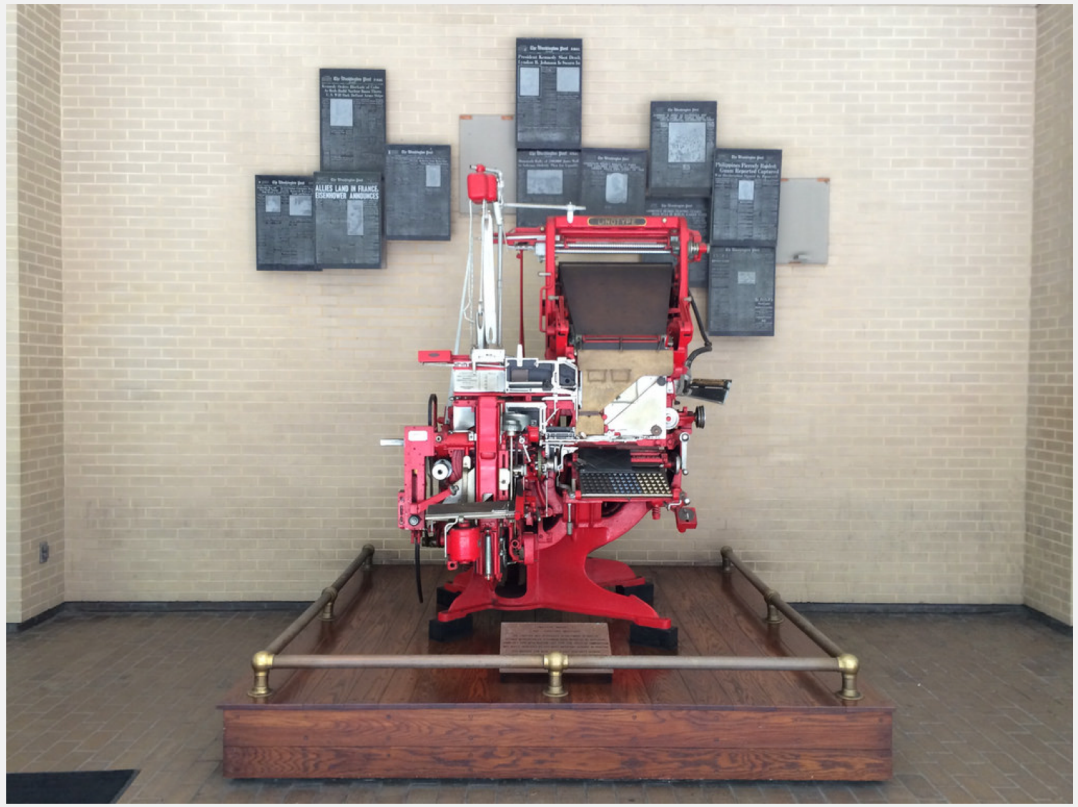
The Washington Post

Democracy Dies in Darkness

WASHINGTON POST IN 2011

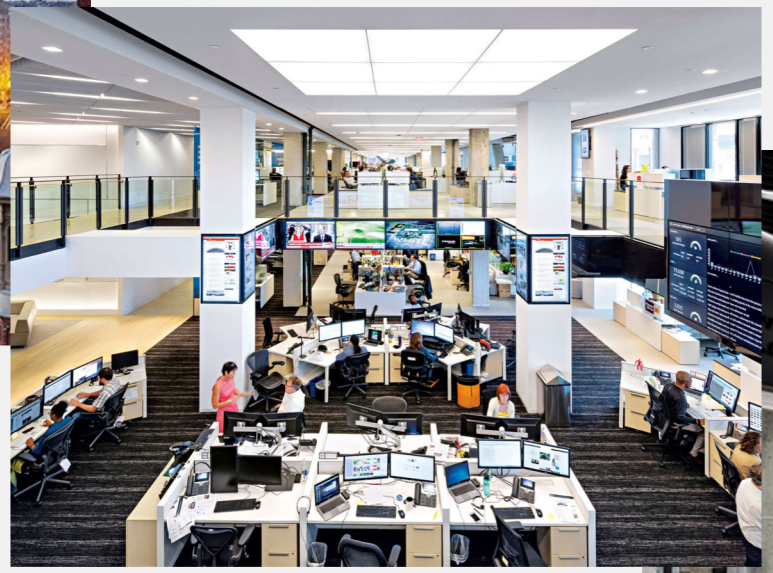
The Post in 2011 came with a rich legacy of incredible journalism and political reporting — but our aspirations were often confined in DC and old ways of delivering news.

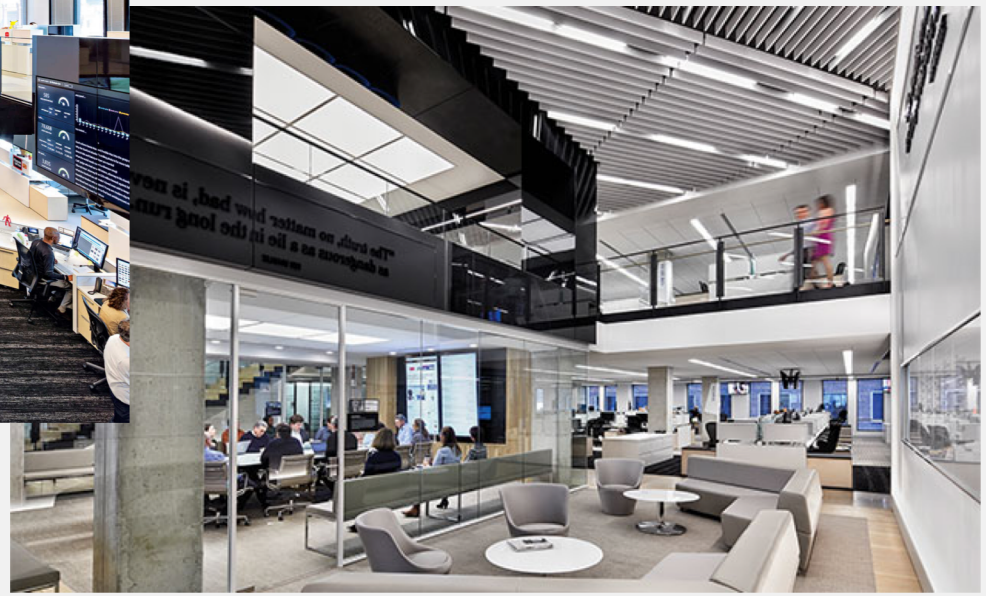


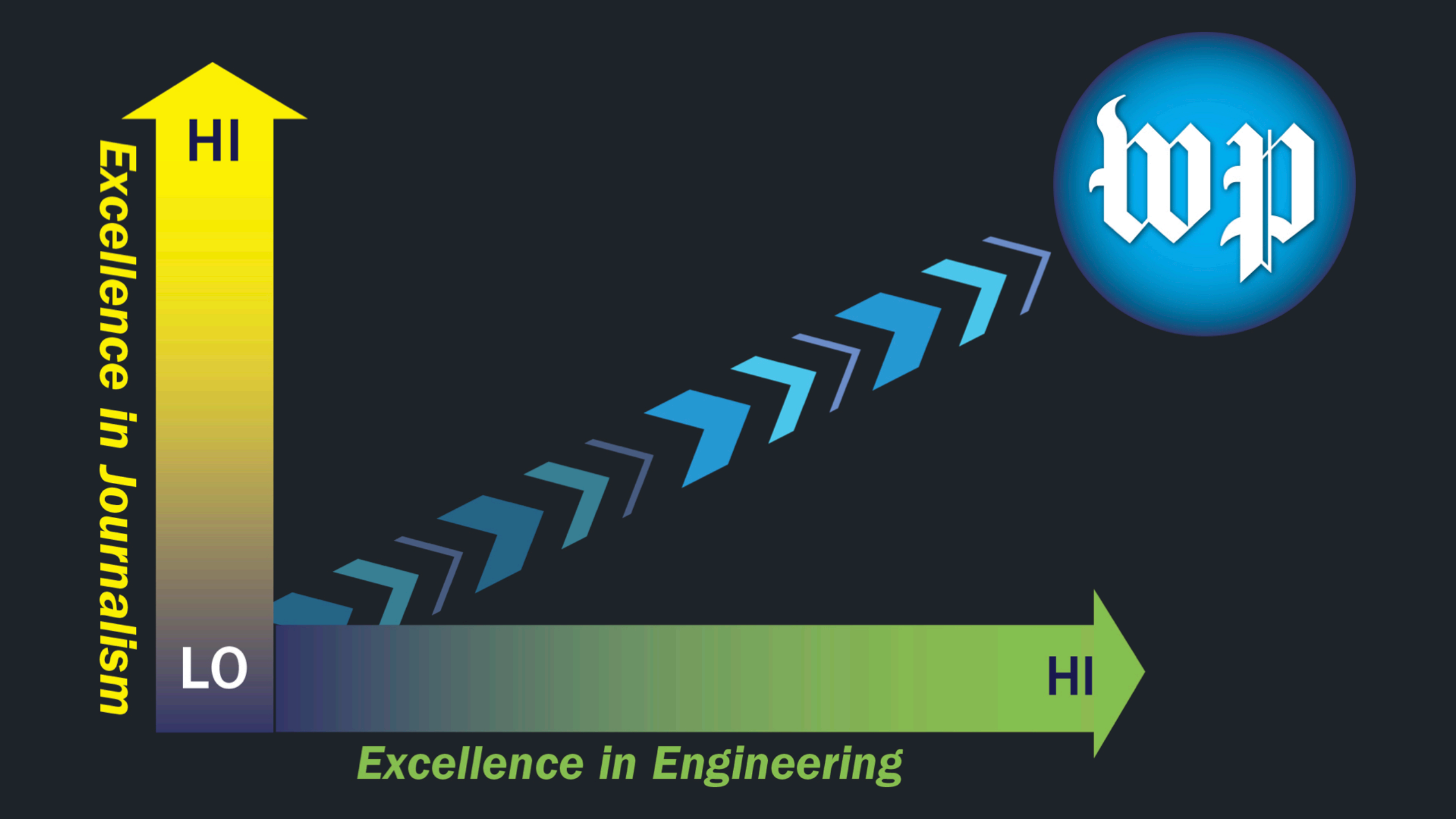
WASHINGTON POST IN 2011

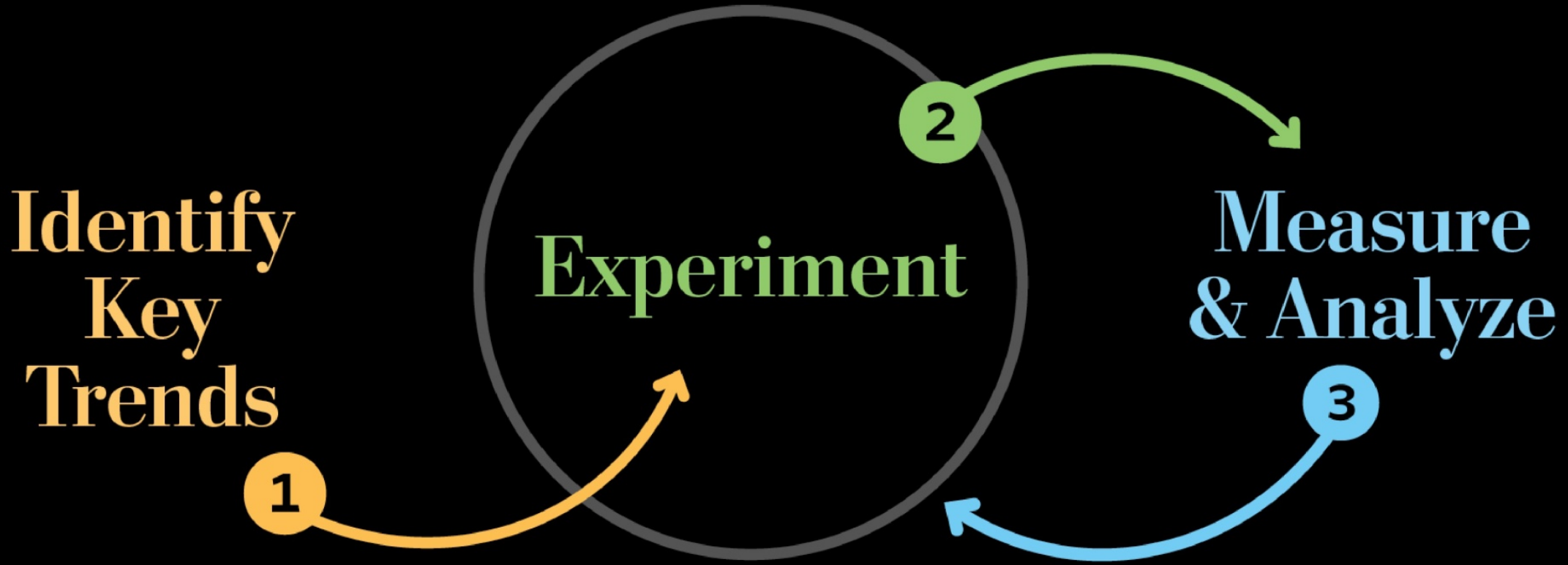
WASHINGTON POST IN 2018

The Post in 2018:

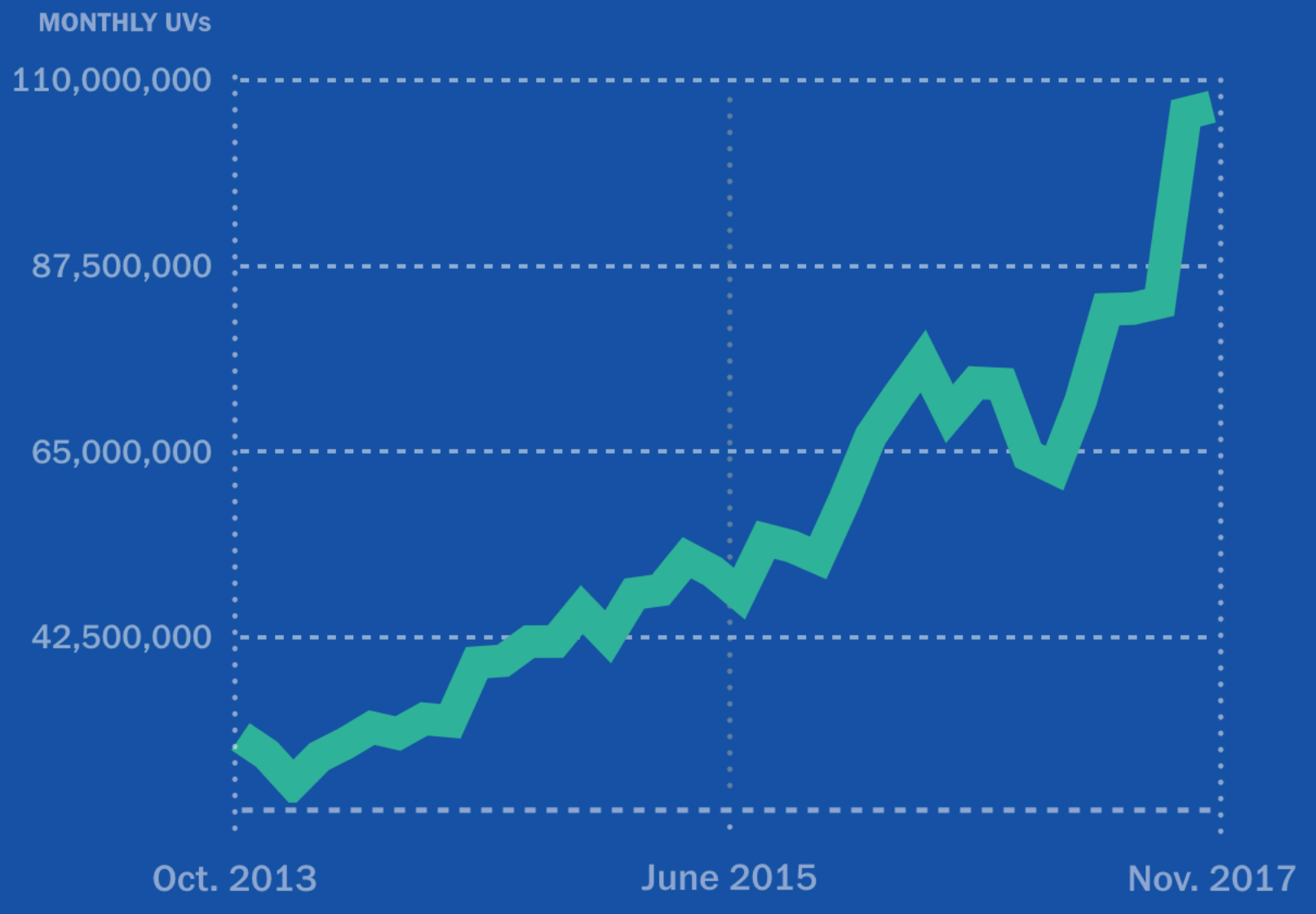





HI
Excellence in Journalism
LO
HI
Excellence in Engineering


Identify
Key
Trends
1
Experiment
2
Measure
& Analyze
3

Domestic
Growth



Source: comScore Multi-Platform

The Washington Post

The Washington Post

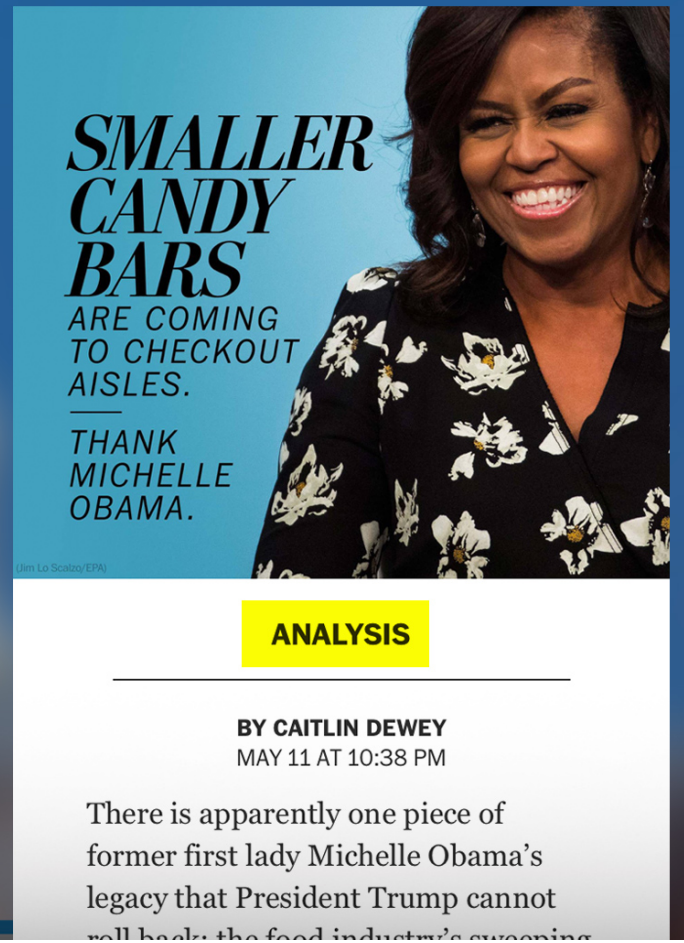
Fighting Fake News

Bringing transparency to the forefront

The Transparency Project

Fighting fake news

We’re working with the Google Trust Project to improve media literacy in the general public—to clarify the difference between responsible journalism and fake news. The Post has been at the forefront of this effort. Our work is defining best practices for other newsrooms to follow.



Separating news from Opinion

We worked with editors to define four types of opinionated news stories and how they should be labeled on every platform.

The Washington Post

By **Firstname Lastname**

Senior Politics Editor covering Congress, health policy, national security, lorem ipsm.

Email Bio Follow

The Washington Post
Democracy Dies in Darkness

Firstname Lastname
Washington, DC

Senior Politics Editor covering Congress, health policy, national security, lorem ipsum dolor reporting.

Education: PhD in Astrophysical Sciences from The University of Michigan; Master's in International Affairs from Oxford University; Bachelor's in Fine Arts from The Rhode Island School of Design

Read more

Connect:

More by Firstname Lastname

- Fears about Trump's 'impulsive' problem
- The number of Americans who think Trur is plummeting Apr 3
- Comey says there is 'no information' to s wiretapping claims Apr 3

See Archive

The Post Recommends

Comey says there is 'no information' to suppor Trump's wiretapping claims

Increasing author visibility

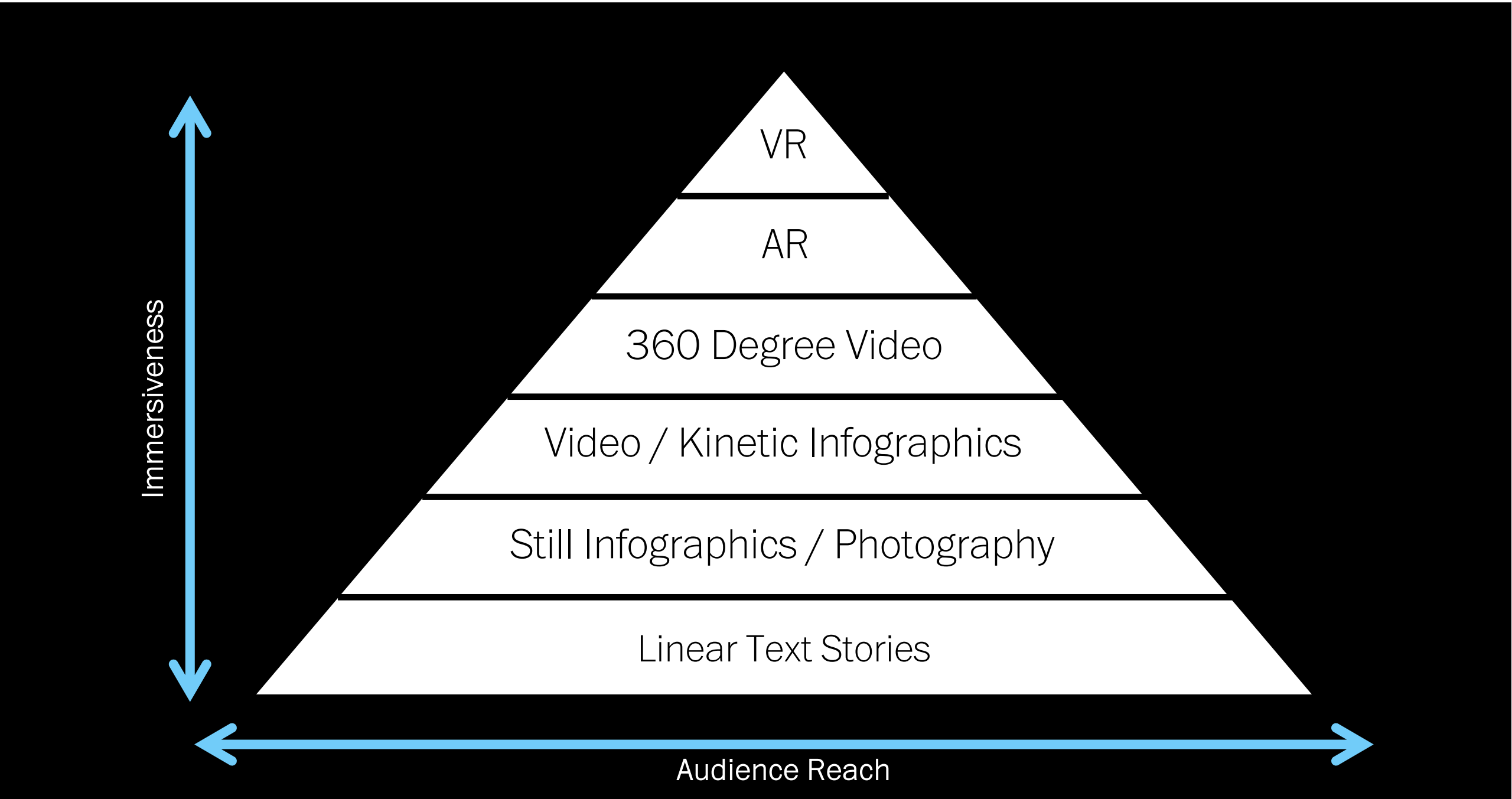
Updating author bio pages and bylines on articles to include more info about authors' education, experience, skills, reporting location and work history

The Washington Post

The Washington Post

Depth & Breadth

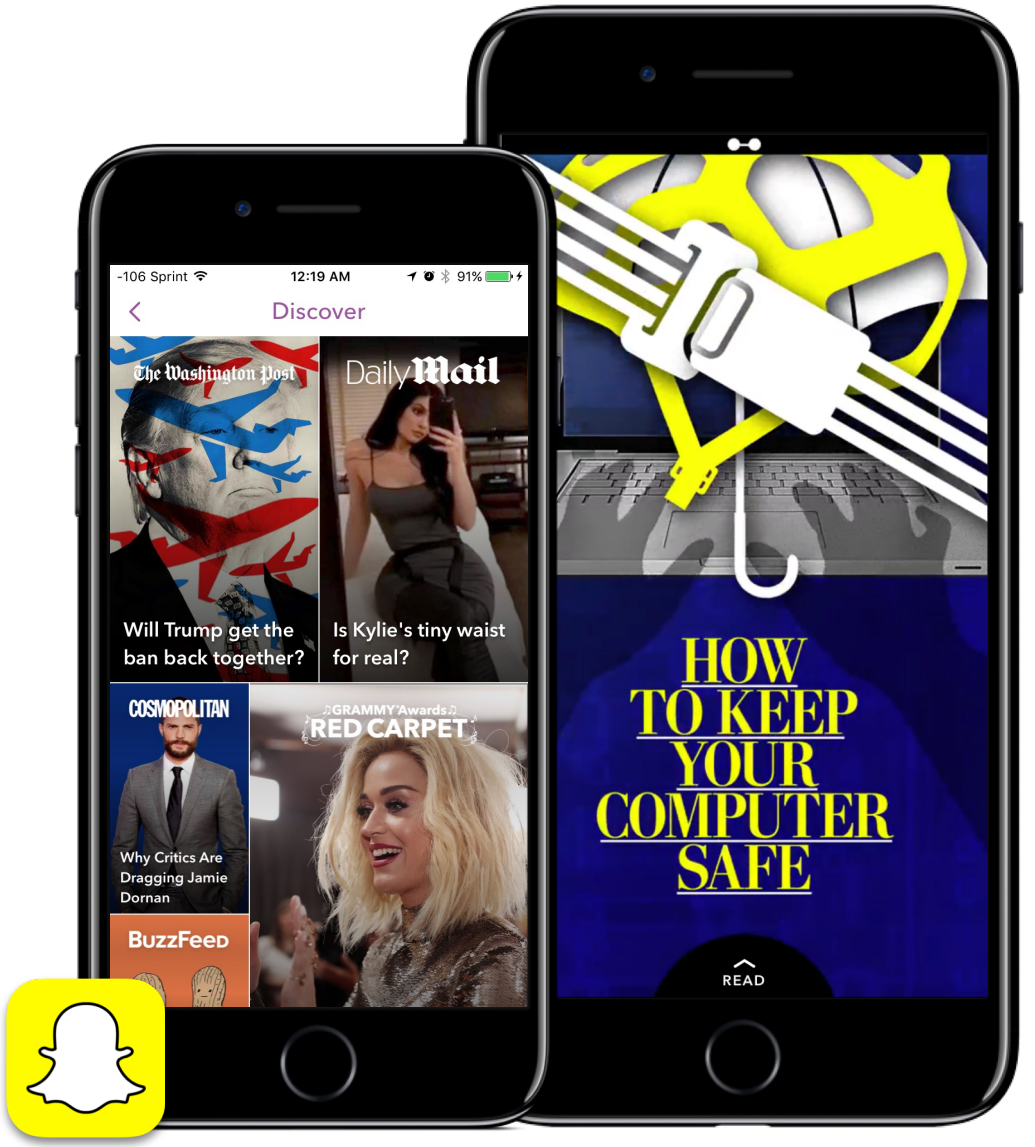
Reach readers wherever they are
Experiment with new forms to let them dive deep


VR
AR
360 Degree Video
Video / Kinetic Infographics
Still Infographics / Photography
Linear Text Stories
Immersiveness
Audience Reach

msn
reddit
slack
Blendle
DRUDGE REPORT
amazon echo
tumblr.
LinkedIn
Apple News
facebook
amazon
hulu
TABLET
DESKTOP
TV
MOBILE
Flipboard
YouTube
amazon fireTV
Pinterest
Messenger
YAHOO!
UBER
Viber
Connect. Freely.
Google
WhatsApp
SAMSUNG
twilio

Snapchat Discover

- Launched February 2017
- Daily editions 7 days a week with updates throughout the day
- First publisher to do breaking news
- Ages 13-24 are the majority of the audience



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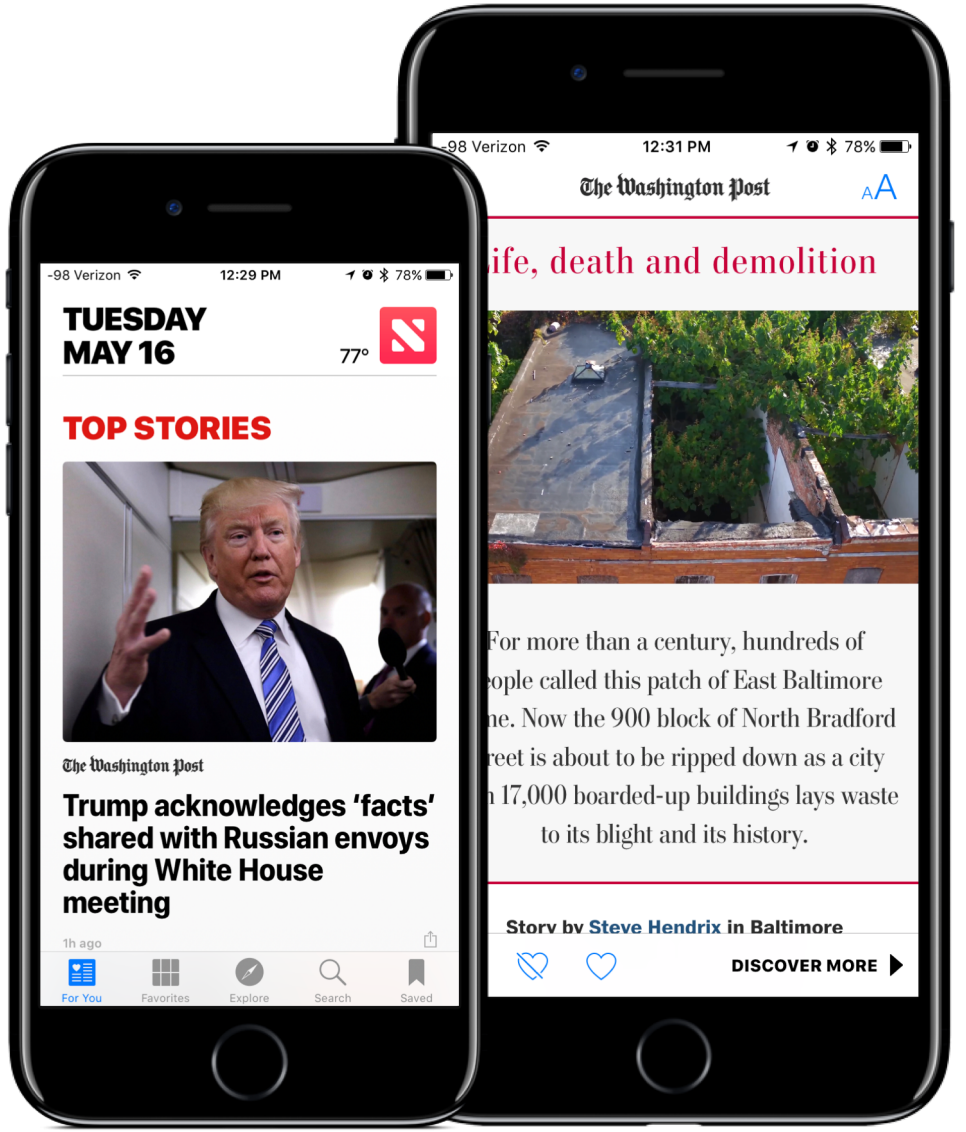
Apple News

- 100% of Washington Post content published on Apple News
- Huge subscription driver, very low advertising opportunities
- Highly visual storytelling with custom templates

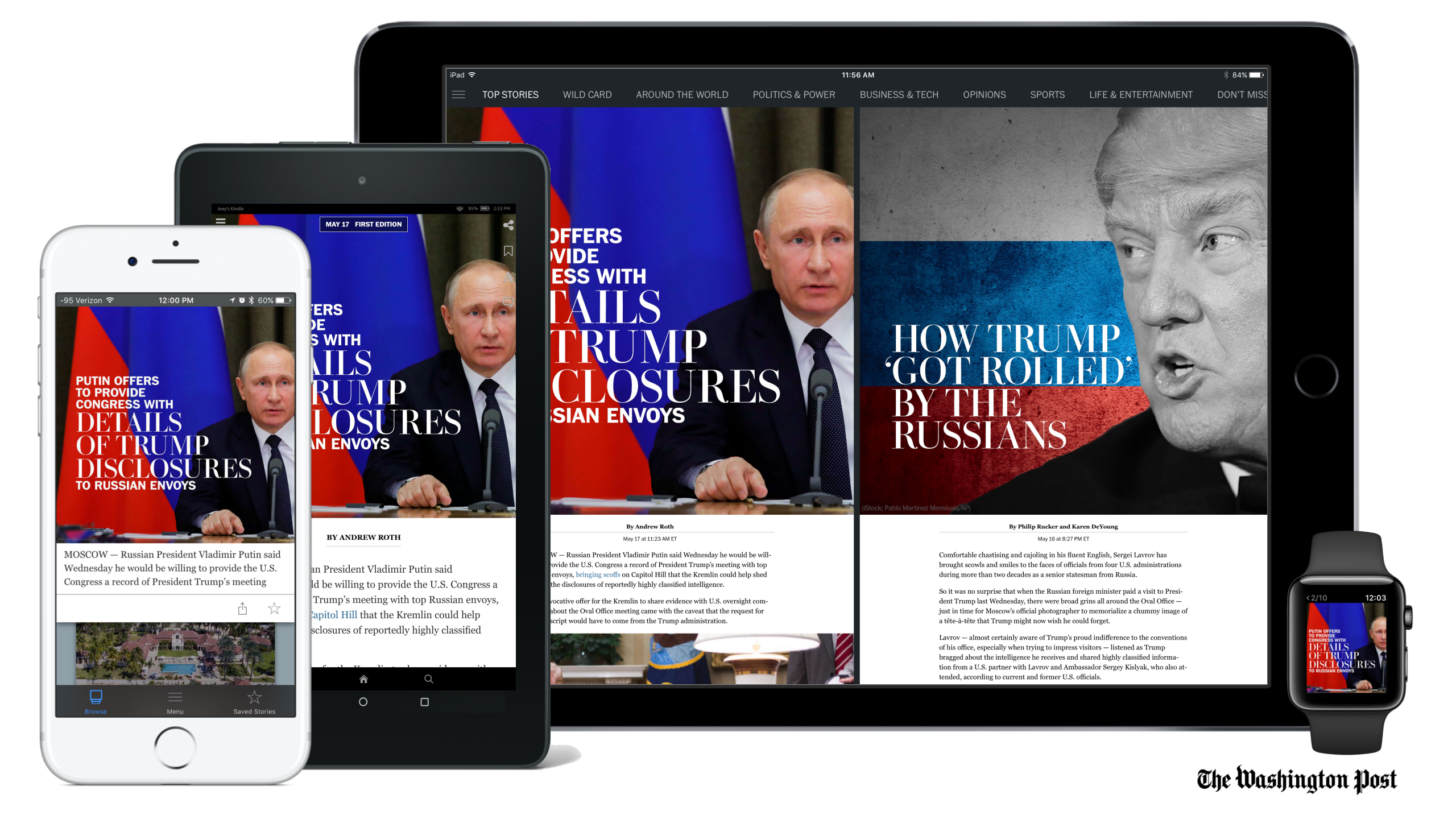


The Washington Post

Alexa

- Politics Flash Briefing every weekday
- Hundreds of thousands of listens per month
- Optimize for 3-5 minutes of listening engagement
- News Quiz skill
- Presidential skill inspired by our Presidential podcast

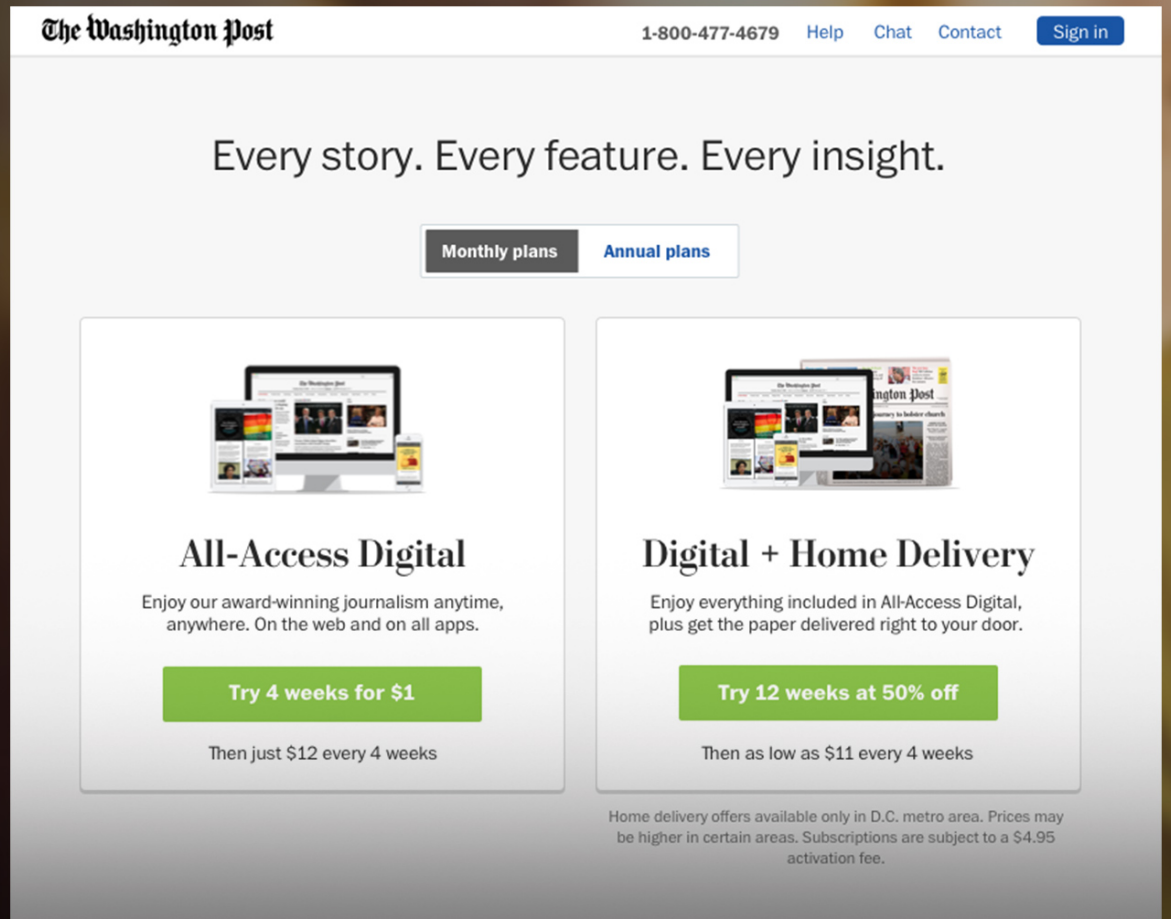
The Washington Post

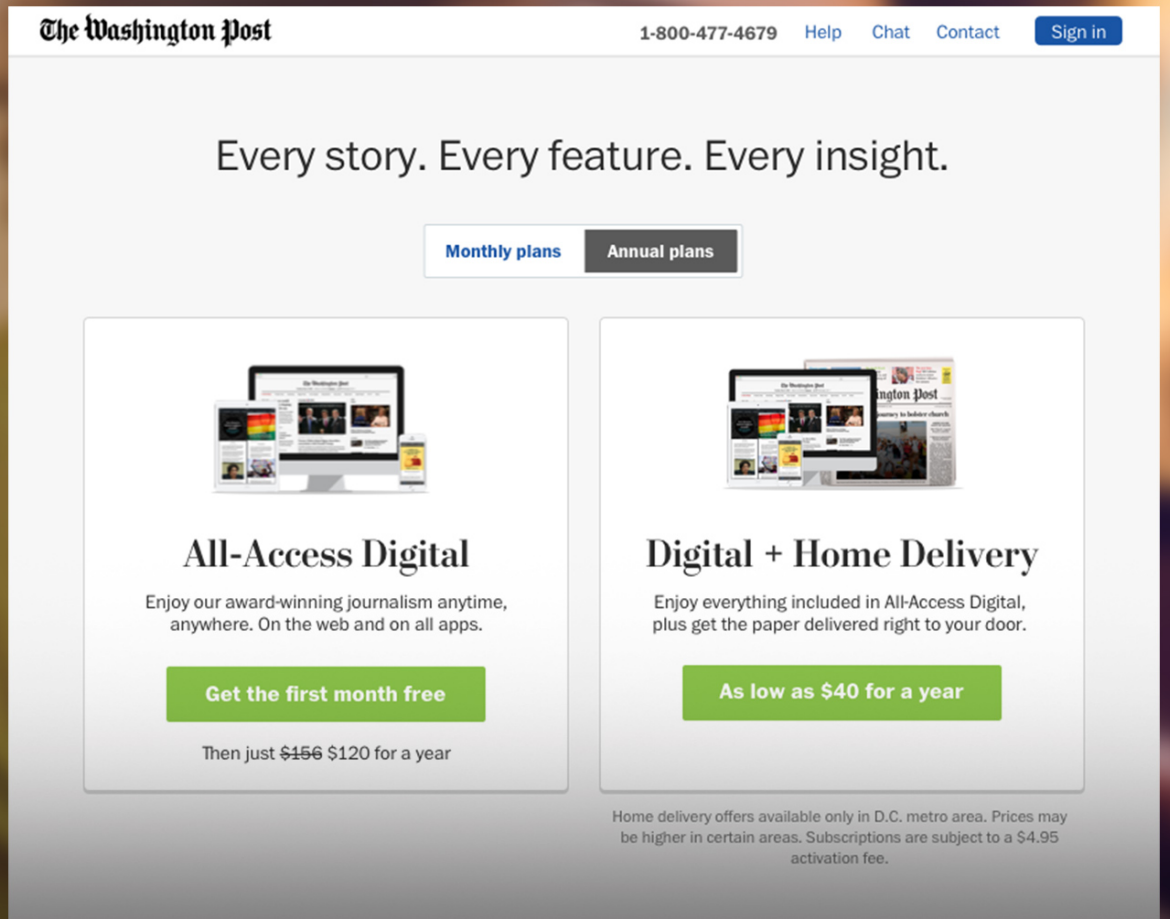

iPad
11:56 AM
84%
TOP STORIES
WILD CARD
AROUND THE WORLD
POLITICS & POWER
BUSINESS & TECH
OPINIONS
SPORTS
LIFE & ENTERTAINMENT
DON'T MISS
HOW TRUMP 'GOT ROLLED' BY THE RUSSIANS
(iStock; Pablo Martinez Monsivais/AP)
By Philip Rucker and Karen DeYoung
May 16 at 8:27 PM ET
Comfortable chastising and cajoling in his fluent English, Sergei Lavrov has brought scowls and smiles to the faces of officials from four U.S. administrations during more than two decades as a senior statesman from Russia.
So it was no surprise that when the Russian foreign minister paid a visit to President Trump last Wednesday, there were broad grins all around the Oval Office — just in time for Moscow's official photographer to memorialize a chummy image of a tête-à-tête that Trump might now wish he could forget.
Lavrov — almost certainly aware of Trump's proud indifference to the conventions of his office, especially when trying to impress visitors — listened as Trump bragged about the intelligence he receives and shared highly classified information from a U.S. partner with Lavrov and Ambassador Sergey Kislyak, who also attended, according to current and former U.S. officials.
By Andrew Roth
May 17 at 11:23 AM ET
Capitol Hill
MAY 17 FIRST EDITION
BY ANDREW ROTH
-95 Verizon
12:00 PM
60%
PUTIN OFFERS TO PROVIDE CONGRESS WITH DETAILS OF TRUMP DISCLOSURES TO RUSSIAN ENVOYS
MOSCOW — Russian President Vladimir Putin said Wednesday he would be willing to provide the U.S. Congress a record of President Trump's meeting
Browse
Menu
Saved Stories
2/10
12:03
The Washington Post

The Washington Post

Digital subscriptions

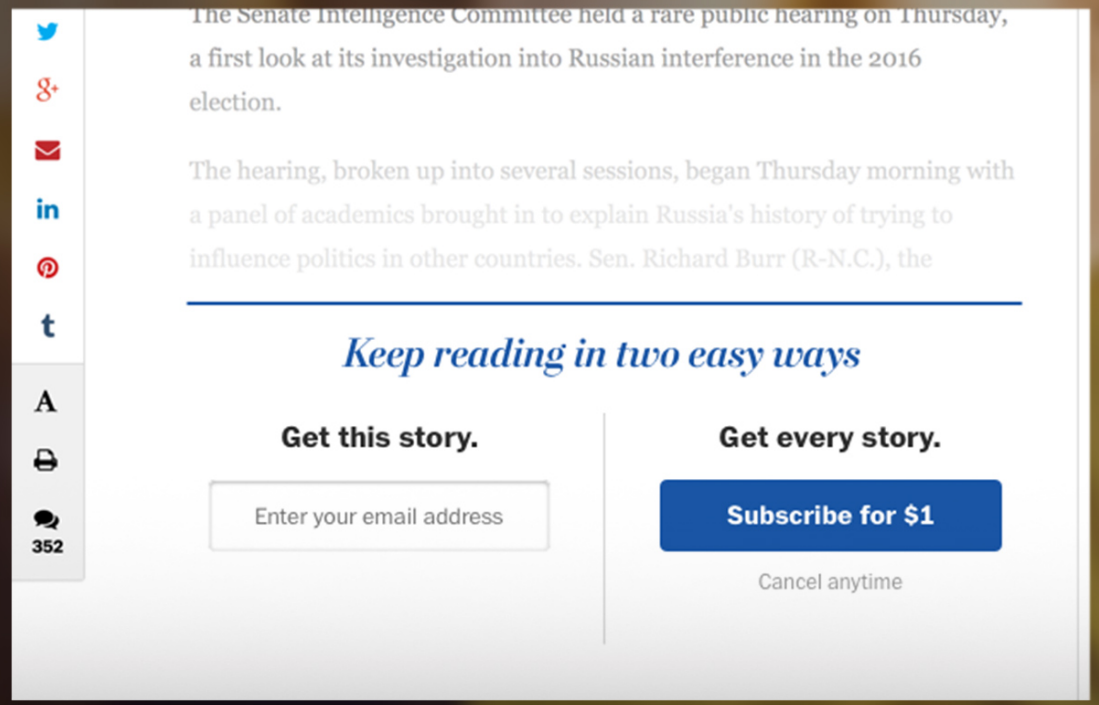
Reduce friction to capitalize

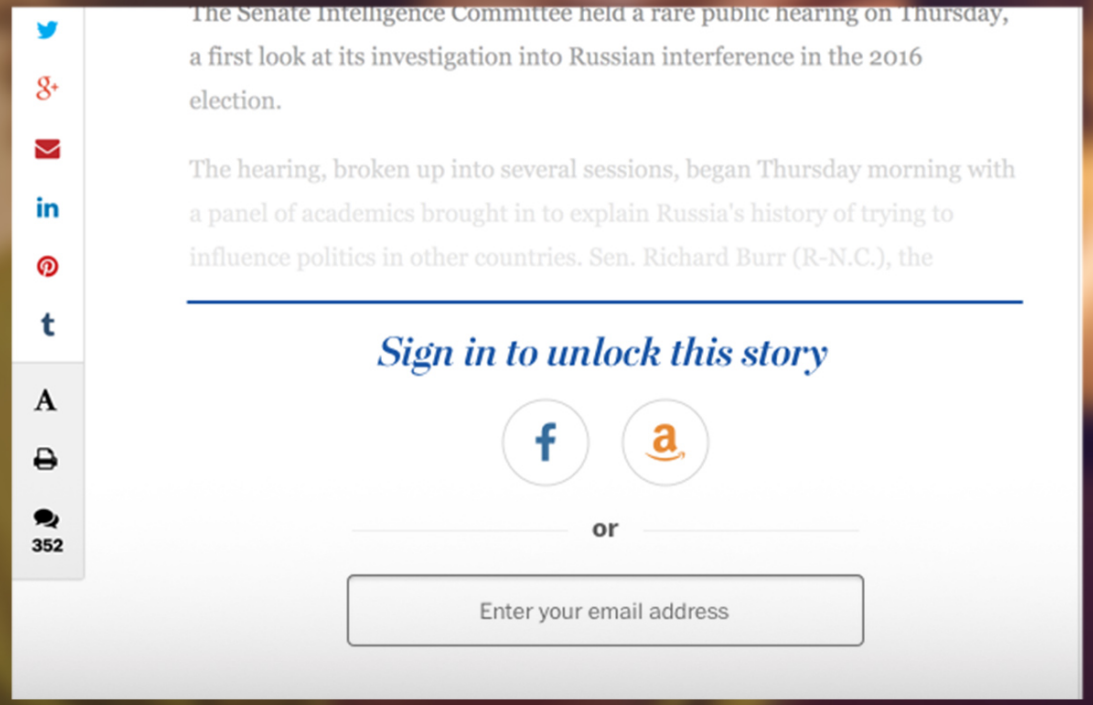




Simplify product offerings

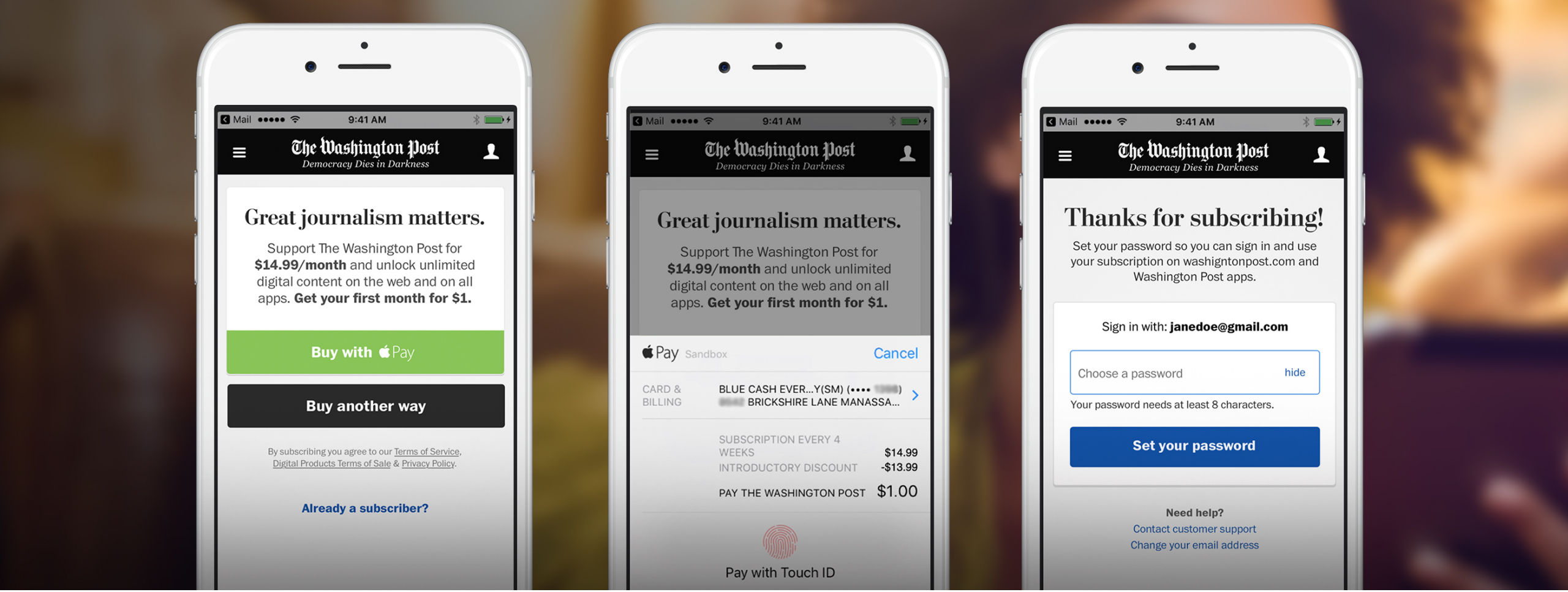
Clearer product descriptions and billing options help readers make decisions with more confidence.





Moving readers down the funnel

Signed in readers experience a faster and simpler checkout.



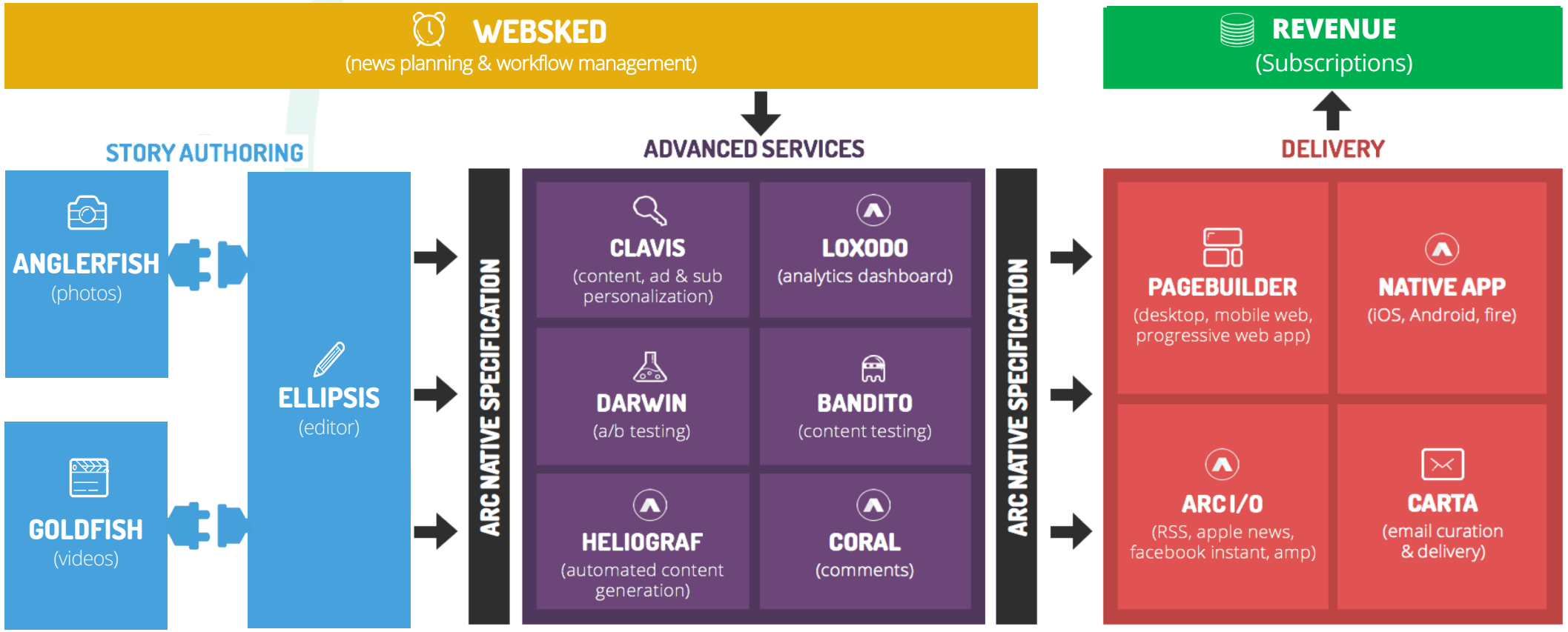
Purchase from paywall

Price and payment options on the paywall help readers become subscribers in fewer steps.

The Washington Post arc publishing

THE ARC ECOSYSTEM

An end-to-end, hosted suite of interconnected tools hand-picked by publishers to meet your needs



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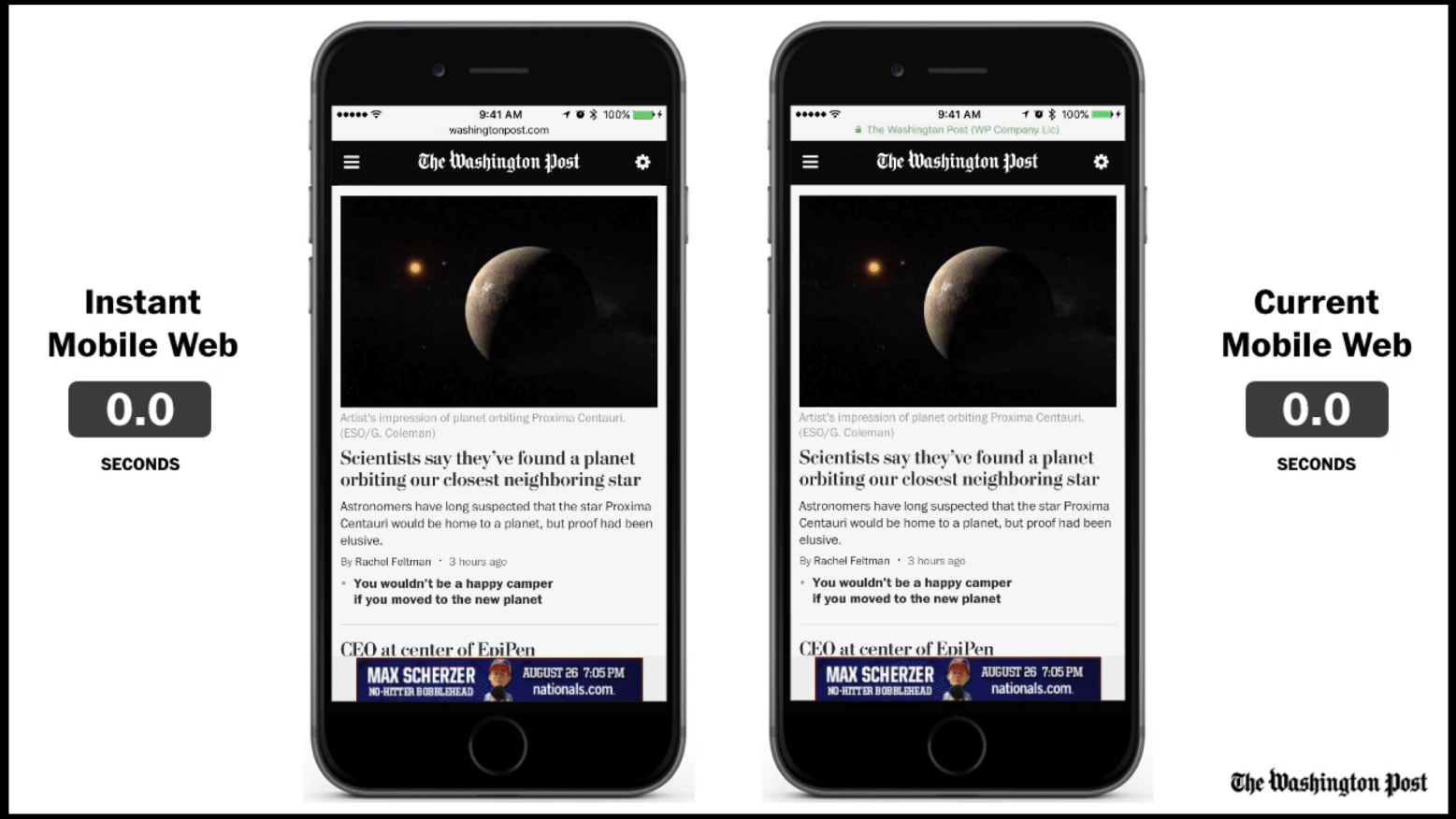
The Washington Post arc publishing

Speed & Automation

Publish more and sooner, with the help of great newsroom tools and automation

- https://
- Google's PWA
- WP Zeus



MEASURING RESULTS, BUT NOT THE PROCESS

Our metrics are backward looking — they tell us how many visitors came to our site, what they read and how they engaged — but they don't give us information in immediately influence the result.

- At the Post:
  - We publish ~ 450 original, staff-written articles daily
  - Publishing process has at least 3 touchpoints, and for breaking news articles often more than a dozen
  - Lots of data on author, desk, story type, story metadata
  - Typically between 25 – 50 FE code deploys daily
  - Data about past performance of similar articles that we can compare in real time

- What does this mean? How many stories per day do you publish?

NEW FRAMING: LEAD VS. LAG MEASURES

LAG MEASURES

- Backward-looking
- Measure past-performance
- Useful for deep analysis of trends
- Requires domain experience to understand how to act on that analysis
- Examples: Omniture/Google Analytics metrics (PVs, engagement, ad viewability), funnel analysis

LEAD MEASURES

- Real-time; within the measurement period
- Provides insight that allows your business to take action before the specific opportunity is over
- Use these metrics to immediately take action and change the result
- Examples: what stories will publish late? Which stories will go viral? Which front-end deployments are negatively impacting the performance budget? How is a user interacting with my site *right now*? How is a particular funnel cohort behaving?

Content published per window

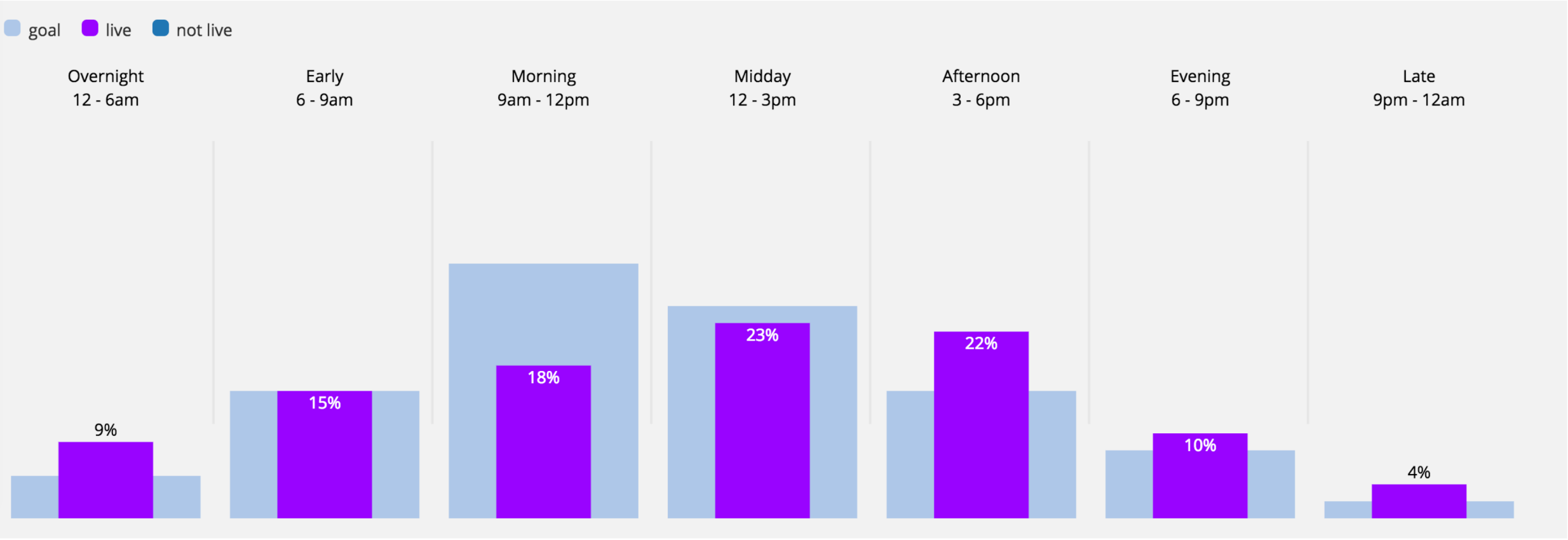
Source type: staff wires

Date : wednesday, february 28, 2018

Section : select section

Platform : select platform

Pitch status: select pitch status



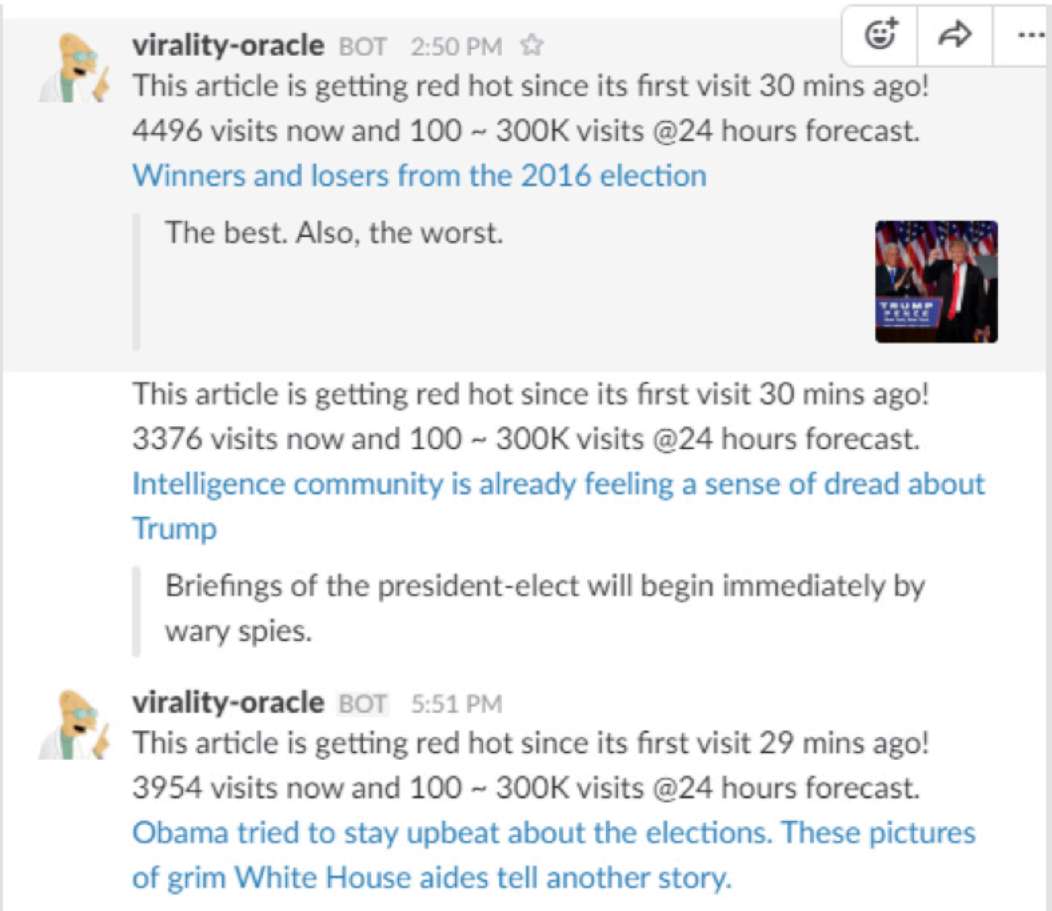
Virality

Article Popularity Prediction

- Allows editors to prioritize stories
- Identifies under-performing articles for content variation testing
- Supports advertising opportunities

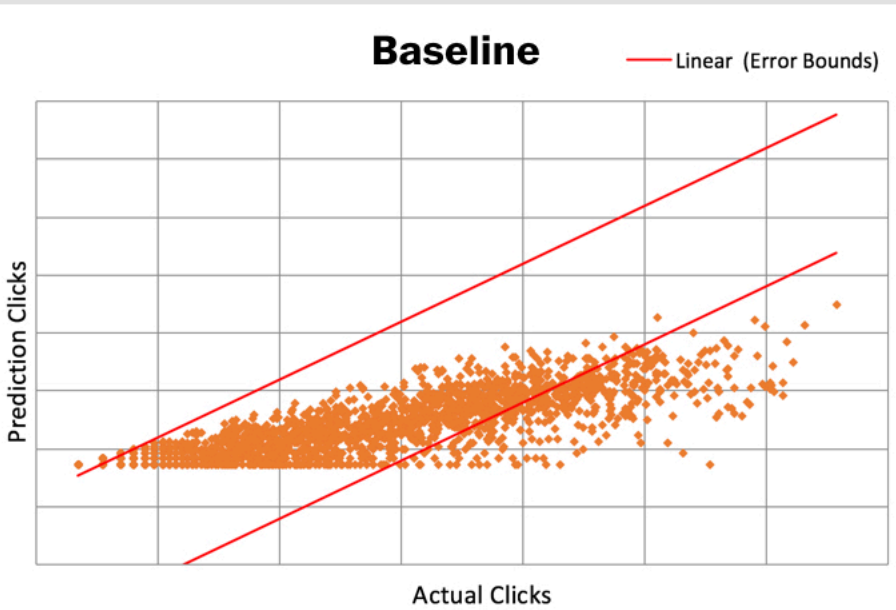
Popularity Forecast Slack Room

The “Virality Oracle” Bot

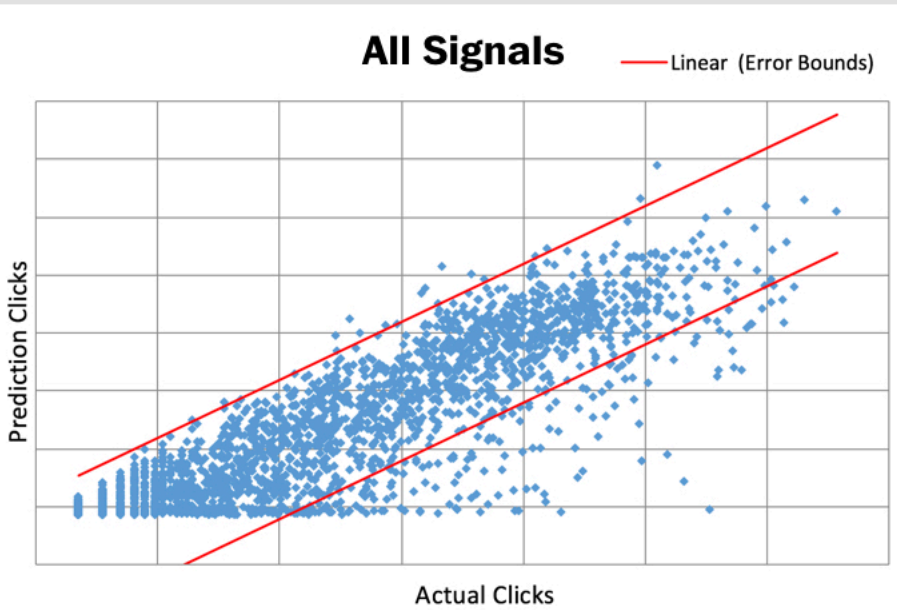


Performance in Production

Predictions with only clicks @ 30 minutes (baseline)



Predictions with all signals - predicted R^2 of 81.3%



Metadata: article type, section, publication time, author

Contextual: sentiment, named entities, readability of text, recency of topics

Temporal: page view time series, page view acceleration

Social: tweet volume time series, number of followers acceleration

Headliner

An Integrated Headline Suggestion System

- Automatic generation of headlines based off of story content
- Suggest different headlines for different channels and devices

The Washington Post

Headline Generation Comparison

Headliner

FIRST SENTENCE OF ARTICLE
Authorities said they apprehended Ahmad Khan Rahami, the 28-year-old wanted in connection with weekend bombings in Manhattan and Seaside Park, N.J., after a shootout Monday with

Method	Headline
Human Reporter	Suspect in N.Y., N.J. bombings arrested after shootout; FBI says ‘no indication’ of terror cell
HedgeTrimmer	They apprehended Ahmad Khan Rahami
Multi-Sentence Compression	Suspect in N.Y. N.J. bombings arrested and put into an ambulance
Neural Machine Translation	Police arrested suspect in weekend bombings in Manhattan

The Washington Post

Nat Geo's famous green-eyed 'Afghan Girl' arrested in Pakistan

Sharbat Gula's story mirrors Afghanistan's pain.

By Max Bearak • **WorldViews**

1.2%

From a Nat Geo cover to a mug shot: The sad story of the green-eyed 'Afghan Girl'

Sharbat Gula's story mirrors Afghanistan's pain.

By Max Bearak • **WorldViews**

3.1%

From a Nat Geo cover to a mug shot: The sad story of the green-eyed 'Afghan Girl'

Sharbat Gula's story mirrors Afghanistan's pain.

By Max Bearak • **WorldViews**

4.0%

The Washington Post

Are Camp David's days as the presidential retreat numbered?

The historic Maryland compound — up a winding mountain road, deep in the woods and with cozy cabins — exemplifies American values and deliberative diplomacy, historians say.

By Michael S. Rosenwald • **Local**

3.5%

In the first month of Trump's presidency, it's Mar-a-Lago 3, Camp David 0

The historic Maryland compound — up a winding mountain road, deep in the woods and with cozy cabins — exemplifies American values and deliberative diplomacy, historians say.

By Michael S. Rosenwald • **Local**

3.7%

Trump on Camp David: 'You'd like it ... for about 30 minutes'

The historic Maryland compound — up a winding mountain road, deep in the woods and with cozy cabins — exemplifies American values and deliberative diplomacy, historians say.

By Michael S. Rosenwald • **Local**

9.2%

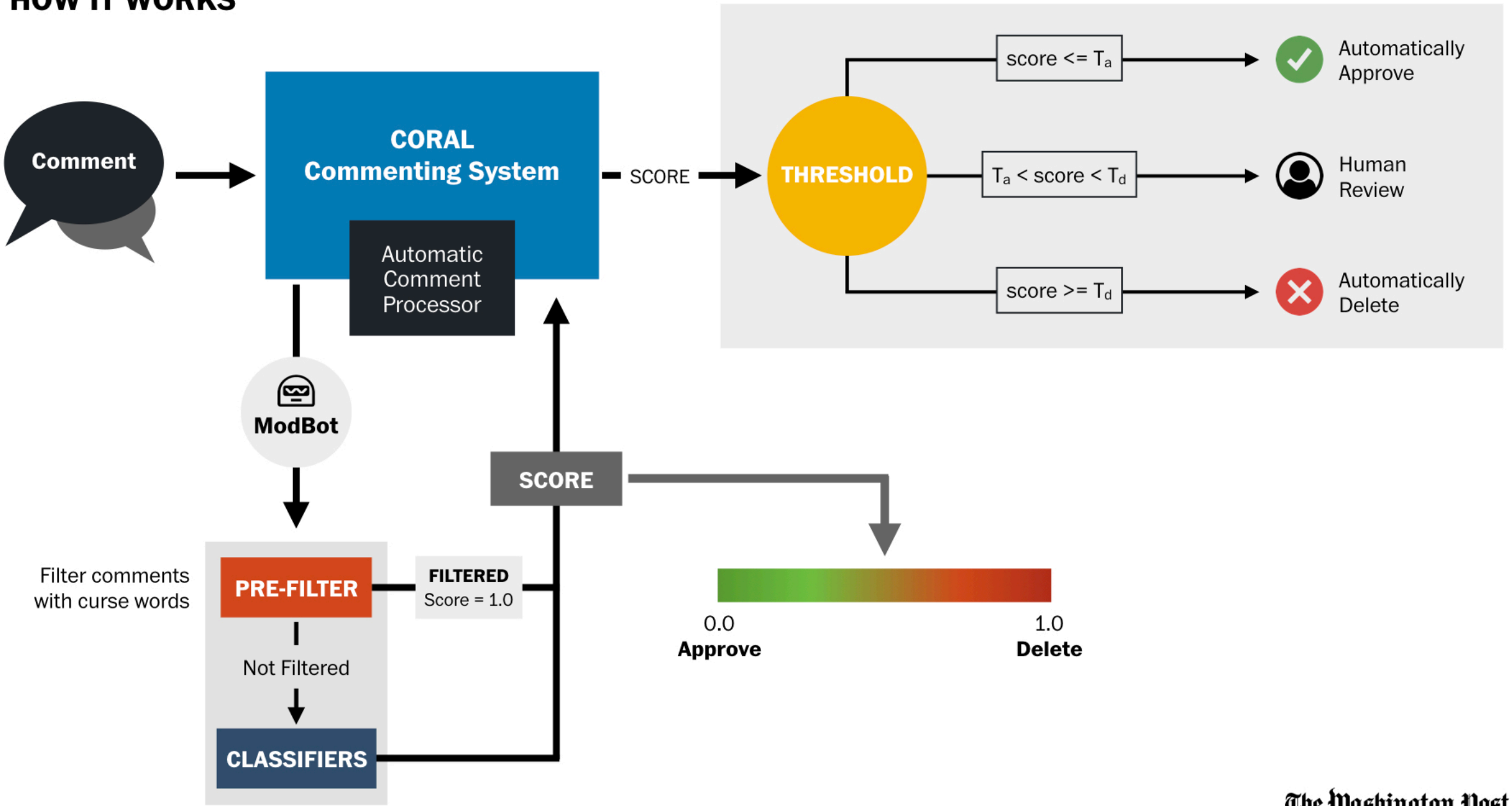
The Washington Post

ModBot

Automatic Content Moderation

- Measures the quality of comments automatically
- Reduce the number of comments that need to be reviewed by human moderators
- Maintain a high quality online comment section

HOW IT WORKS



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Performance

ModBot

TRAINING

20,900 Comments

Classifier	Accuracy
Linear Kernel SVM	**0.85**
Ensemble Classifier	0.84
Decision Tree	0.78
Naïve Bayes	0.60

TEST

3,796 Comments

Accuracy	0.88

Confusion Matrix	Predict Approve	Predict Delete
True Label Approve	**2906**	113
True Label Delete	332	445

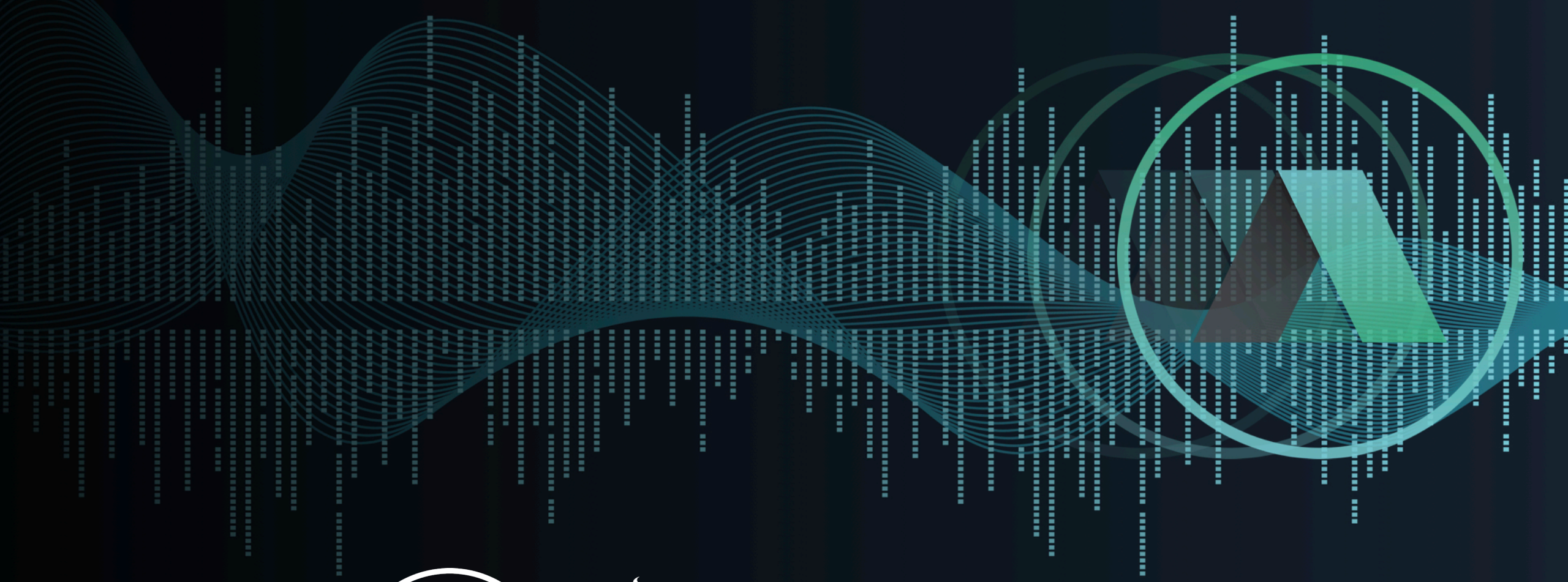
Ran 10-fold cross validation on training data

The Washington Post

Comment Prediction Examples

ModBot

Big f*ckin deal. I'm white and the same has happened to me. Multiple times. Next real "news" story please.	**Pre-filtered (Curse Word) Score: 1.0**
What a pathetic, dumb and disgusting racist rant...	**Classifier Predict (Delete) Score: 0.97**
Obama chose Rev Wright, and his God damn America, as his religion.	**Classifier Predict (Approve) Score: 0.36**
He is one of the smartest senators we have, and an old man in his final term.	**Classifier Predict (Approve) Score: 0.29**



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ARC PUBLISHING: 2018 ROADMAP

1. **Arc Subscriptions:** Advanced digital subscription system with paywall, offer management, analytics, testing, user registration, segmentation and CRM integration

2. **Multisite Capabilities:** Ability to manage multiple websites through Arc, including content sharing, rights restrictions, permissions, site template management, and syndication

3. **Improved Workflow Analytics:** Version 2.0 of analytics includes the same easy-to-use interface with more detail about editing workflow and actionable metrics for improvement

4. **Content Engagement Analytics:** Actionable, contextual analytics directly in Arc's content creation tools to help reporters and editors create more engaging stories, galleries and videos

5. **Editorial Calendar:** Editorial calendar-based view for magazines, weekly sections and more

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QUESTIONS?