From: Lubo Malo </O=THEFACEBOOK/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=LMALO701>

To: Tim Harris; Thomas O'Day; Lubo Malo

Sent: 5/7/2019 6:50:39 AM

Subject: Message summary [{"otherUserFbId":null,"threadFbId":2160055437420274}]

Attachments: Web_Review_Summary_TODv3.pptx

```
Thomas O'Day (5/07/2019 01:37:03 PDT):
>Morning folks!

Thomas O'Day (5/07/2019 01:37:56 PDT):
shared: Web_Review_Summary_ToDv3.pptx

Thomas O'Day (5/07/2019 01:38:02 PDT):
>Please do not share the deck any further - some LRP data in there

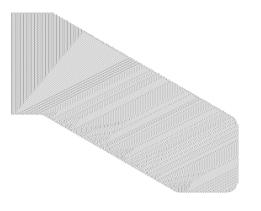
Thomas O'Day (5/07/2019 01:38:15 PDT):
>Can you please send me some feedback

Lubomir Malo (5/07/2019 06:50:39 PDT):
>I will send over feedback tomorrow morning
```

lav

Web Analysis

H1 Marketplace Review

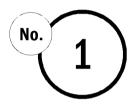


AGENDA

- FINANCIAL UPDATE
 Top down for Mobile Web and Desktop
- 4. COMPETITIVE LANDSCAPE Density & competitor set

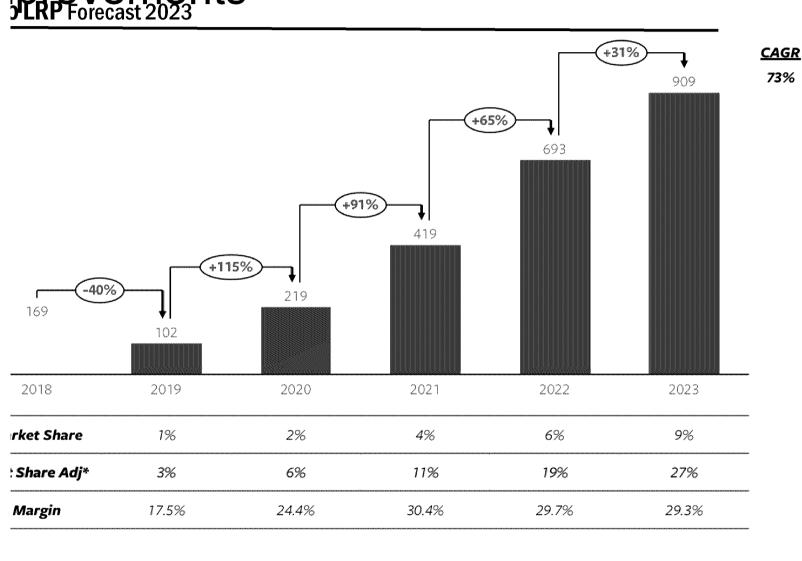
- MARKET SIZINGBottom up for Mobile Web and Desktop
- 5. SUMMARY Prioritisation

3. FUTURE GROWTH OPPORTUNITIES Organic growth vectors



Financial Summary

eb growth is expected through Bidding & CPM provements

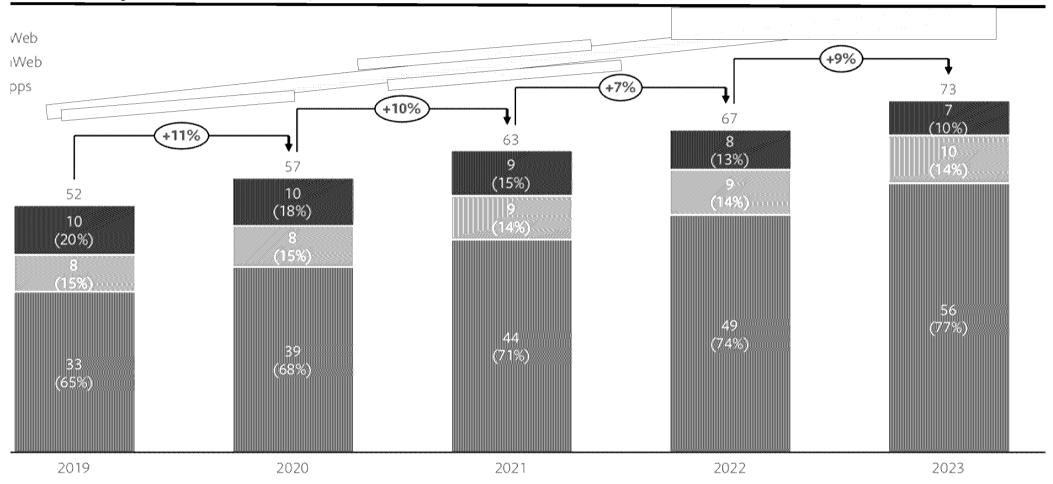


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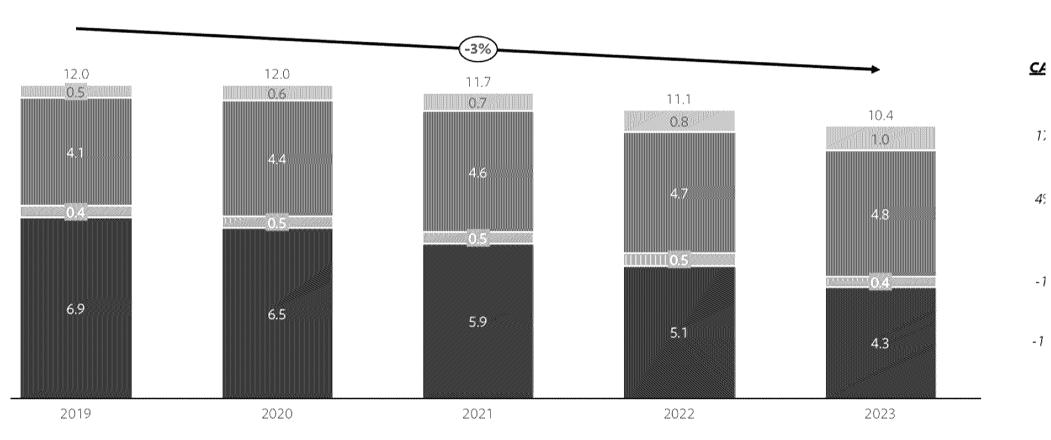


ce via IDC

obile Web will overtake Desktop in 2019

Iressable Market Excluding In-Stream





ce via IDC

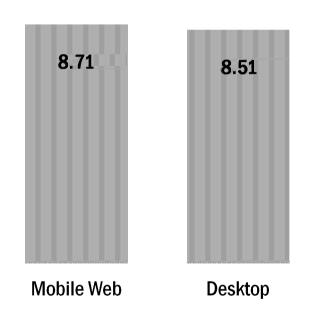
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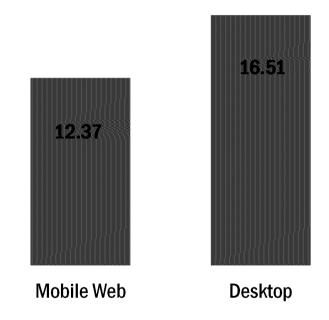
Market Sizing

pressions-wise, market is ~50-50 divided between bile web and desktop; desktop monetisation continue outperform web Impression (B) Annualized

Revenue (\$B) Annualized



17.200B – unique imps



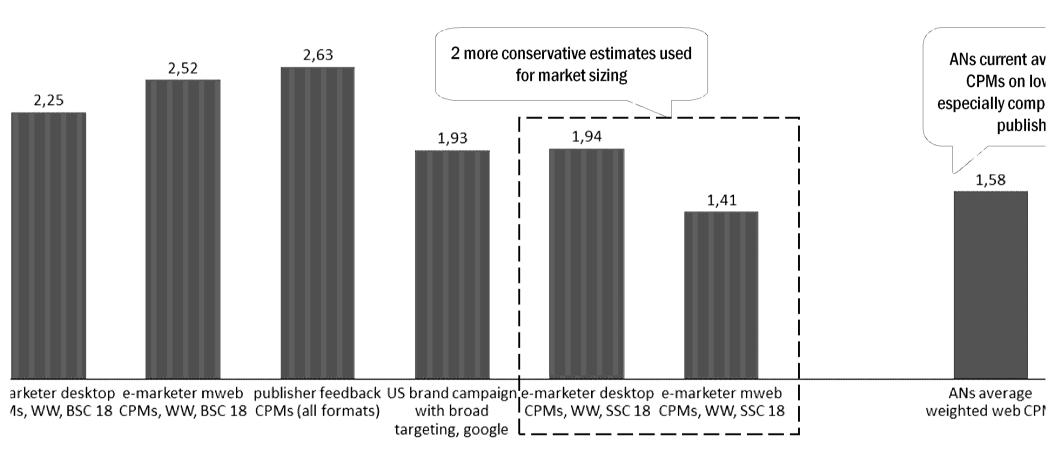
\$29B – total market

Add Slide traie

– please see further slides, impressions – adjusted DV360 – please see further slides; to arrive at the unique impressions we are dividing the total numb er by the average weighted number of exchanges

e more conservative CPMs assumed for web: 1.94\$ desktop and 1.42\$ for mweb

able CPM benchmarks, \$



- buyer side, SCS - seller side

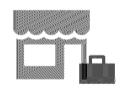
No. 3

Future Growth Opportunities

ways to view the Web opportunity for the Audience **etwork**







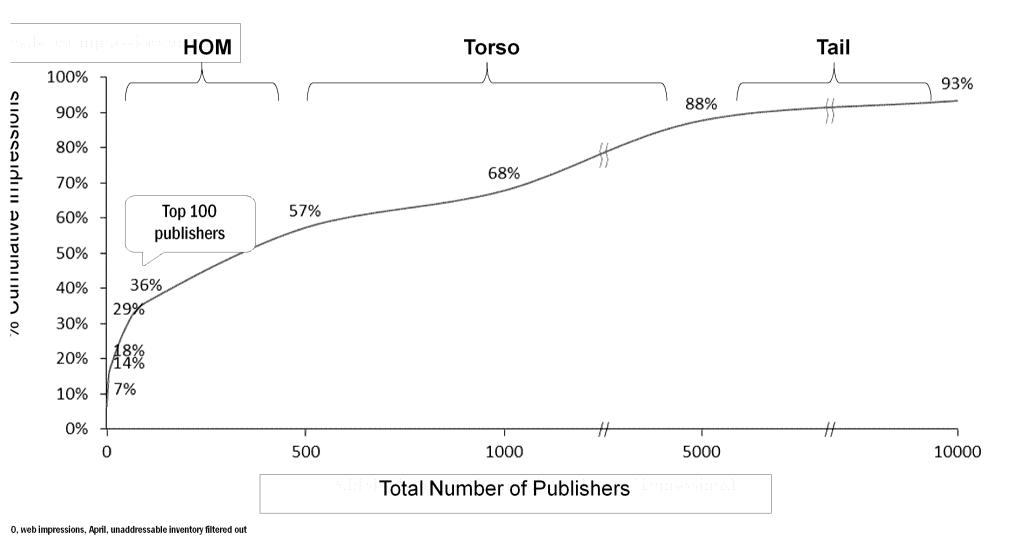




- Customer egmentation
- 2. New Ad **Formats**
- **3.** Supply Access
- Expansion
- **4.** Geographic **5.** Monetisation & competitivenes

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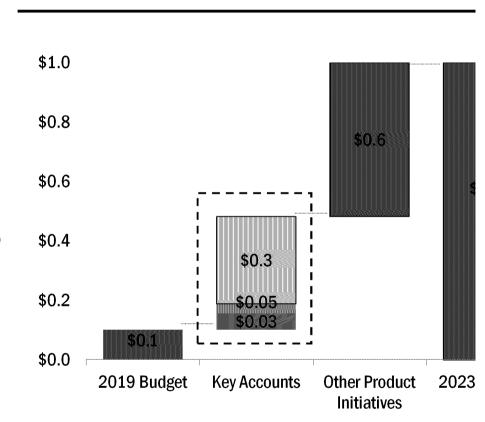
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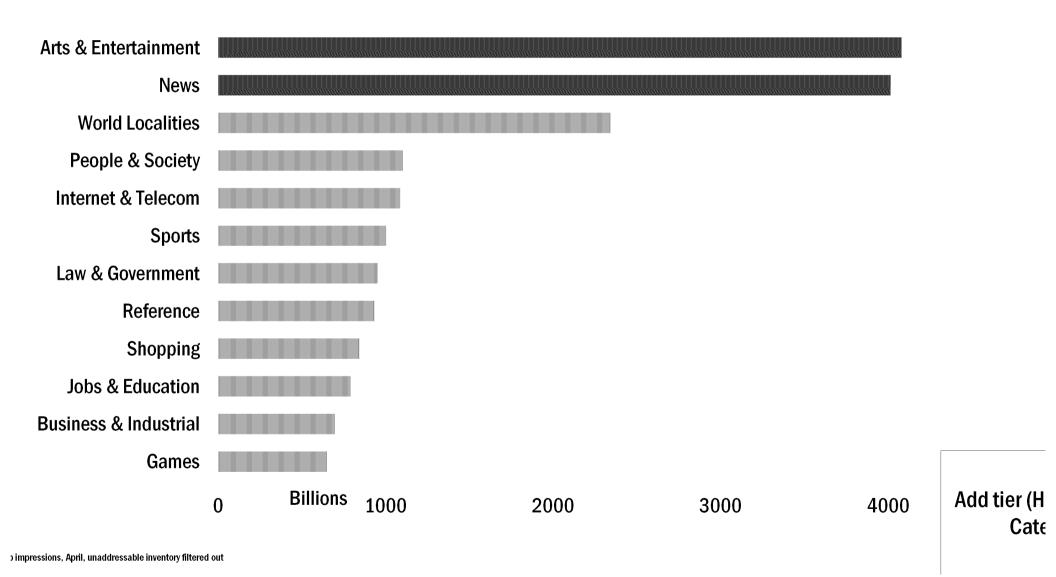


Contribution of Top 3 Pubs to 2023 Budget (\$B)



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CONFIDENTIAL TREATMENT REQUESTED BY FACEBOOK, INC.

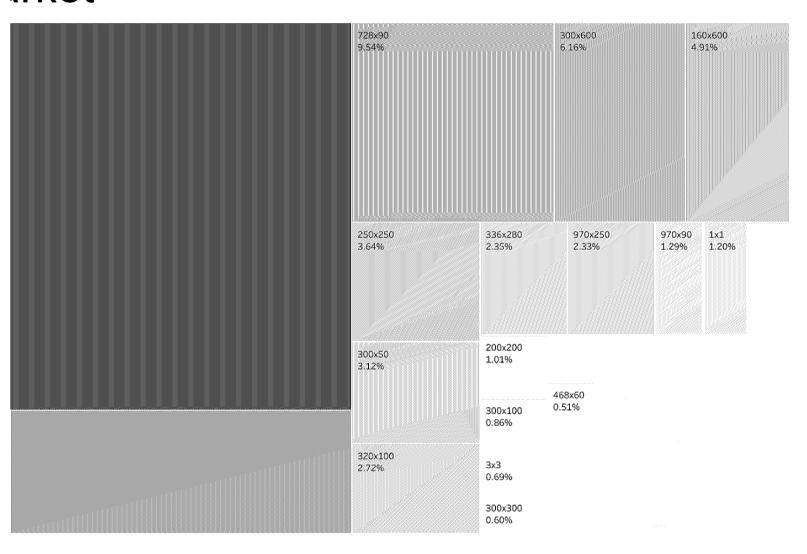
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Need to ad Matvey

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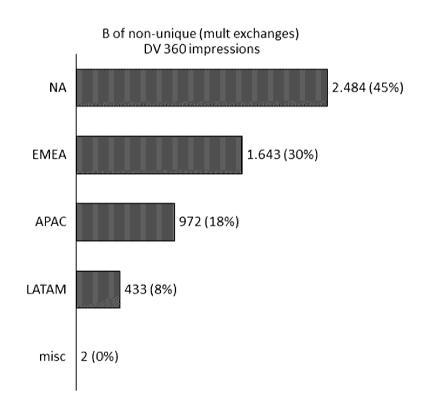


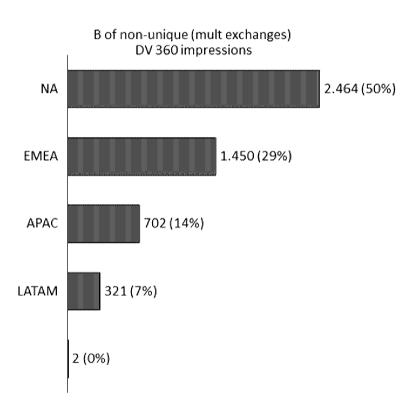
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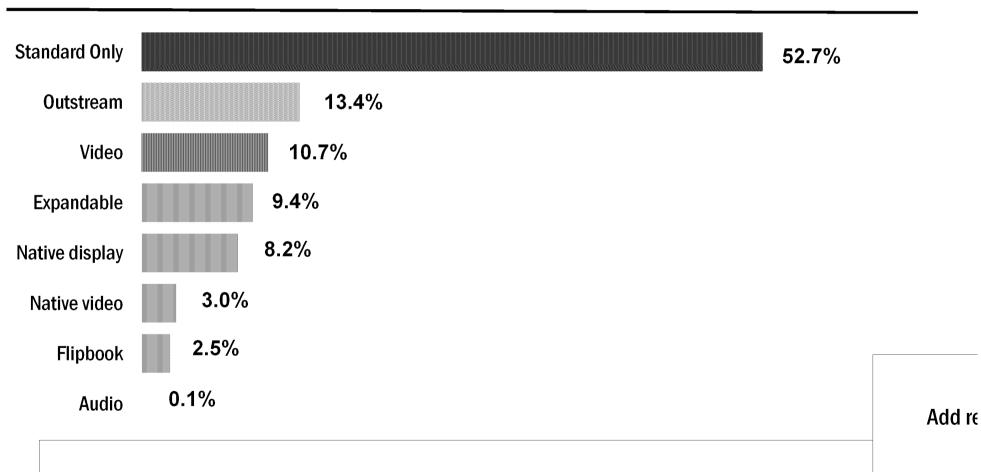




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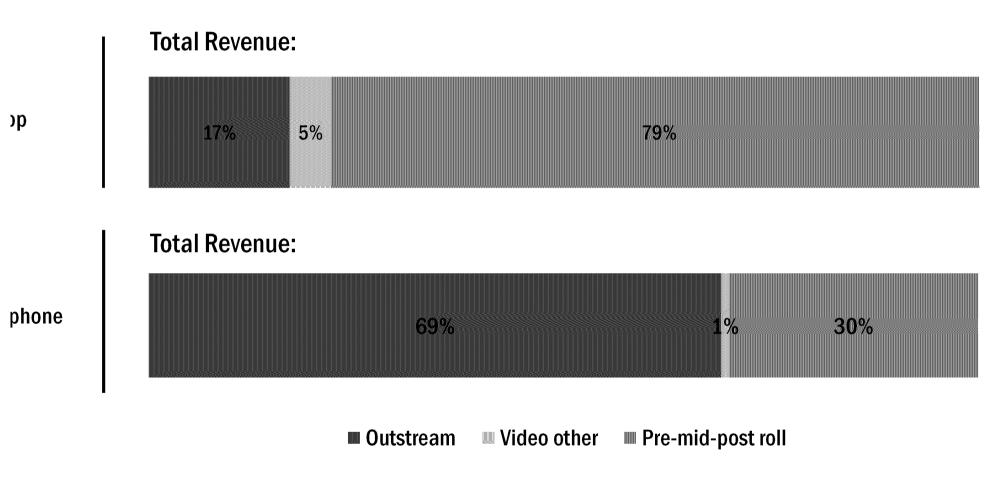
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Mobile Web Impressions



ıtstream Over-Indexes on Smartphones

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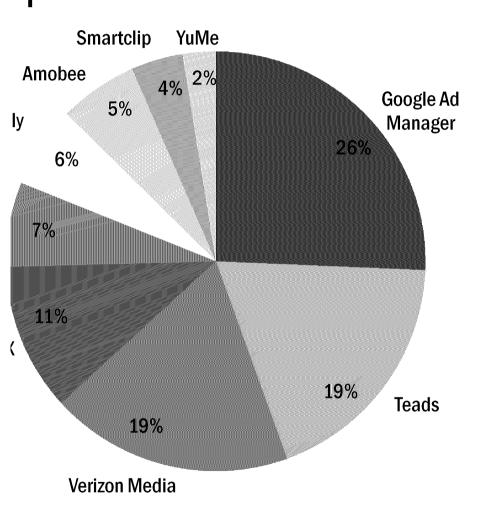


*Video other excluding IBV served from 300x250 or full width

Source: IAB/PWC Ad Spend Reporting - US routstream evenue from 2018.

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Emarketer Video & Display Metrics (2018) and Comscore AdMetrix Video (Mar 2018)

Trend: media owners buying Outstrear ad tech vendors for greater inventory control & transparency

Key announcements

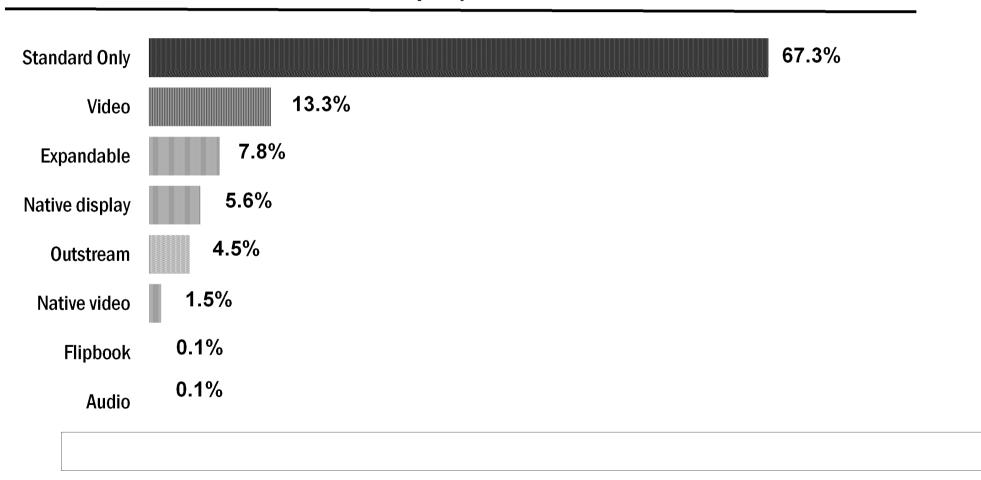
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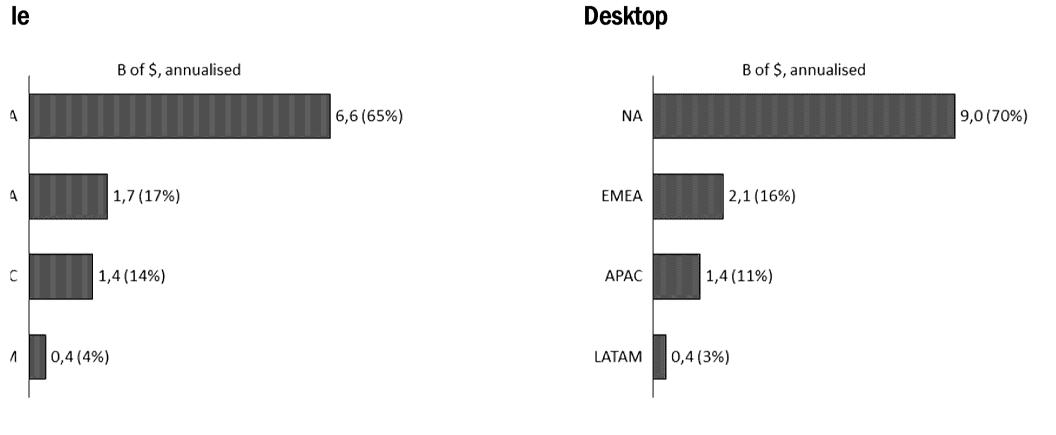
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Desktop Impressions



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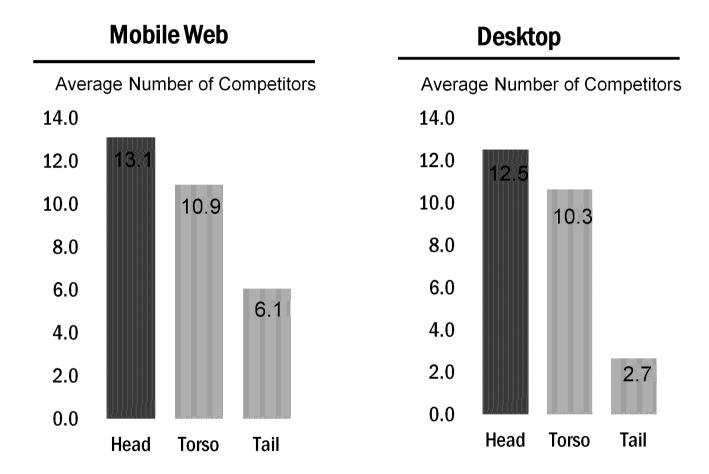
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Competitive Landscape

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Note: Data is based on DV360. Average number of competitors is the volume of programmatic exchanges accessing a publishers supply in each publisher tier. This could be either via a tag or parallel mediation

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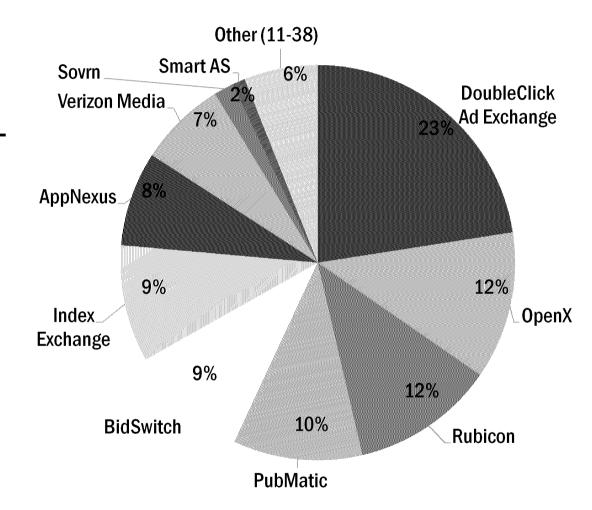
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- \$1.4B gross revenue
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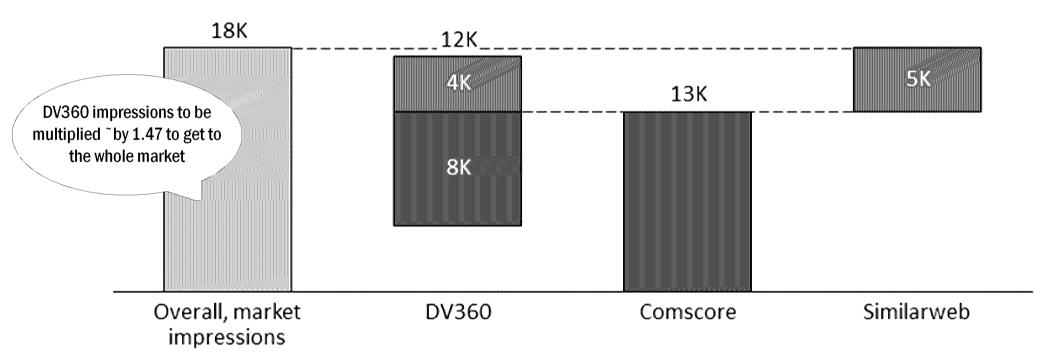
Appendixes

Tips and tricks

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Natively Produced PowerPoint of FBDOJ012408351

7 May

Web Analysis

H1 Marketplace Review





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- FINANCIAL UPDATE
 Top down for Mobile Web and Desktop
- MARKET SIZING
 Bottom up for Mobile Web and Desktop
- 3. FUTURE GROWTH OPPORTUNITIES

 Organic growth vectors

- 4. COMPETITIVE LANDSCAPE

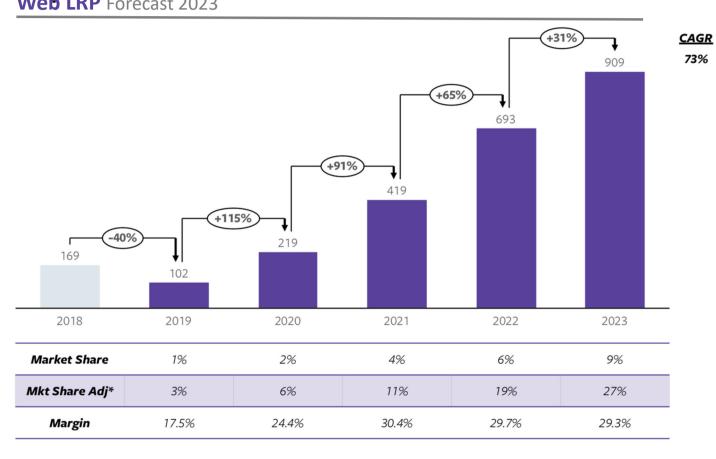
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Financial Summary

٥

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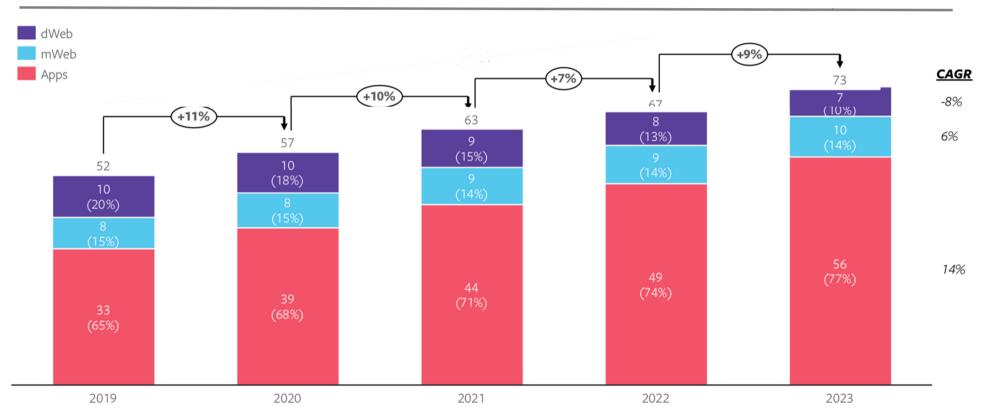


Outlook assumes we are able to fix the current competitive gaps and maintain/improve upon current win rates as we onboard new Web publishers in the short-term.

Growth will largely expected to come from Bidding partnerships to gain access to net new publishers similar to App Non-Gaming and becoming a self-serve model. Model assumes no significant ramp in GTM

Mobile increases its share from 80% to 90% with Mweb +6% CAGR. Desktop expected to decline -8%

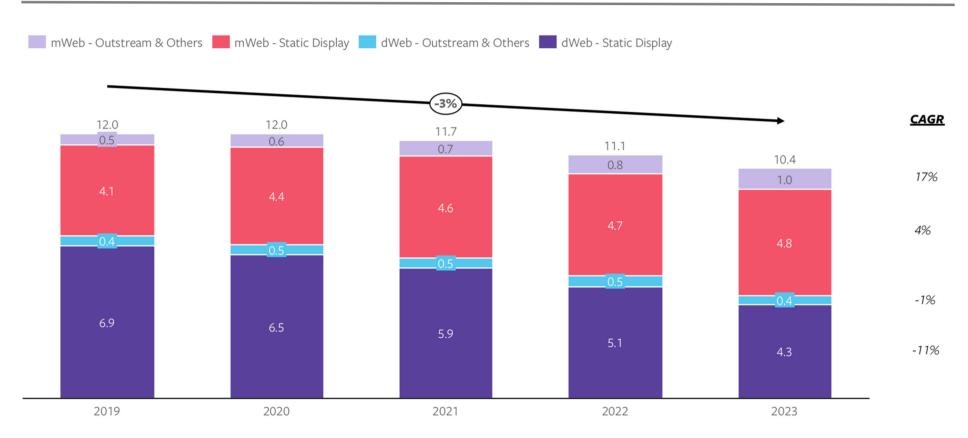
Publisher Ecosystems Ads Market by Surface



Source: Finance via IDC

Mobile Web will overtake Desktop in 2019

Addressable Market Excluding In-Stream



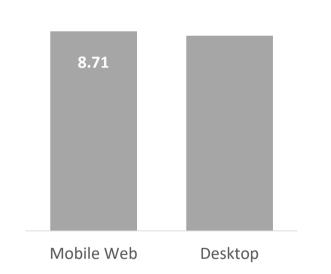
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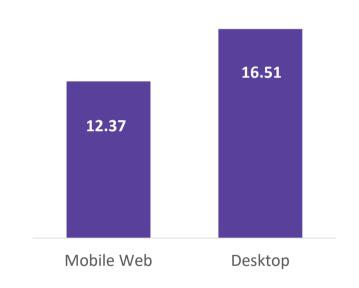
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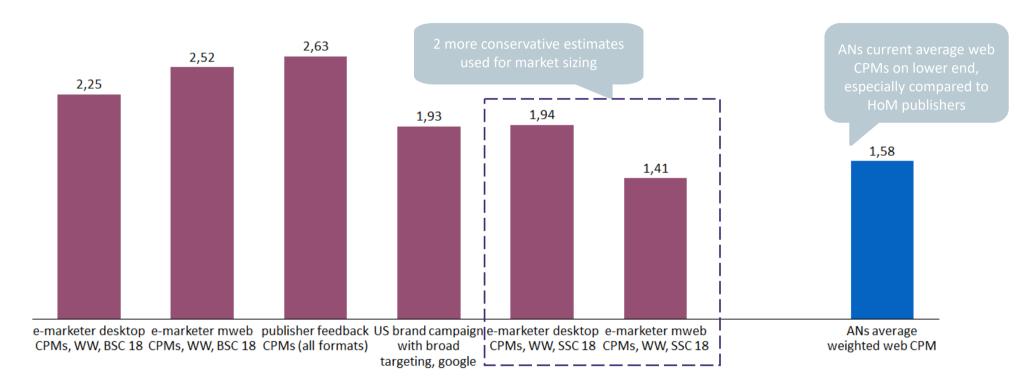


\$29B—total market

Add Slide with 3

The more conservative CPMs assumed for web: 1.94\$ for desktop and 1.42\$ for mweb

Available CPM benchmarks, \$



Source: BSC – buyer side, SCS – seller side



Future Growth Opportunities

5 ways to view the Web opportunity for the Audience Network











1. Customer Segmentation

2. New Ad Formats

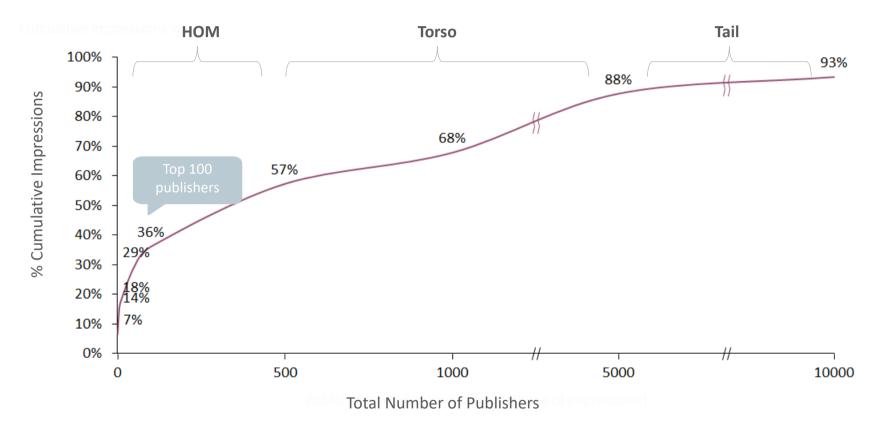
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5. Monetisation & competitiveness

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Top 3 publishers represent 16% of revenue opportunity

Verizon Media (formerly Oath), Microsoft and Ebay revenue potential \$380M for 2023

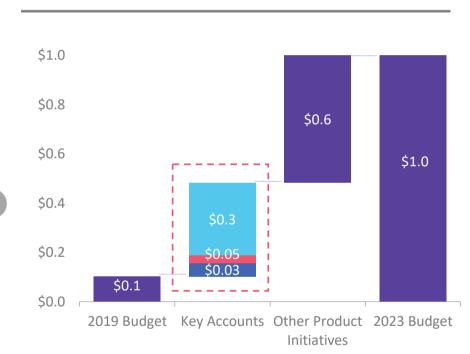
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Notes: Each publisher currently uses a custom server-side bidding integration to access supply. Not available through EB

- Ebay Sandwich (proprietary)
- Microsoft Prebid Server (hosted by AppNexus)
- Verizon Media Brightroll Ad Manager & Gemini

Model assumes native and standard display only with \$1CPM, 65% match-rate. In-stream excluded.

Contribution of Top 3 Pubs to 2023 Budget (\$B)

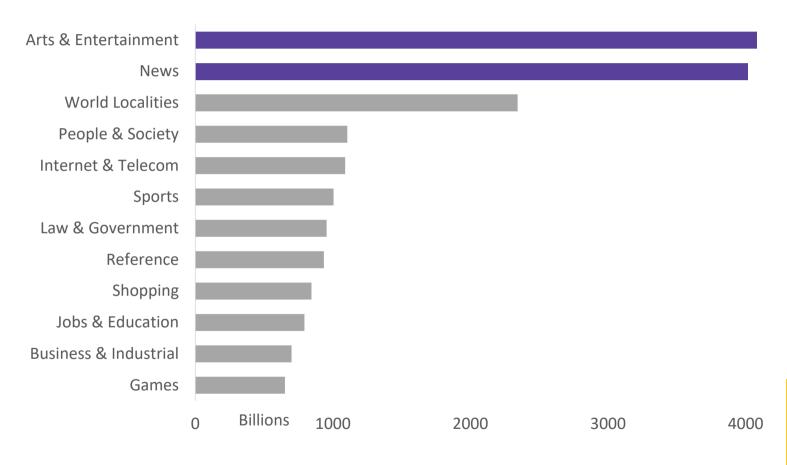


Source: DV360 & SimilarWeb impressions, April 2019

13

Entertainment & News ~11% of publishers impressions, only

Limited concentration of supply on either Mobile Web and Desktop



Add tier (HQM, etc) by Category

Source: DV360, web impressions, April, unaddressable inventory filtered out

Integration

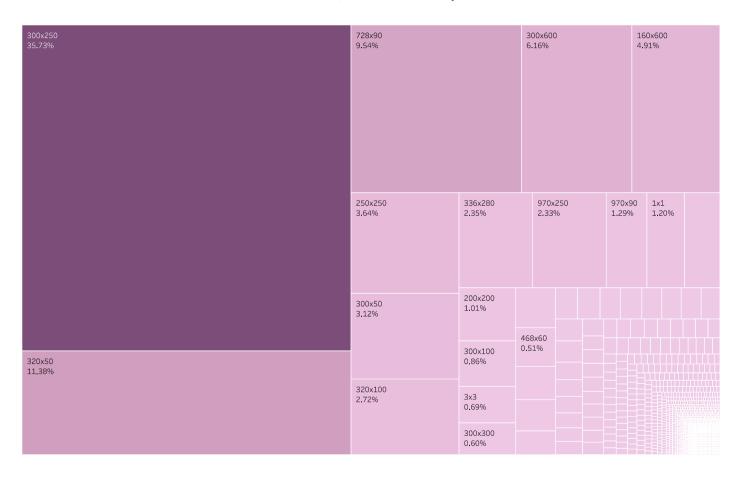
Preferred container solutions

Need to add data from Matvey & Darren

Source: DV360, web impressions, April, unaddressable inventory filtered out

Top 10 creatives sizes take up more than 80% of the market

300X250 unit alone accounts for 1/3 of the impressions

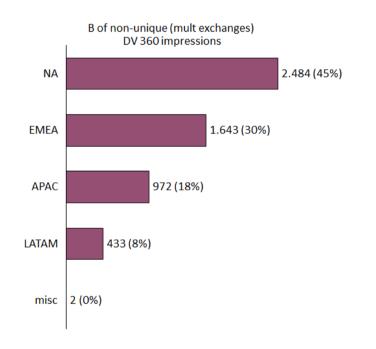


Creatives sizes: % of overall impressions

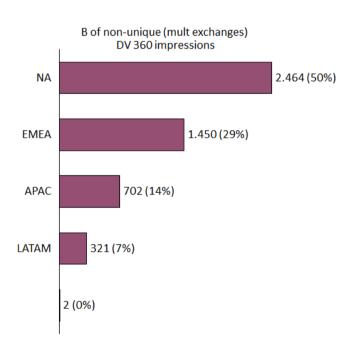
Standard IAB formats are the lions share of volume. Rich media & expandables (1x1) constitute 1.2% of supply

Both mobile and desktop are heavily driven by NA region with ~50% impressions there

Mobile



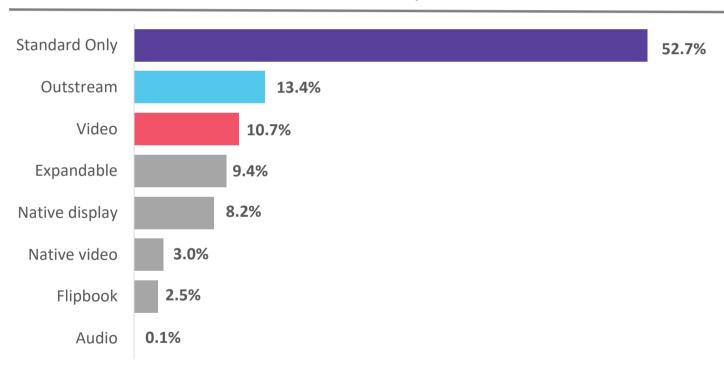
Desktop



Standard Display Formats & Outstream are the largest supply opportunity on Mobile Web

Outstream and Video (inc. In-Banner Video) grew +21% and 10% in 2018, respectively

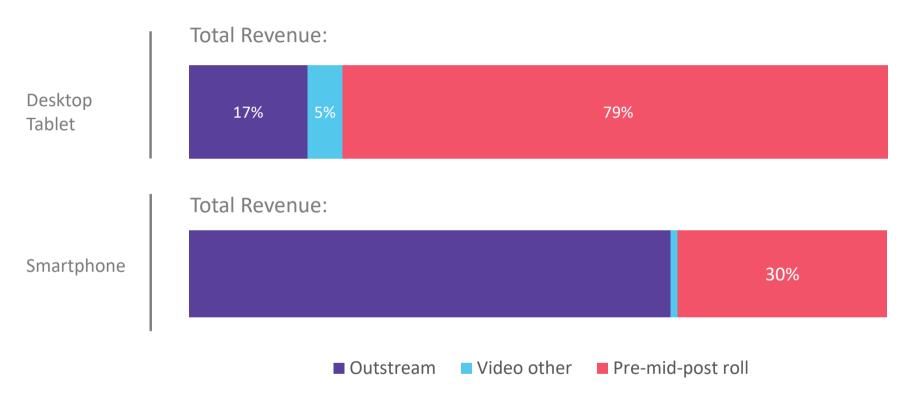
Mobile Web Impressions



Add revenue

Outstream Over-Indexes on Smartphones

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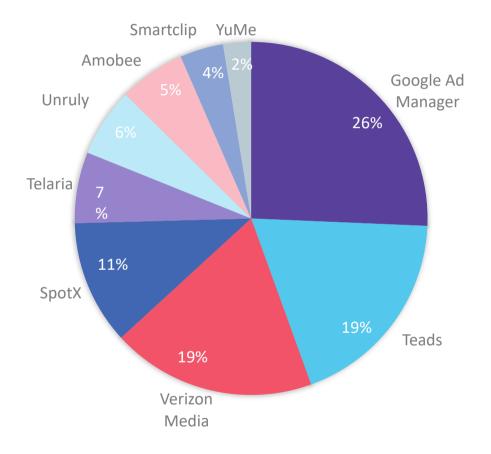


*Video other excluding IBV served from 300x250 or full width

Source: IAB/PWC Ad Spend Reporting - US routstream evenue from 2018 .

Outstream Market Remains Fragmented Despite Acquisitions

Largest opportunity to access web supply through client & server-side bidding integrations



Source: Emarketer Video & Display Metrics (2018) and Comscore AdMetrix Video (Mar 2018)

Trend: media owners buying Outstream ad tech vendors for greater inventory control & transparency

Key announcements

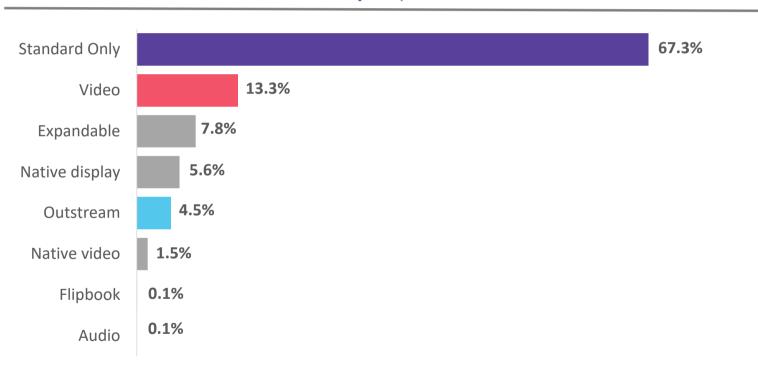
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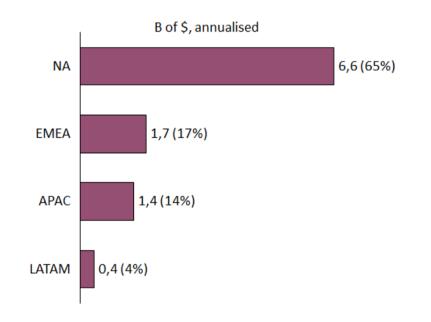
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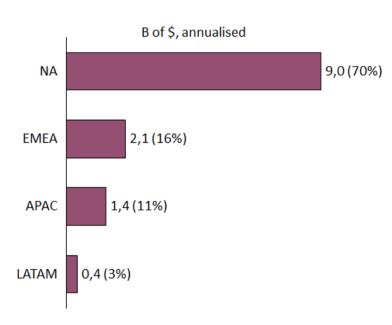
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Mobile Desktop





22

Note: for different regions, scaled FAN CPMs were used

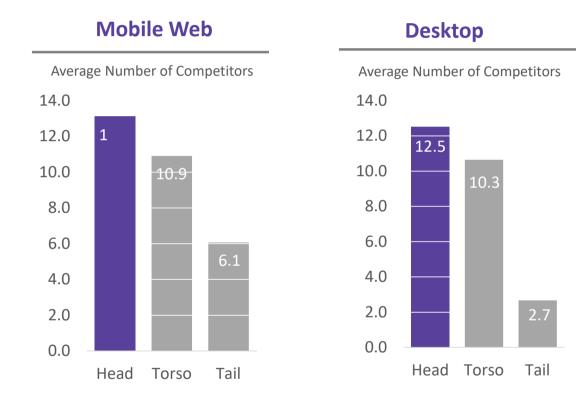


Competitive Landscape

23

Dense Competition in Head & Torso with +10 exchanges

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Note: Data is based on DV360. Average number of competitors is the volume of programmatic exchanges accessing a publishers supply in each publisher tier. This could be either via a tag or parallel mediation

Access to Supply Is Now Ubiquitous

Overview of Top Web Competitors

Legacy exchanges retain strong competitive position in saturated supply marketplace

OpenX - \$1.4B gross revenue

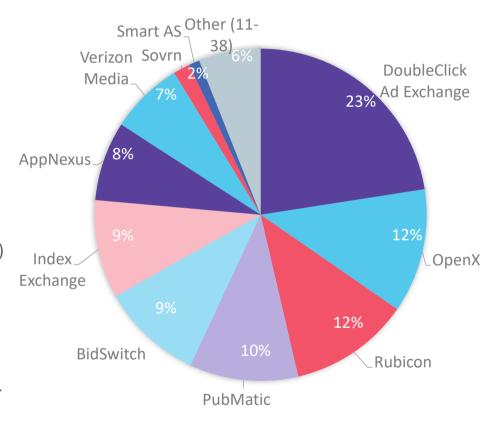
Differentiation - Launched OpenAudience; people based marketing solution partnering with LiveRamp, Adobe and Lotame DMPs to compete with Walled Garden.

Rubicon - \$1.5B gross revenue

Differentiation – (1) Strongest independent PMP provide. (2) Auction mechanics, specifically Estimated Market Rate (EMR). Bid shading tool-kit designed to optimise supply path for buyer & maximise win-rate for publishers

Index – NA (estimated \$1.8B)

Differentiation – Access to premium publisher supply. Proprietary client-side container developed on top of Prebid. Member of the governing body for Prebid and hosts serverside container enabling better match rates





Appendixes

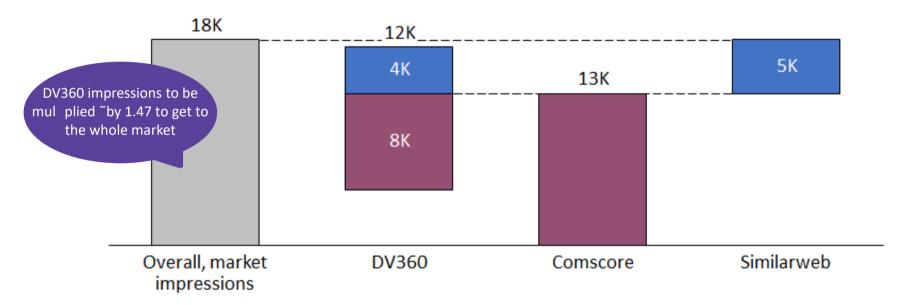
Tips and tricks

26

DV360 impressions account for ~2/3 of the market – and should be multiplied ~by1.5 to arrive at the whole market

(schematic, doesn't show Comscore and Similarweb overlap – even though it's accounted for)

B of impressions, monthly



Data: monthly impressions, latest available month (April)
Calculation methodology: Step 1: For conscore X DV360 overlap, IM1: Σimpressions/Σpage views; Step 2:For unique comscore pubs, I1: Σpage views * IM1; Step 3: M1 = I1/ΣDV360 impressions; Step 4: Calculate same M2 for similar web For any impressions figure based on DV360, F, amalgamated market figure would be F * (1+M1+M2)
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