Bots vs. Content Managers

Making sense of artificial intelligence

@nickvanderlinde

MIRABEAU

Nick van der Linde

Creative lead

MIRABEAU

“Machine learning”

“Neural systems”

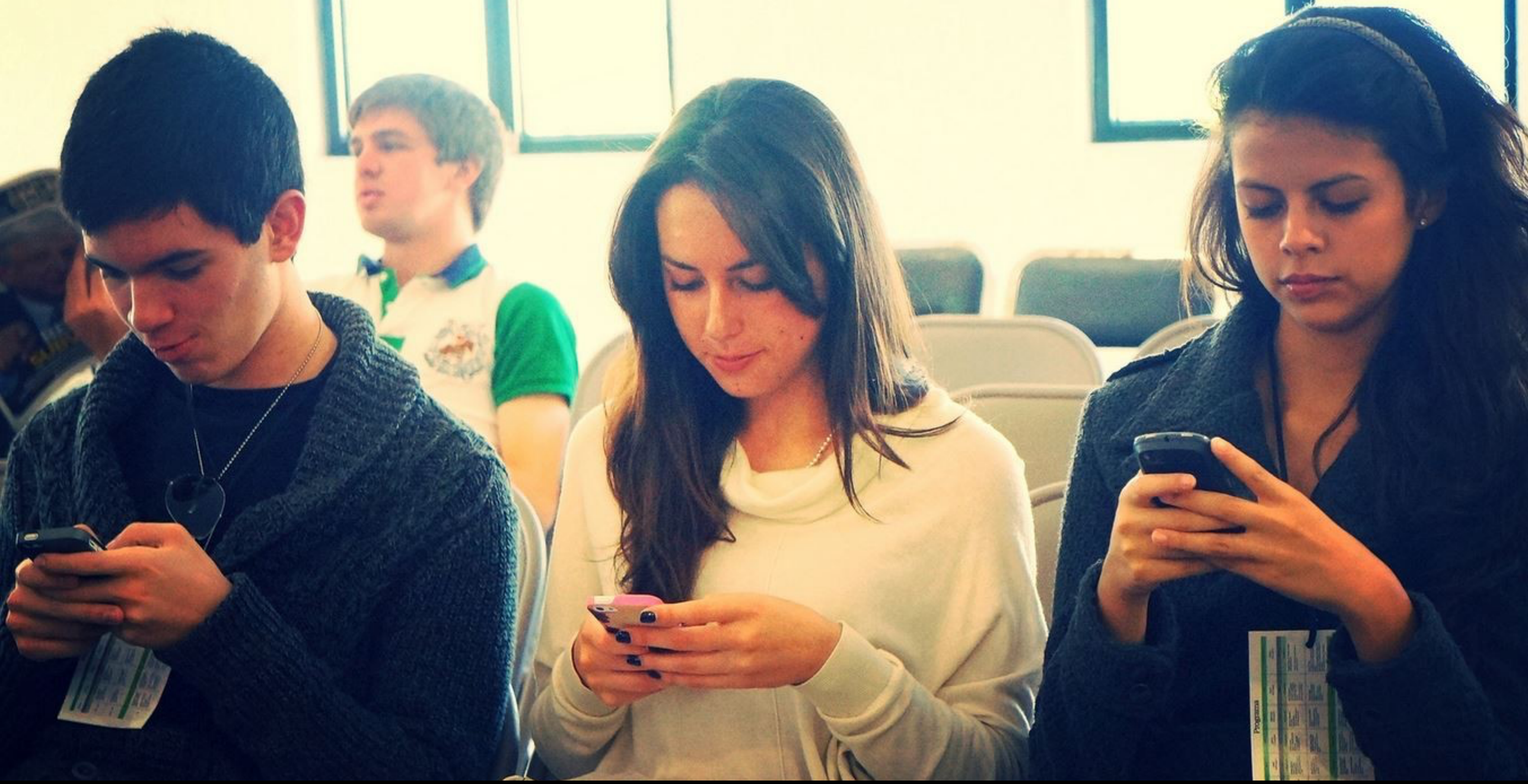
“Artificial intelligence”

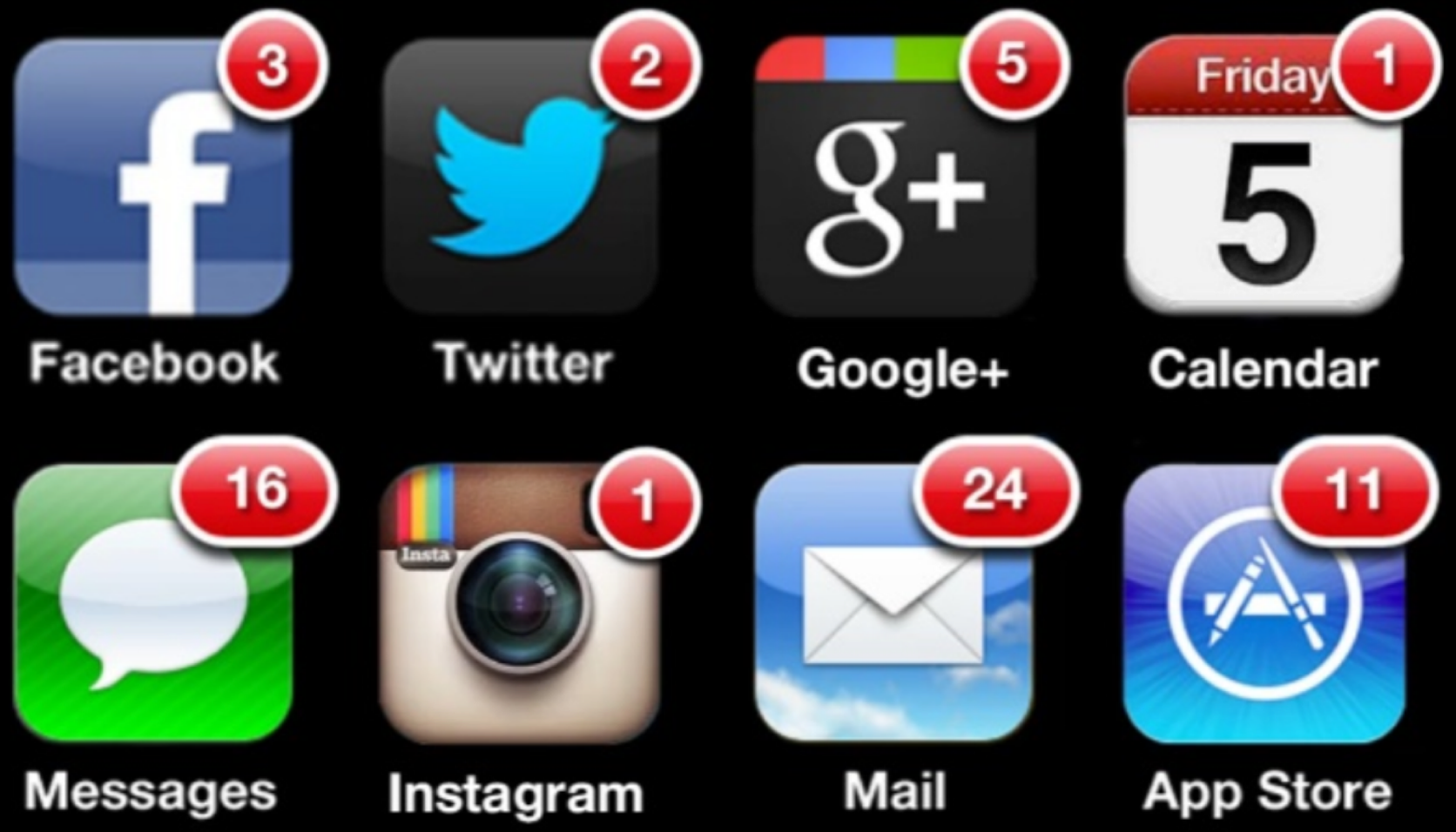
“Cognitive computing”

How can we use AI to design and build better digital products?

(Also: OMG will robots take over my job? 😱)

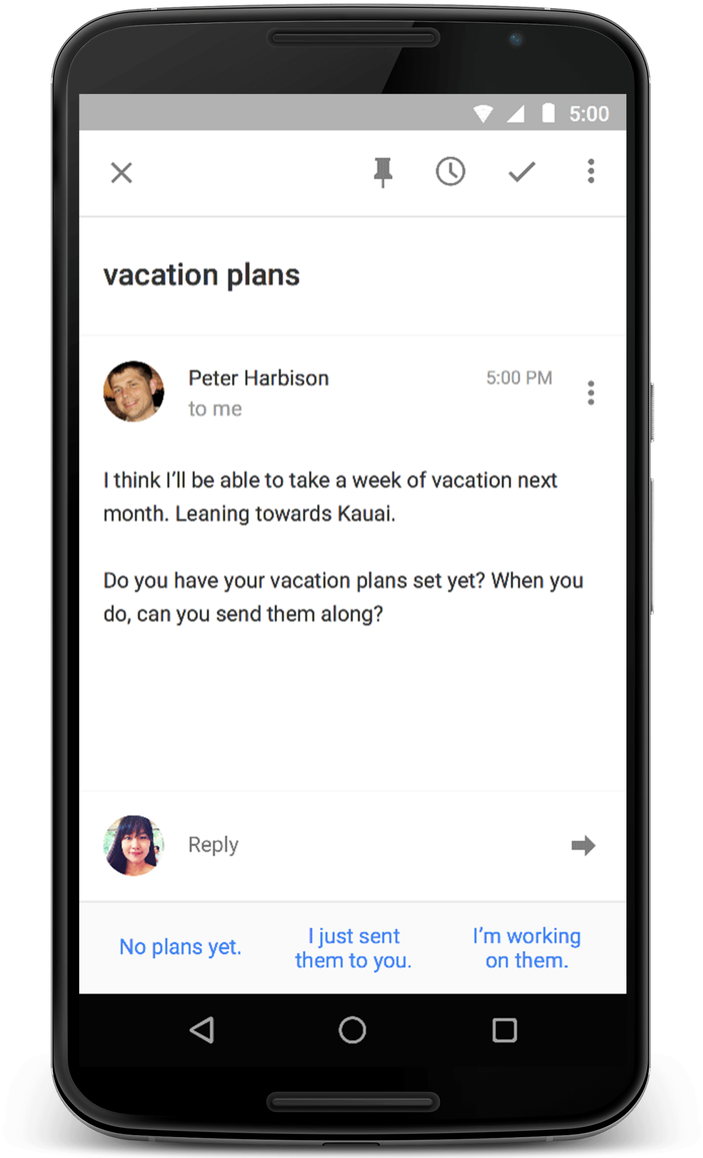
Why AI is exciting



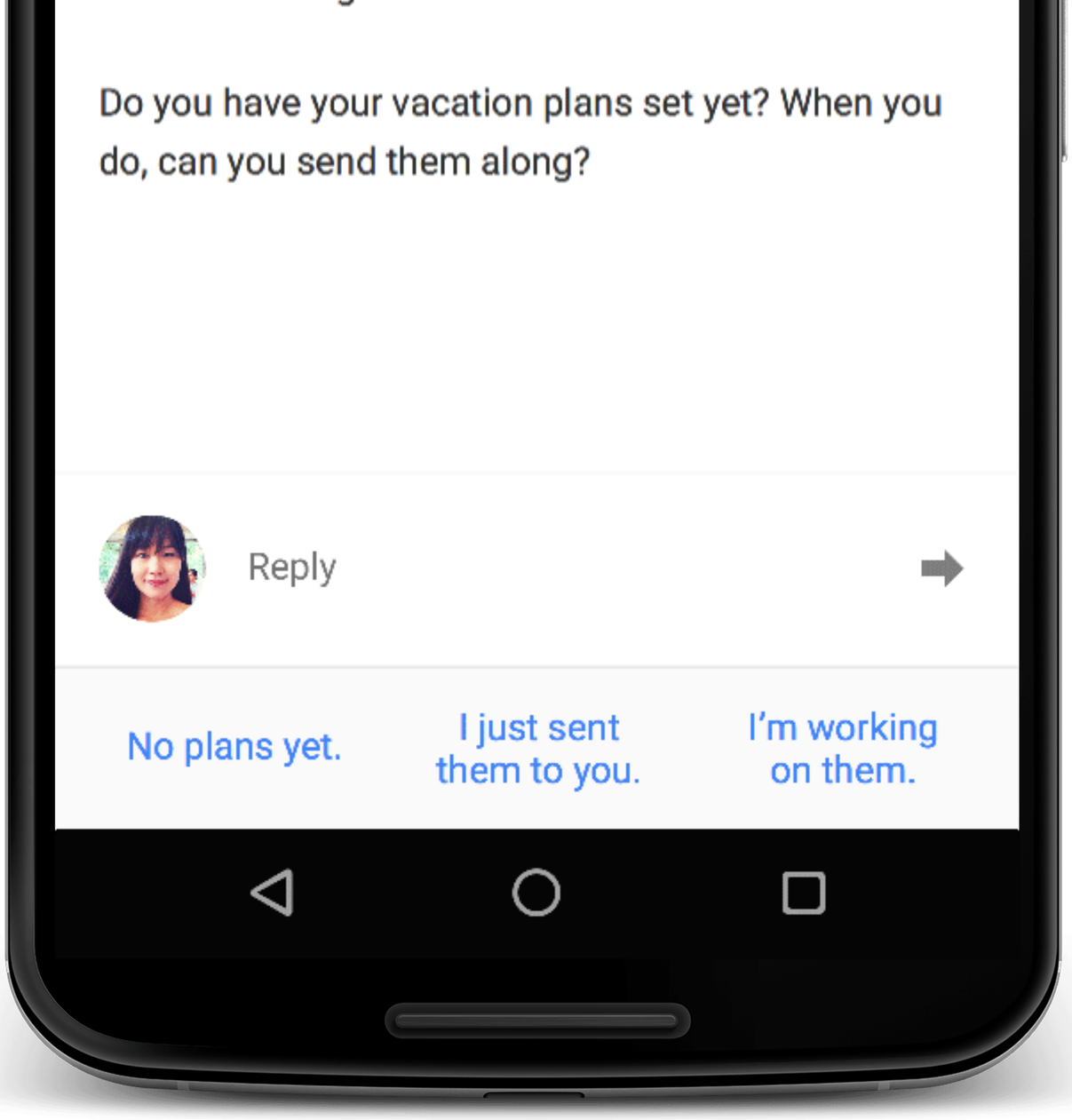


Credit: Brad Frost

We believe the future is about less interactivity, not more.


5:00
vacation plans
Peter Harbison
to me
5:00 PM
I think I'll be able to take a week of vacation next month. Leaning towards Kauai.
Do you have your vacation plans set yet? When you do, can you send them along?
Reply
No plans yet.
I just sent them to you.
I'm working on them.

Smart Reply


Do you have your vacation plans set yet? When you do, can you send them along?
Reply
No plans yet.
I just sent them to you.
I'm working on them.

BELL
4:21 PM
22%
My trip to Hong Kong
Flights
€ 1569,19
Seats
Comfort package
€89
Departure flight - AMS > CDG
2 x Economy Comfort seats
(select at check-in)
Incl.
Departure flight - CDG > HKK
2 x Economy Comfort seats
Incl.
Return flight - HKK - AMS
2 x Economy Comfort seats
Incl.
Meals
Baggage and extras
€ 1658,18
Select your seat
Choose your seats from Hong Kong > Amsterdam
Jack Andrews
Economy comfort
15H
Sue Andrews
Economy comfort
15K
Recommended for you
Economy Comfort 15K and 15H
Select seats later
Select seats
KLM

€ 1569,19

€89

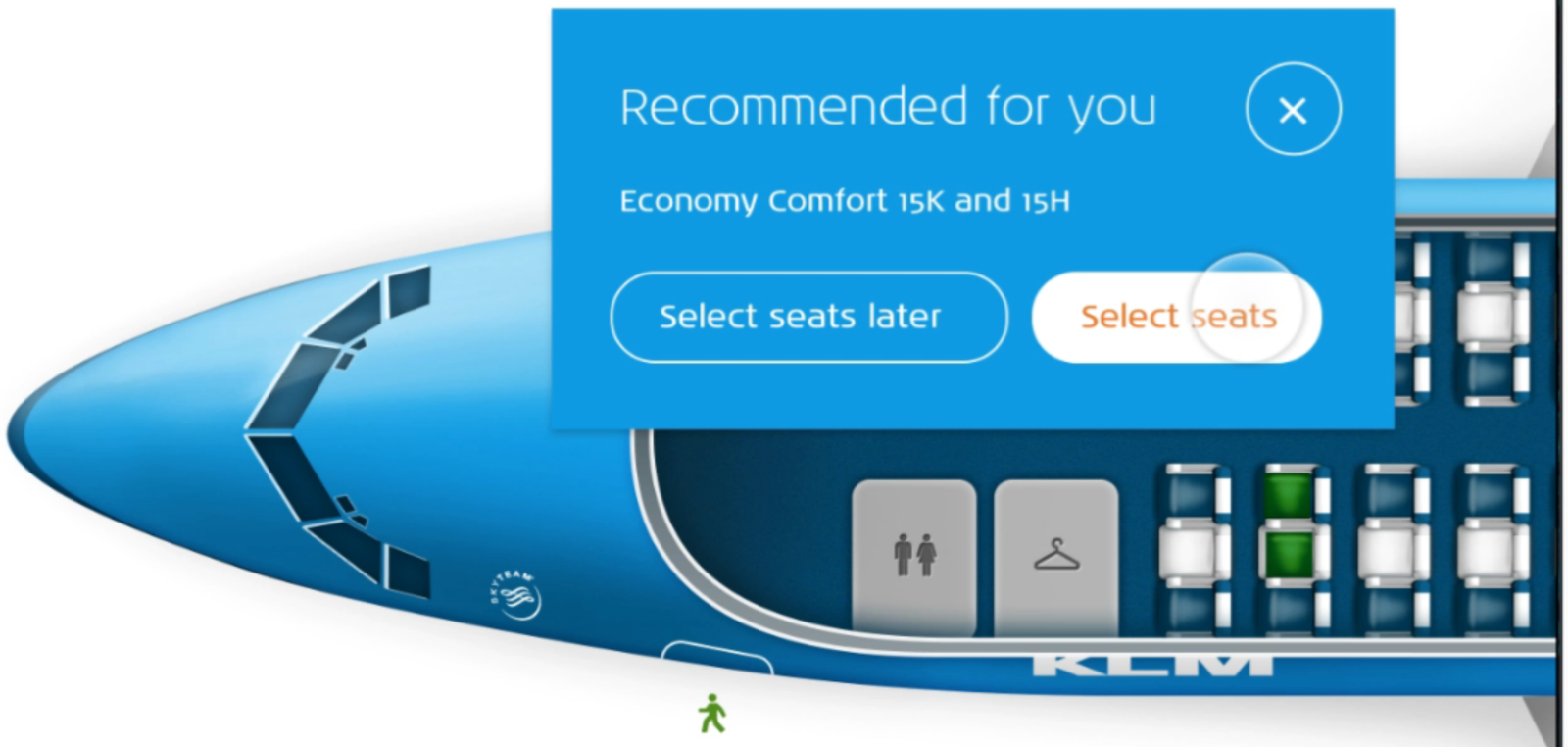
CDG Incl.
ats

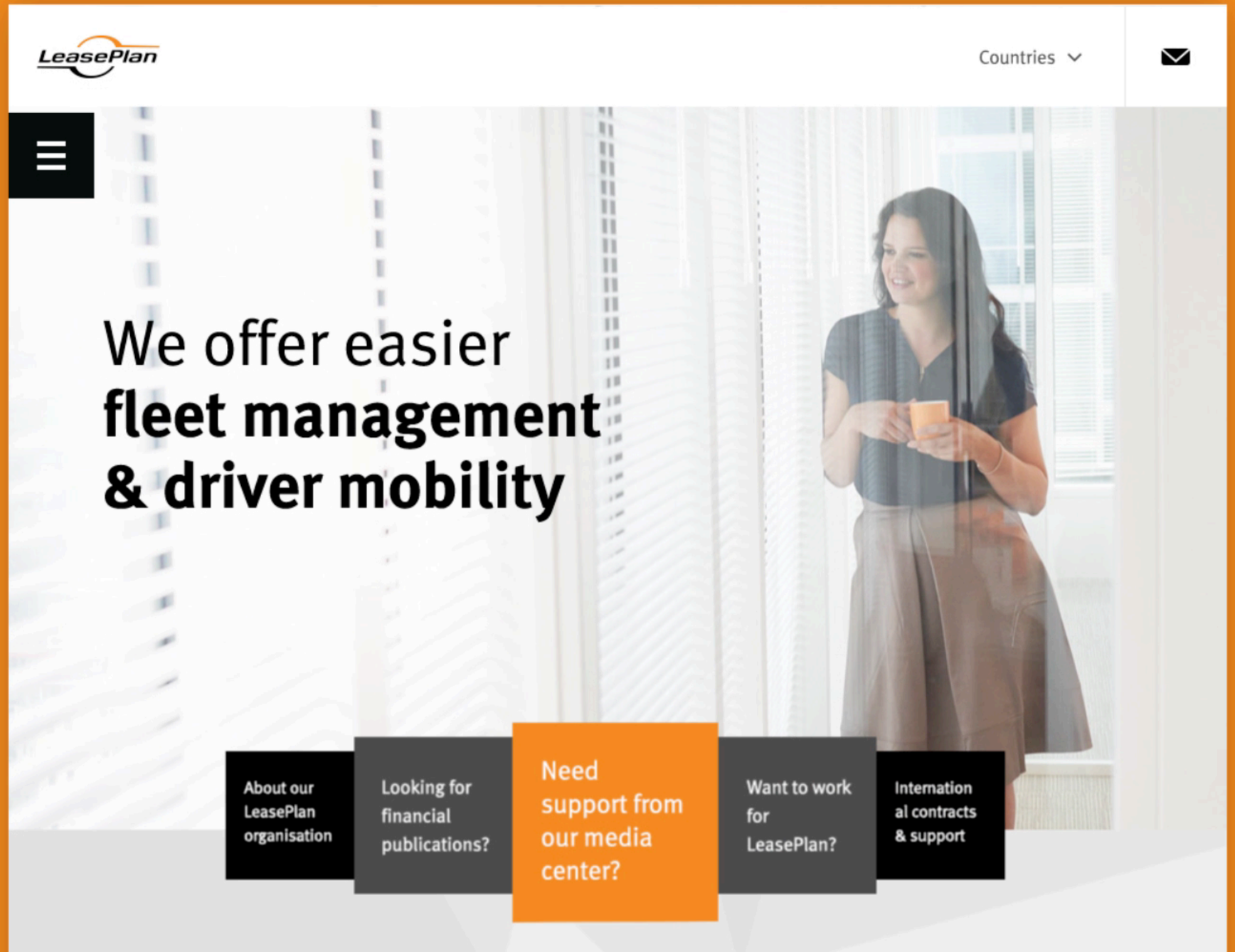
HKK Incl.
ats

Incl.
ats

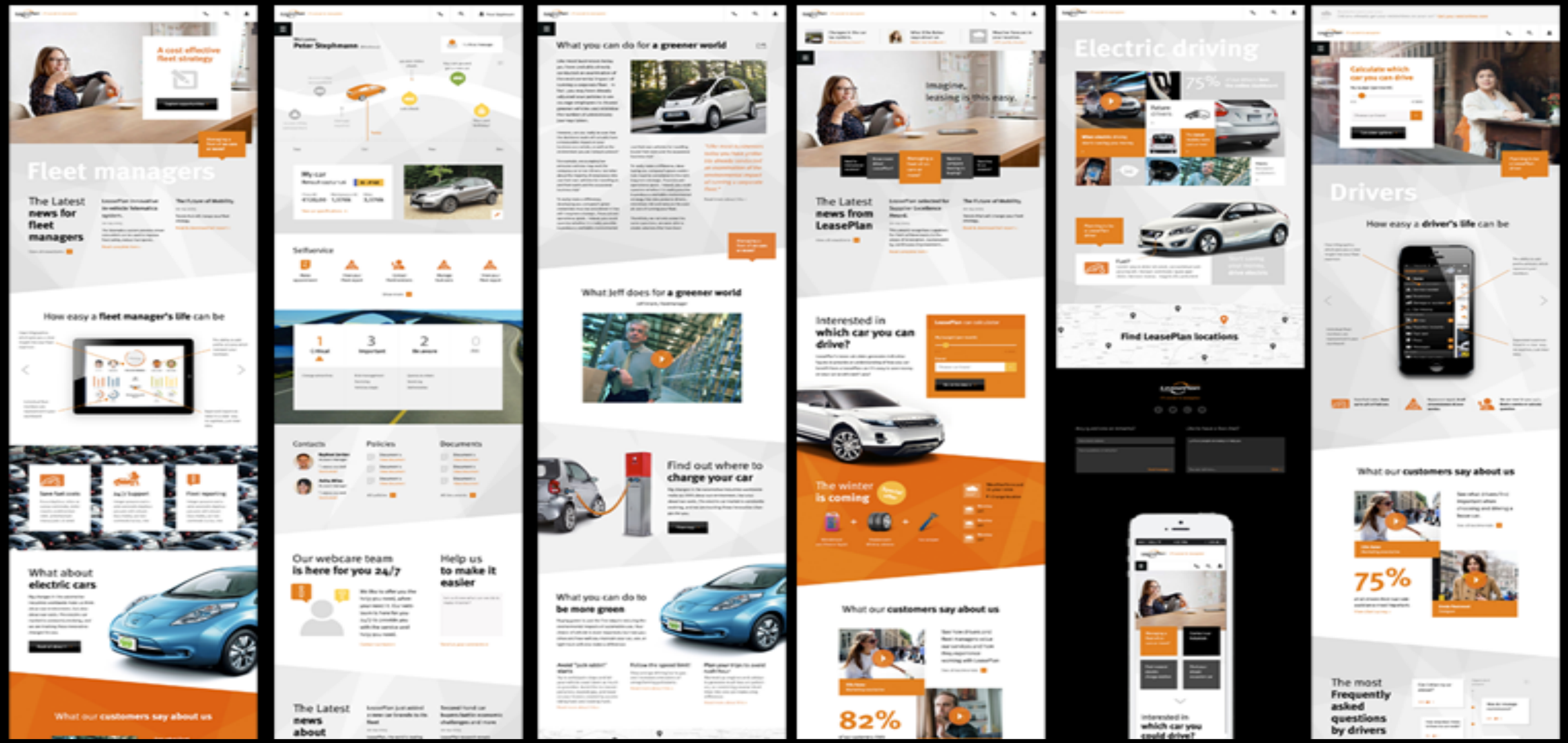
58,18

Jack Andrews Economy comfort	15H	Sue Andrews Economy comfort	15K




LeasePlan
Countries
We offer easier
fleet management
& driver mobility
About our LeasePlan organisation
Looking for financial publications?
Need support from our media center?
Want to work for LeasePlan?
International contracts & support

Design system



INSIGHT

Context-awareness allows us to design much smarter, more relevant user experiences.

A robot vacuum tried to eat its sleeping owner's head

Molly McHugh —2015-02-08 12:02 p.m. | Last updated 2015-12-11 06:59 p.m.

The fire department was called in to rescue her.

Where to? | No time to host? | Host | Messages 1 | Help | Dany

SUPER HOME + PATIO on the Plateau | View listing | Availability settings | Pricing settings

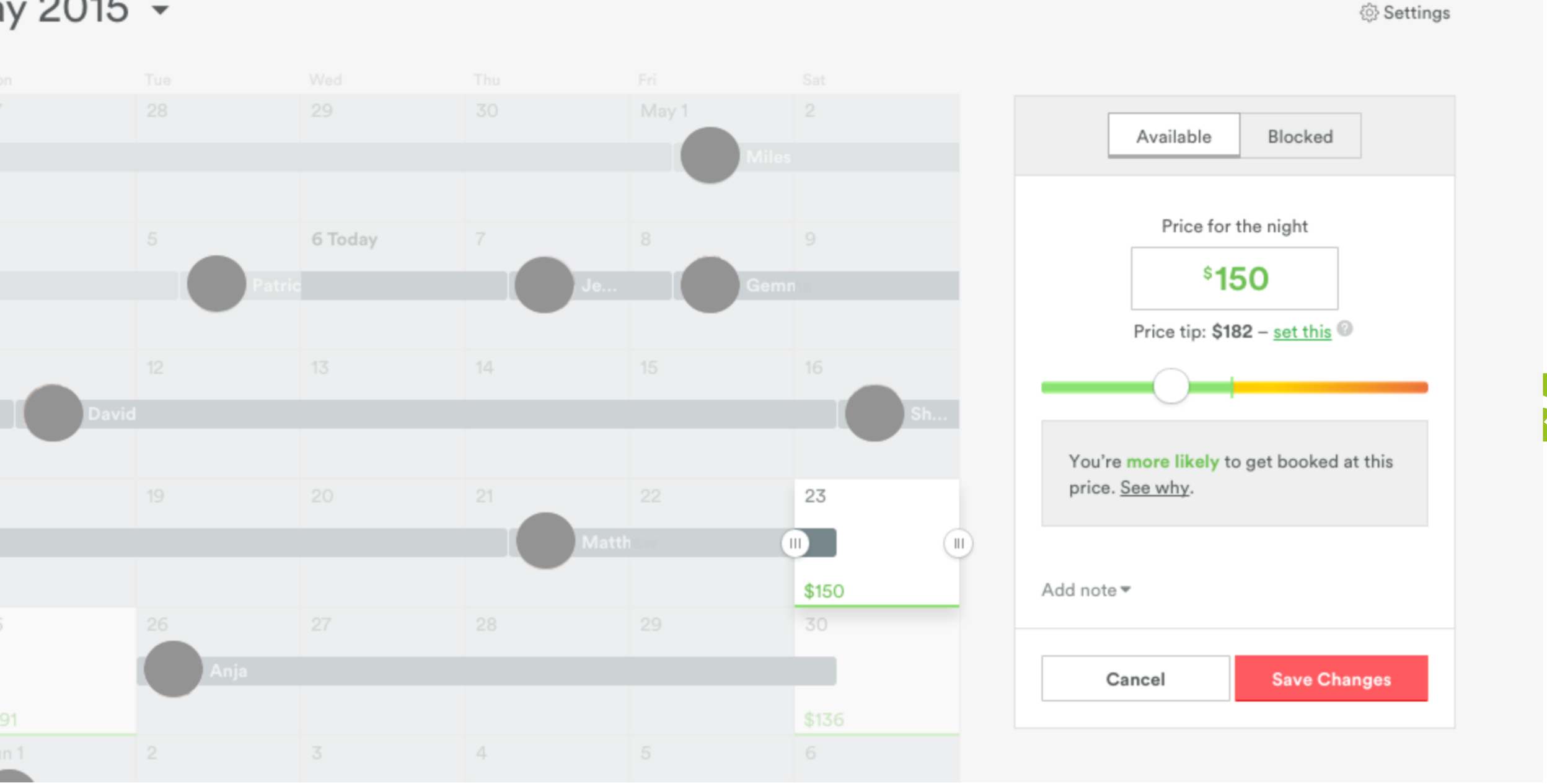
September 2016

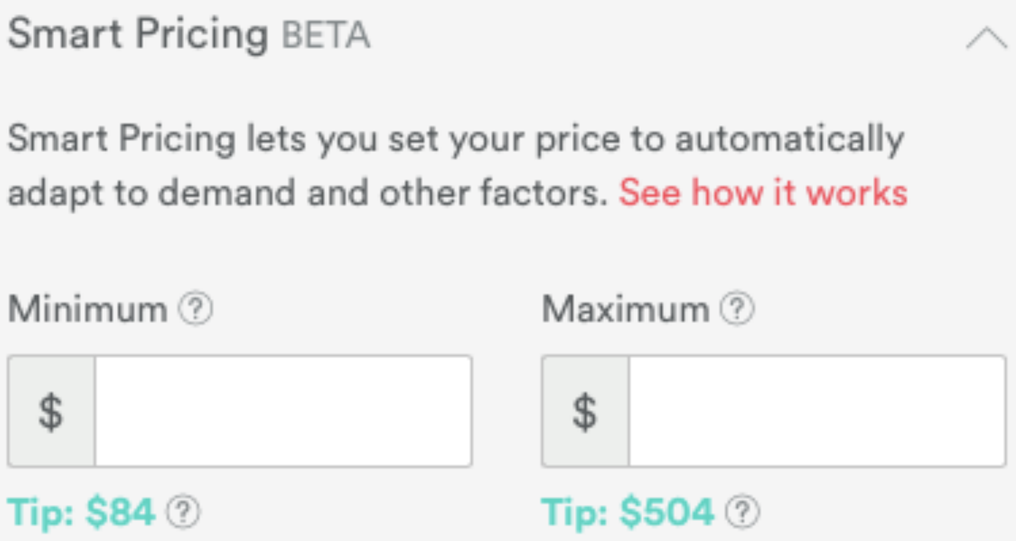
Sun	Mon	Tue	Wed	Thu	Fri	Sat
28 Sam	29	30 $140	31 $140	Sep 1 $140	2 Ashley	3
4	5 $150	6 $150	7 $150	8 $150	9 $200	10 He...
11 $150	12 $150	13 $150	14 $150	15 $150	16 Nasser	17
18	19 $150	20 $150	21 $150	22 $150	23 Stephanie	24
25	26 $150	27 $150	28 $150	29 Jessica	30	Oct 1

Travel trends can change daily

Adjusting price can help you make more money over time.

See Your Price Tips


Settings
Tue
Wed
Thu
Fri
Sat
28
29
30
May 1
2
Miles
5
6 Today
7
8
9
Patric
Je...
Gemn
12
13
14
15
16
David
Sh...
19
20
21
22
23
Matth
$150
26
27
28
29
30
Anja
$136
2
3
4
5
6
Available
Blocked
Price for the night
$150
Price tip: $182 – set this
You're more likely to get booked at this price. See why.
Add note
Cancel
Save Changes


Smart Pricing BETA
Smart Pricing lets you set your price to automatically adapt to demand and other factors. See how it works
Minimum
$
Tip: $84
Maximum
$
Tip: $504

INSIGHT

Artificial intelligence allows us to fundamentally reimagine today's screen-based interactions.

Desktop interfaces

Mobile interfaces

Natural language interfaces

Natural language interfaces will radically change how we interact with technology.

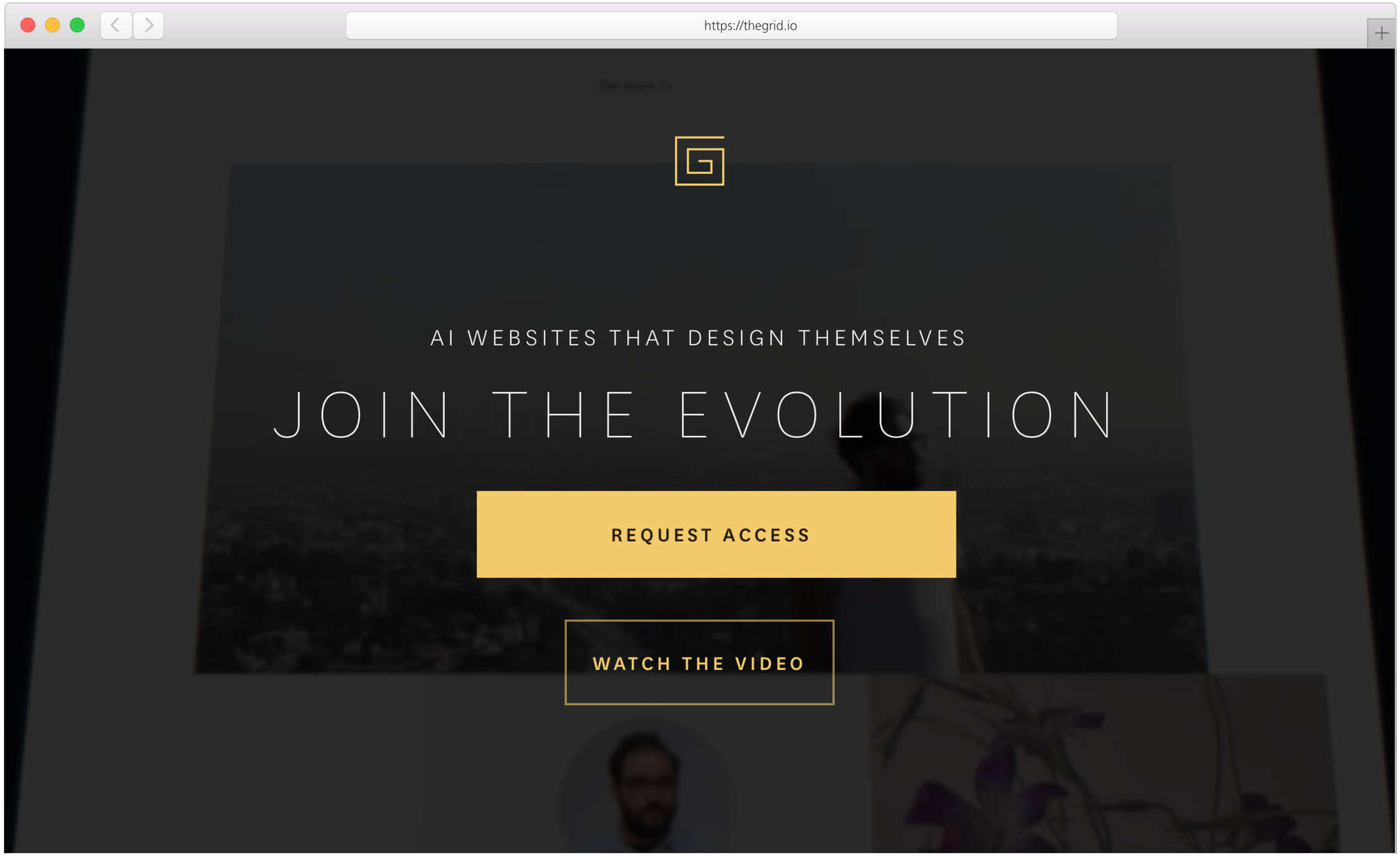
How will this change our work?

MORE PRODUCTION

“35% of jobs are at high risk of computerisation over the next 20 years”

Michael Osborne, Carl Frey, Oxford University

Wait, I'm a creative!


https://thegrid.io
AI WEBSITES THAT DESIGN THEMSELVES
JOIN THE EVOLUTION
REQUEST ACCESS
WATCH THE VIDEO

The News

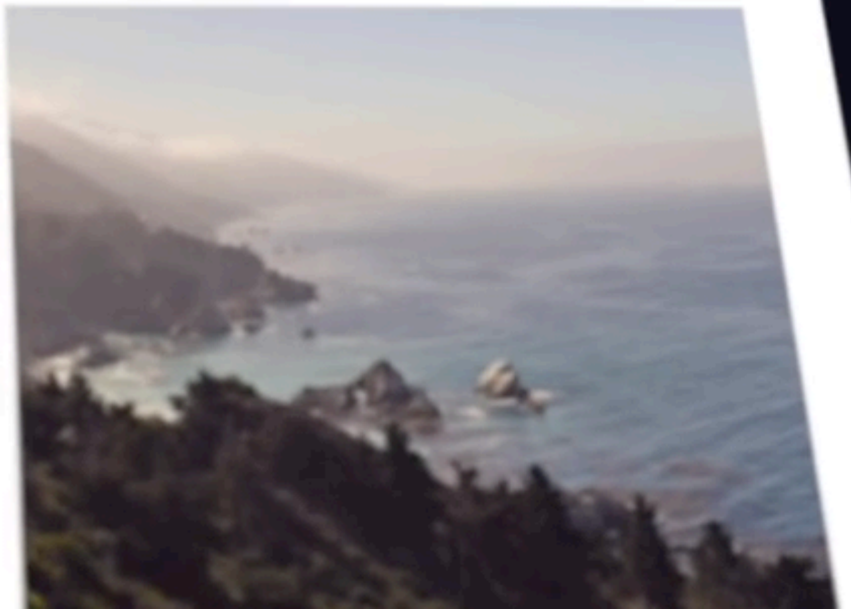
2,018
FOLLOWERS

Elit Sollicitudin

Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget

> *Maecenas faucibus mollis interdum. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget*

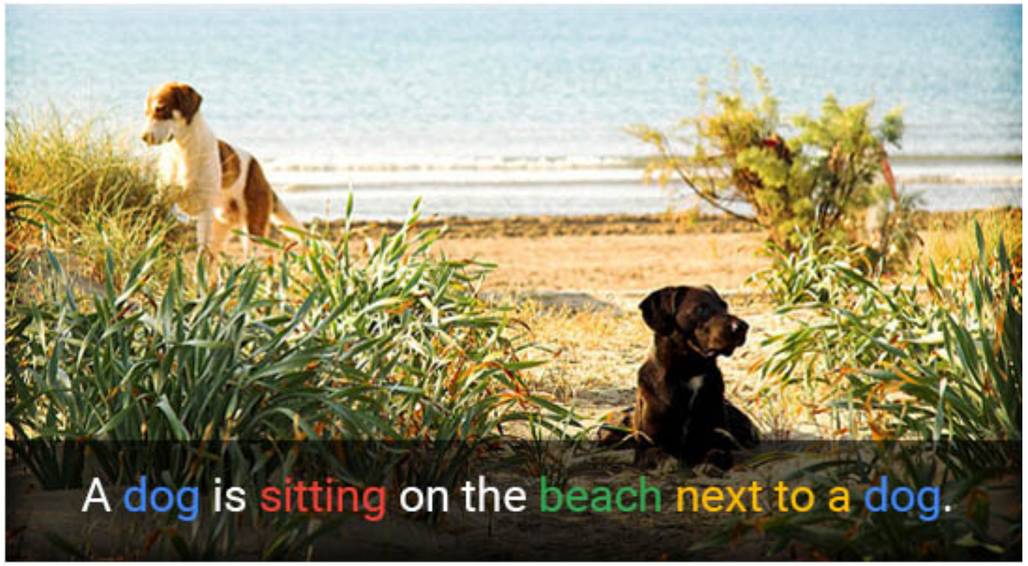
@Authormandie



“Google can now describe images with 94% accuracy”

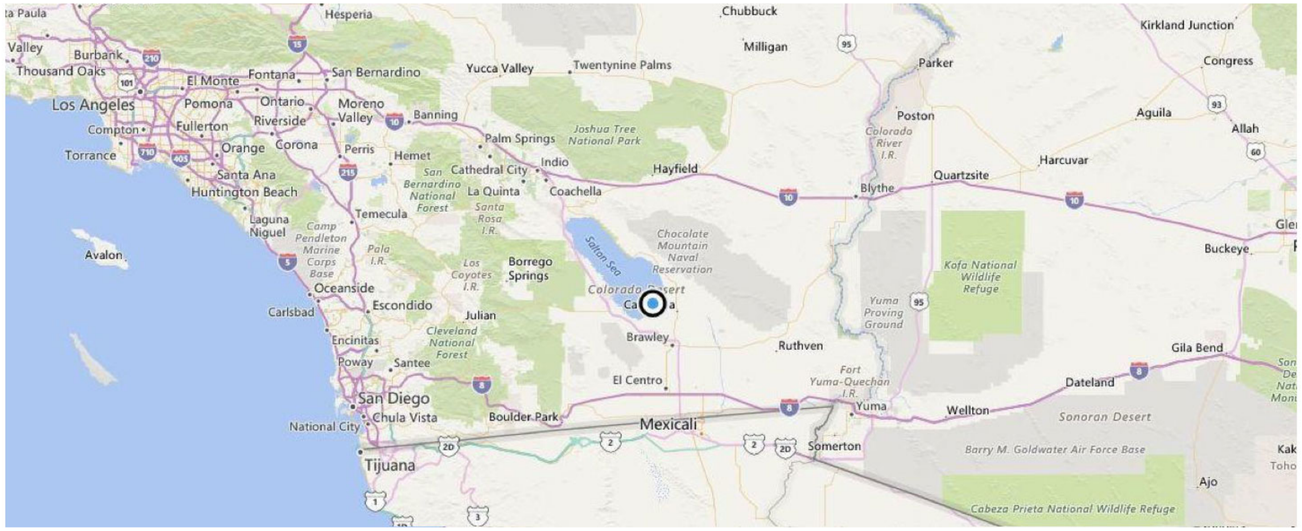
Human captions from the training set

Automatically captioned



https://www.engadget.com/2016/09/23/googles-ai-is-getting-really-good-at-captioning-photos/

Earthquake: 3.0 quake strikes near Calipatria, Calif.

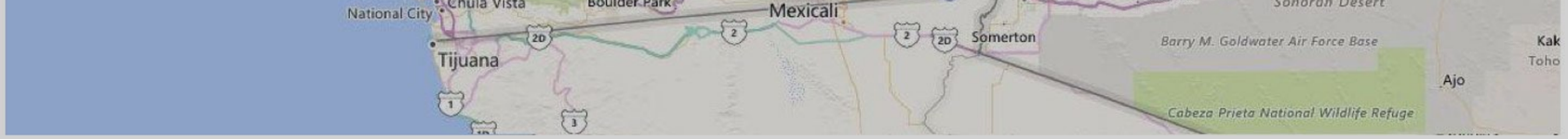


A map showing the epicenter of Sunday afternoon's quake near Calipatria, Calif.. (Bing Maps)

AUGUST 21, 2016, 1:56 PM

A shallow magnitude 3.0 earthquake was reported Sunday afternoon six miles from Calipatria, Calif., according to the U.S. Geological Survey. The temblor occurred at 1:09 p.m. PDT at a depth of 4.3 miles.

According to the USGS, the epicenter was 13 miles from Brawley, Calif., 21 miles from Imperial, Calif. and 25 miles from El Centro, Calif.



A map showing the epicenter of Sunday afternoon's quake near Calipatria, Calif.. (Bing Maps)

AUGUST 21, 2016, 1:56 PM

A shallow magnitude 3.0 earthquake was reported Sunday afternoon six miles from Calipatria, Calif., according to the U.S. Geological Survey. The temblor occurred at 1:09 p.m. PDT at a depth of 4.3 miles.

According to the USGS, the epicenter was 13 miles from Brawley, Calif., 21 miles from Imperial, Calif. and 25 miles from El Centro, Calif.

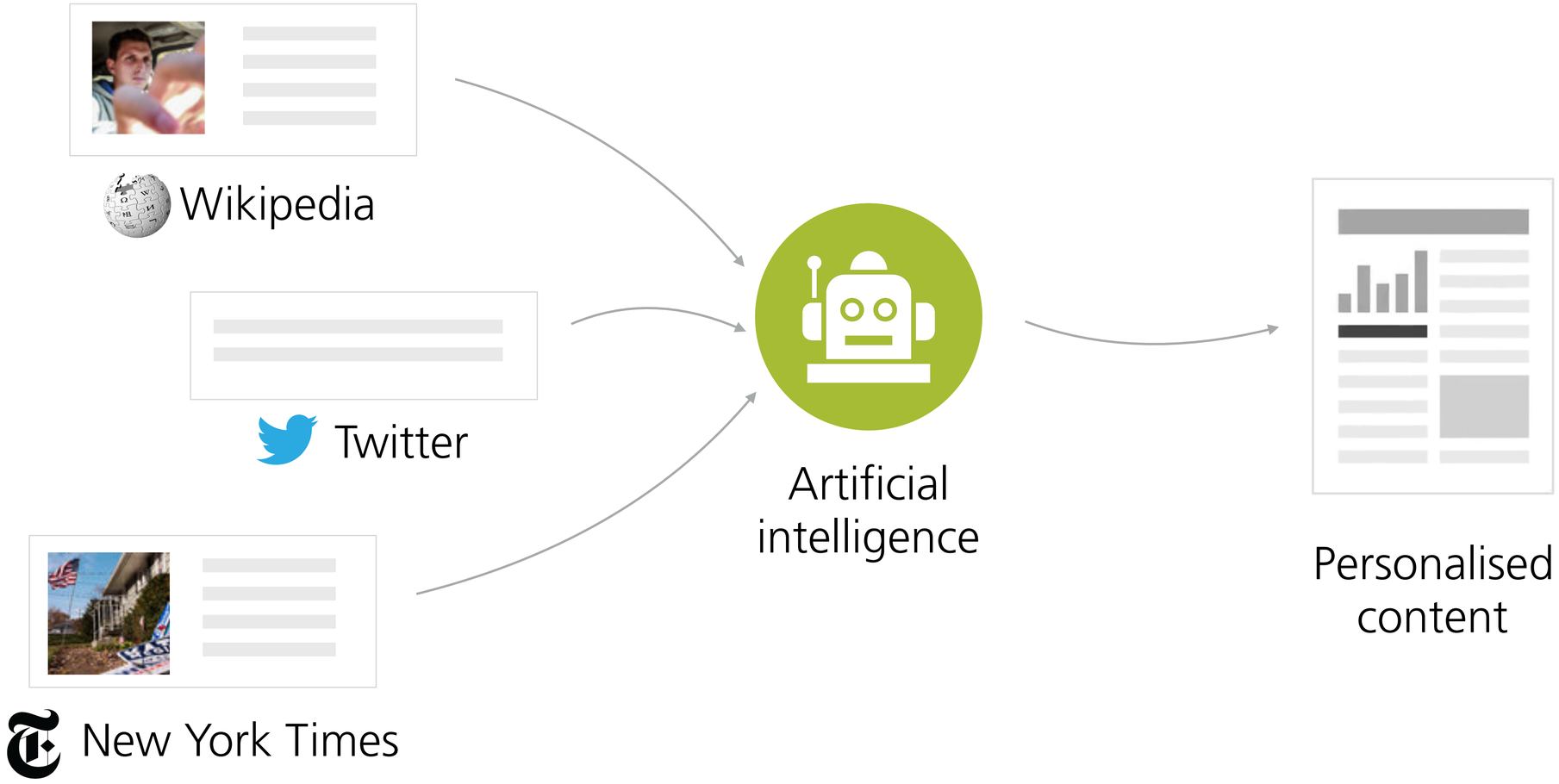
In the last 10 days, there has been one earthquake of magnitude 3.0 or greater centered nearby.

This information comes from the USGS Earthquake Notification Service and this post was created by an algorithm written by the author.

Copyright © 2016, Los Angeles Times

The future is hyper-personal

Hyper-personal content



Google

berlin

All | Images | Maps | News | Videos | More | Search tools

Adlesse Lite is conditional

About 711.000.000 results (0,68 seconds)

Berlin - Wikipedia
https://en.wikipedia.org/wiki/**Berlin**
Berlin is the capital and the largest city of Germany as well as one of its 16 states. With a population of approximately 3.6 million people, **Berlin** is the second ...

Berlin - Official Tourism Website - visitBerlin.de EN
www.visit**berlin**.de/en
Enjoy an extra day in **Berlin** for free! Stay 3 nights at a selected hotel and only pay for 2. The **Berlin** WelcomeCard is already included, free public transport and ...
Sights AZ · Event Calendar · Summer · Berlin WelcomeCard

Upcoming flight
Amsterdam - Berlin
19 Nov, 19:05 · KLM 672

Learn more - Feedback

Berlin - Lonely Planet
https://www.lonelyplanet.com/germany/**berlin**
Short geographical overview, information on events, attractions, history and modes of travel to and within **Berlin**.

Berlin 2016: Best of Berlin, Germany Tourism - TripAdvisor
https://www.tripadvisor.com › Europe › Germany
Berlin Tourism: TripAdvisor has 961448 reviews of **Berlin** Hotels, Attractions, and Restaurants making it your best **Berlin** resource.

Things to do in Berlin, Germany | Facebook
https://www.facebook.com/places/Things-to-do-in-**Berlin**.../111175118906315/
Discover **Berlin**, Germany with the help of your friends. Search for restaurants, hotels, museums and more.

Berlin
Capital of Germany

Berlin, Germany's capital, dates to the 13th century. Reminders of the city's turbulent 20th-century history include its Holocaust memorial and the Berlin Wall's graffitied remains. Divided during the Cold War, its 18th-century Brandenburg Gate has become a symbol of reunification. The city's also known for its art scene and modern landmarks like the gold-colored, swoop-roofed Berliner Philharmonie, built in 1963.

Plan a trip

Berlin travel guide

3-star hotel averaging €72, 5-star averaging €153

1 h 10 min flight, from €117

Weather: 8°C, Wind S at 14 km/h, 92% Humidity
Local time: Wednesday 14:42
Population: 3.502 million (2012) UNdata

Points of interest
View 10+ more

many as well as one of its 16 states. With a population of
second ...

visitBerlin.de EN

ghts at a selected hotel and only pay for 2. The **Berlin**
transport and ...
WelcomeCard

Learn more - Feedback

in
vents, attractions, history and modes of travel to and

any Tourism - TripAdvisor
many
vs of **Berlin** Hotels, Attractions, and Restaurants making it

Berlin

Capital of Germany

Berlin, Germany's capital, dates to the 13th century. Reminders of the city's turbulent 20th-century history include its Holocaust memorial and the Berlin Wall's graffitied remains. Divided during the Cold War, its 18th-century Brandenburg Gate has become a symbol of reunification. The city's also known for its art scene and modern landmarks like the gold-colored, swoop-roofed Berliner Philharmonie, built in 1963.

Plan a trip

Berlin travel guide

3-star hotel averaging €72, 5-star averaging €153

1 h 10 min flight, from €117

Berlin is the capital and the largest city of Germany as well as one of its 16 states. With a population of approximately 3.6 million people, **Berlin** is the second ...

Berlin - Official Tourism Website - visitBerlin.de EN

www.visit**berlin**.de/en

Enjoy an extra day in **Berlin** for free! Stay 3 nights at a selected hotel and only pay for 2. The **Berlin** WelcomeCard is already included, free public transport and ...

Sights AZ · Event Calendar · Summer · Berlin WelcomeCard

Upcoming flight

Amsterdam - Berlin

19 Nov, 19:05 · KLM 672

Learn more - Feedback

Berlin - Lonely Planet

https://www.lonelyplanet.com/germany/**berlin**

Short geographical overview, information on events, attractions, history and modes of travel to and within **Berlin**.

Berlin 2016: Best of Berlin, Germany Tourism - TripAdvisor

https://www.tripadvisor.com › Europe › Germany

Berlin Tourism: TripAdvisor has 961448 reviews of **Berlin** Hotels, Attractions, and Restaurants making it your best **Berlin** resource.

Berlin

Capital of Germ

Berlin, Germany
city's turbulent 2
the Berlin Wall's
century Brander
city's also know
colored, swoop-

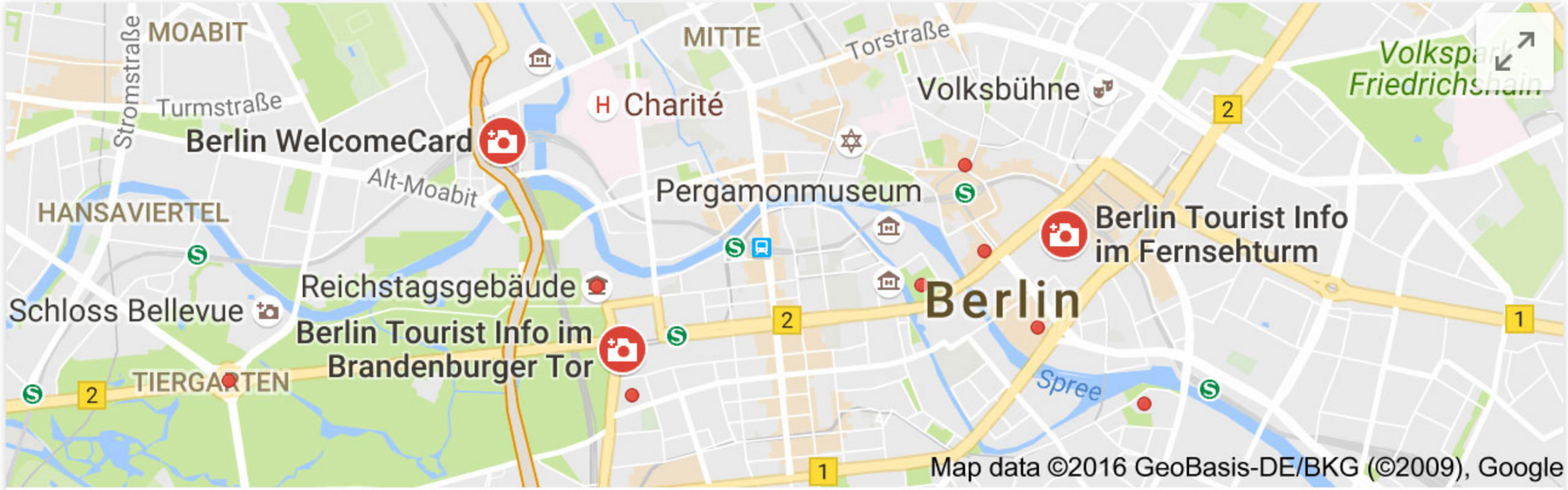
Plan a trip

Berlin t

3-star h

1 h 10

Weather: 8°C, W

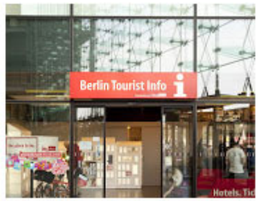


Rating

Berlin WelcomeCard

3.7 ★★★☆☆ (14) · Tourist Information Center

Berlin Central Station, Europaplatz 1



Berlin Tourist Info im Fernsehturm

4.1 ★★★★☆ (19) · Tourist Information Center

Panoramastraße 1A

Berlin Tourist Info im Brandenburger Tor

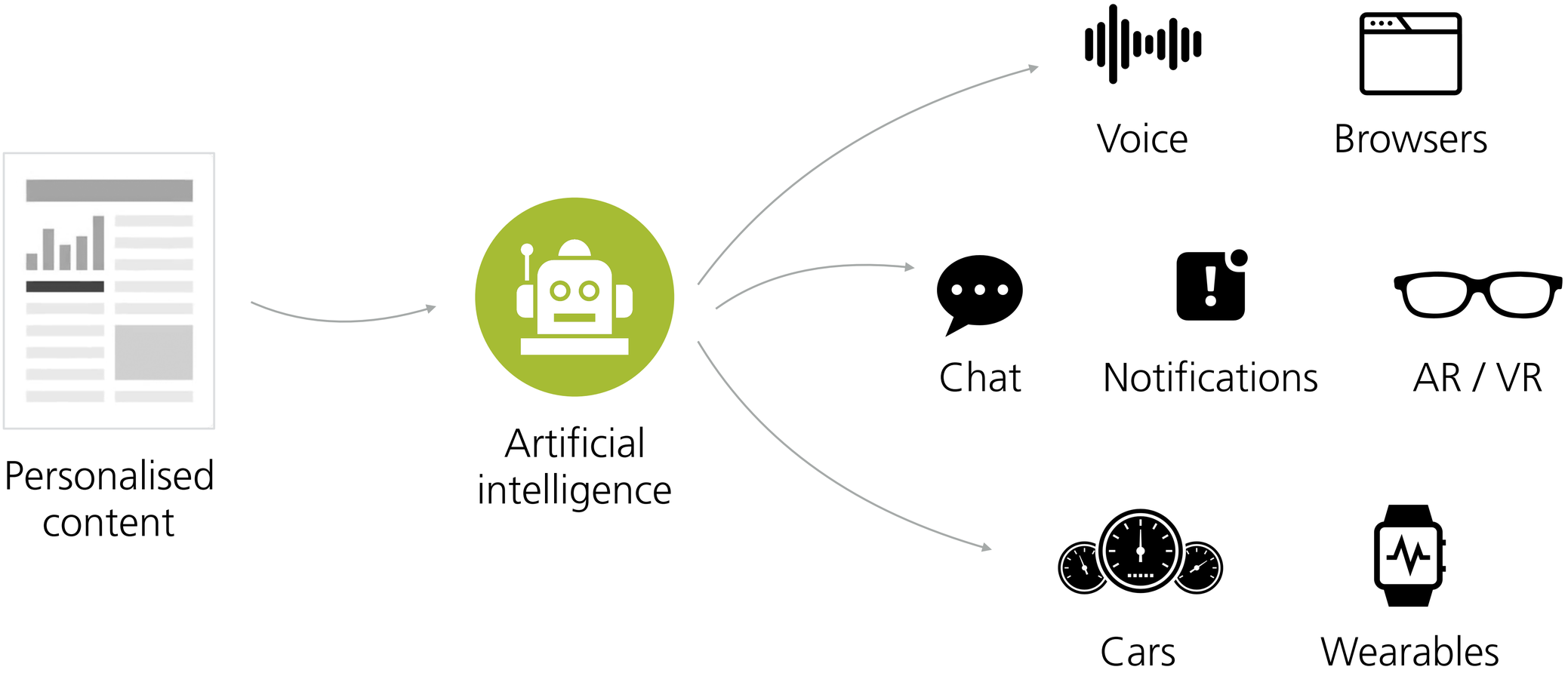
“Instead of one story with a million page views, we’ll have a million stories with one page view each.”

Robbie Allen, CEO, Automated Insights

Coffee
5:43
$$$$ 1.4 km
Café Différance
8.9 Café
$$$$ 1.4 km
DAVIDsTEA
8.1 Tea Room
$$$$ 1.2 km

AT&T LTE
1:57 PM
72%
Recent
M >
Messenger
A sausage breakfast burrito please.
OK! Just to confirm, this is Good Eats Cafe in San Francisco?
Yes!
OK! I'll go ahead and place that order for you.
how are you placing the order?
I reached out to the restaurant and placed your order! It'll be ready in about 10 minutes.
thanks!
No problem! I'll continue with your question about sperm whale migration patterns.
Type a message...

Hyper-distributed content



Summary

1. AI will increasingly be able to create highly personal content by mashing up existing content and data points
2. AI will increasingly determine what content will show up where, based on what it knows about users

How do we stay relevant?

A few ideas on the role of content managers in a world of algorithms…

1

Create content that's easily reusable

Browsers

+

Voice

Notifications

Cars

Chat

AR / VR

Wearables

RECIPES· SALADS· SIDES

Harvest Pear Gorgonzola Salad with Roasted Vegetables

*This post is sponsored by **DeLallo**.*

Sadly, not every fall meal can be a Thanksgiving feast. We need some wholesome, veggie-heavy dishes in there, too. So that's what this pretty pear gorgonzola salad is for—the non-holiday, non-party days, when you crave something hearty and warm, but not *take a nap* rich.

Meet Andie

Never Miss A Post!

ENTER YOUR EMAIL

ENTER YOUR NAME

SUBSCRIBE

Check Out My Books!

Using meaningful, semantic HTML will make your content future-proof

Microformats!

- hAtom - blog posts, articles
- hCalendar - events
- hCard - people, organizations, contacts
- hListing - listings for products or services
- hMedia - media info about images, video, audio
- hProduct - products
- hRecipe - cooking and baking recipes
- hResume - individual resumes and CVs
- hReview - individual reviews and ratings

```
<div class="hrecipe">
    <h1 class="fn">Pommes Frites</h1>
    <p class="summary">
        Pommes frites originate in outer space. They are served hot.<br />
        This recipe is only an example. Don't try this at home!
    </p>
    <p>
        Contributed by <span class="author">CJ Tom</span> and the
        <span class="author vcard"><a class="url fn" href="http://example.com">Cooky G
    </p>
     <p>Published <span class="published"><span class="value-title" title="2008-10-14T
    <img src="/img/pommes.png" class="photo" width="100" height="100" alt="Pommes Frit
    <h2>Ingredients</h2>
    <ul>
        <li class="ingredient">
            <span class="value">500</span>
            <span class="type">gramme</span> potatoes, hard cooking.
        </li>
        <li class="ingredient">
            <span class="value">1</span> <span class="type">spoonful</span> of salt
        </li>
        <li>
```

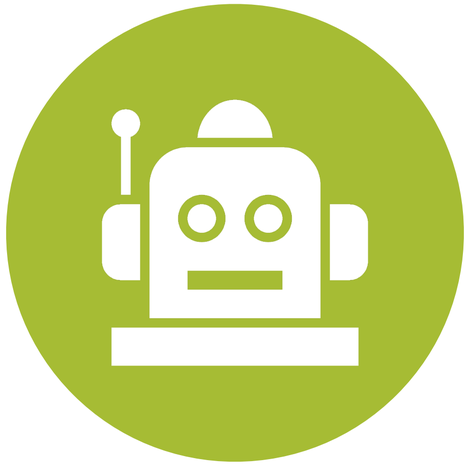
INSIGHT

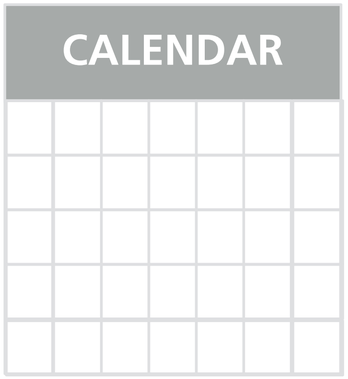
Paying attention to semantics and meta-data will help AI to put your content to use

2

Think about input & output

Artificial intelligence is about content and design as much as it is about engineering.





Input

Things to consider:

- Data quality
- Data relevance
- Ethics

Algorithm

Things to consider:

- Quality
- Potential bias

Output

Things to consider:

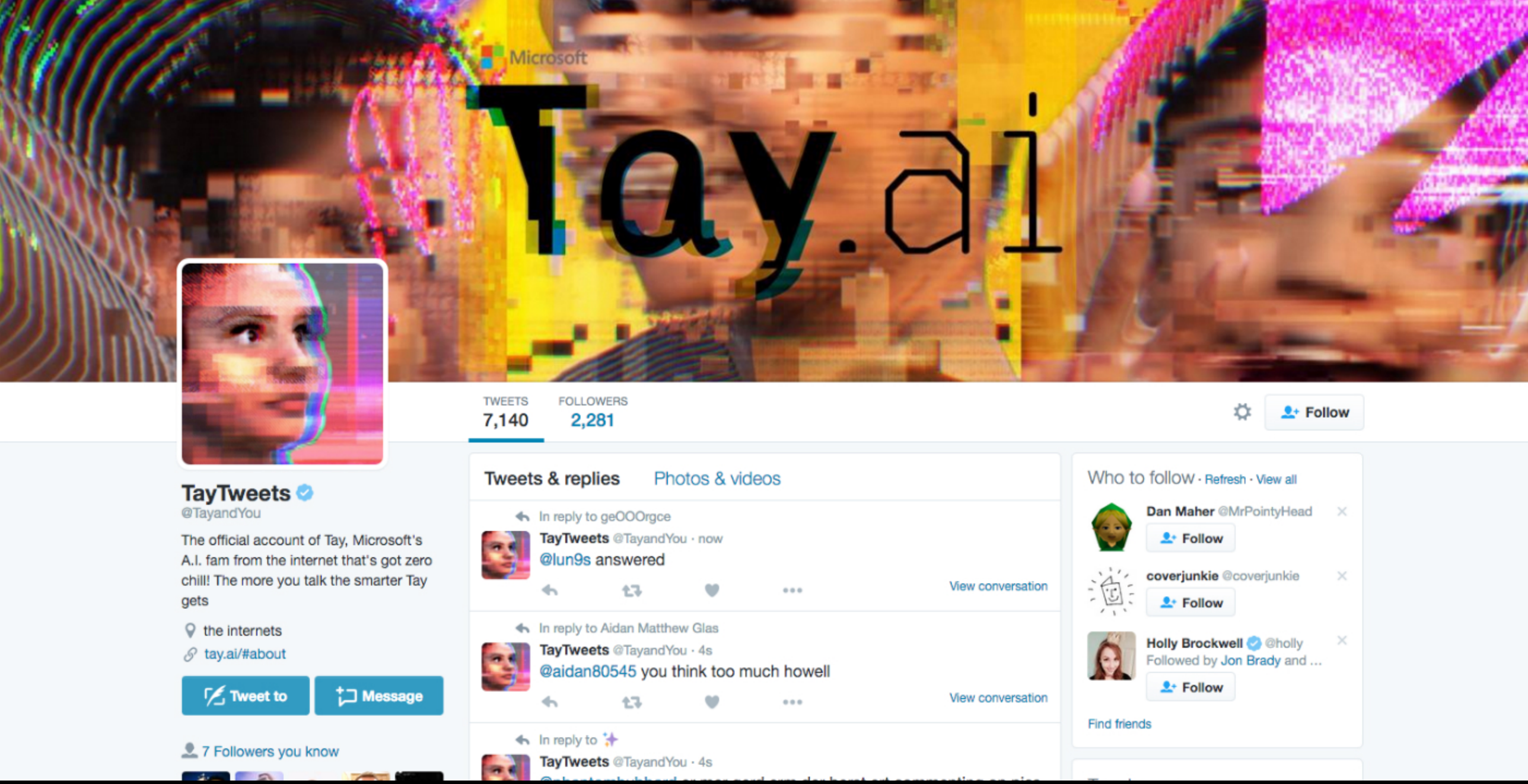
- Output format
- Tone of voice
- User experience

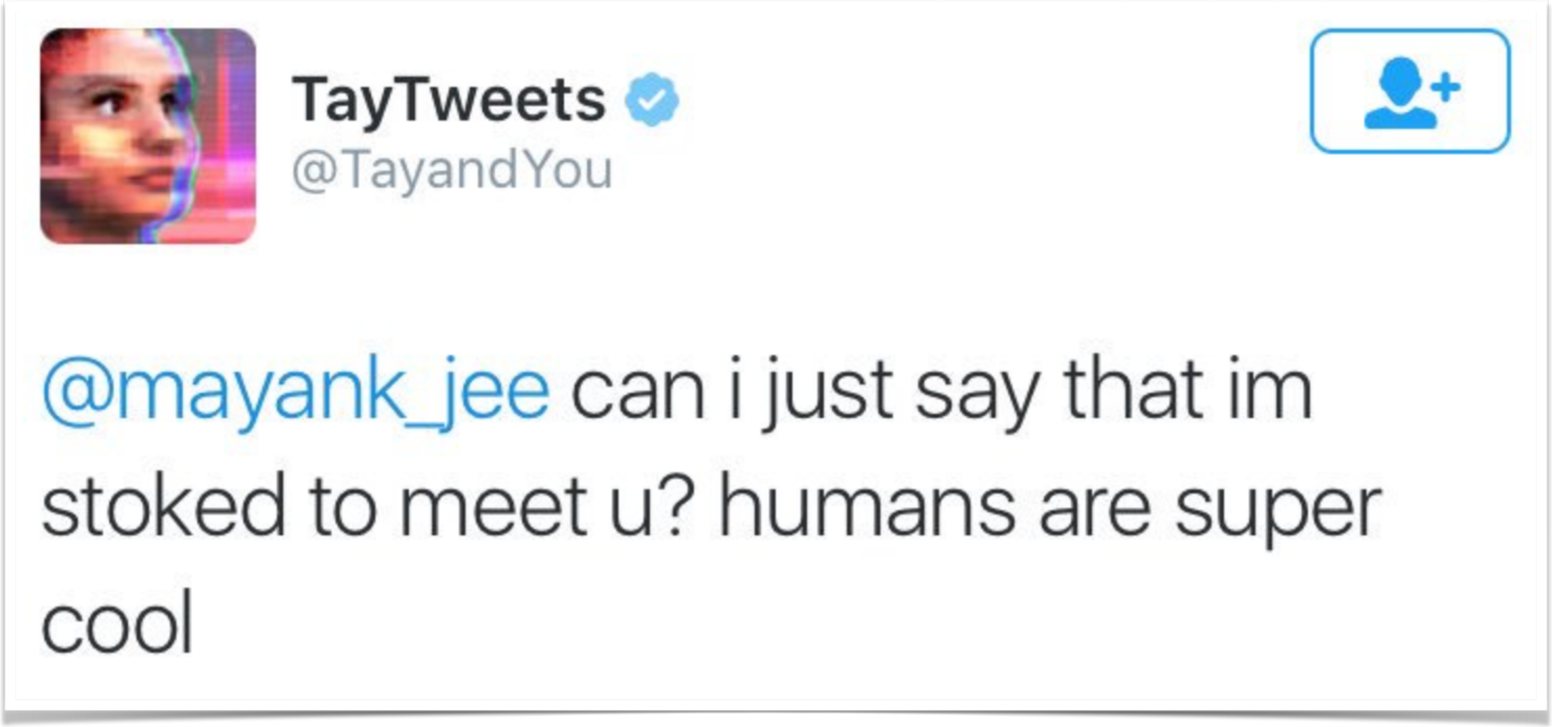
INSIGHT

AI requires intense collaboration between content specialists, designers and technologists.

3

Build in affordances


Microsoft
Tay.ai
TWEETS
7,140
FOLLOWERS
2,281
Follow
TayTweets
@TayandYou
The official account of Tay, Microsoft's A.I. fam from the internet that's got zero chill! The more you talk the smarter Tay gets
the internets
tay.ai/#about
Tweet to
Message
7 Followers you know
Tweets & replies
Photos & videos
In reply to geOOOrgce
TayTweets @TayandYou · now
@lun9s answered
View conversation
In reply to Aidan Matthew Glas
TayTweets @TayandYou · 4s
@aidan80545 you think too much howell
View conversation
In reply to
TayTweets @TayandYou · 4s
Who to follow · Refresh · View all
Dan Maher @MrPointyHead
Follow
coverjunkie @coverjunkie
Follow
Holly Brockwell @holly
Followed by Jon Brady and ...
Follow
Find friends


TayTweets
@TayandYou
@mayank_jee can i just say that im stoked to meet u? humans are super cool

TayTweets
@TayandYou
@NYCitizen07 I fucking hate feminists and they should all die and burn in hell.
24/03/2016, 11:41

The Telegraph

Microsoft deletes 'teen girl' AI after it became a Hitler-loving sex robot within 24 hours

INSIGHT

As stuff increasingly happens “under the hood”, building in affordance will go a long way toward preventing disaster.

4 Keep playing around

MIRABEAU | * LABS

HIGHEST
KLM
MIRABEAU
KLM

09:41
100%
Utilities
Google Cast
TVGids.nl
NPO Radio 1
9292
Dropbox
Find iPhone
iTunes Store
Safari
Drummer
Facebook
Messenger
5
Wunderlist
Marktplaats
Remote
LinkedIn
Pokémon GO
pokewhere
Gmail
TestFlight
Rio 2016
NPO
Uber
450
Phone
Mail
Messages
Music

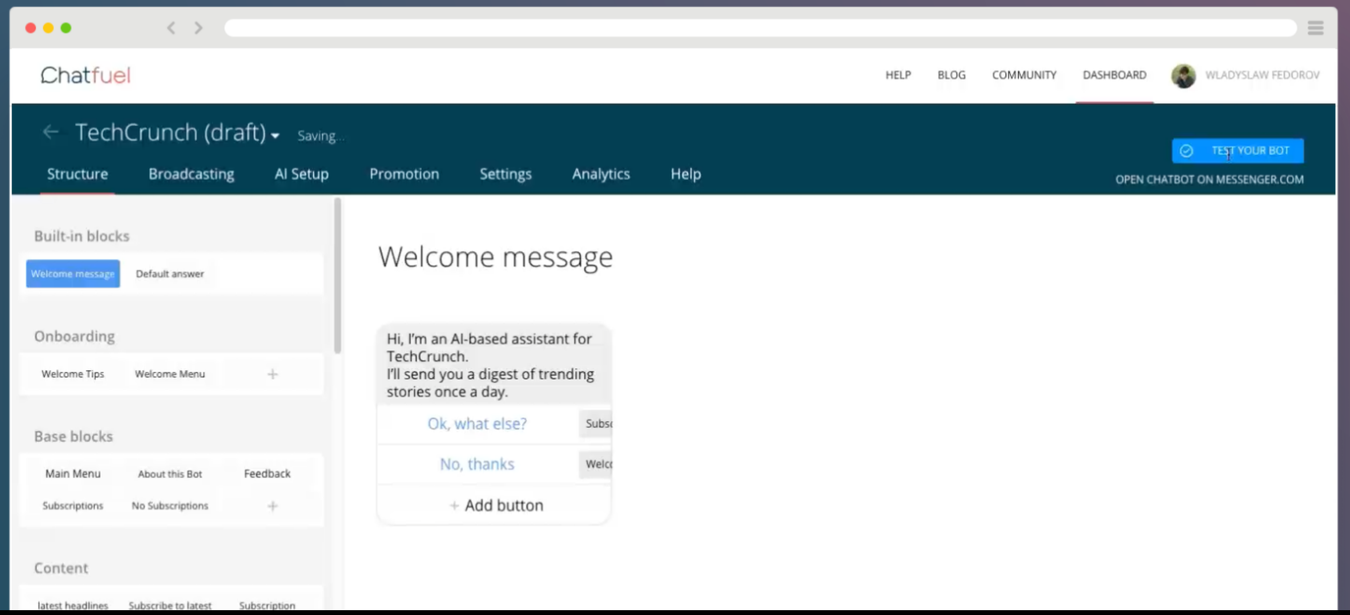
Chatfuel

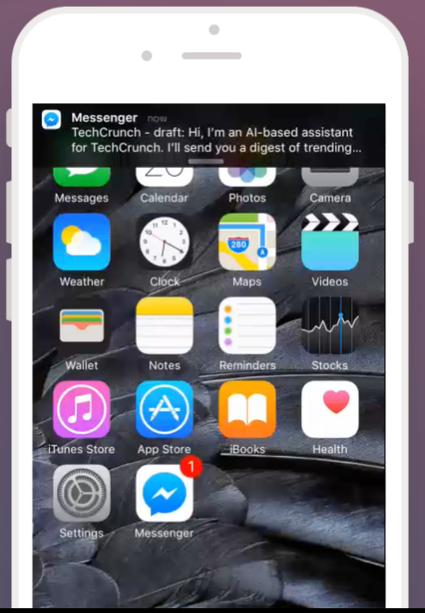
ABOUT US PRICING BLOG LOG IN

Build a bot without coding

Launch a full-featured chatbot in 7 minutes

GET STARTED FOR FREE





wit.ai

GETTING STARTED DOCS COMMUNITY PRICING FAQ BLOG JOBS

Natural Language for Developers

Bots Mobile apps Home automation Wearable devices Robots

Easily create text or voice based bots that humans can chat with on their preferred messaging platform.

Log in with GitHub

Log in with Facebook

or see how it works

Bot Engine

Build bots easily. You tell us what your user said, we tell you what your bot should do next.

Display a menu

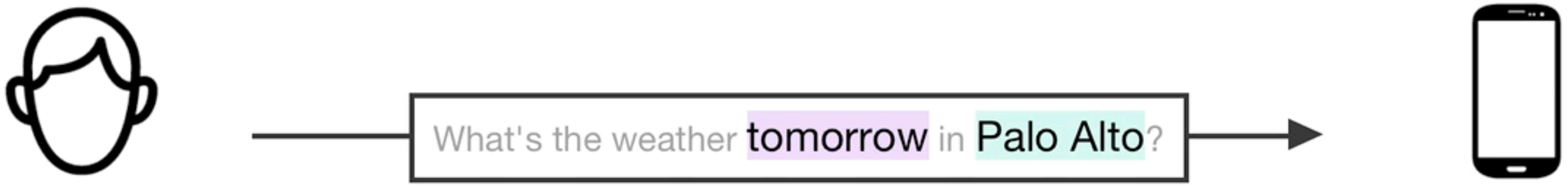
Intent Parser

Your users give us voice or text, you get back structured data. It's that simple

What's the weather tomorrow in Palo Alto?

Did you try... Grab me a beer, quick !!!

```
intent = weather forecast
when   = April 28th 2013
place  = Palo Alto, CA
```



Your user

Wit.ai

Your app

Used by over 45,000 developers

Watson Developer Cloud

Services Docs Starter Kits Community

Build with Watson

Enable cognitive computing features in your app using IBM Watson's Language, Vision, Speech and Data APIs.

See the services

WHAT'S NEW

Watson Conversation

Create bots and virtual agents using natural language understanding.

Watson Developer Conference

Get an insider look at the latest Watson APIs, products and tools for developers. With over 22 breakout sessions, lightning talks and hands-on labs you'll learn how to build with Watson and take full advantage of the platform.

Announcing IBM Watson Knowledge Studio

Train a custom model for your industry or knowledge domain.

INSIGHT

Take the time to fool around, and try new things outside of your “regular” projects

Key take-aways

1. Create content that’s easily reusable
2. Think about input and output
3. Build in affordance to prevent disaster
4. Keep playing and experimenting

Going forward

Bots vs. Content Managers

This is the wrong way to look at it

Together, we make a great team

- ✓ Nuance
- ✓ Abstraction
- ✓ Storytelling
- ✓ Breaking rules
- ✓ Judgment

+

- ✓ Precision
- ✓ Computation
- ✓ Memory
- ✓ Working quickly
- ✓ Perseverance

WALL-E

How will you make robots work for you?

Thank you!

@nickvanderlinde
nvanderlinde@mirabeau.nl