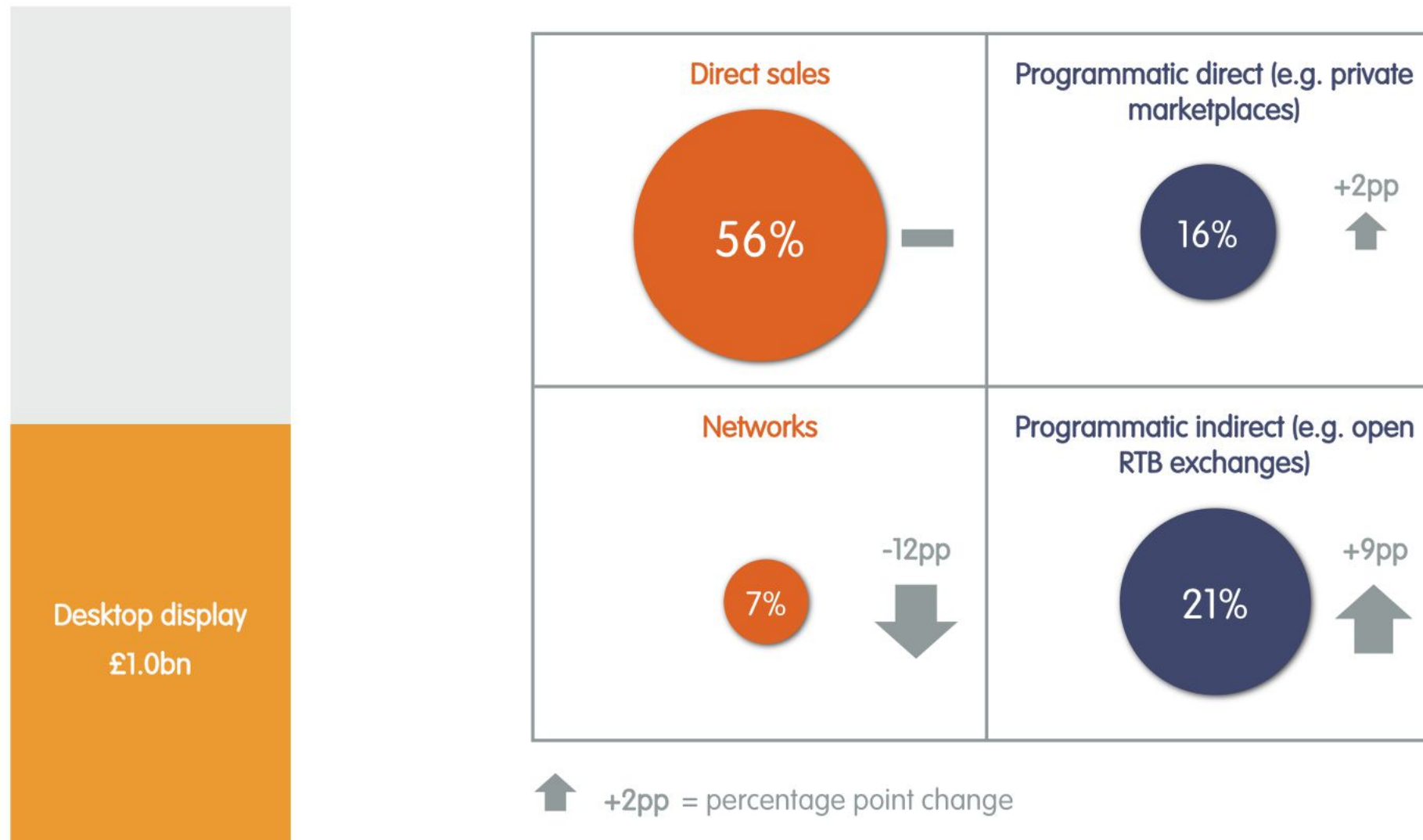
# The programmatic marketplace

Mobile programmatic sales are driven by major US internet companies – programmatic direct has grown to 40%



# The programmatic marketplace

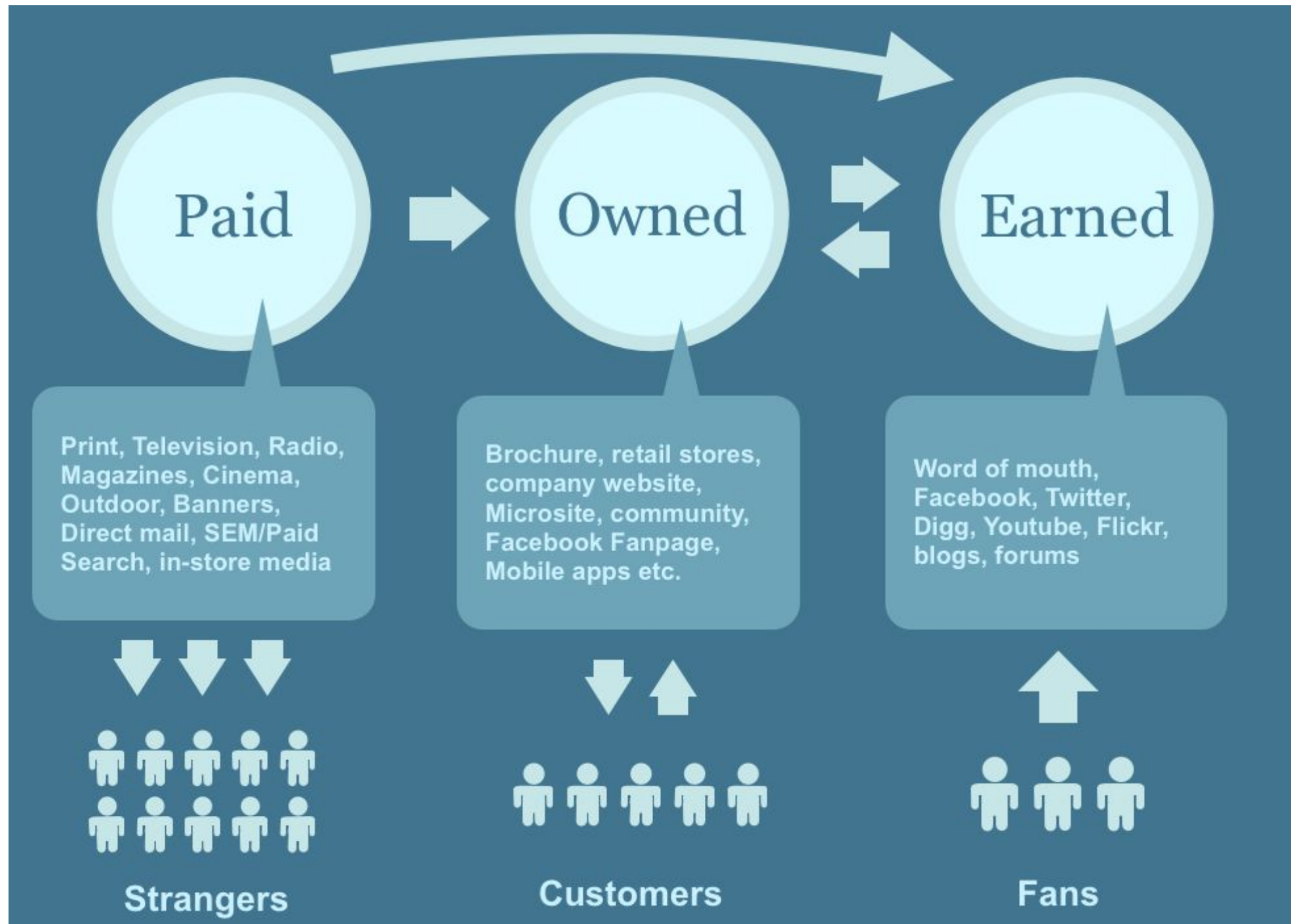
In desktop display, growth in programmatic has been driven by smaller media owners moving to exchanges



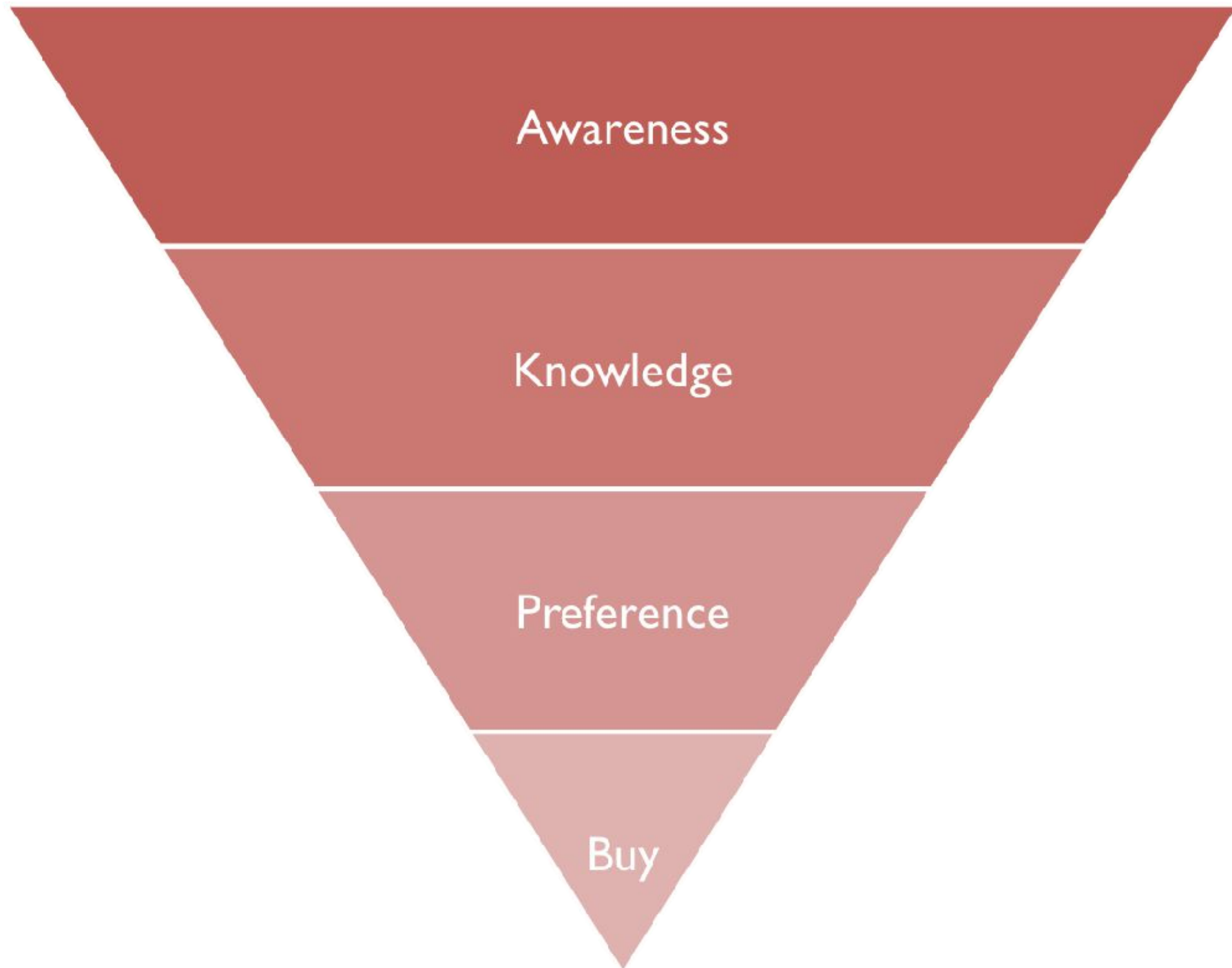


# **Principles of programmatic advertising**

# Owned, Paid and Earned media



# The purchasing funnel



# Old way of buying advertising



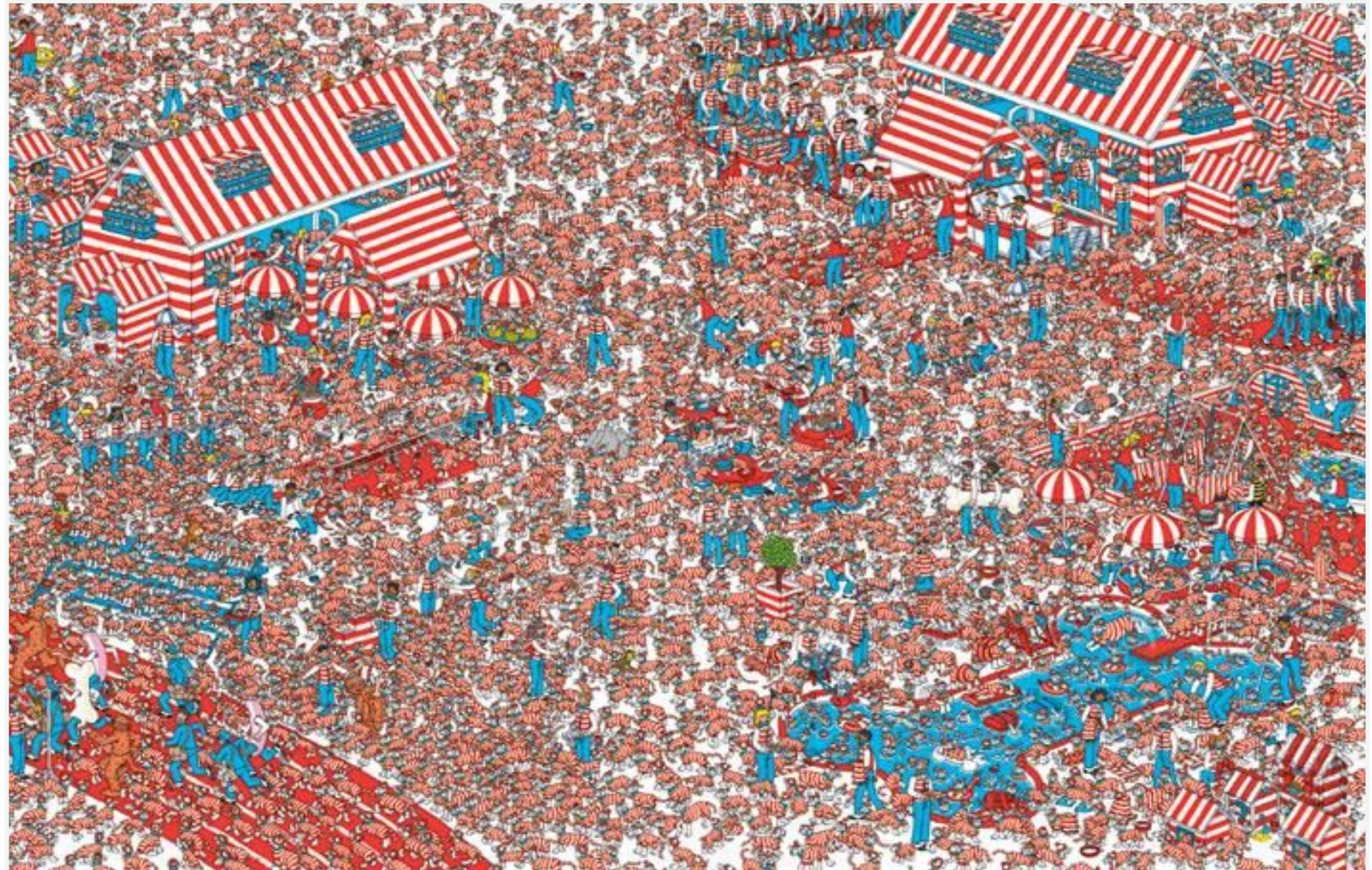
The target consumer



# Old way of buying advertising



The target consumer



The audience we are shooting at



# Buying advertising

Direct sales...

Manually buy and sell

Ad networks packaged with unsold inventory with little or no transparency

Process involved people, RFPs, I/O forms, and human error

Process ineffective and unreliable

# Effective advertising

Right message / creative

Right time

Right place

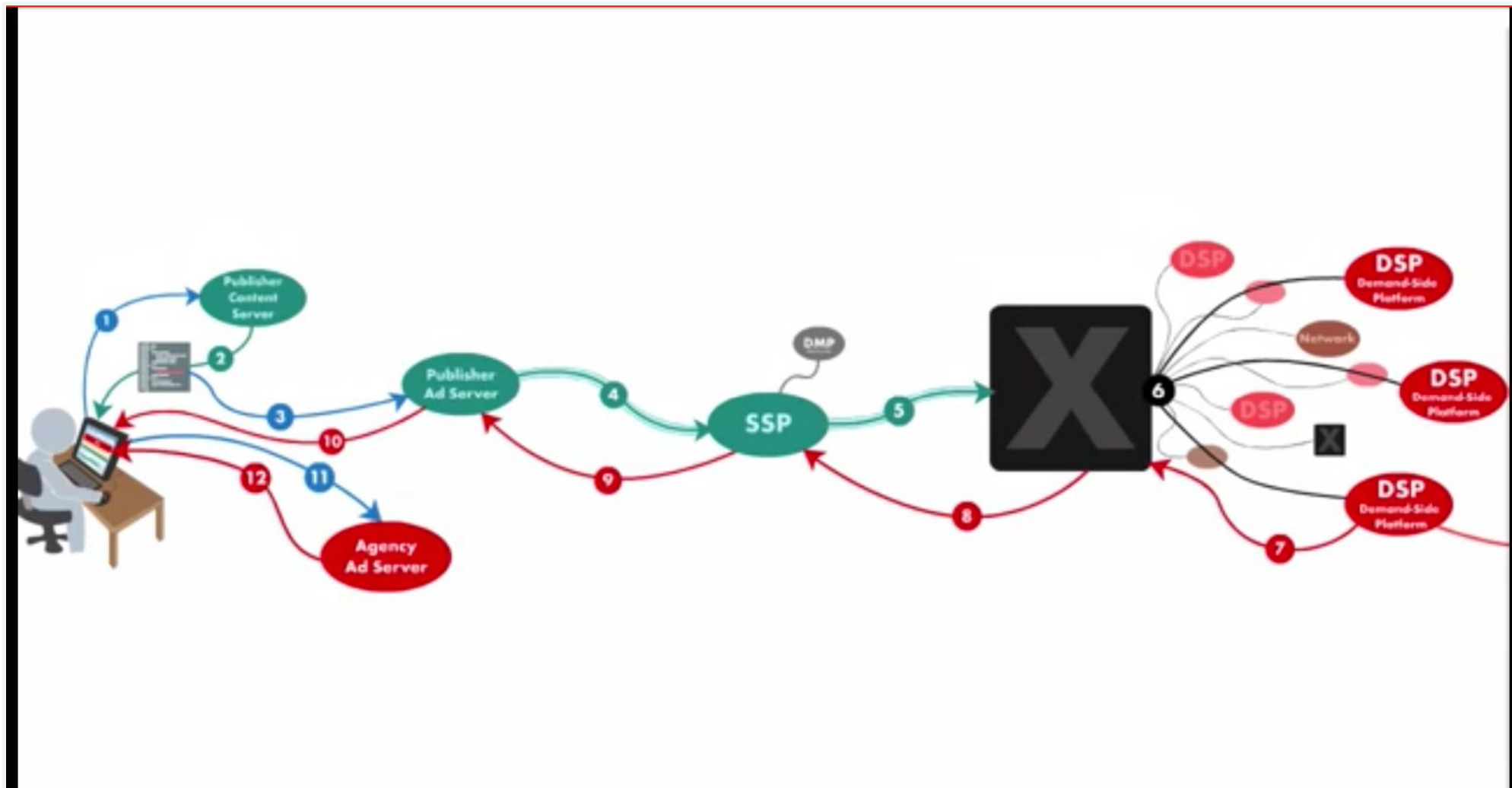
Right context

Right person



# Programmatic advertising

How does this all work? Example: Real-time bidding – Open Exchange



# Buying advertising

Now...

Faster, more efficient

Impressions bought and sold individually

Sellers have more stock control

Buyers can buy from multiple sources efficiently

Buyers use dashboards to manage and optimise campaigns tactically in real-time

Marketplaces allow for supply/demand forces to apply



# Programmatic advertising

How does this all work in practice?



# Targeting audiences

# Effective advertising

Right message / creative

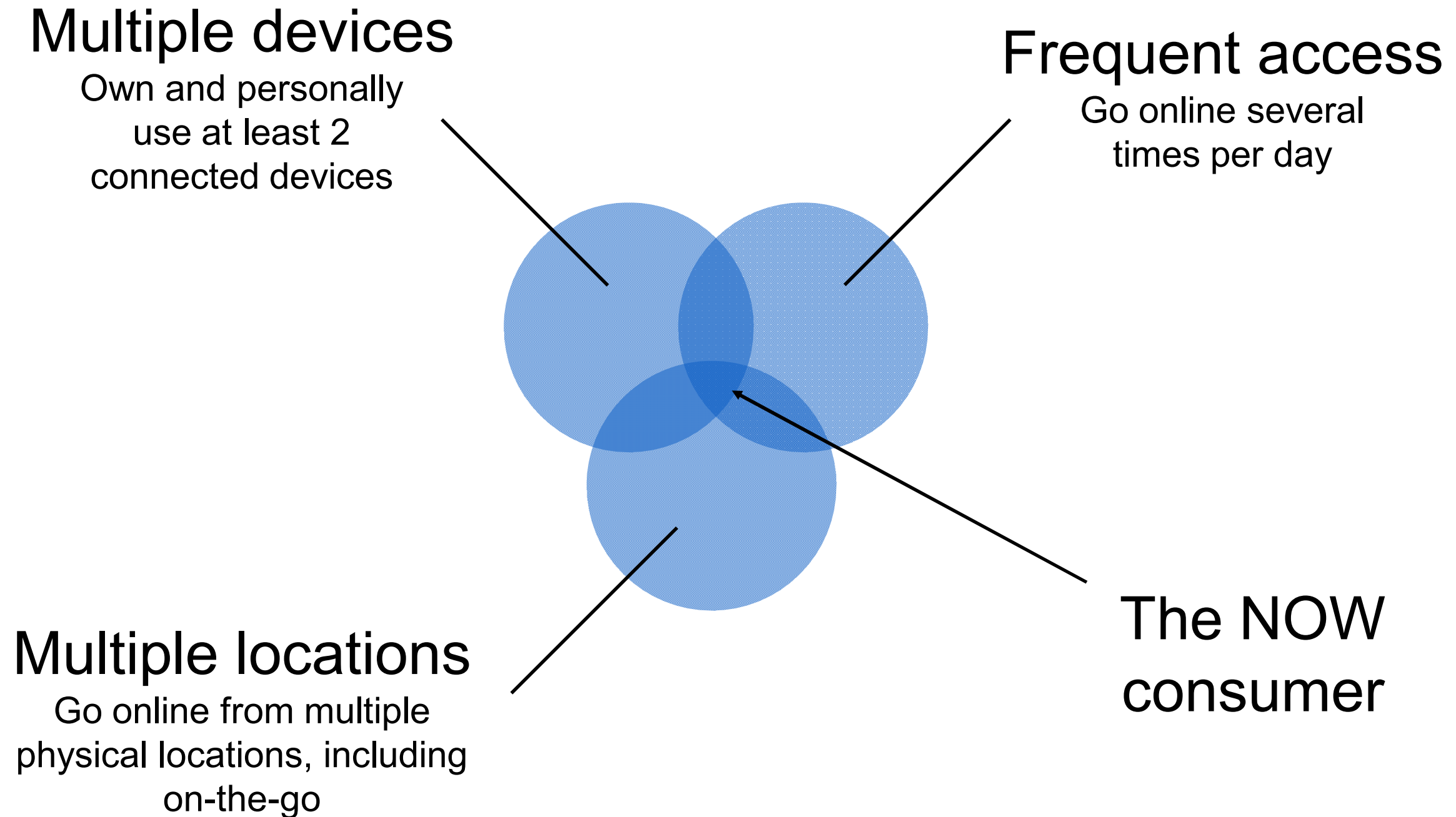
Right time

Right place

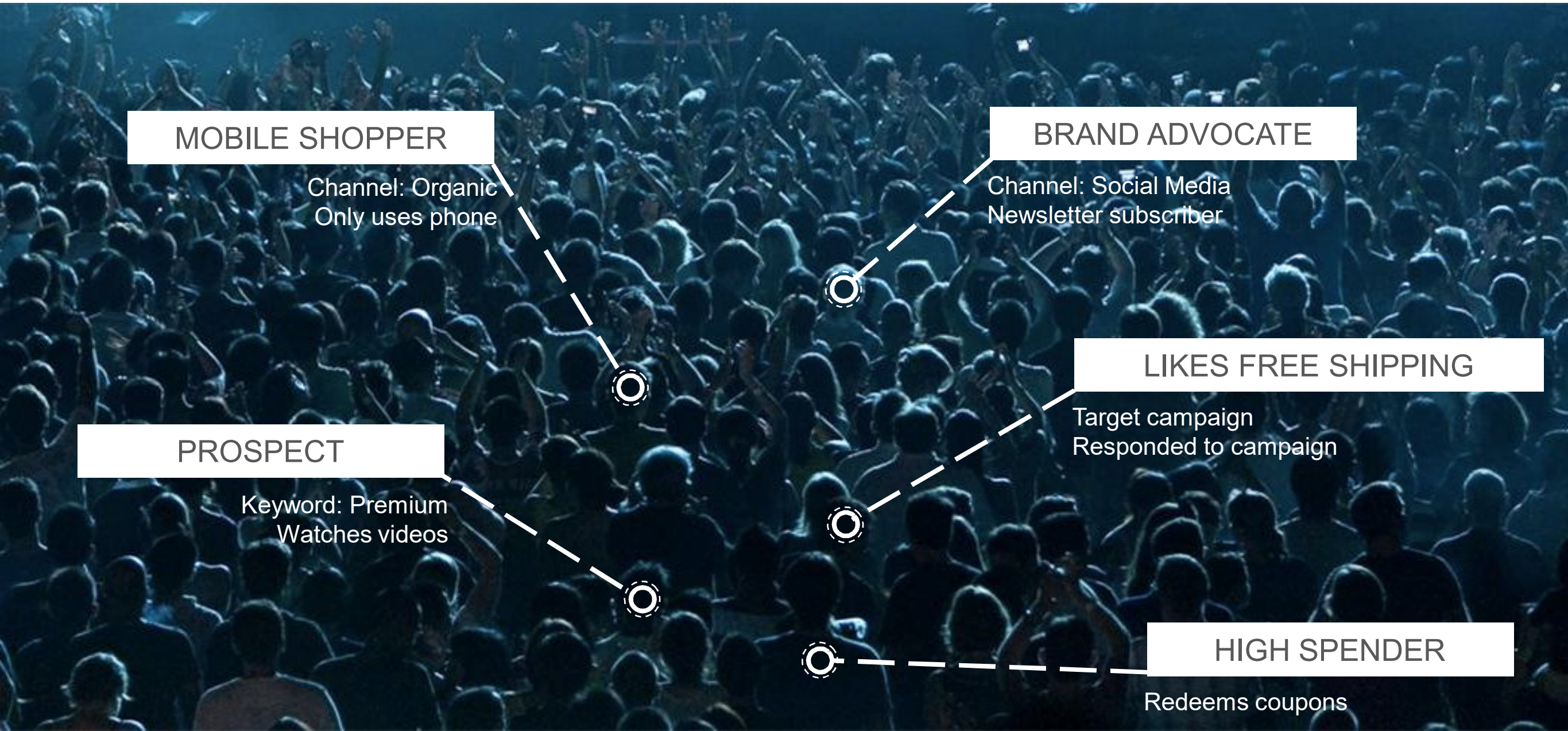
Right context

Right person

# Consumers are more complex







# DATA

Content has a shelf-life, eg views, shares, comments

Impressions have a shelf-life, eg viewability, engagement, relationship to consumer behaviour

Buying the attention of consumers is difficult

Collection of data improves targeting and effectiveness of programmatic

# A comparison

New York Stock Exchange

5 billion shares traded daily

50 terabytes of data processed daily

AppNexus

100 billion impressions served daily

100 terabytes of data processed daily

# DMP - Data Management Platforms

Data collection - in real-time across multiple data streams

Revert users to a single anonymous ID from multiple online and offline sources

Provide tools to turn raw data into valuable insights and targetable audiences

Deterministic and Probabilistic insights

Maintain links to live channels for message delivery in real-time



# 360 degree view of the consumer



**Think person, not device**

# First party data – realising assets

First party cookie-based data - ads, content, search

Device ids

IP location

CRM – online - email marketing, registration, e-commerce, affiliate, etc

CRM – offline – DM, events, loyalty scheme, etc

B2C and B2B

# Second party data partnerships





# DMP + DSP

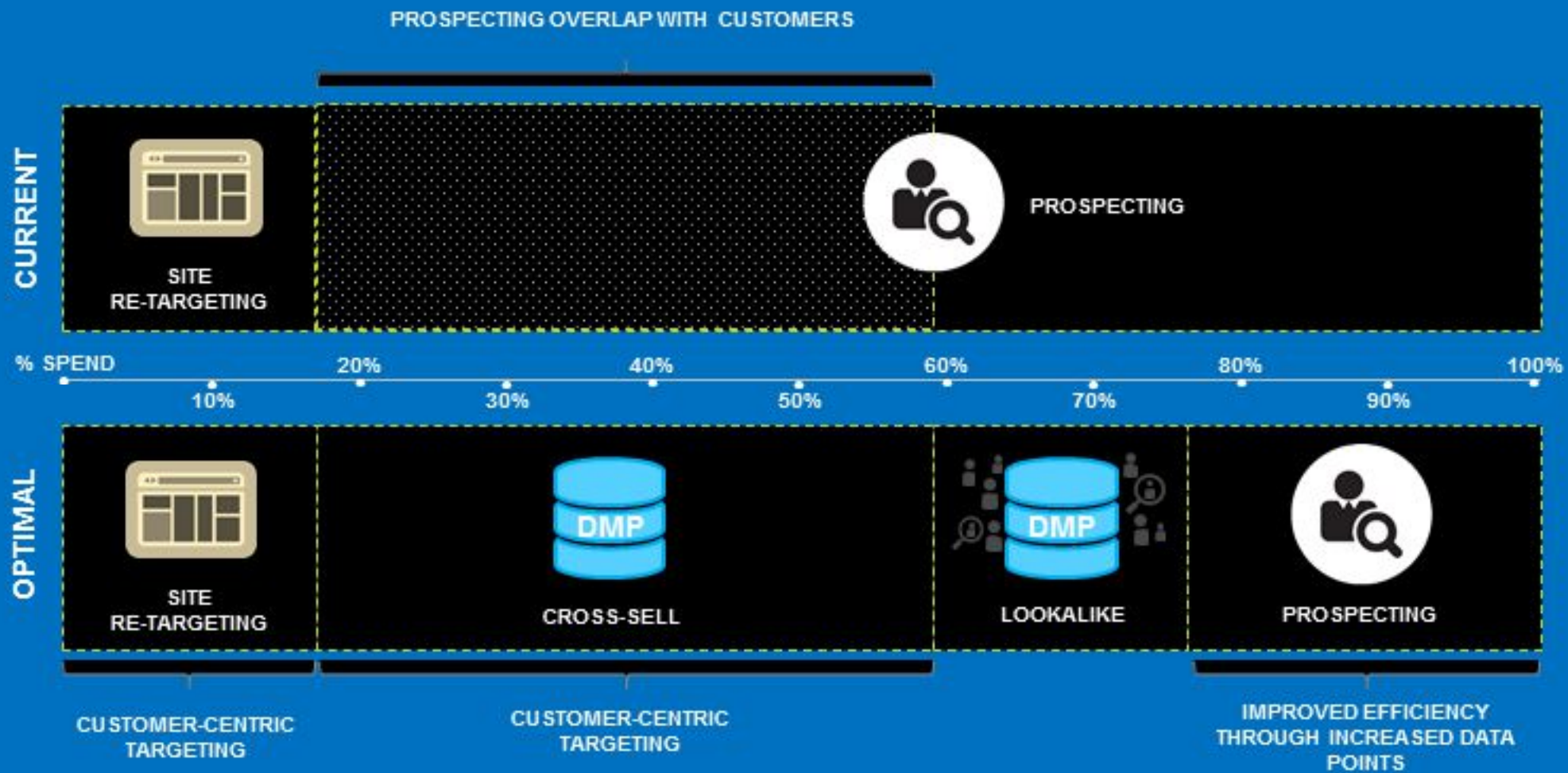
Multichannel approach across paid and owned media channels

Personalisation - Segment, Individual

Real-time through the purchasing journey

Feeds DMP for future campaigns

Attribution modelling



**Single  
Conversation  
with Customers**

**Upsell & Cross  
Sell  
Opportunities**

**Increased Scale  
With Lookalikes**

**Efficient  
Prospecting**

# **Development of programmatic advertising**

# Opportunities

Unsold / remnant inventory

Premium / exclusive content

More private exchanges

Look-a-like audiences

Consolidation in the marketplace

# Projections

Programmatic buying will continue to disrupt media marketplaces:

TV

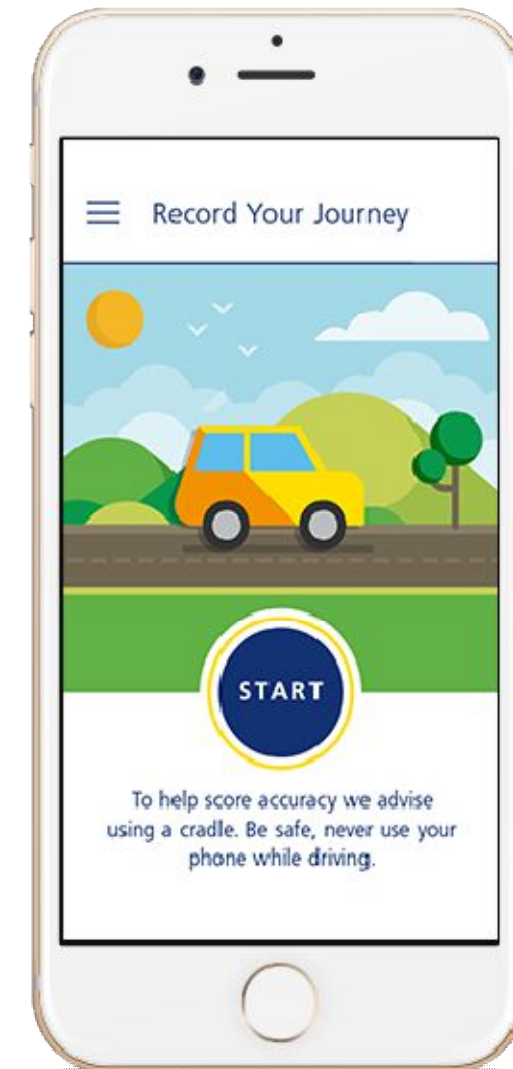
OOH

Radio

Print

IOT

# Your life as a data source

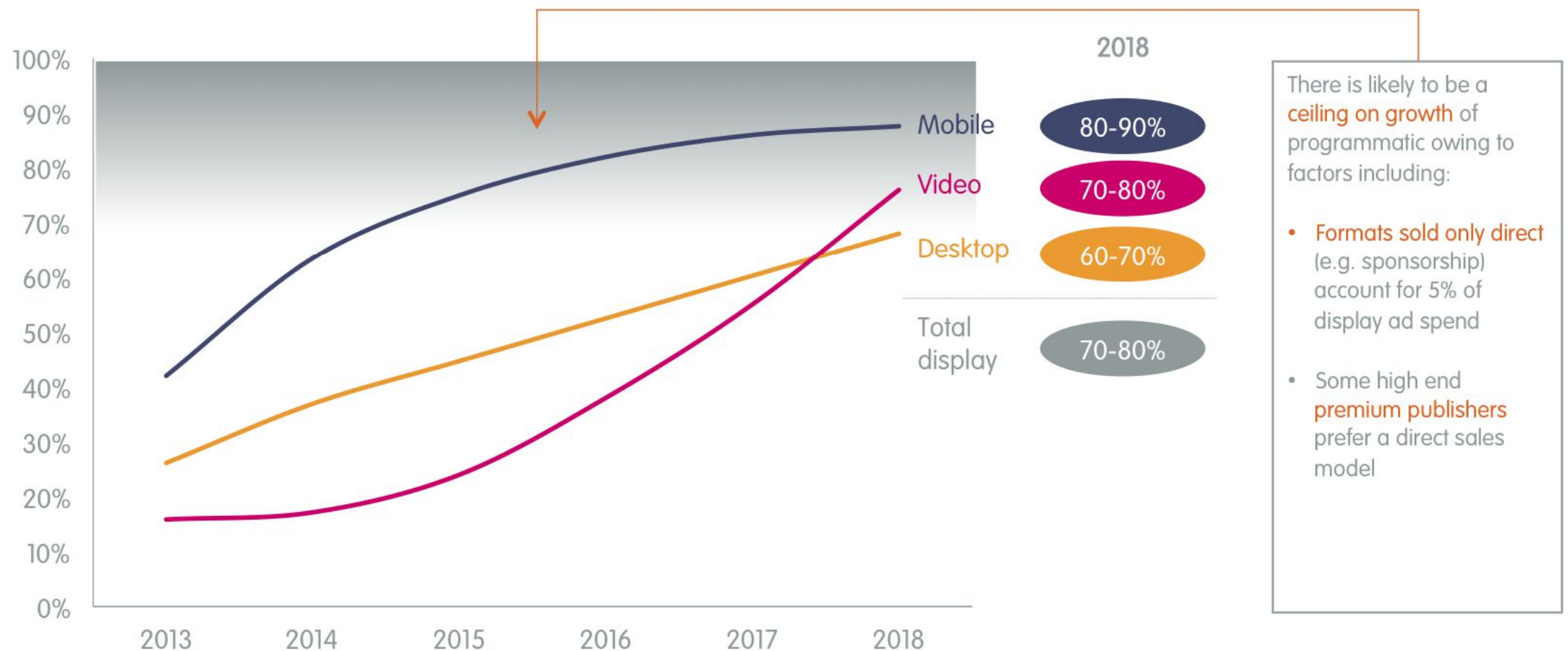




# Projections

iab

Programmatic is expected to grow rapidly, accounting for 70-80% of display ad spend in 2018



# Issues

Banner blindness

Ad collision

Viewability

Ad blocking

Brand security

NHT and fraudulent traffic

Click fraud

Dark social

# Viewability - Standards

Display:

50% of advert pixels visible on screen for at least 1 second

Large canvas display:

30% of advert pixels visible on screen for at least 1 second

Video:

50% of advert pixels visible on screen for at least 2 consecutive seconds

# Issues

Banner blindness

Brand security

Ad collision

NHT and fraudulent traffic

Viewability

Click fraud

Ad blocking

Dark social



Does this guy's click effectively measure the  
branding impact of exposing the other 999  
users to the same ad?

# ComScore: Natural Born Clickers

8% of internet users account for

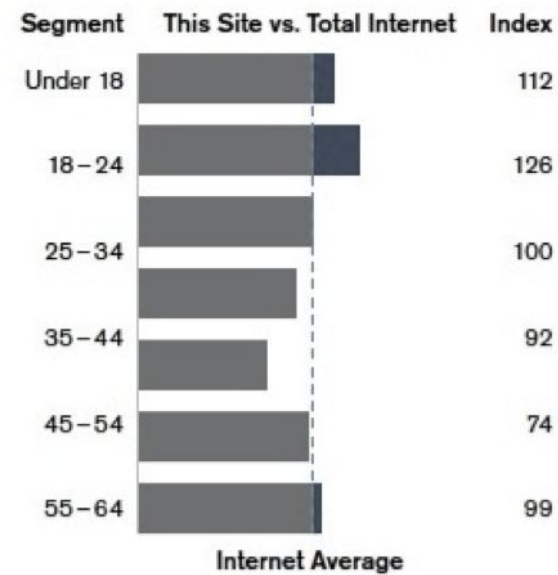
**85%** of clicks



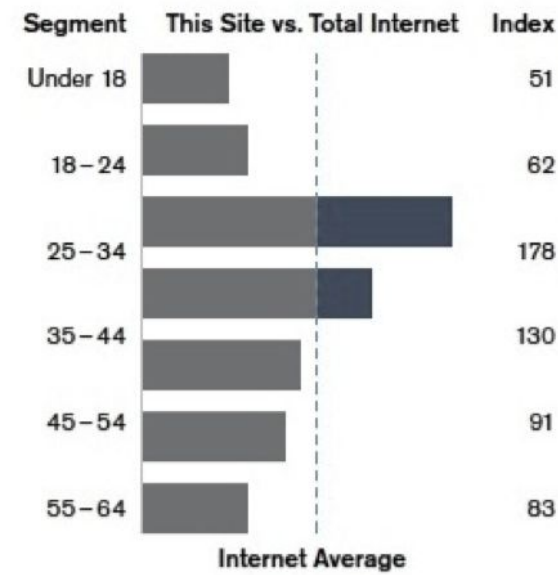


# Attribution modelling

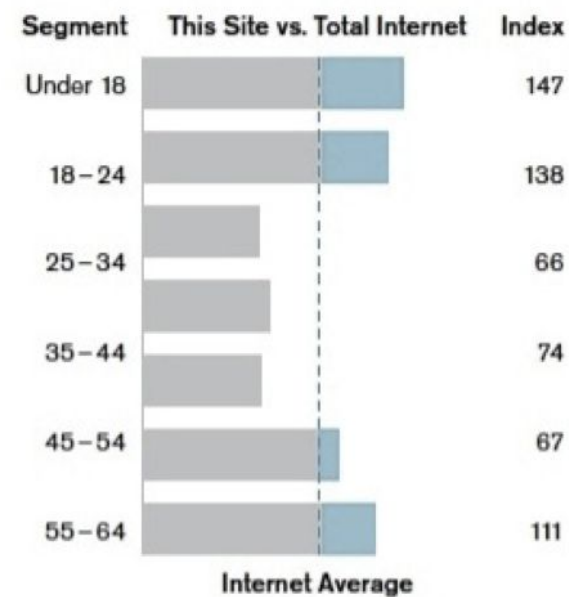
Online Retailer – Clickers



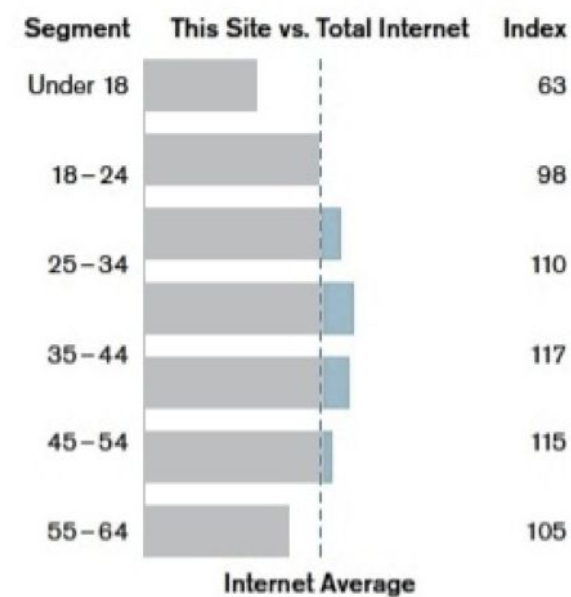
Online Retailer – Converters



Insurance – Clickers



Insurance – Converters



# Attribution

“Half the money I spend on advertising is wasted; the trouble is I don’t know which half.”

John Wanamaker



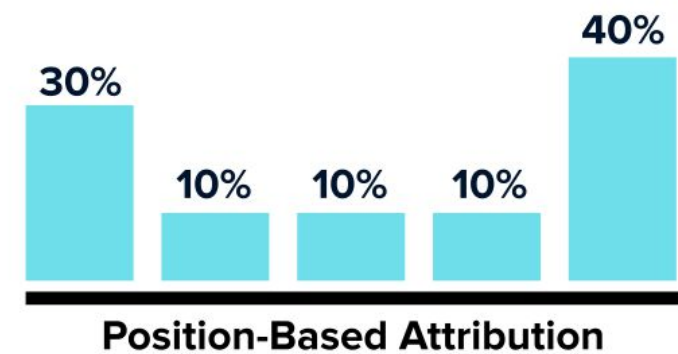
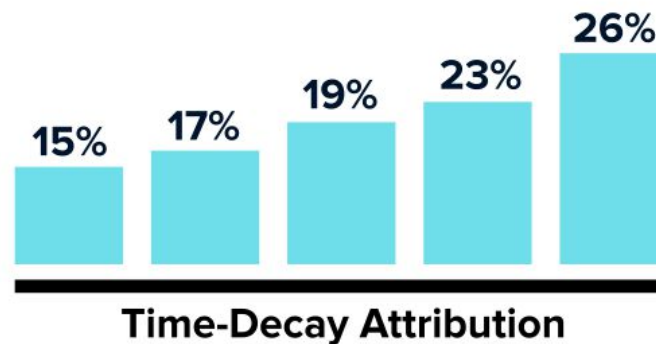
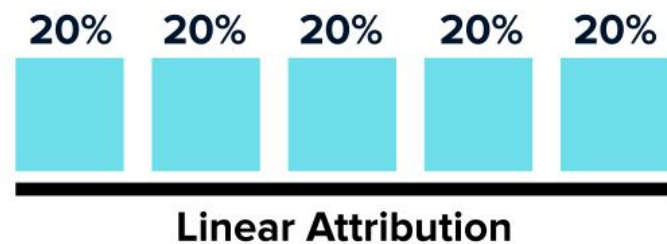
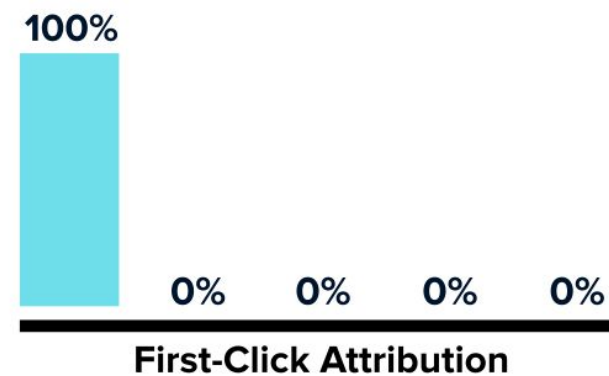
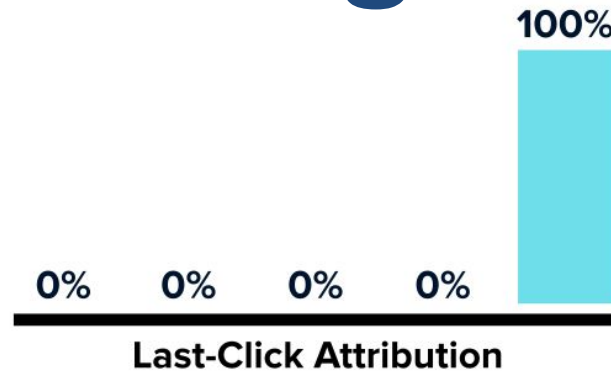
# View throughs

“The number of online conversions that happened within 30 days after a user saw, but did not click, a display ad”

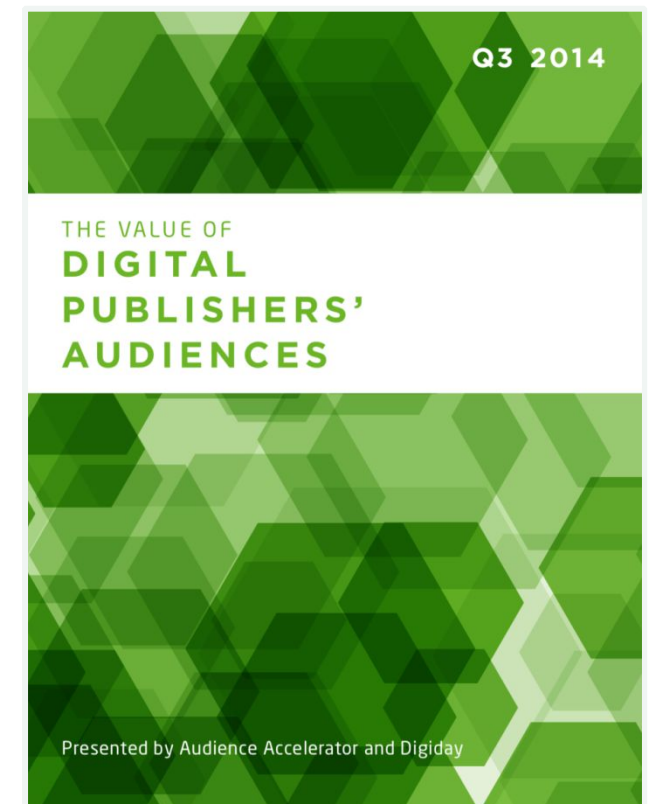
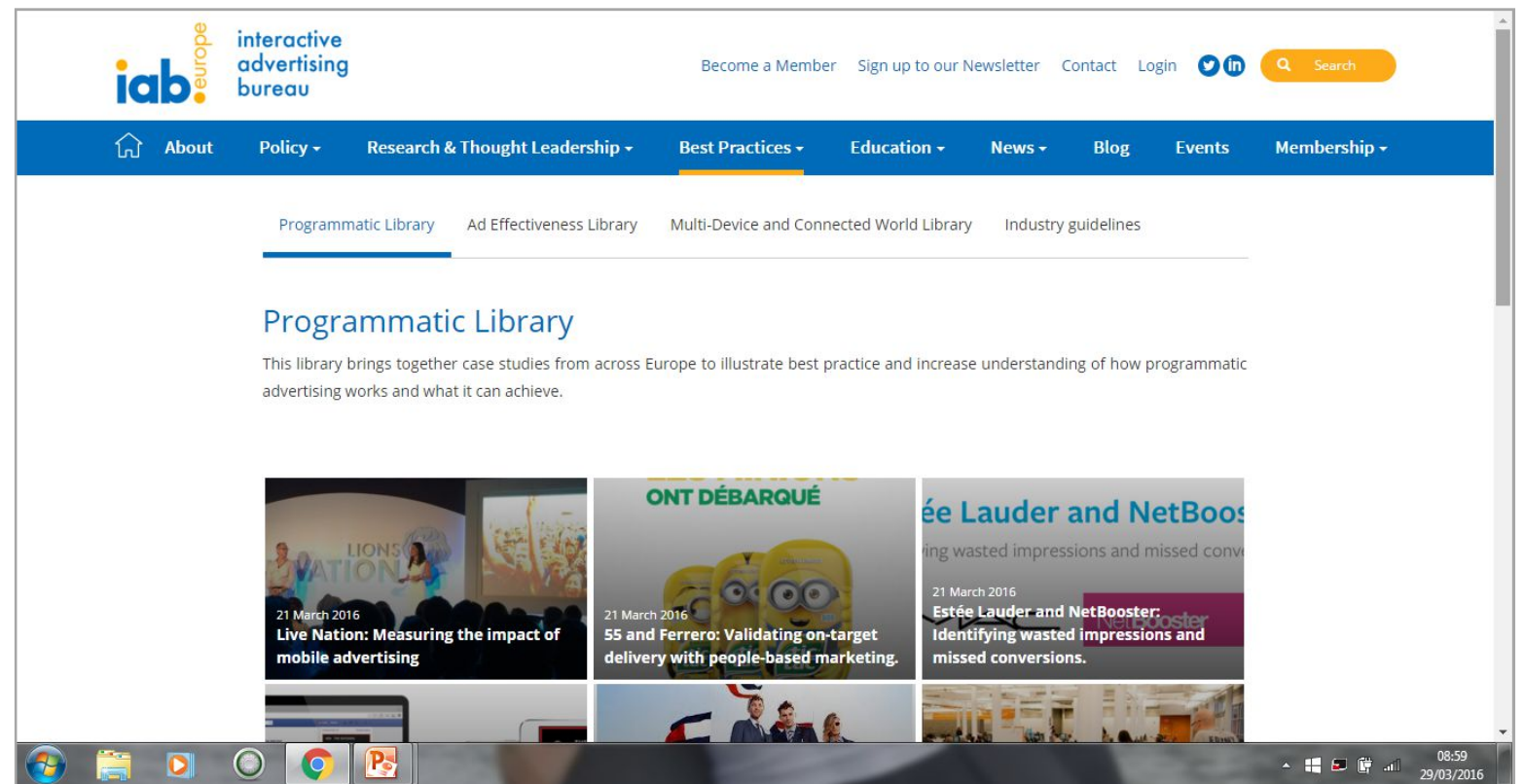
Lift in brand metrics occurs throughout a campaign, often irrespective of the volume of clicks

Number of clicks is not an accurate predictor of the effectiveness of an advert on brand metrics

# Attribution modelling



# Further reading





# Questions

Steve Thompson  
Digital Media Consultant

@thompsondigital