Listener Technology in Action:
Practical Application

October 11, 2016

Mather Economics LLC

Mather Approach

- Start with the end in mind

- Analytics are not valuable unless they can be implemented
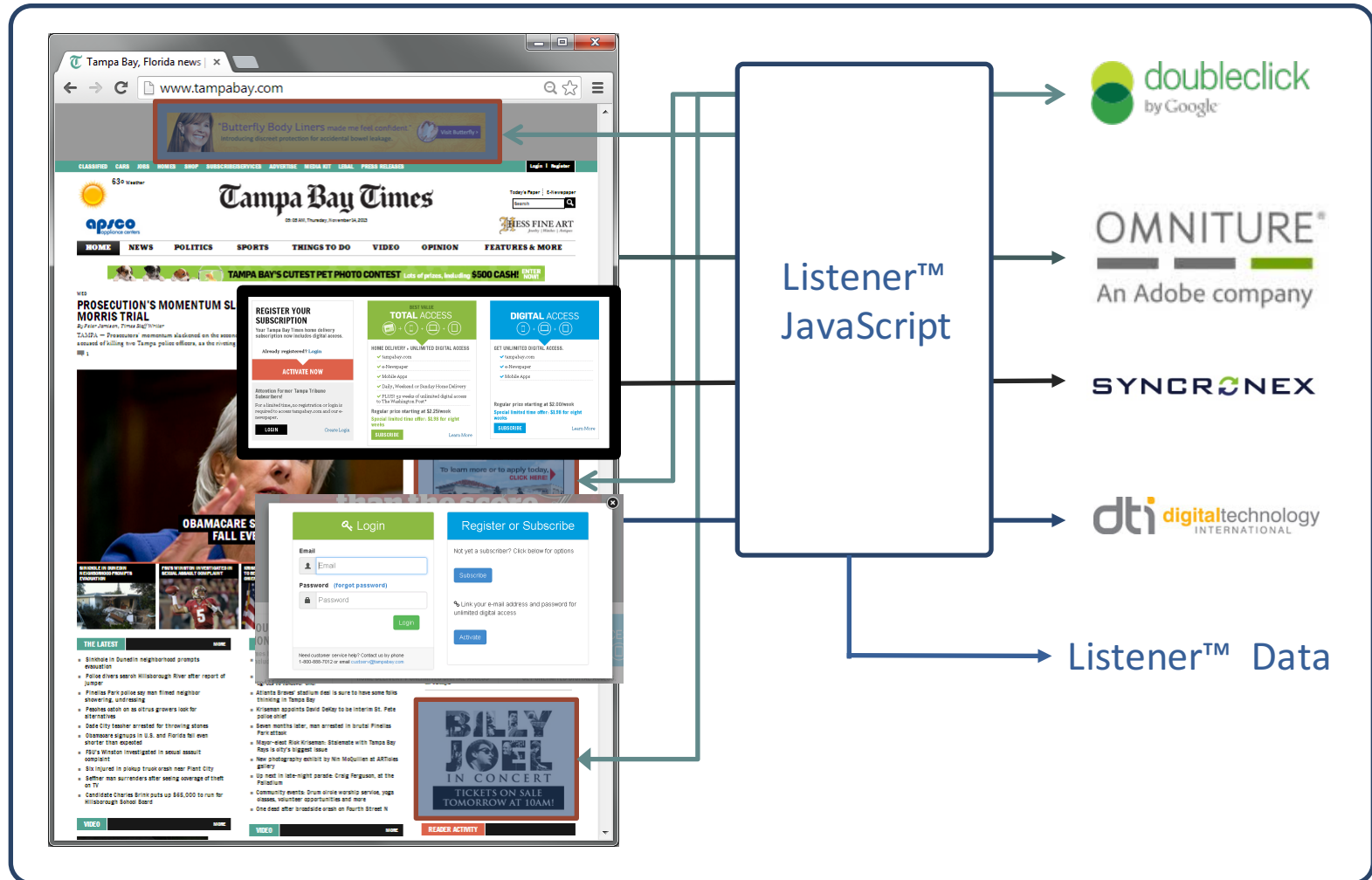
- Measure and report, test and learn

mather:

What is Listener™?

- ## Listener data platform collects every event on a page
  - User/page
  - Impressions/revenue
  - Paywall/logins

- ## Reporting modules show data and trends

- ## Analytics and data application through common vendors make data actionable

mather:

Typical Digital Data is Collected and Stored in Silos
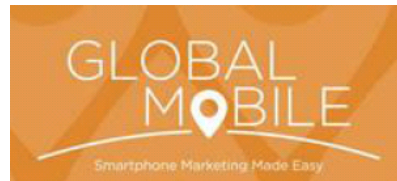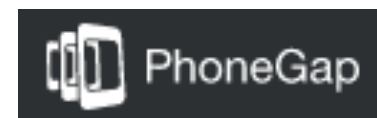# Listener Collects Everything in Real Time from the Perspective of the User

Listener™
JavaScript

Listener™ Data

mather:

Mather's Growing List of Partners and Connections with Listener™

Relationships

GLOBAL MOBILE
Smartphone Marketing Made Easy

moblico

press reader

olive
OLIVE SOFTWARE

PageSuite

TECNAVIA

NEWSCYCLE SOLUTIONS

CXENSE

PRESS+

PIANO

MARKETING G2

PRESSLAFF INTERACTIVE REVENUE
THE POINT IS

SYNCRONEX

gigya

Compatibility

salesforce marketing cloud

AMP Project
ACCELERATE MOBILE PAGE PROJECT
Google

doubleclick
by Google

AppNexus

OpenX

bluekai

krux

rubicon
PROJECT

Simpli.fi

SAILTHRU

facebook Instant Articles

DOMO

+ableau

iOS

ANDROID

PhoneGap

mather:

Listener Data Platform

Visualization Layer

Analytics Layer

Reporting Modules

System Integration

Email System

Paywall

DMP

Ad Server

mather:

Product Development Roadmap

Reporting Modules	User Database	NMA Digital Benchmarking (metricsXchange)

Standard

Paywall

Advertising

User

Content

Advertising Rate Card	Dynamic Meter – Paywall A/B Testing

Listener Tag Manager	Subscriber Benchmarking

Inventory Forecasting

mather:

Analytics –
Audience, Advertising, Content
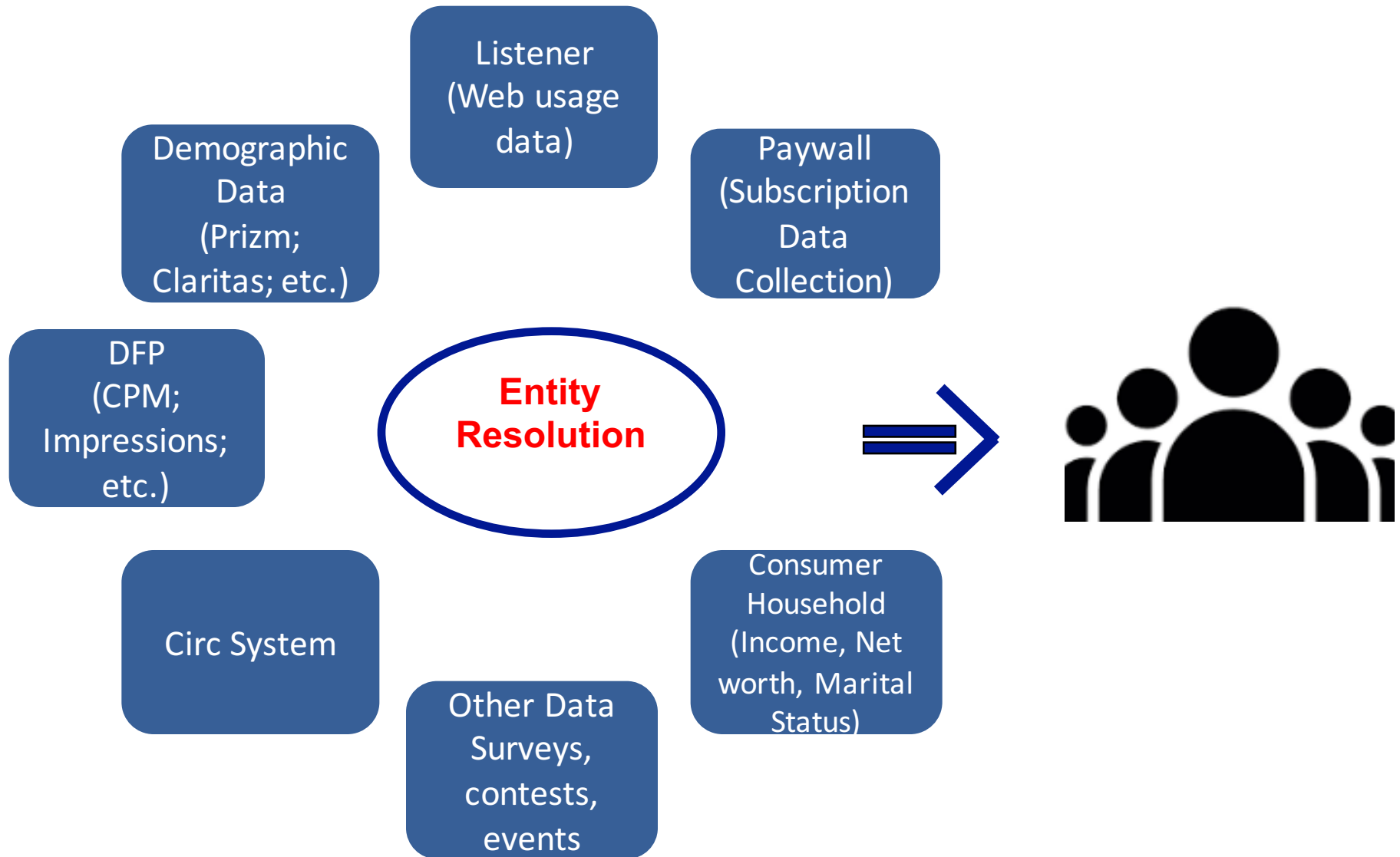
Audience – Two Types: Anonymous and Known

- Cookie, device, IP (geo)
- Content preference, engagement behavior
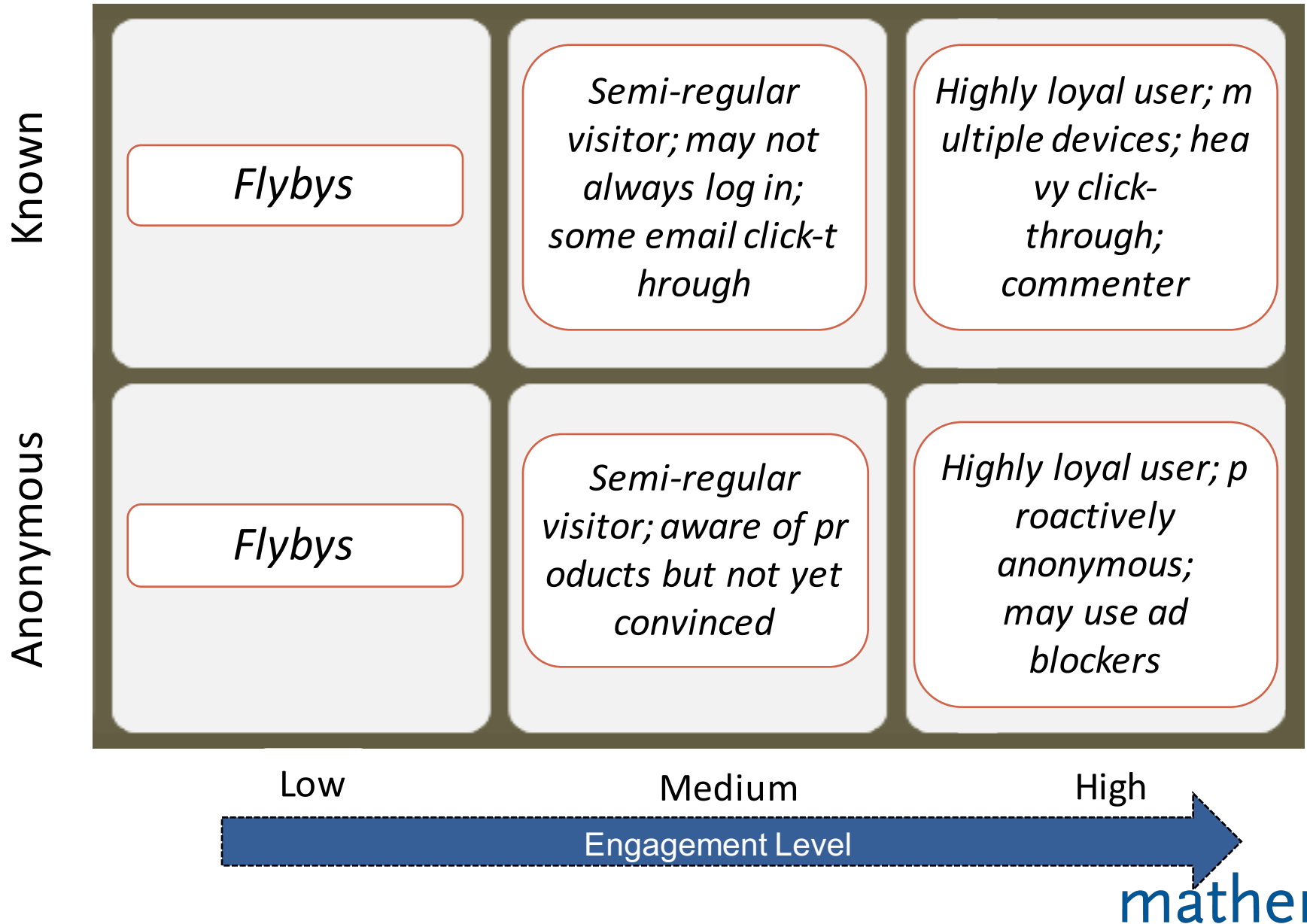- Ad revenue, paywall interaction
- 3rd party demographics

- Email address, login, and PII
- Newsletter opt-ins
- Subscription status
- 1st party demographics
- All owned 1st party data sources

mather:

Listener (Web usage data)

Demographic Data (Prizm; Claritas; etc.)

Paywall (Subscription Data Collection)

DFP (CPM; Impressions; etc.)

Entity Resolution

Circ System

Consumer Household (Income, Net worth, Marital Status)

Other Data Surveys, contests, events

mather:

Audience Tranches: Known vs. Anonymous

	Low	Medium	High
Known	*Flybys*	*Semi-regular visitor; may not always log in; some email click-through*	*Highly loyal user; multiple devices; heavy click-through; commenter*
Anonymous	*Flybys*	*Semi-regular visitor; aware of products but not yet convinced*	*Highly loyal user; proactively anonymous; may use ad blockers*

Engagement Level →

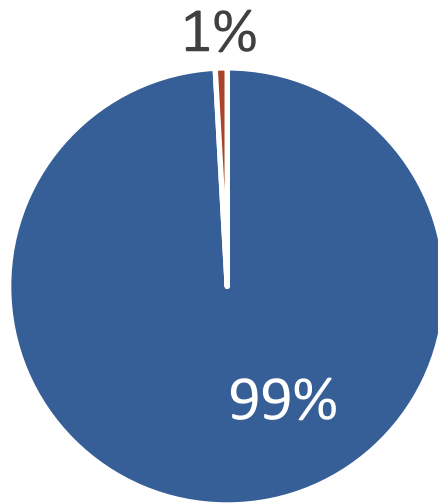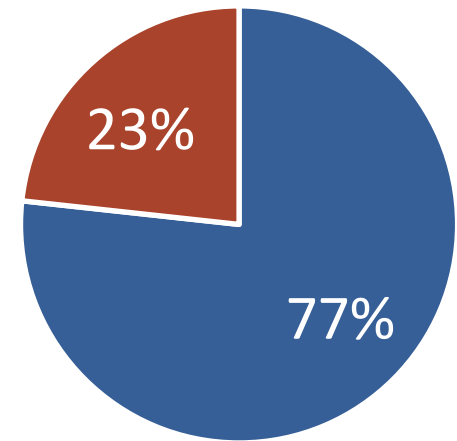mather:

A Midsize Midwestern Market shows only 1% of users are logged in though they generate 23% of page views
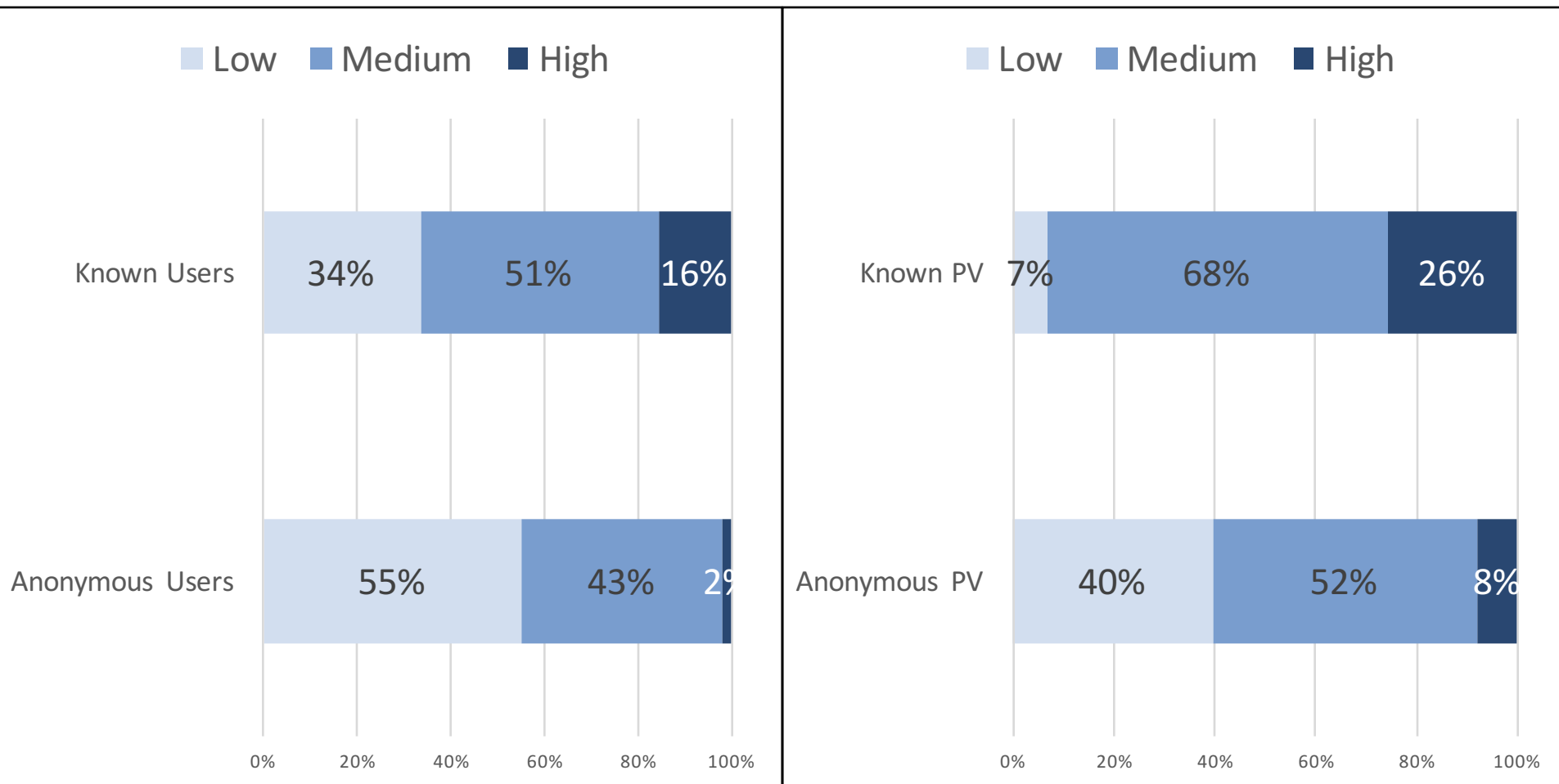
■ Anonymous Users   ■ Known Users

■ Anonymous PV   ■ Known PV

1%

99%

23%

77%

mather:

Page views, impressions, and ad revenue are comparable in volumes by engagement tranche

Known Users: Low 34%, Medium 51%, High 16%

Anonymous Users: Low 55%, Medium 43%, High 2%

Known PV: Low 7%, Medium 68%, High 26%

Anonymous PV: Low 40%, Medium 52%, High 8%

Legend: Low, Medium, High

Engagement Level →

mather:

- Behavioural Data -

mather:
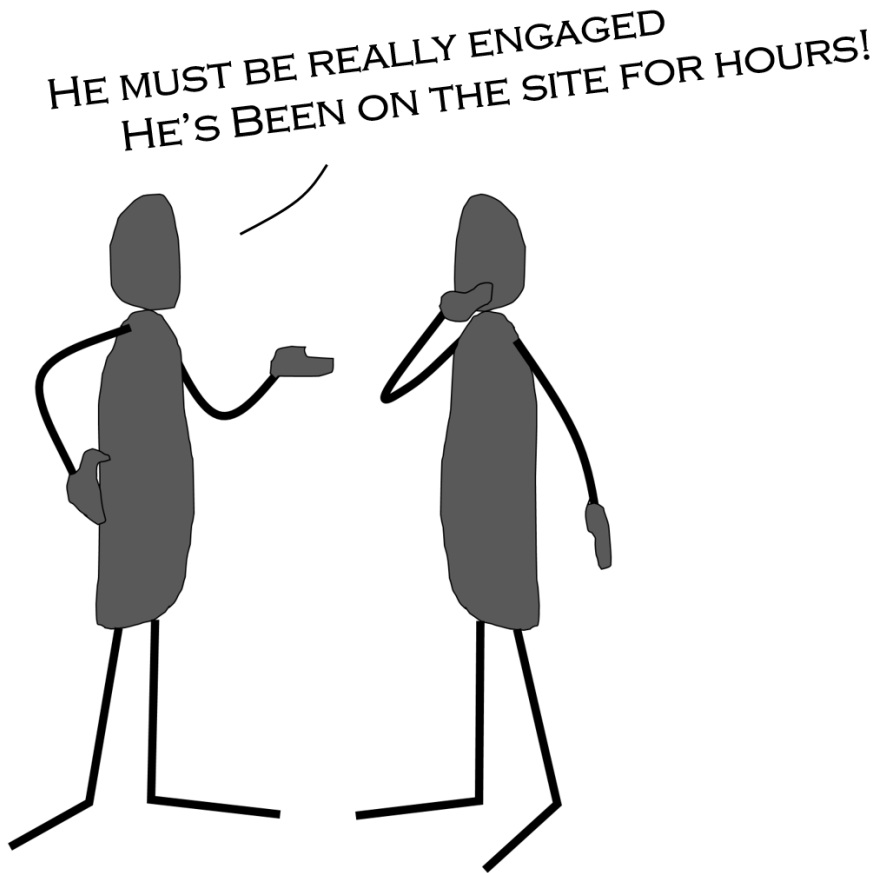
Audience Metrics Identify Overall Engagement Trends and Averages

- Anonymous users spend the least time on site but scroll furthest down the page

- Digital-only subscribers index high on volume (visits, days, impressions, ad revenue)

- Print subscribers scroll the fastest through articles

- Registered users spend the most time per visit

User Type	Minutes per Visit	Scroll Depth per Visit	Scroll Velocity per Visit	Visits	Days per Month	Page Views	Impressions	Ad Revenue	Avg Subscription Price
Anonymous	02:57	53%	36.1	1.5	1.4	1.6	5.2	$0.02	.
Digital	04:05	51%	22.1	8.8	2.9	6.9	27.2	$0.13	$2.09
Print	03:19	46%	77.8	5.2	2.2	4.4	16.4	$0.09	$4.93
Registered	04:36	47%	23.9	5.3	1.9	4.0	15.7	$0.08	.
Average	02:57	53%	36.1	1.5	1.4	1.6	5.2	$0.02	$4.49

mather:

Application and Case Studies – Paywall, Email System, Ad Server, Editorial/Social Media

Paywall Application via Listener Connection

- Customized paywall experiences based on audience segmentation
  - Tests completed with Syncronex at device/content level
  - Testing in progress through Piano (Composer)
    - Content preference, ad blocking, engagement bucket, expected conversion, expected lifetime value (net ads and subscription revenue)

- Dynamic paywall
  - Optimized meter settings to balance ad revenue risk and subscription revenue

mather:

Meter Optimization: Case Study

- Content was identified as having relative value in either subscriptions or advertising

- An "optimal" point was found where ad risk was minimized and subscription revenue was maximized

- A revenue forecast was built to reflect changes in conversions and revenue

- Custom reporting under development

Section	Meter Setting
Business	5
ClassAd	5
Entertainment	10
Lifestyle	10
News	3
Online	5
Other	5
SpecialSec	5
Sports	3
Travel	10
mobilesite_Business	15
mobilesite_ClassAd	15
mobilesite_Entertainment	15
mobilesite_Lifestyle	15
mobilesite_News	7
mobilesite_Online	15
mobilesite_Other	15
mobilesite_SpecialSec	5
mobilesite_Sports	5
mobilesite_Travel	15

Advertising Value

Subscription value

mather:

Meter Optimization: Case Study

Deployed at the Section and Device Level

- Desktop recommendations live in August 2015
  - Mobile recommendations live in September 2015

- **New conversions increased by 15% above monthly trend**

- Advertising revenue remained consistent

- Total page views and unique visitors declines slightly
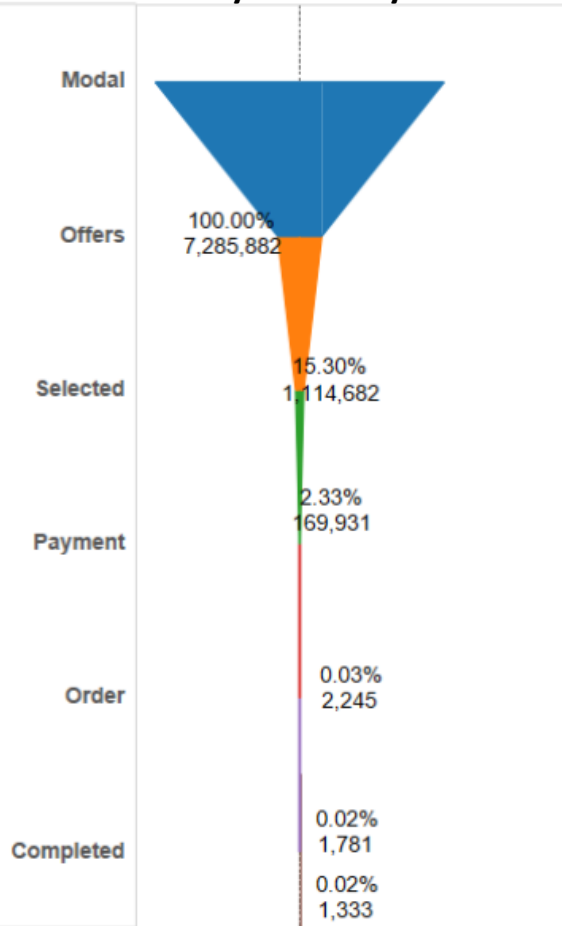 - Mobile traffic remained consistent

mather:

Selected Case Study (In Progress)

- Publisher launched a paywall in summer of 2016
  - Publisher wanted to take advantage of engaged audiences from election coverage and start of NFL season

- Listener identified multiple segments:
  - *POLITICS3*: 3+ articles per week in political/election content
  - *FOOTBALL3*: 3+ articles per week in football content
  - *GAMEDAY3*: 3+ articles on the day of the game

- Segments are synced with paywall
  - Custom offers are being built now
  - A/B testing proposed and measured by Listener

mather:

Relative to the "offers" phase, the subscription entry performs best. The paywall entry is the least efficient in converting users

Paywall Entry

Modal	
Offers	100.00% 7,285,882
Selected	15.30% 1,114,682
Payment	2.33% 169,931
Order	0.03% 2,245
Completed	0.02% 1,781
	0.02% 1,333

Subscription Entry

Offers	
Selected	100.00% 28,737
Payment	62.90% 18,077
Order	5.97% 1,715
Completed	4.62% 1,329
	3.51% 1,010

Email Entry

Offers	
Selected	100.00% 276,882
Payment	35.51% 98,308
Order	0.82% 2,266
Completed	0.71% 1,967
	0.41% 1,139

mather:
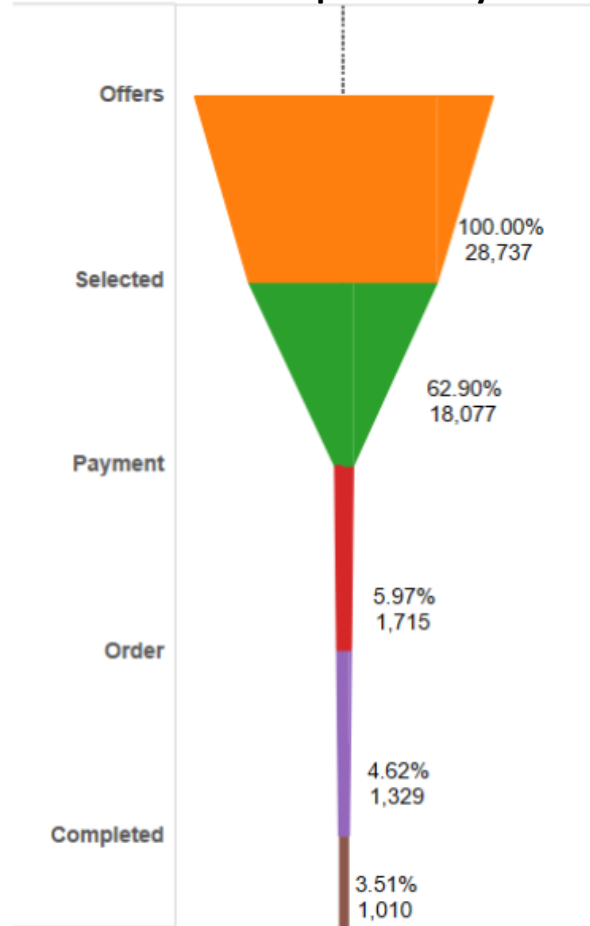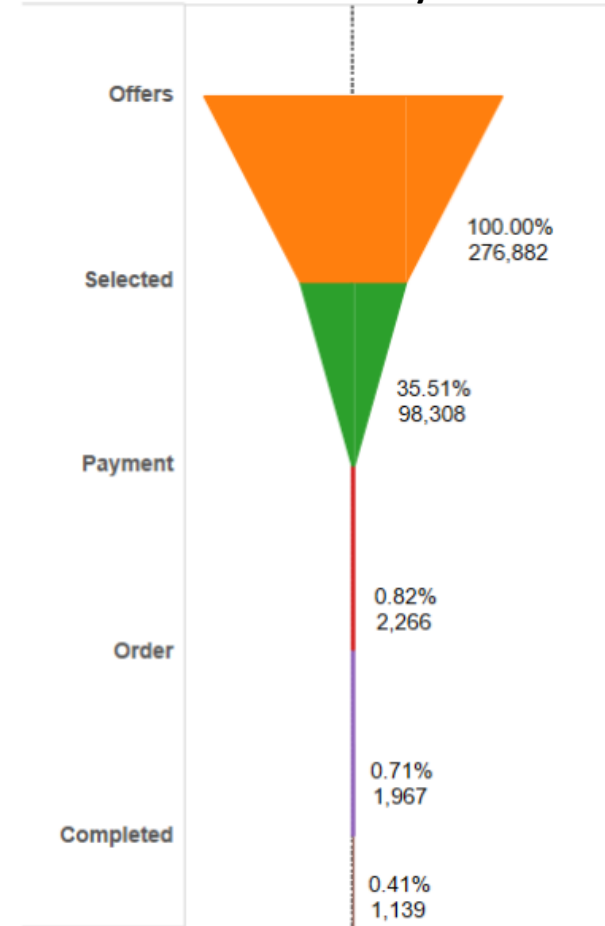
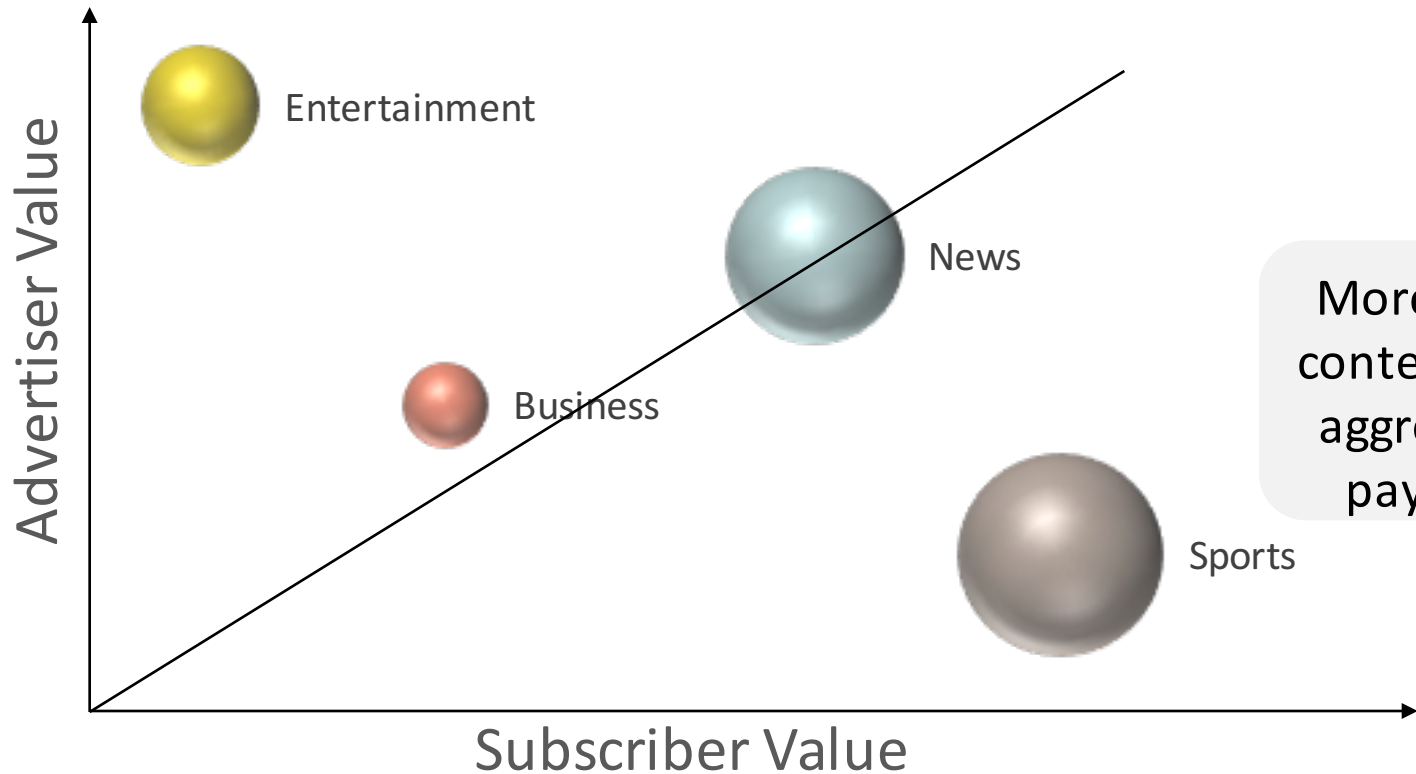# The Dynamic Paywall Sets the Meter Where Advertising Risk is Minimized but Conversions are Maximized

More free content and light paywall

More paid content and aggressive paywall

Advertiser Value

Subscriber Value

Entertainment

News

Business

Sports

mather:

Email Application via Listener Connection and API

- Targeted email list automation based on known audience segmentation
  - Digital engagement, content preference…etc.
  - Onboarding, retention, acquisition, marketing/communication

- A/B testing
  - List generation and robust sampling to test different communication methods

- Attribution reporting
  - Measuring lift in volume, ad revenue, and conversions directly form email campaign

mather:

User List Generator with Online Engagement for Last 30 Days

Emails Hidden for Privacy

		Page Views	Article Page Views	Unique Days	Cookies	Ad Revenue	Impressio..	Complaints	Avg. Minutes on Site	Avg. Week Price	Last Login
ia	..n..	37	2	21	1	$2.81	229	0	41	$0.00	2016-08-19
m	n..	37	2	21	1	$2.81	229	0	41	$0.00	2016-08-19
m	ba..	61	36	15	1	$2.81	338	0	625	$0.00	2016-08-19
ra	s..	139	47	16	5	$2.81	409	0	304	$0.00	2016-08-17
ri	er..	41	12	18	2	$2.81	211	0	85	$0.00	2016-08-20
ri	g..	59	22	9	1	$2.81	205	0	130	$0.00	2016-08-18
D	ER..	22	10	9	1	$2.80	144	1	60	$3.64	2016-08-16
D	33..	56	20	13	1	$2.80	343	0	321	$4.07	2016-08-19
Fl	T..	48	10	17	1	$2.80	268	0	80	$2.54	2016-08-18
Jl	O..	21	5	3	1	$2.80	101	1	31	$2.84	2016-08-19
lil	in..	57	22	2	1	$2.80	235	0	144	$0.00	2016-08-10
M	o..	63	30	6	1	$2.80	440	0	108	$7.10	2016-08-18
nv	o..	40	8	16	2	$2.80	207	0	42	$0.00	2016-08-18
U	h..	47	7	22	1	$2.80	300	0	235	$0.00	2016-08-19
aj	m..	42	19	12	1	$2.79	277	0	270	$0.00	2016-08-19
ca	y..	68	32	13	2	$2.79	425	1	91	$3.54	2016-08-17
dl	@..	26	7	12	1	$2.79	159	0	156	$0.00	2016-08-17
d	ne..	79	28	12	2	$2.79	409	0	65	$0.00	2016-08-17
jo	ne..	51	0	13	1	$2.79	136	0	56	$0.00	2016-08-17
S	O..	56	17	11	2	$2.79	234	1	108	$8.20	2016-08-17
ba	n..	31	27	11	1	$2.78	165	0	84	$0.00	2016-08-14

Match Type
(All) ▼

Top Content Area
(All) ▼

Top Author 1 Last30
(All) ▼

Top Locality
(All) ▼

Top Device
(All) ▼

Have Email Address
(All) ▼

Income
(All) ▼

Status
(All) ▼

Tenure
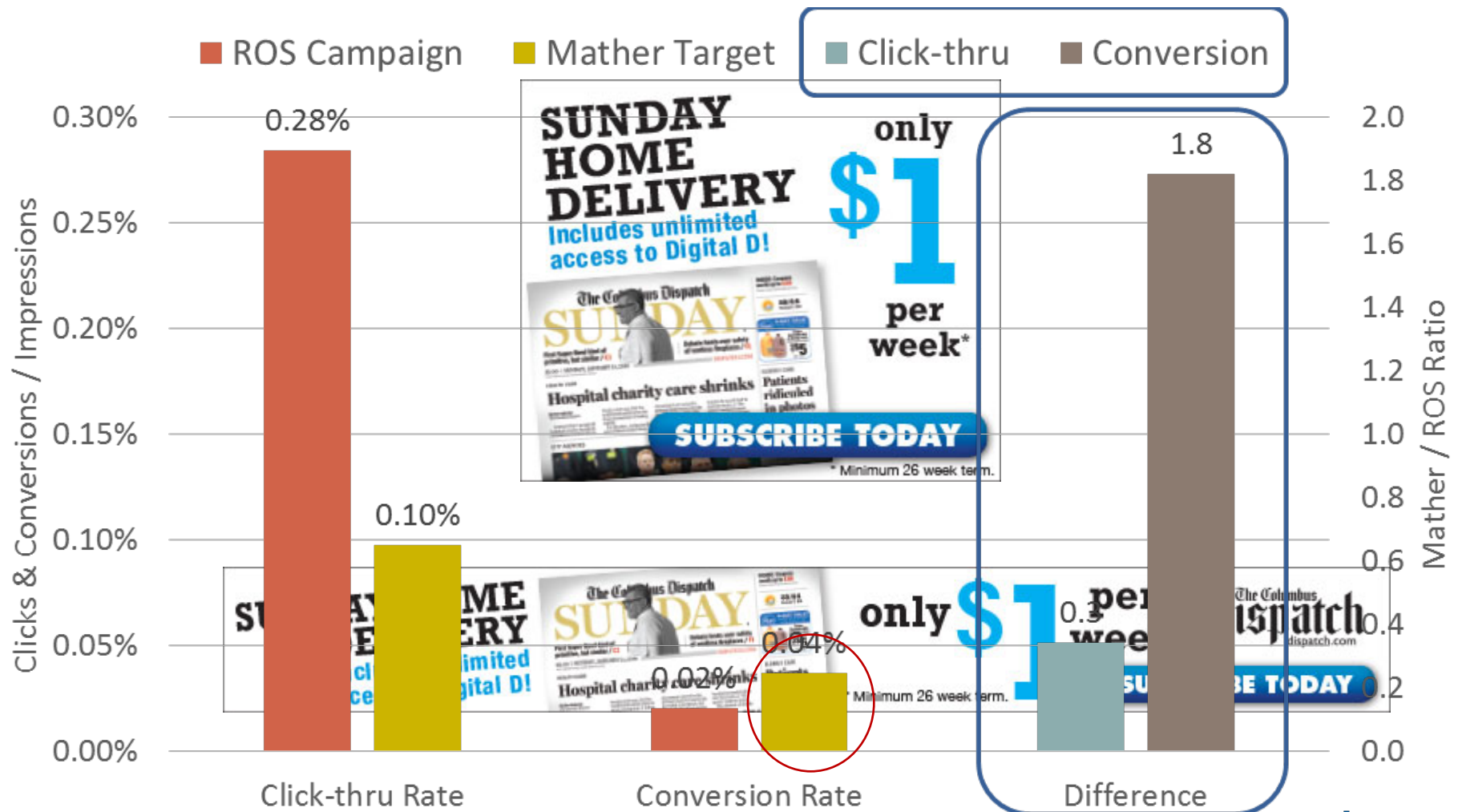(All) ▼

Freq
(All) ▼

mather:

Selected Case Study (In Progress)

- Publisher wants to measure value of various email campaigns
  - Three types of emails identified:
    - Recurring informational (billing, announcements…etc.)
    - Recurring newsletters (daily digest, opt-ins, top articles…etc.)
    - Recurring and ad-hoc campaigns (promotions, events…etc.)

- UTM tag for each email (with date in UTM)

- "Closed loop" reporting
  - Metrics: page views, ad revenue, change in engagement group
  - Actions: conversion, sign-up, payment
  - A/B testing

mather:

Ad Server Application via Listener Connection

- Targeted ad campaigns through DFP from audience segments
  - Digital engagement, content preference…etc.
  - Offline data
    - House campaign test complete
    - Advertiser campaign pending

- Retargeting campaigns through Simpli.fi from audience segments
  - Campaign in progress

- Attribution reporting
  - Closed-loop reporting between advertiser, inventory, audience

mather:

Selected Case Study: Test of Targeted House Ads Reveals Targeted Campaign leads to 1.8X More Conversions with 1/3 as Many Clicks

Legend: ■ ROS Campaign ■ Mather Target ■ Click-thru ■ Conversion

Left Y-axis: Clicks & Conversions / Impressions — 0.00%, 0.05%, 0.10%, 0.15%, 0.20%, 0.25%, 0.30%

Right Y-axis: Mather / ROS Ratio — 0.0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4, 1.6, 1.8, 2.0

Click-thru Rate: 0.28% (ROS Campaign), 0.10% (Mather Target)

Conversion Rate: 0.02% (ROS Campaign), 0.04% (Mather Target)

Difference: 0.3 (Click-thru), 1.8 (Conversion)

X-axis categories: Click-thru Rate, Conversion Rate, Difference

mather:

Selected Case Study (In Progress)

- Segment users based on content preference (non-subscribers):
  - Sports fan
  - News fan

- Integrate segments into Simpli.fi retargeting tool
  - $1,000 investment

- Target relevant sites:
  - ESPN, Bleacher Report, Fox Sports, local football team,
  - Washington Post, NY Times, USA Today, Huffington Post, MSN, CNN, ABC, local TV station

mather:

Editorial/Social Media Application

- Prioritization of articles for promotion on different platforms
  - Based on yield per article rather than volume

- Measure effectiveness of paid promotion on Facebook and other social networks
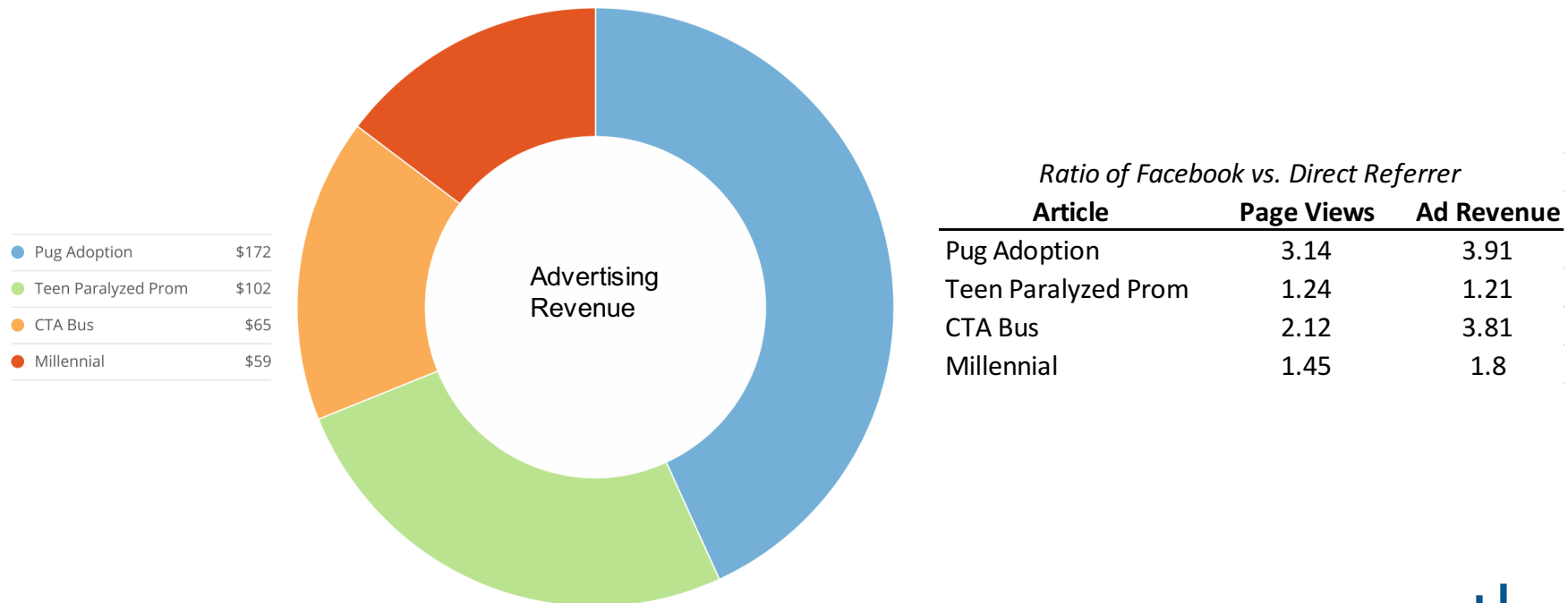 - Test complete

mather:

Articles published at similar times have drastically different performance metrics when comparing volume and yield

- The first article shows more volume but total ad revenue is greater from the second article
  - The yield per page is almost double for the second article

Page	Publication Time	Page Views	Impressions	Ad Revenue	Avg Ad Revenue per Page
Gigantic tooth comes from ancient monster	5:00:00 AM	43,183	154,259	$2,111	$0.049
Capitol Insider: Democrats oust party officials for voting in GOP primary	5:00:00 AM	27,344	109,406	$2,200	$0.080

mather:

Selected Case Study: Social Media ROI

- A newspaper decided to pay for boosting content through Facebook
- The content matrix measured precisely the volume and revenue impact to each article by referrer
- Some articles generated nearly 4X as much advertising revenue from Facebook compared to direct (non-boosted) traffic

● Pug Adoption	$172
● Teen Paralyzed Prom	$102
● CTA Bus	$65
● Millennial	$59

Advertising Revenue

Ratio of Facebook vs. Direct Referrer

Article	Page Views	Ad Revenue
Pug Adoption	3.14	3.91
Teen Paralyzed Prom	1.24	1.21
CTA Bus	2.12	3.81
Millennial	1.45	1.8

mather:

Wrap up

mather:

Best Practices

- Registration!
  - Collect PII, behavior
  - Use for engagement, marketing, advertising

- Move from "One-sized to Individualized"
  - Acquisition
  - Retention/Churn reduction
  - Ads, content, email, offers, communication

- Centralized data & analytics
  - Coordinated actions across enterprise
  - Audience, Advertising, Content

mather:

Mather philosophy:

- Start with the end in mind

- Focus on holistic long-term value

- Use data to make decisions

- Test everything
  - Operationalize and measure the results

mather:

Questions?