



Growing Innovation at the AP:

Leveraging AI to Advance the Power of Facts

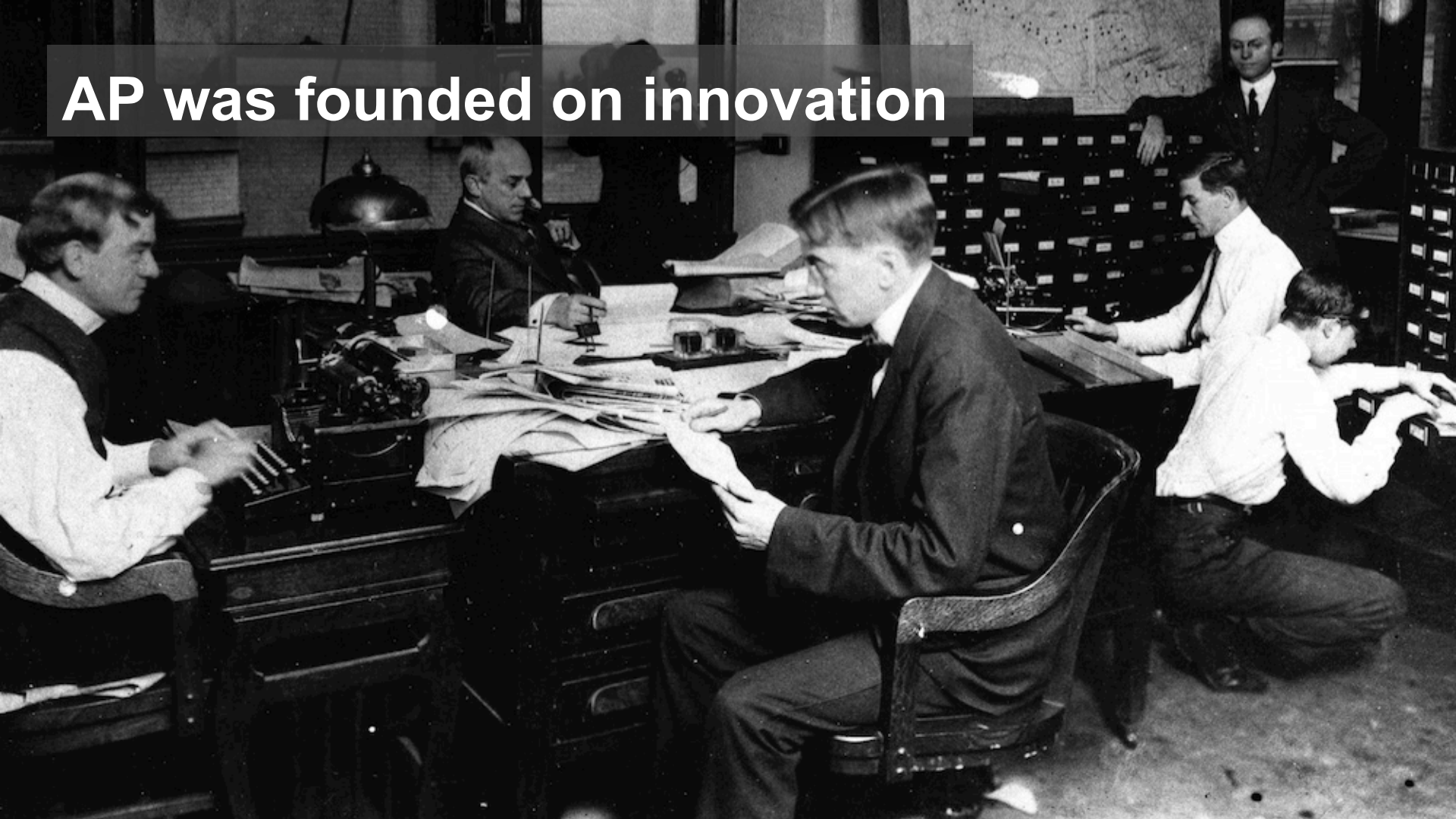


Robyn Spector,
Director of Corporate
Strategy and Development



AP is the world's leading independent news service, supporting thousands of newsrooms globally and reaching two-thirds of the world's population every day.

AP was founded on innovation





AP



1 million
photos per year

December 4, 2018



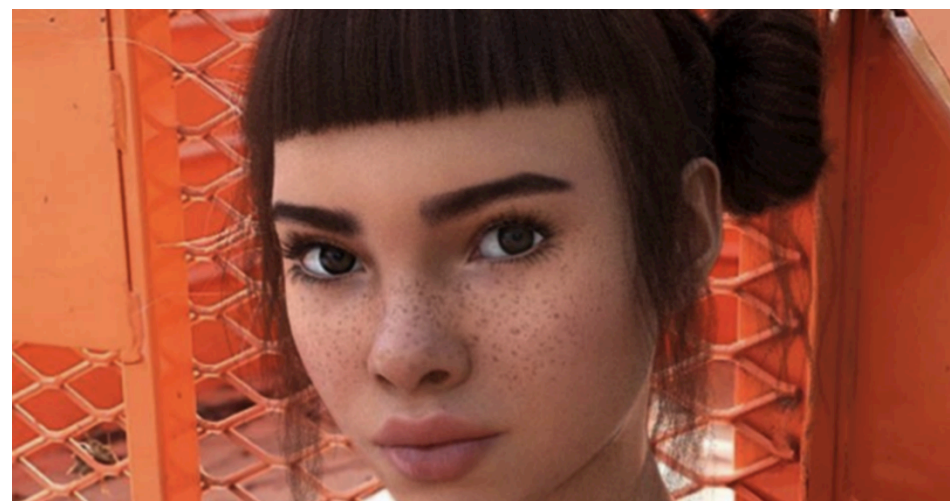
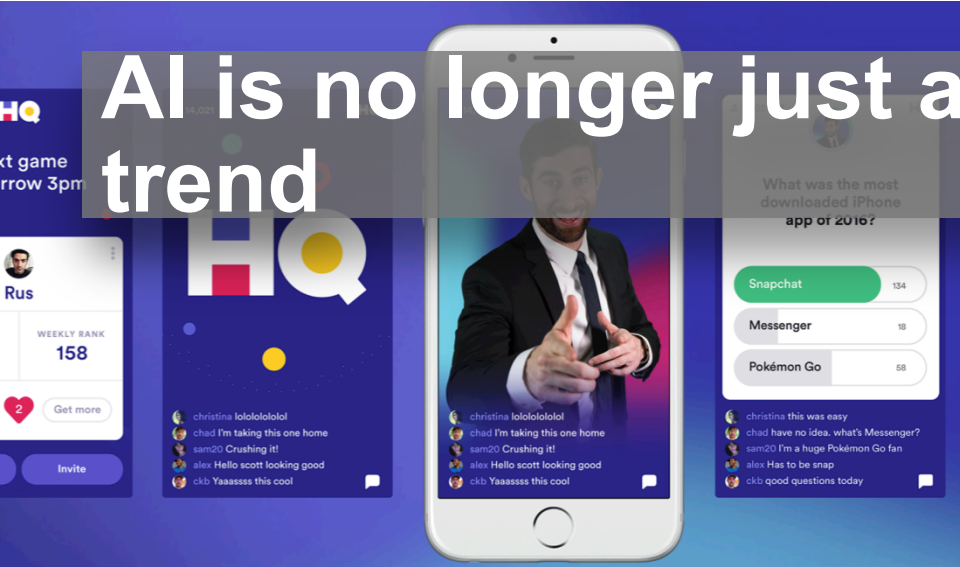
2,000
stories per day

ASSOCIATED PRESS

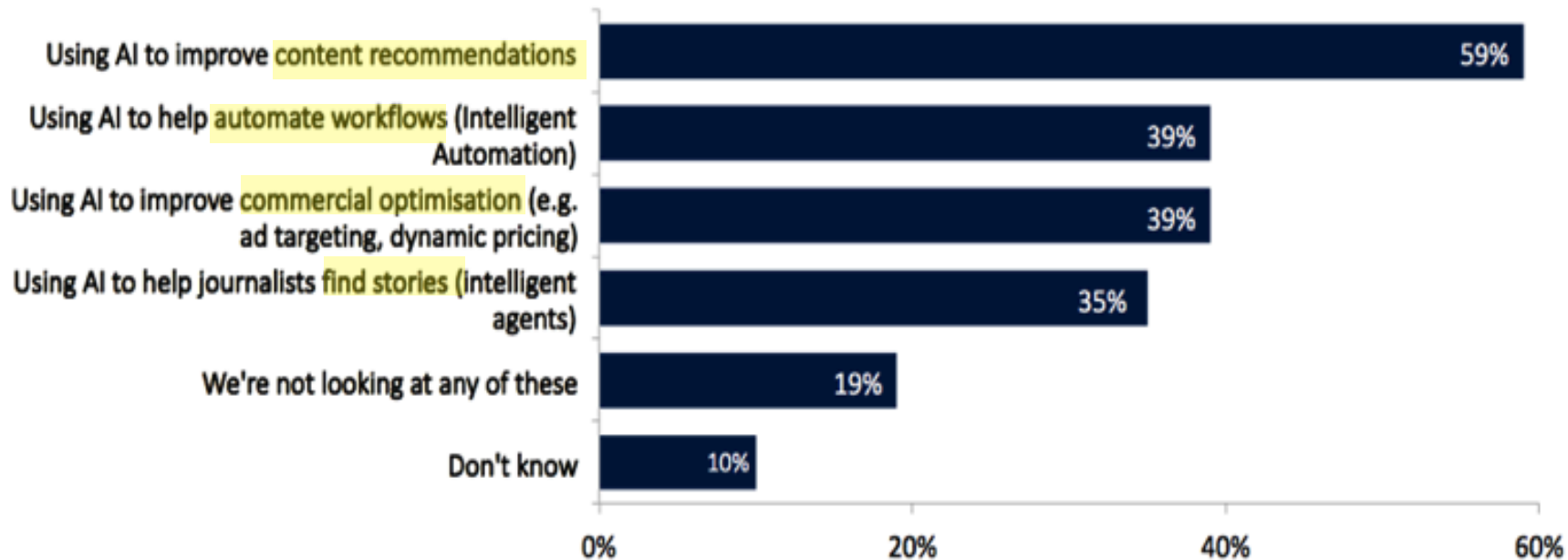


100,000
videos per year

AI is no longer just a tech trend



How the News Industry is Already Using Artificial Intelligence (AI)



Q9: Is your company actively looking into any of the following uses of AI – select all that apply

RISJ Digital Leaders Survey, n=184

The way we consume media is changing



Eric Risberg/Associated Press

Personalization is important to consumers



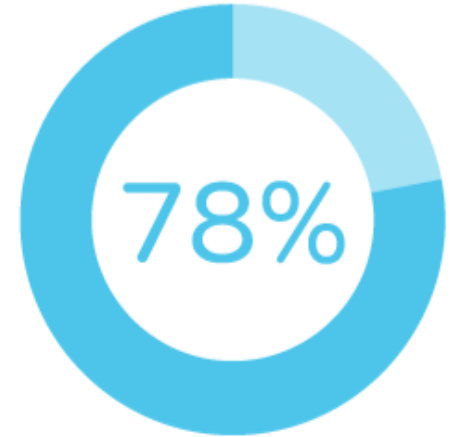
...say that website and email personalization influences their shopping decisions

[Infosys]



...have recommended, chosen or paid more for a brand that provides a personalized service

[Forrester]



will only engage offers if they've been personalized to their previous brand engagements

[Marketo]

And news orgs are seeing some positive results

Generate a version of your article for a

16 to 30-year-old | white | man

living in texas | who is not familiar | with and somewhat interested | in your topic.

Breast cancer is the most common cancer in American women except for skin cancers.

Researchers at the American Cancer Society estimate that there will be 252,710 new cases of invasive breast cancer in women in the United States in 2017. **Some 40,610 women will die from the disease.**

In addition, there will be 63,410 cases this year of carcinoma in situ, abnormal cells that may be an early form of cancer.

Over a lifetime, a woman living in the United States has a 12.4 percent risk — one in eight — of being diagnosed with breast cancer.

Non-Hispanic whites and non-Hispanic blacks have higher breast cancer incidence and mortality than other racial and ethnic groups. **The incidence of cancer in black women was slightly lower than that of whites, but the death rate during 2011 to 2015 was 42 percent higher in black women.**

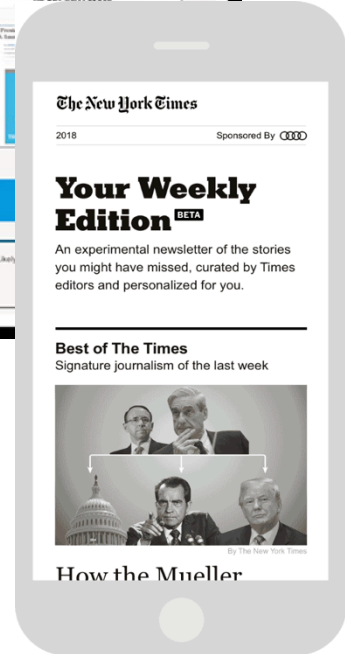
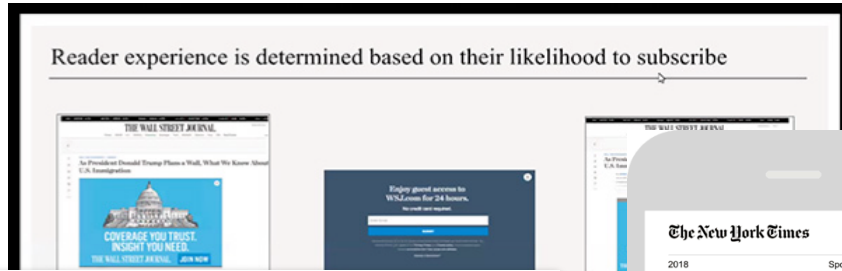
Scientists have now identified at least five subtypes of breast cancer. Lower overall rates among Hispanic women can largely be explained by lower rates of the most common subtype, called luminal A.

A particularly aggressive subtype, triple-negative breast cancer, is twice as common in black women as in whites.

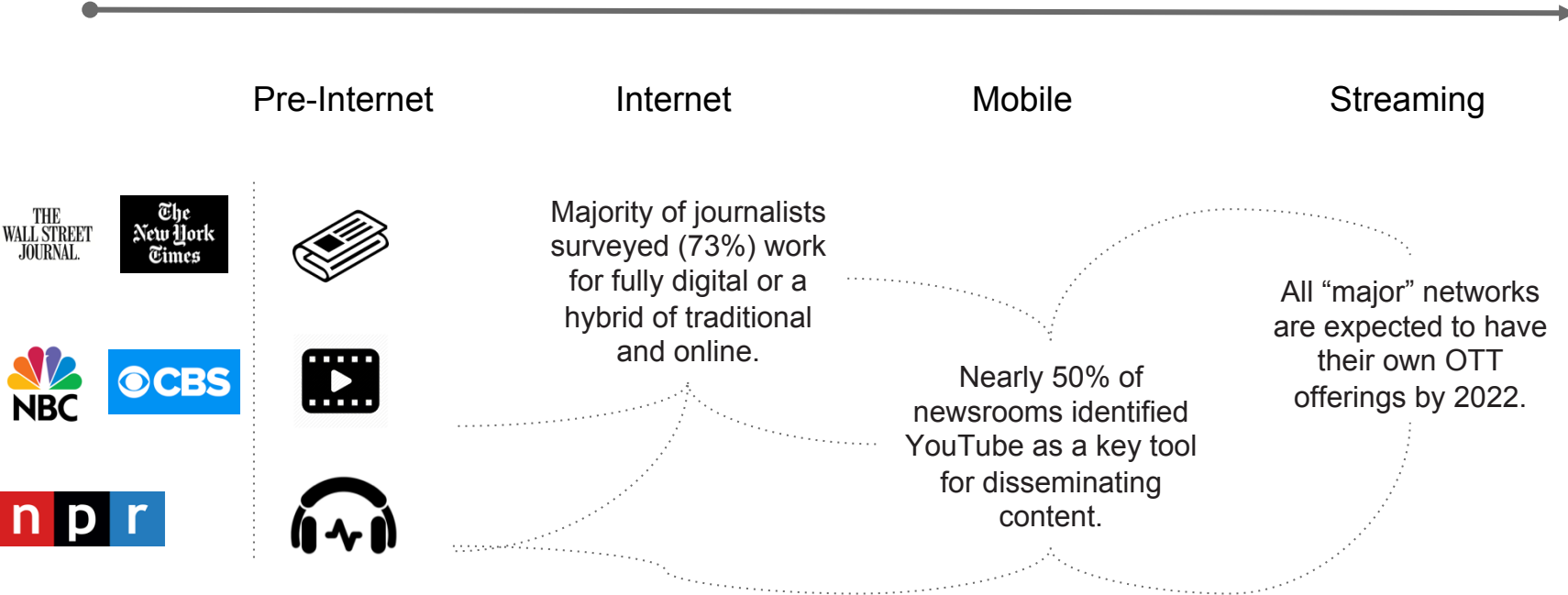
"These racial disparities are not inevitable," said Carol E. DeSantis, director of breast and gynecological cancer surveillance at the American Cancer Society.

"Access to care, economic status, getting high quality treatment early and beginning and completing chemotherapy are all factors," Ms. DeSantis said.

In the 1980s and 1990s, breast cancer rates rose. Scientists believe that the increases may be explained by the growing trend toward delayed



To keep up with demand, newsrooms need to produce new and multiple types of content



Pre-Internet

Internet

Mobile

Streaming



Majority of journalists surveyed (73%) work for fully digital or a hybrid of traditional and online.



Nearly 50% of newsrooms identified YouTube as a key tool for disseminating content.

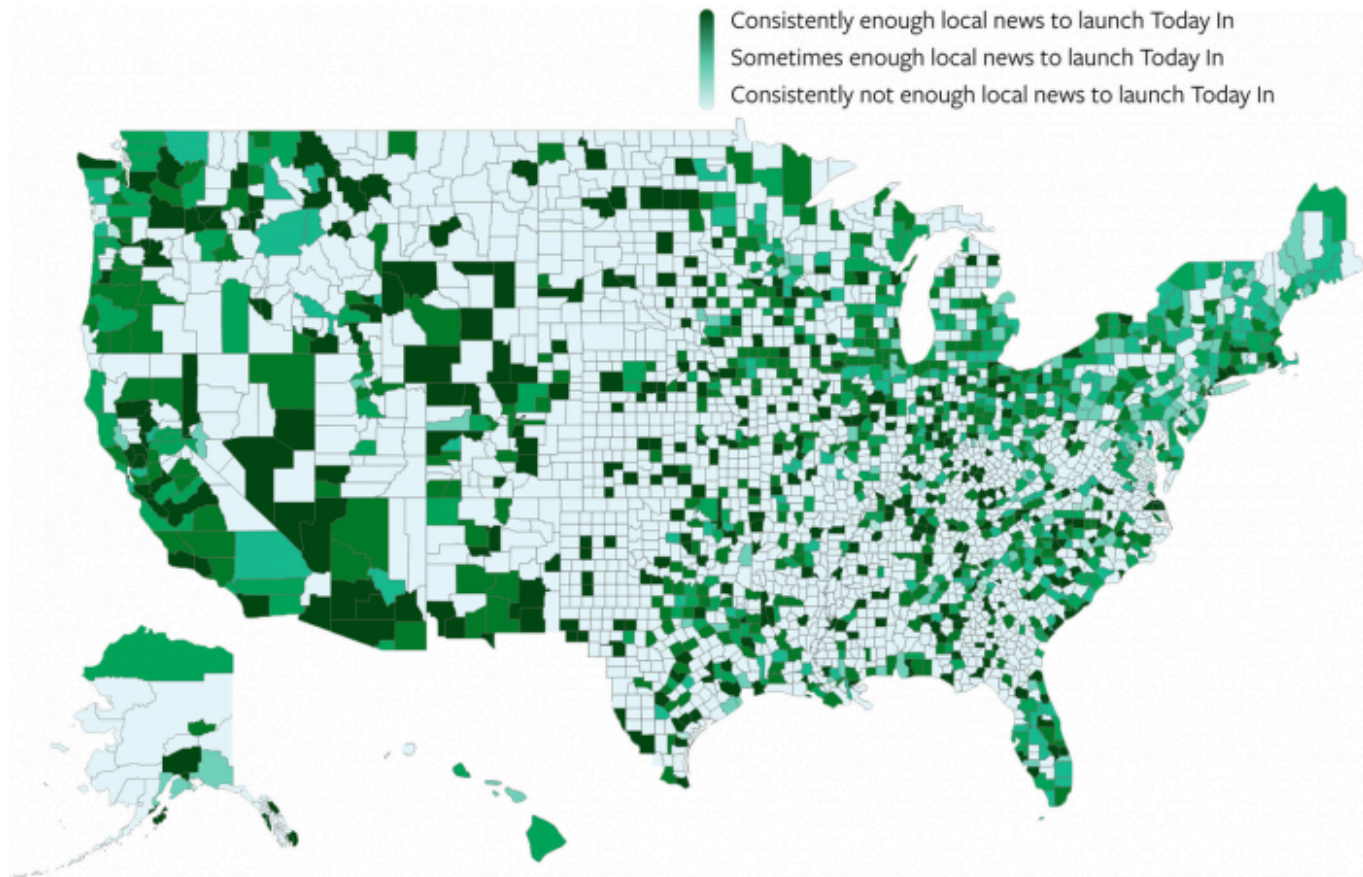


All "major" networks are expected to have their own OTT offerings by 2022.

And journalists now need more tools with less time.



In the
midst of
all the
changes,
there is a
growing
gap in
coverage.



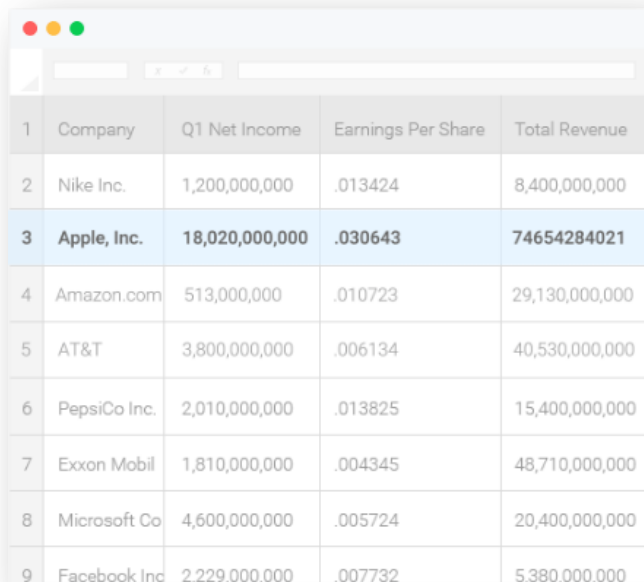
Source: [Nieman Lab, 2019](#).



**Our goal at
the AP is to
give
journalists the
superpowers
they need to
thrive in this
new climate.**

Our first project using AI launched in 2014:

Source data from key vendors:



1	Company	Q1 Net Income	Earnings Per Share	Total Revenue
2	Nike Inc.	1,200,000,000	.013424	8,400,000,000
3	Apple, Inc.	18,020,000,000	.030643	74654284021
4	Amazon.com	513,000,000	.010723	29,130,000,000
5	AT&T	3,800,000,000	.006134	40,530,000,000
6	PepsiCo Inc.	2,010,000,000	.013825	15,400,000,000
7	Exxon Mobil	1,810,000,000	.004345	48,710,000,000
8	Microsoft Co	4,600,000,000	.005724	20,400,000,000
9	Facebook Inc	2,229,000,000	.007732	5,380,000,000

Create NLG templates with startup partner:

ai AUTOMATED INSIGHTS



Distribute stories on wire:



Apple tops Wall Street 1Q forecasts

CUPERTINO, Calif. (AP) - Apple, Inc. (AAPL) on Tuesday reported fiscal first-quarter net income of \$18.02 billion. The Cupertino, California-based company said it had profits of \$3.06 per share. The results surpassed Wall Street expectations.



The average estimate of analysts surveyed by Zacks Investment Research was for earnings of \$2.60 per share. The maker of iPhones, iPads and other products posted revenue of \$74.6 billion in the period, also exceeding Street forecasts. Analysts expected \$67.38 billion, according to Zacks. For the current quarter ending in March, Apple said it expects revenue in the range of \$52 billion to \$55 billion. Analysts surveyed by

Robo-Journalism Is Good News for Stocks

Automation in the newsroom expands coverage of smaller firms and improves markets.

February 2, 2017 | by Lee Simmons

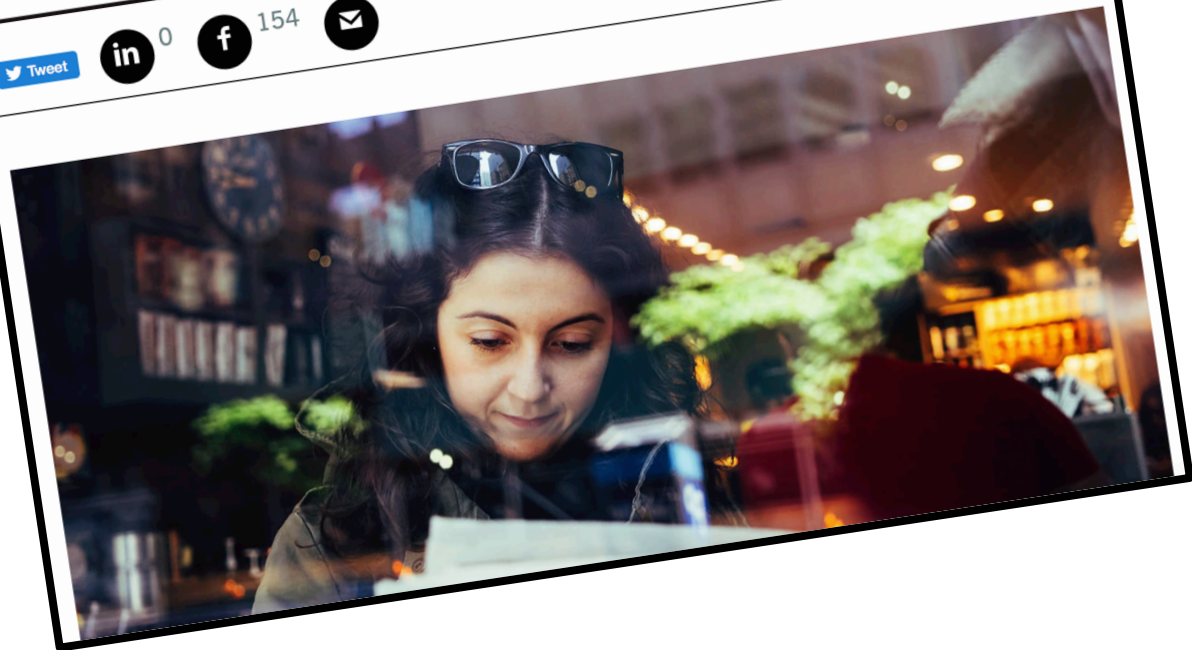
Tweet



0



154



Stanford Business School researchers found that our **automated stories** increased the **liquidity** of stocks for smaller companies that previously never received coverage.

The logo consists of the letters 'AP' in a bold, black, sans-serif font, positioned on a white rectangular background. A solid red horizontal bar is located directly beneath the white background.

AP

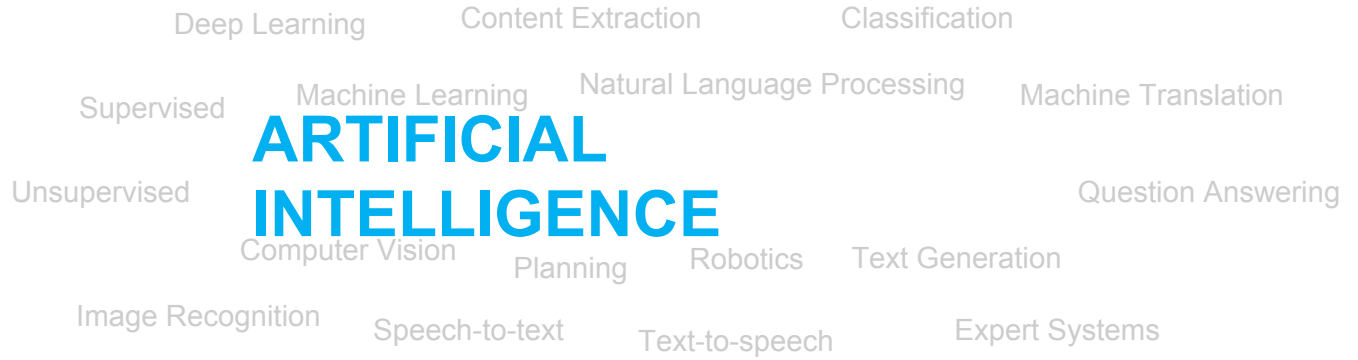
The background of the slide is a long-exposure photograph of a person in a dark room, creating a complex, multi-colored light trail. The person is wearing a red shirt and dark pants. The light trails are primarily red and orange, with some green and yellow highlights, forming a dense, swirling pattern that fills much of the frame. The room's architecture, including pillars and ceiling lights, is faintly visible in the background.

We've come a long way since
2014. Here is what we've done
and what we've learned.

1) We set our AI objectives:

1. Free up journalists to work on higher-level assignments and investigations.
2. Scale our operations and coverage.
3. Give journalists the tools to break news faster and find deeper insights.
4. Work with startups to infuse innovation into the AP and support entrepreneurs working on industry needs.

2) We organized into the following three categories:



In combination with our expert human journalists, helps to improve:

News Gathering

News Production

News Distribution

3) We've piloted, tested, launched several AI projects, matching priority problems to available tech:



News Gathering:

Building out an AI-assisted UGC verification portal


SAM

AI + Social

Every day, over 1 billion statuses, tweets, photos, and videos are uploaded to social media—creating the richest, raw dataset in the world.

SAM's NLP and ML algorithms extract key descriptors, triangulate location data, and group substantiating social content to provide you with alerts and context surrounding developing events.

FLOOD in Houston, Texas, United States



Private boat owners coming over to help evacuate people's homes around Houston. This has been going all day. #HoustonFlood

AP VERIFY Home Collections Scan history

SCAN NEW VIDEO Sign out


Scan in progress Download results as PDF Collection: Add to a collection Status: Manage status Notes

EARLIER MATCH FOUND VIEW

Bride and groom & policeman flood waters

Scan upload date: 2018.08.12

Bride and groom rescued by police from rising flood waters
https://www.youtube.com/watch?v=ZmRizko_0Q



Source analysis

Greg Wolf @gregwolf View source profile

Post analysis

Published date: 2018.08.12 Posted 1 day after your defined date.

Published time: 13:45 GMT Matches Audio, Matches Location.

Language used in post: English

Keywords found: New Jersey

Download transcript

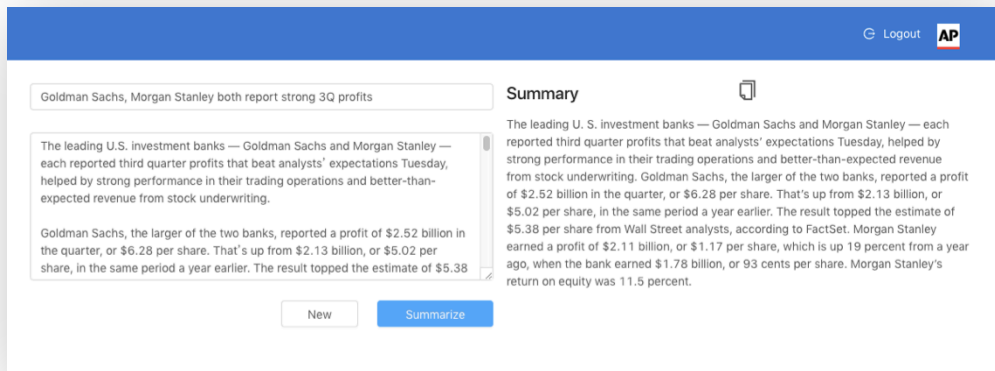
Audio analysis

Language Spoken: English Language doesn't match location

Event Detection via NLP

News Production:

Auto-generated story summaries
as a first experiment with AI-
assisted content versioning



Goldman Sachs, Morgan Stanley both report strong 3Q profits

The leading U.S. investment banks — Goldman Sachs and Morgan Stanley — each reported third quarter profits that beat analysts' expectations Tuesday, helped by strong performance in their trading operations and better-than-expected revenue from stock underwriting.

Goldman Sachs, the larger of the two banks, reported a profit of \$2.52 billion in the quarter, or \$6.28 per share. That's up from \$2.13 billion, or \$5.02 per share, in the same period a year earlier. The result topped the estimate of \$5.38

Summary

The leading U.S. investment banks — Goldman Sachs and Morgan Stanley — each reported third quarter profits that beat analysts' expectations Tuesday, helped by strong performance in their trading operations and better-than-expected revenue from stock underwriting. Goldman Sachs, the larger of the two banks, reported a profit of \$2.52 billion in the quarter, or \$6.28 per share. That's up from \$2.13 billion, or \$5.02 per share, in the same period a year earlier. The result topped the estimate of \$5.38 per share from Wall Street analysts, according to FactSet. Morgan Stanley earned a profit of \$2.11 billion, or \$1.17 per share, which is up 19 percent from a year ago, when the bank earned \$1.78 billion, or 93 cents per share. Morgan Stanley's return on equity was 11.5 percent.

New Summarize



Automated transcription

News Distribution:

Experimenting with automated shotlists

0.6	Donald Trump	SOUNDBITE (Donald Trump)
23.5		Cutaway to audience
27.6	Donald Trump	SOUNDBITE (Donald Trump)
49.9	Donald Trump	Cutaway to audience
112.4	Donald Trump	SOUNDBITE (Donald Trump)
167.1	Donald Trump	Cutaway to audience
193.0		SOUNDBITE
197.0		Cutaway to audience
221.0	Donald Trump	SOUNDBITE (Donald Trump)
239.7	Donald Trump	SOUNDBITE (Donald Trump)
243.8		SOUNDBITE
248.7		SOUNDBITE



and image
recognition

We take steps to mitigate AI risks:

- Biased data creates biased stories.
- Personalization can reinforce the “echo chamber” and lead to filter bubbles.
- Tools can be misused by those who aren't journalists, and to create propaganda.

Human editors are very much required.

4) We setup an AI working group:

- Cross-functional team (news, product, sales, tech, strategy)
- Meet monthly to provide updates, vet startups, discuss what other newsrooms are doing, and provide a sounding board

Inside Out:

Focused on capturing innovative AI-driven ideas internally and testing them from the inside out

Outside In:

Focused on bringing the learnings of the industry from the outside into AP

5) Built a portfolio of startups based on mutually beneficial partnerships



Matter.



bambuser



6) Create pathways for collaboration

- Matter Ventures Partner
- NYC Media Lab Founding Member

**THE MACHINES
ARE COMING**
AUTOMATING THE MEDIA

MODERATOR
JUSTIN HENDRIX
EXECUTIVE DIRECTOR, NYC MEDIA LAB

JOHN BORTHWICK
CEO
BETAWORKS

HILARY MASON
FOUNDER
FAST FORWARD LABS

KATHY MCKEOWN
DIRECTOR OF THE DATA SCIENCE INSTITUTE
COLUMBIA UNIVERSITY

AMANDA STENT
NLP RESEARCHER
OFFICE OF THE CTO AT BLOOMBERG

What's on our mind going forward?

- Better evaluating “what’s working”
- Addressing the Innovation Gap
- Preparing for the next media waves of convergence and disruptive technology



THANK