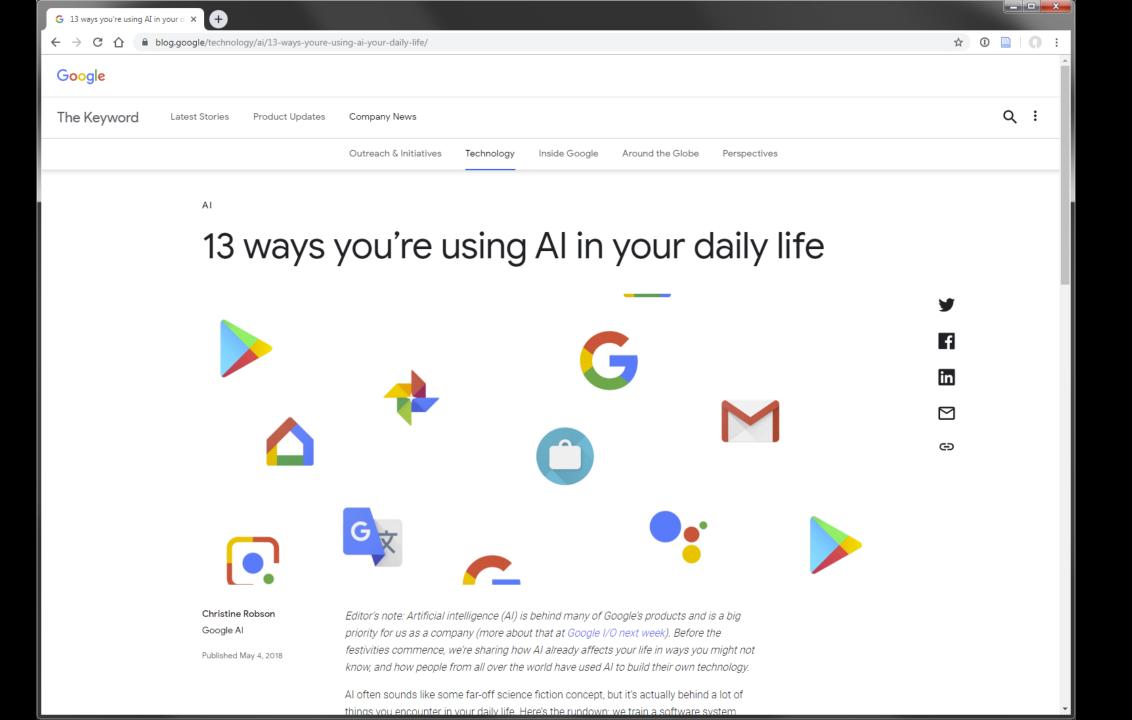
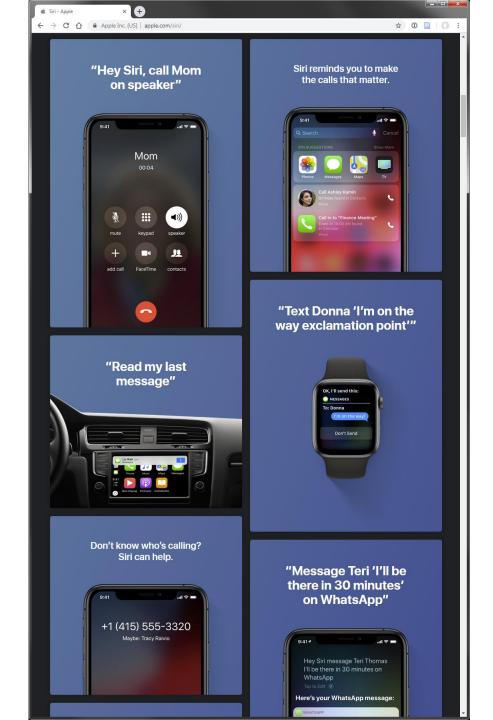
MARKETING DIGITAL & INTELLIGENCE ARTIFICIELLE

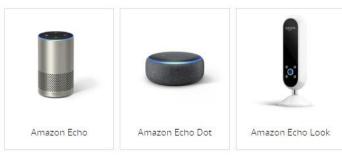
Prof. Dr. Arnaud Dufour Haute École d'Ingénierie et de Gestion du Canton de Vaud Numerik Games Festival | Yverdon-les-Bains | 29.08.19 1. l'IA investit l'environnement du client







DEVICES - ALEXA-ENABLED





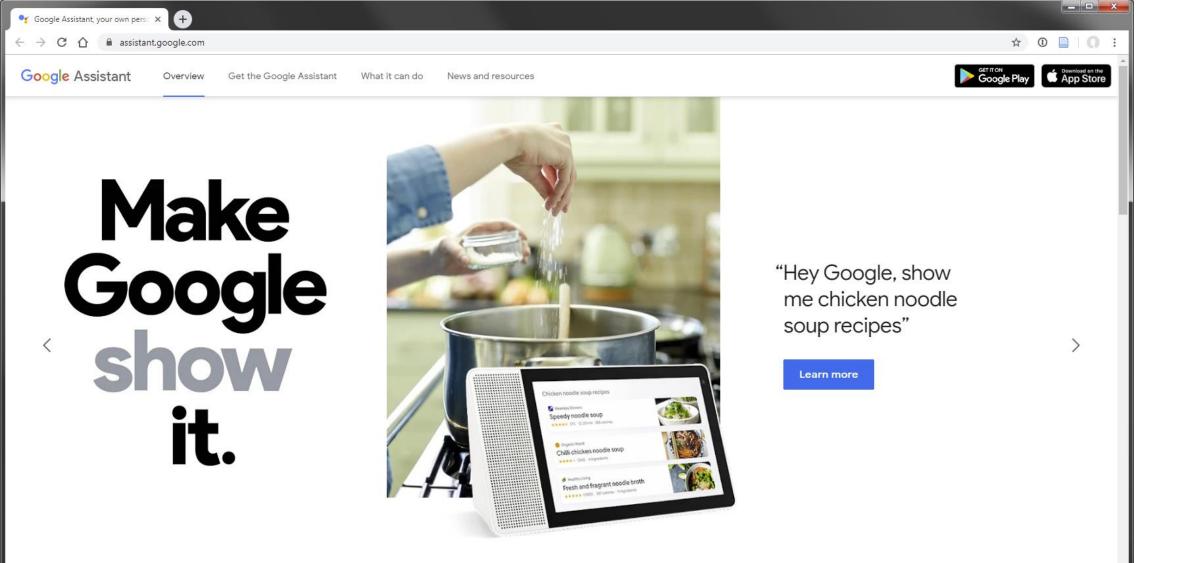






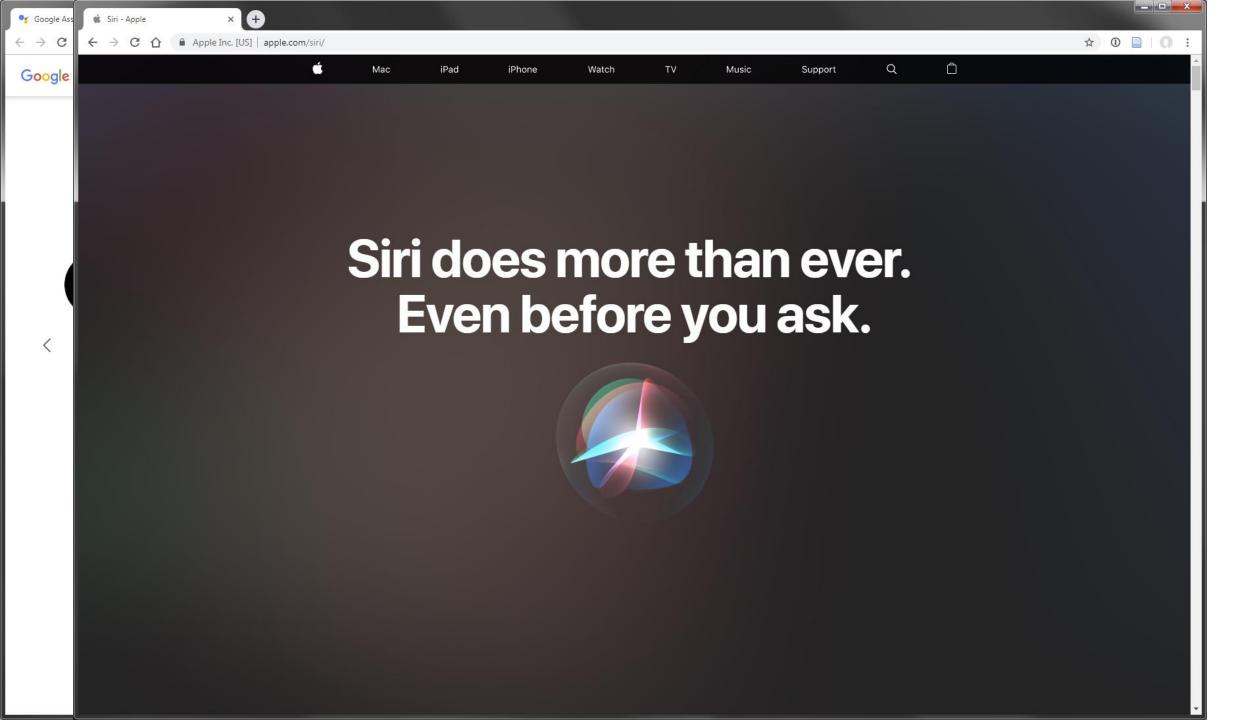


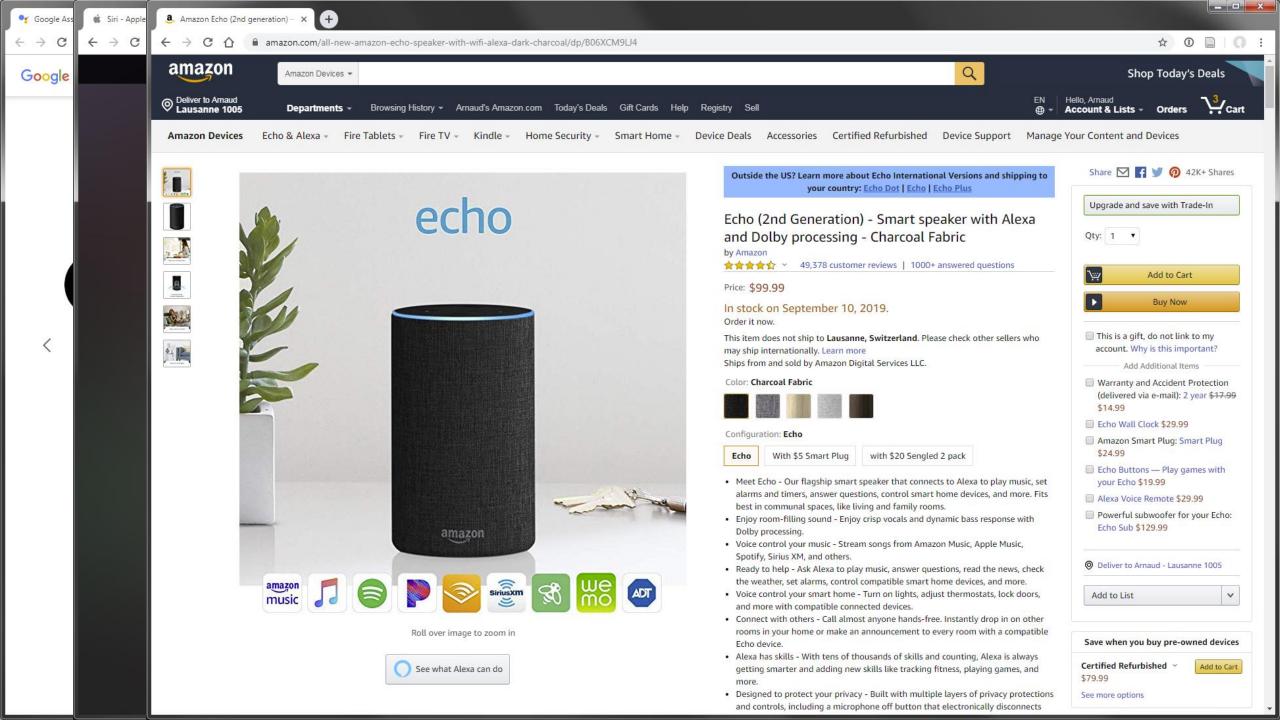




Ready to help, wherever you are

.0000

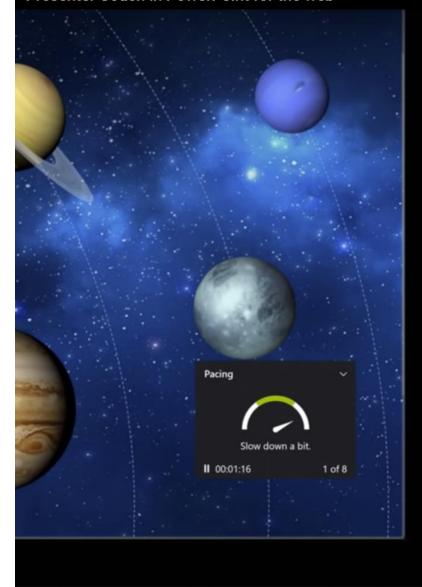












The tool gives you real-time feedback on your pacing





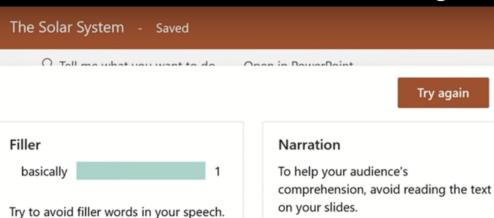










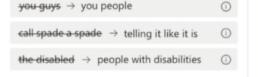


Sensitive Phrases

Consider avoiding or replacing these terms or phrases, which might offend some people.

Try tips like taking a deep breath

before you speak to help you relax, pausing before you speak, etc.





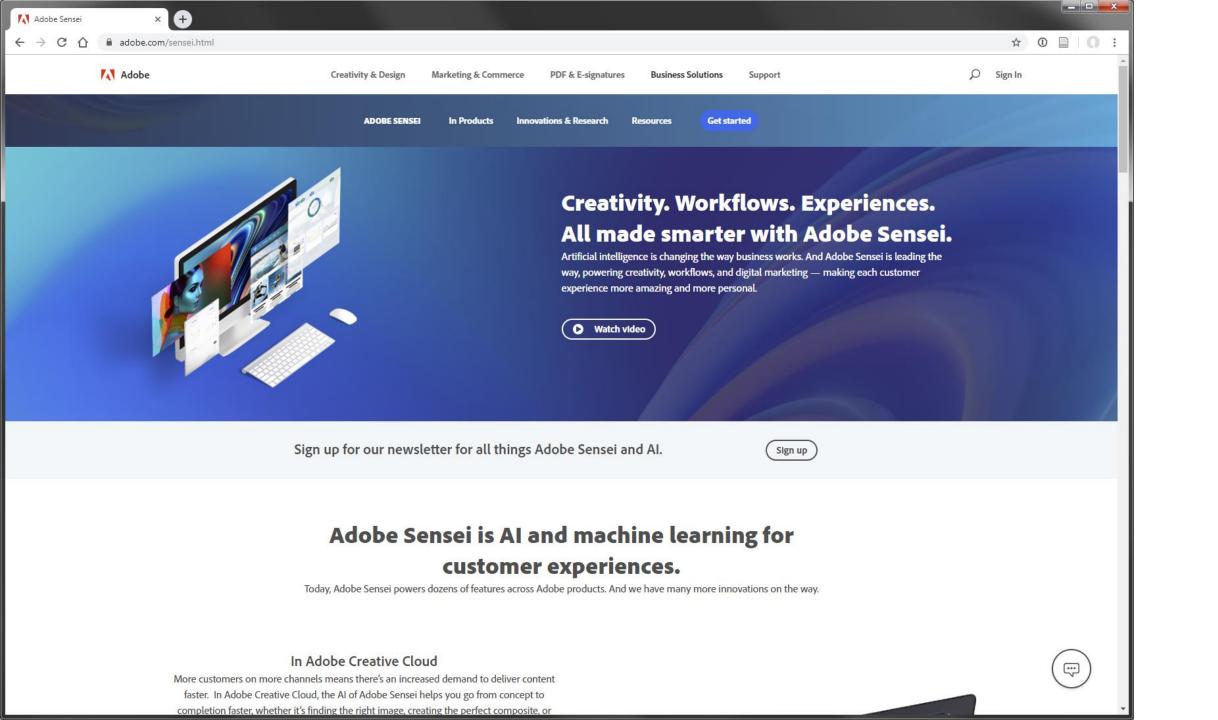
Here are the slides you might want to

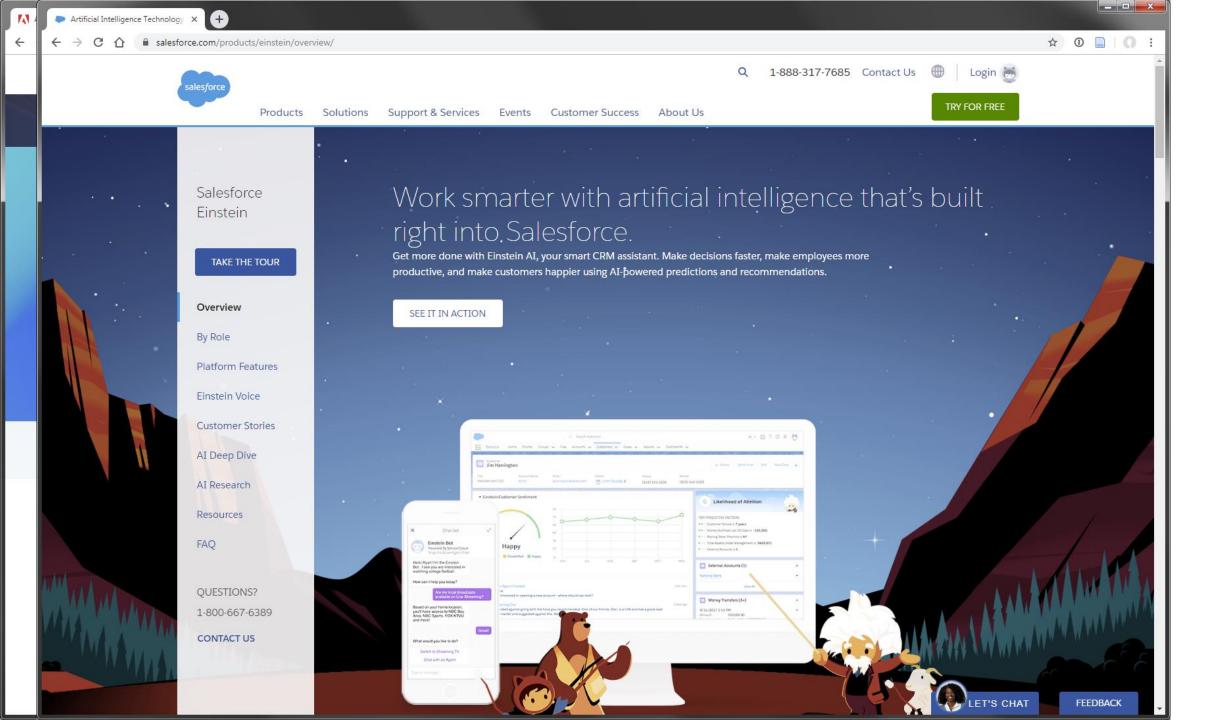


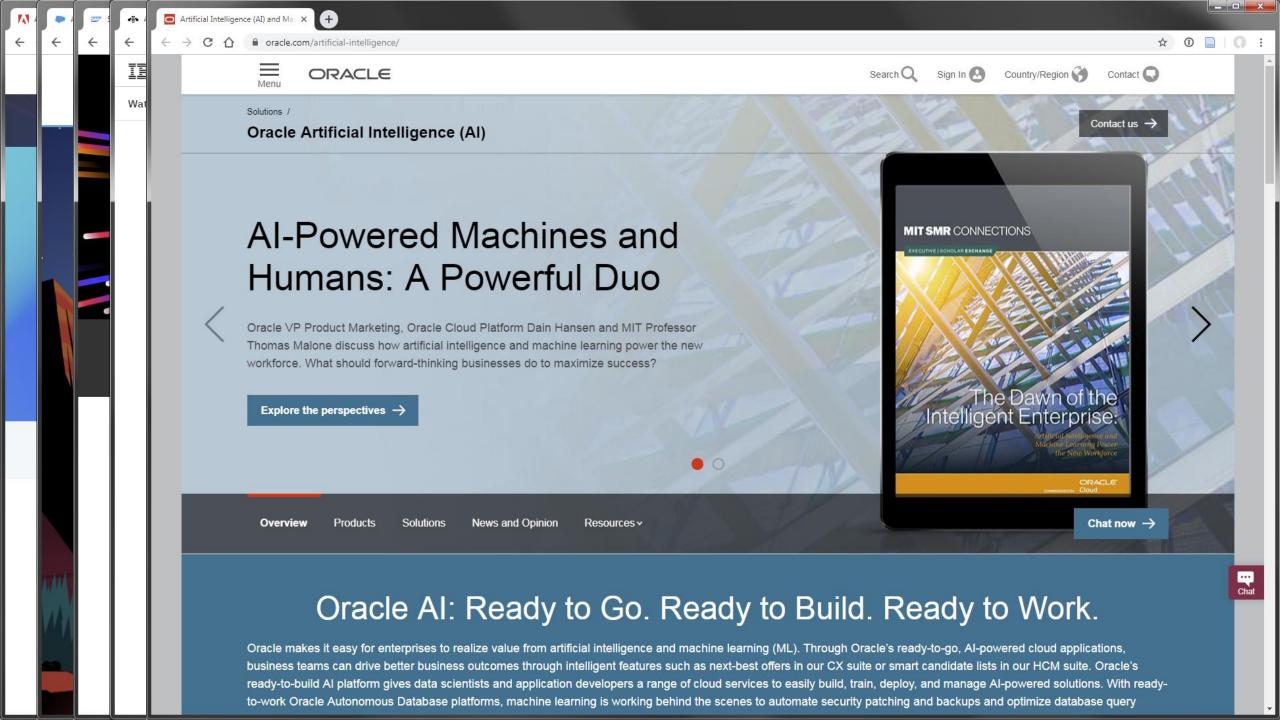
Slide 4

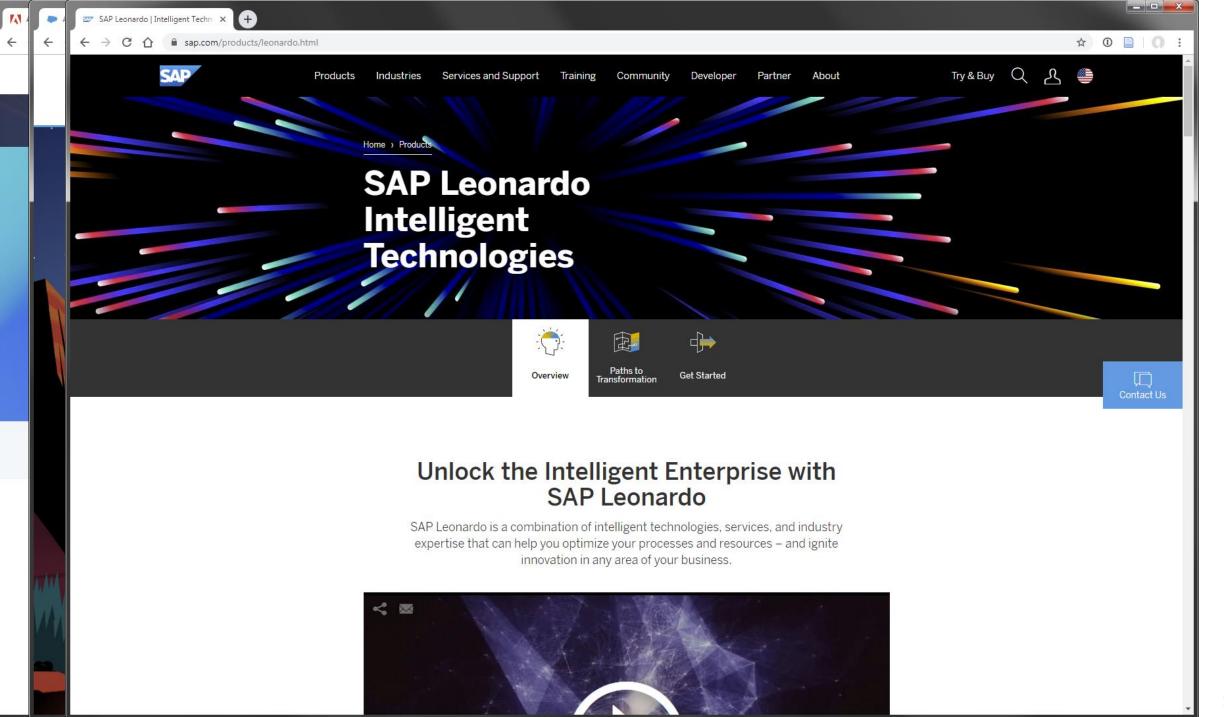


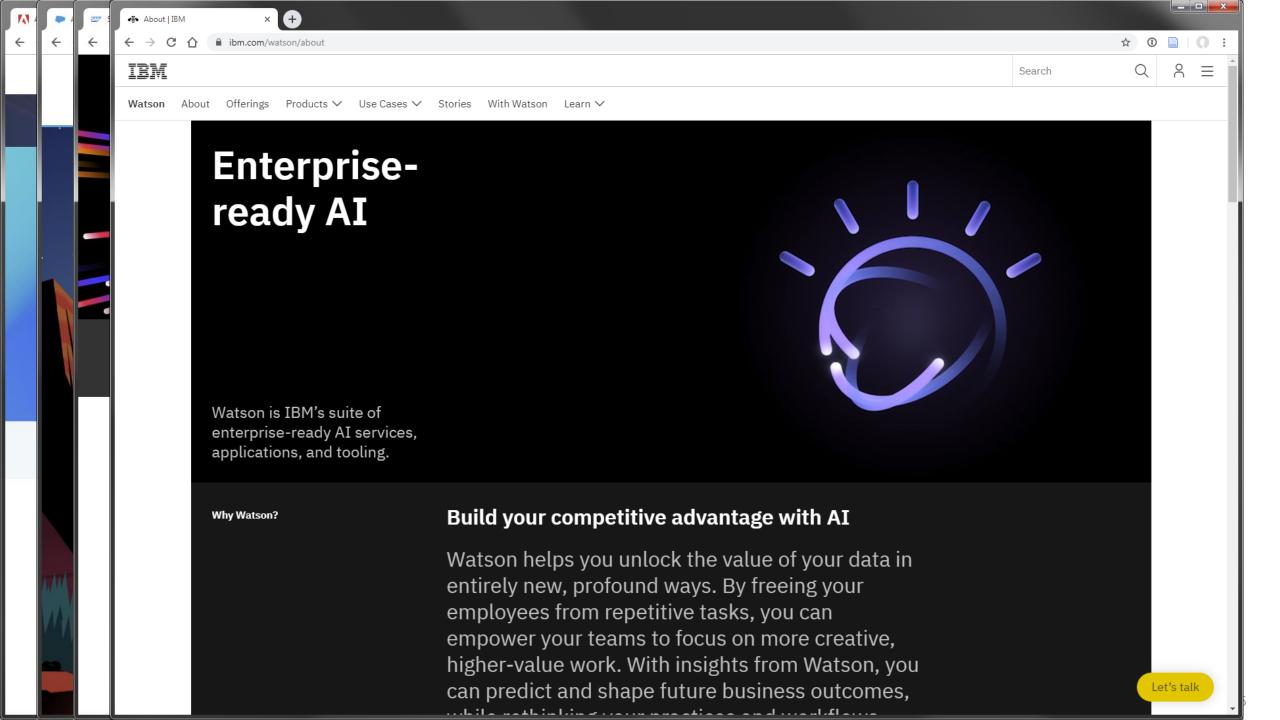


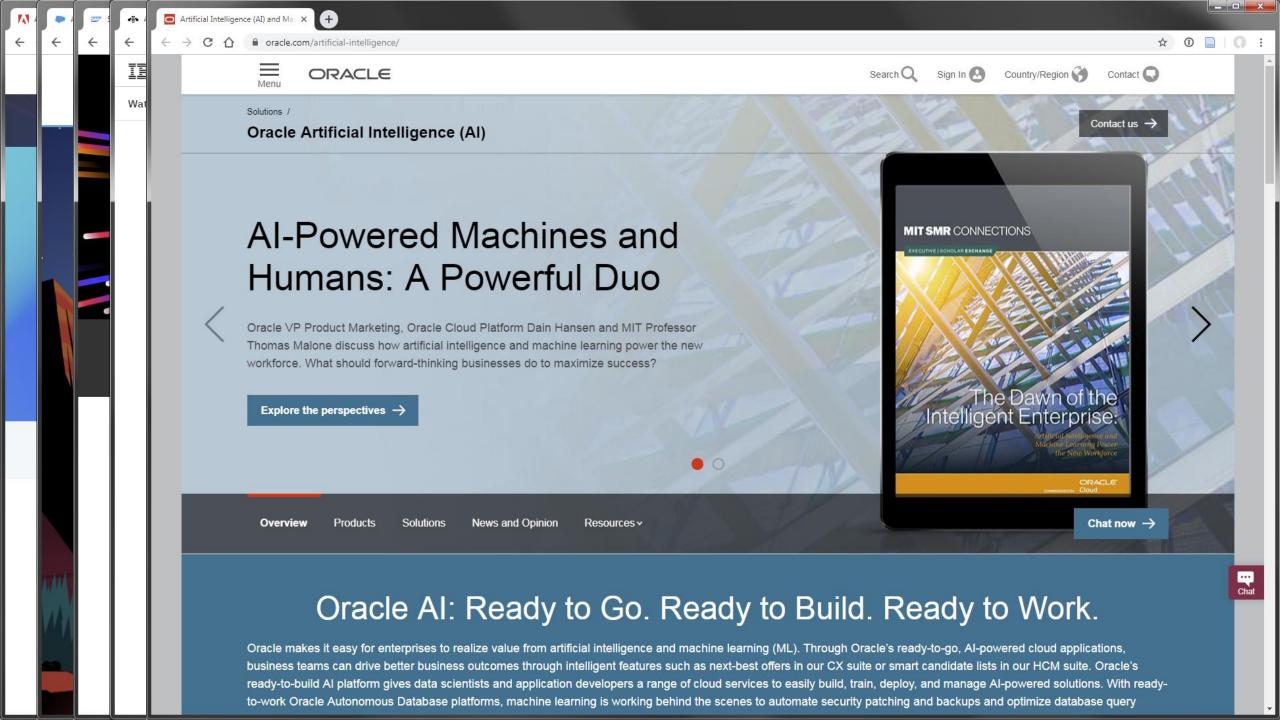


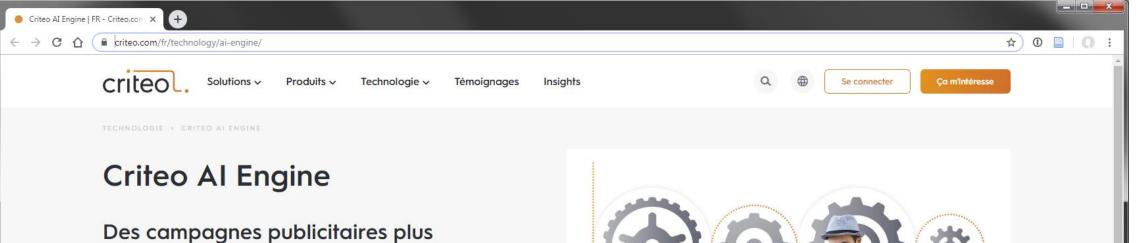












intelligentes

Misez sur la puissance de l'intelligence artificielle pour des annonces optimisées, hyperpertinentes et diffusées à la bonne personne au bon moment. Les algorithmes avancés de l'IA analysent les insights de Criteo Shopper Graph en temps réel, soit près d'1,9 milliards de consommateurs actifs par mois et 800 milliards de dollars de données transactionnelles chaque année. Plus il engrange d'informations sur le comportement de vos shoppers, plus le Criteo Al Engine se rapproche de vos objectifs de campagne.



Les avantages

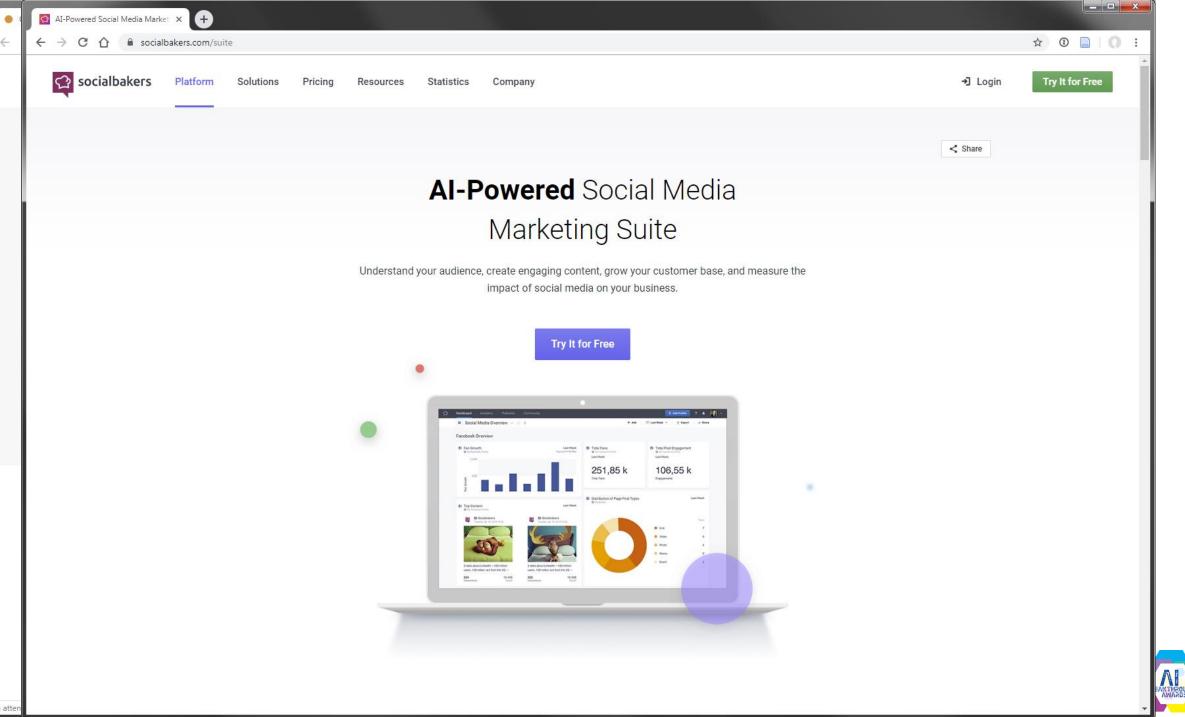
Créez une véritable personnalisation 1:1

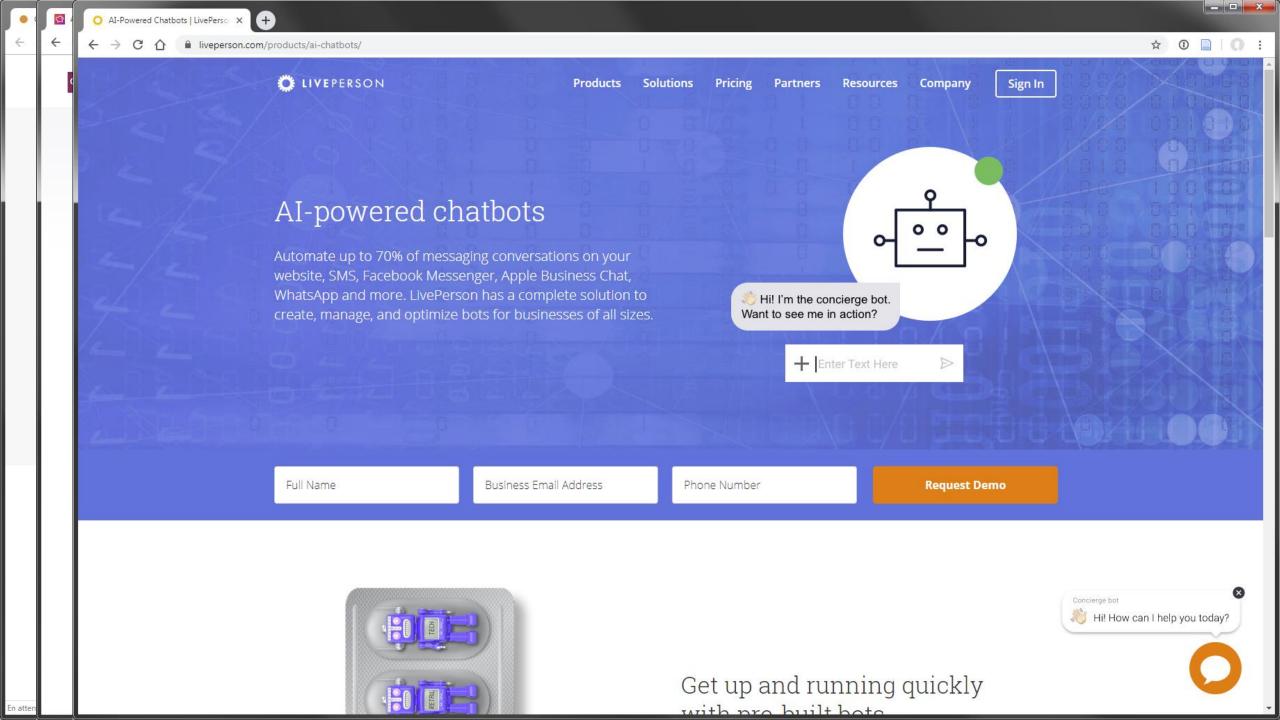
Criteo AI Engine analyse plus de 120 signaux d'achat pour créer les annonces les plus susceptibles d'engager chaque utilisateur. Le contexte est également pris en compte à chaque impression, pour des annonces toujours plus adaptées en fonction des préférences consommateurs, à chaque étape du parcours d'achat.

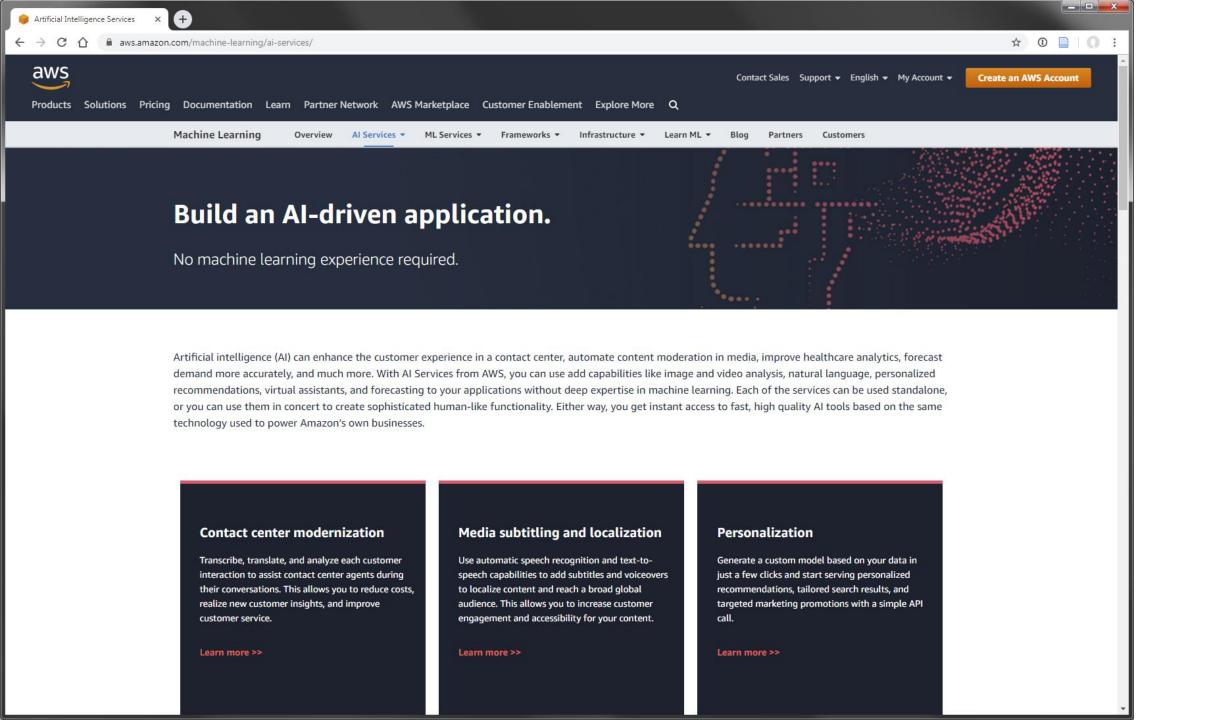
Atteignez vos objectifs

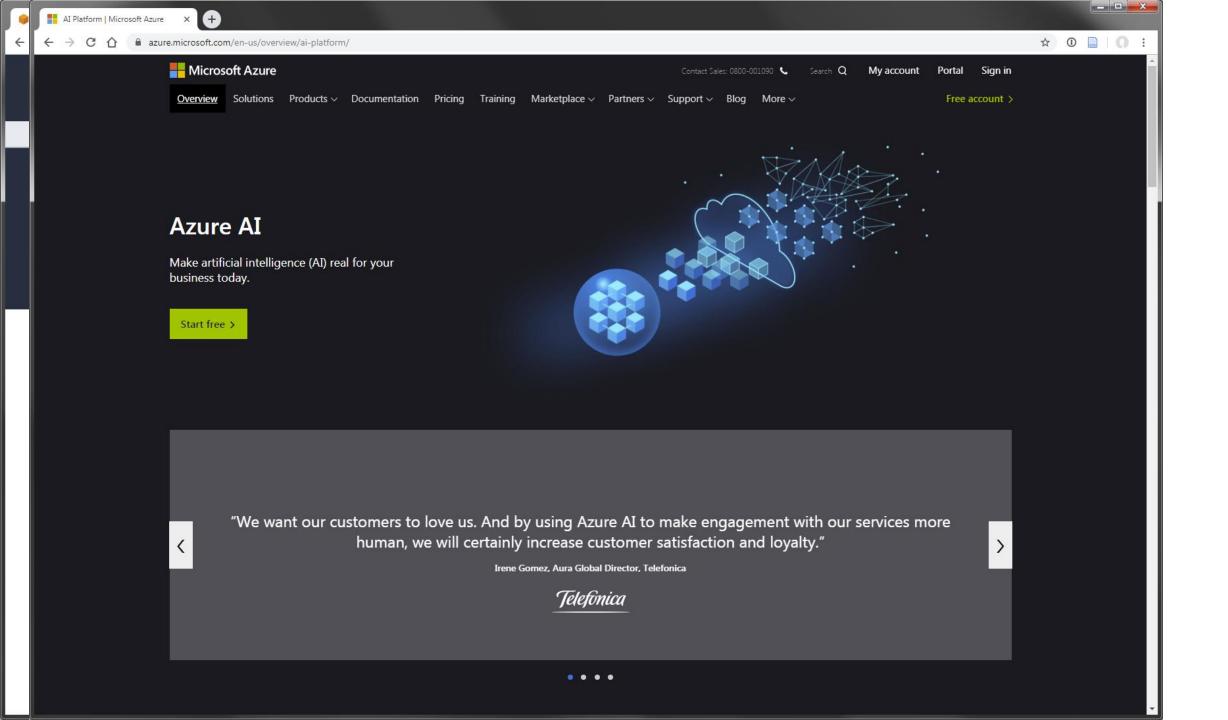


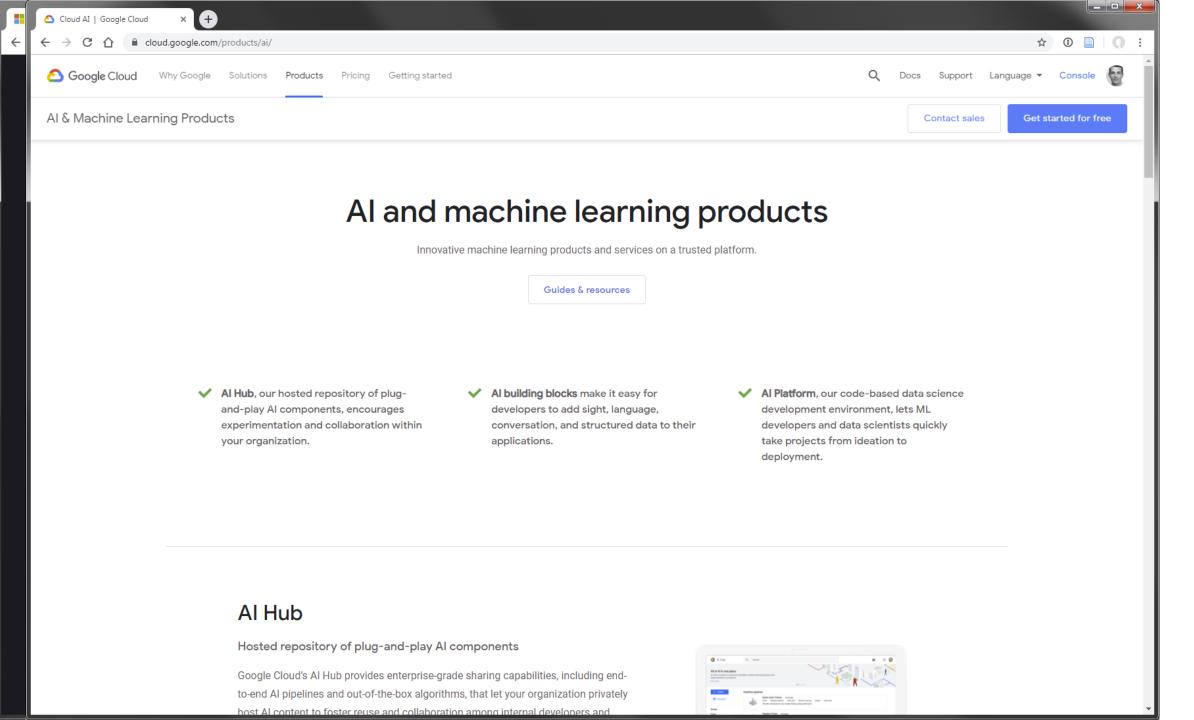


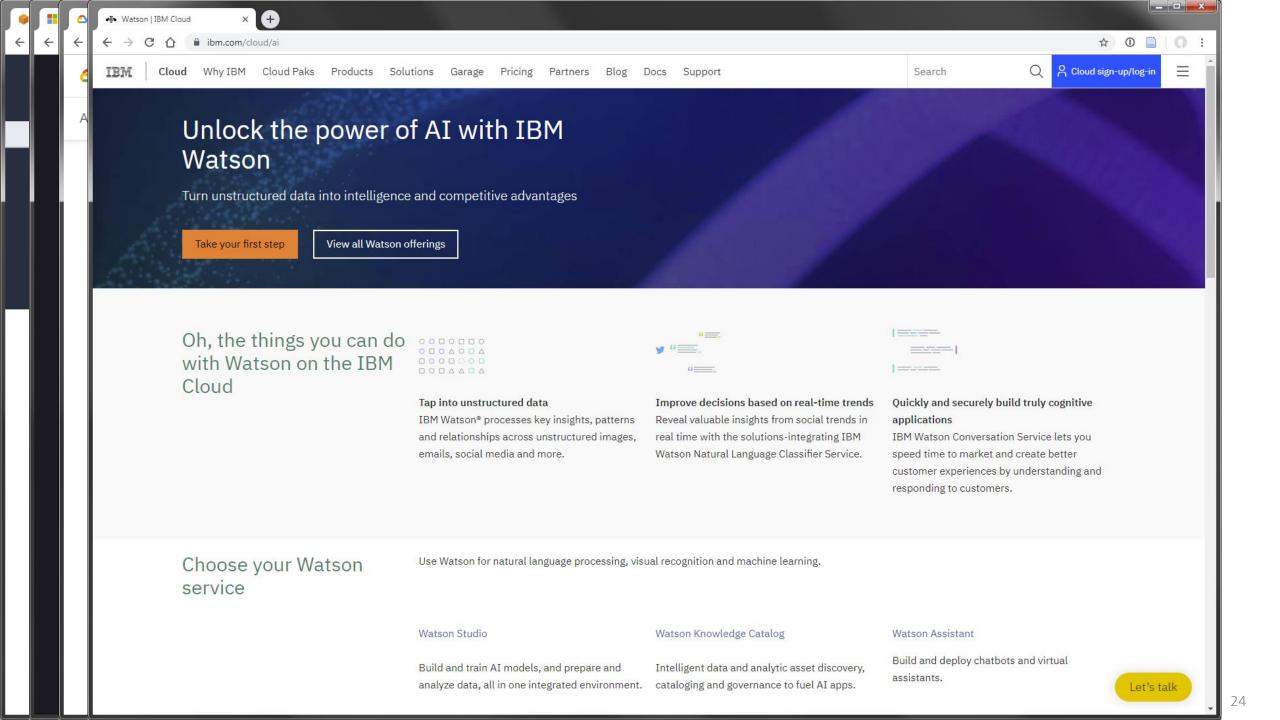


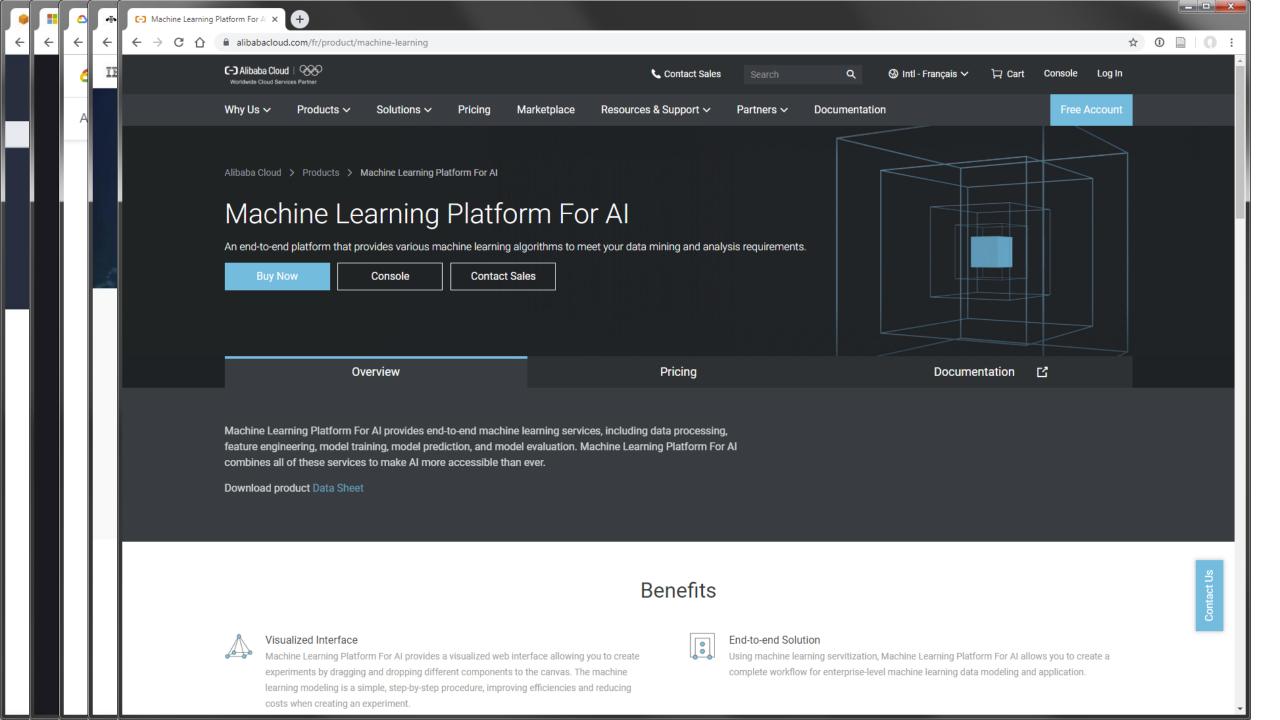


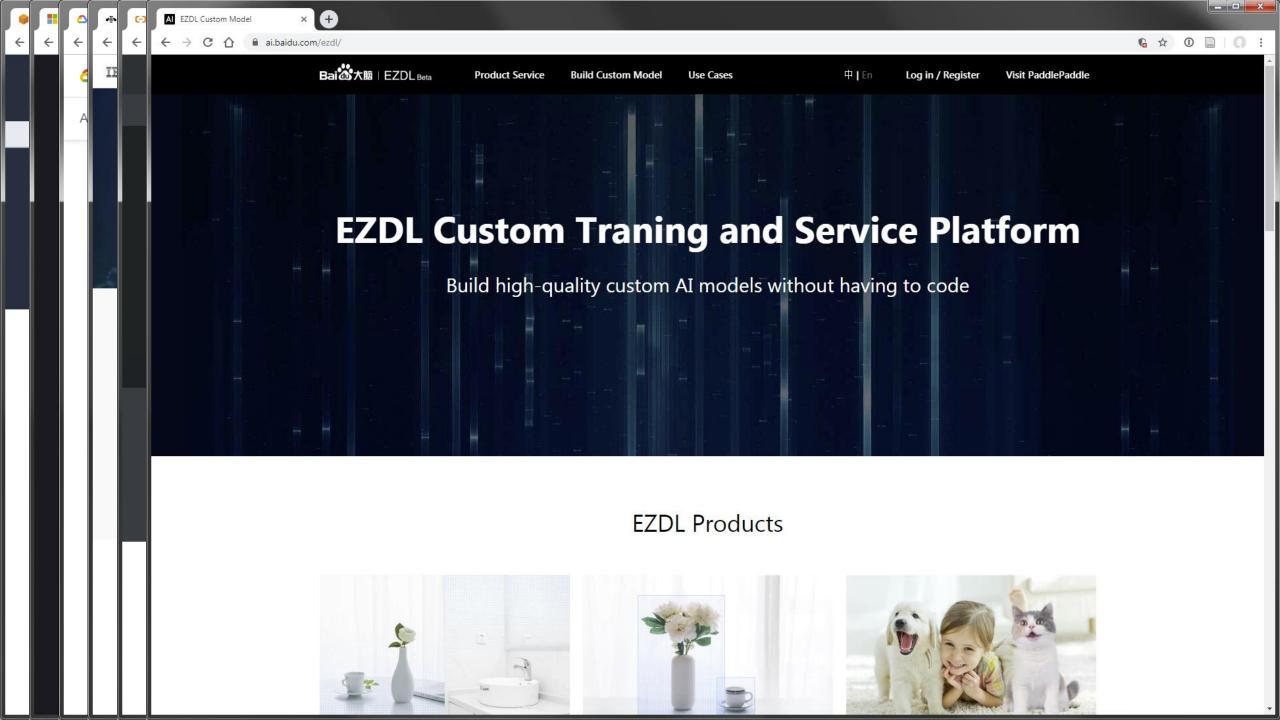














Amazon Personalize





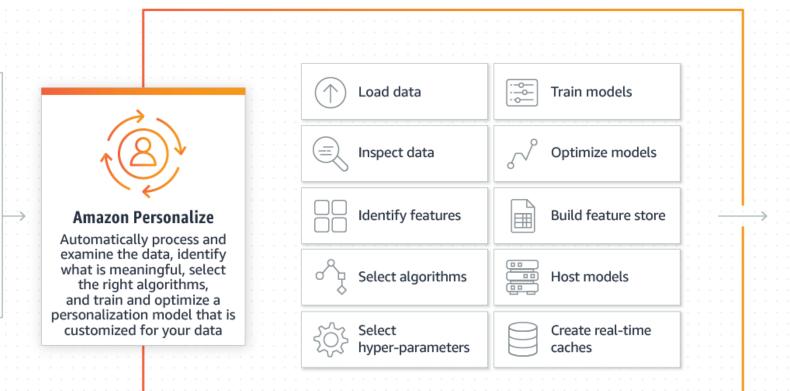
Amazon S3

Store your inventory and user demographics data in Amazon S3



Amazon Personalize API

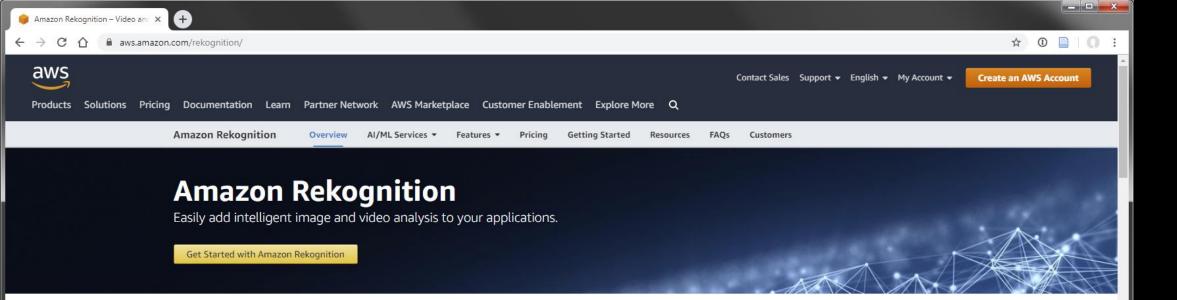
Stream use activity from your application using the Amazon Personalize API or JavaScript library





Customized Personalization API

Provides Amazon Personalize with an activity stream to generate real-time recommendations or request recommendations in bulk



Amazon Rekognition makes it easy to add image and video analysis to your applications. You just provide an image or video to the Rekognition API, and the service can identify the objects, people, text, scenes, and activities, as well as detect any inappropriate content. Amazon Rekognition also provides highly accurate facial analysis and facial recognition on images and video that you provide. You can detect, analyze, and compare faces for a wide variety of user verification, people counting, and public safety use cases.

Amazon Rekognition is based on the same proven, highly scalable, deep learning technology developed by Amazon's computer vision scientists to analyze billions of images and videos daily, and requires no machine learning expertise to use. Amazon Rekognition is a simple and easy to use API that can quickly analyze any image or video file stored in Amazon S3. Amazon Rekognition is always learning from new data, and we are continually adding new labels and facial recognition features to the service.



AWS re:Invent 2017 Introducing Amazon Rekognition (2:56)

Benefits

Simple integration

Batch & real-time analysis

Amazon Rekognition makes it easy to add visual analysis features to your application with easy to use APIs that don't require any machine learning expertise.

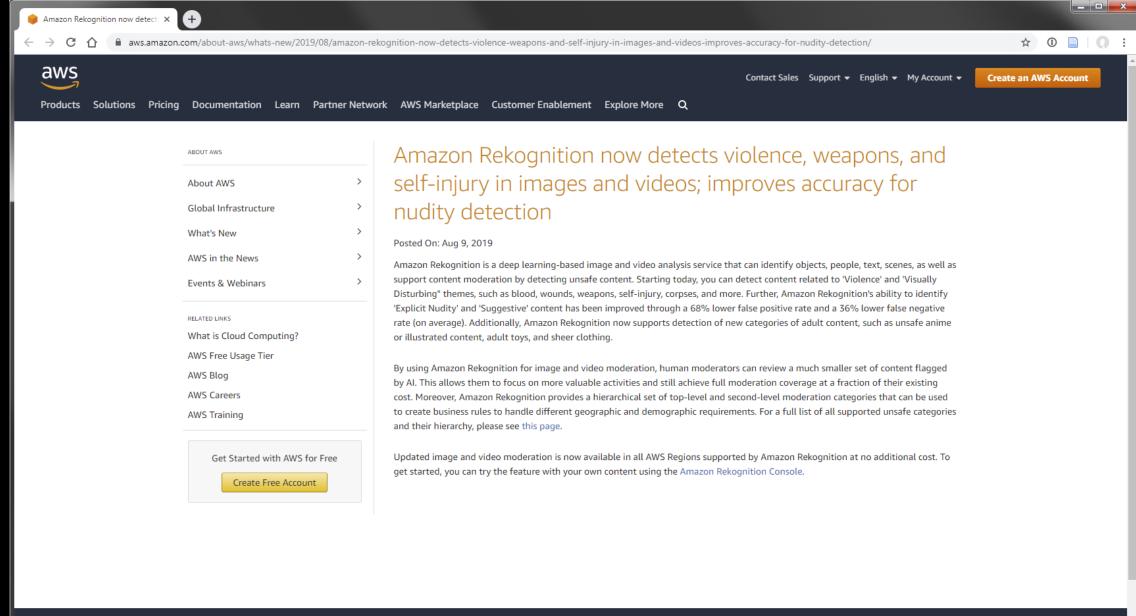
Continually learning

The service is continually trained on new data to expand its ability to recognize objects, scenes, and activities to improve its ability to accurately recognize.

Fully managed

Amazon Rekognition provides consistent response times regardless of the volume of requests you make. Your application latency remains consistent, even as your request volume increases to tens of millions of requests.

Low cost



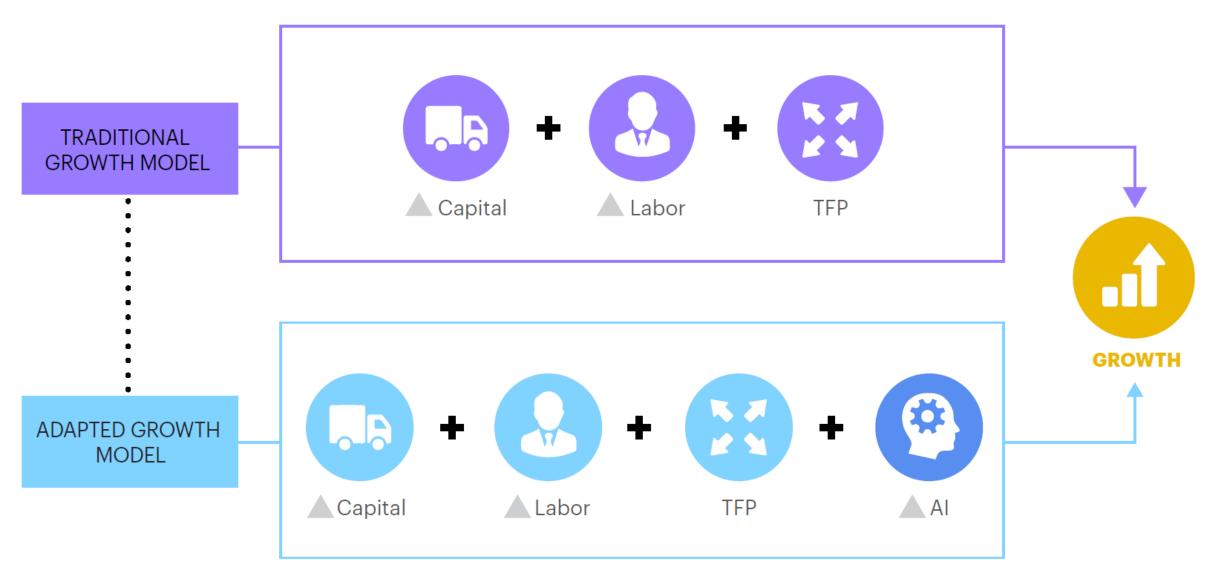




$$Y = K^{\alpha} \cdot L^{\beta} \cdot A$$

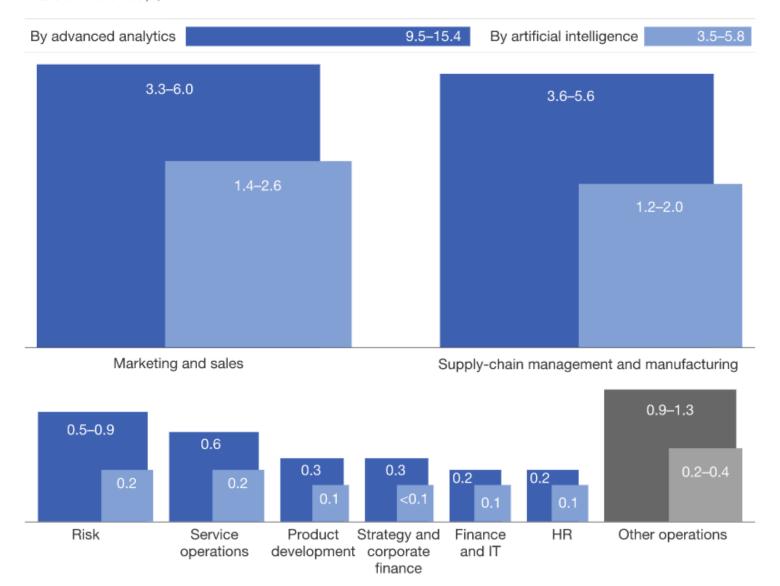
FIGURE 5: THE AI GROWTH MODEL

Our model adapts the traditional growth model by including AI as a factor of production.



> accenture Artificial intelligence's impact is likely to be most substantial in marketing and sales as well as supply-chain management and manufacturing, based on our use cases.

Value unlocked, \$ trillion





Who's Burning the Amazon? Rampant Capitalism

Market forces and the administration of Jair Bolsonaro are supercharging the deforestation that's imperiling the world's biggest tropical rainforest.

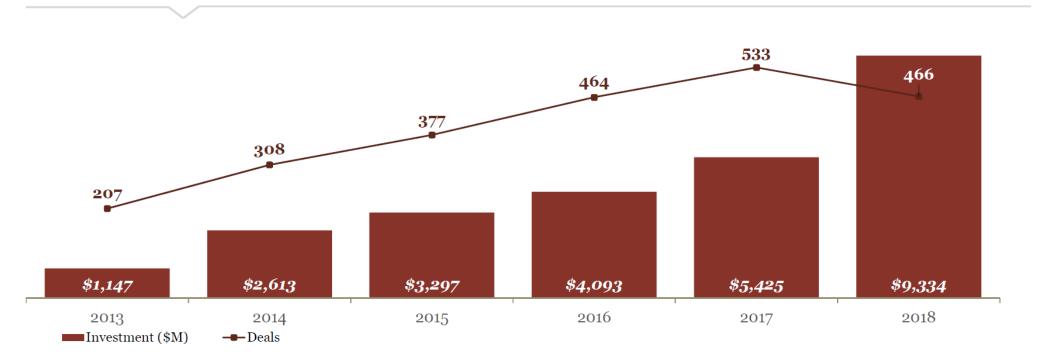


AI: US annual funding



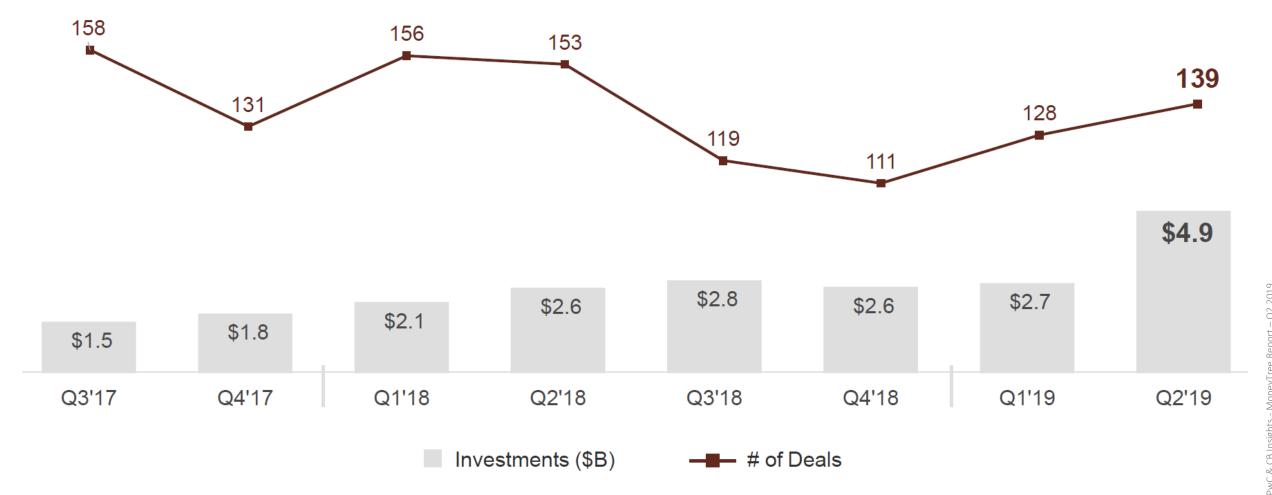
AI-related funding jumps sharply after increasing every year since 2013

- AI-related companies raised \$9.3B in 2018, a 72% increase compared to 2017.
- Deal activity dipped to 466 from 533 in 2017, after increasing for four years.



PwC | CB Insights MoneyTree™ Report Q4 2018

Al-related financing increases for the second-straight quarter Artificial Intelligence deals and dollars – Quarterly



Source: PwC / CB Insights MoneyTree™ Report Q2 2019

The Al Marketing Landscape 2019



4. et concrètement... quelles opportunités de l'IA en marketing ?

ENGAGE

Develop ongoing loyalty programs that will bond customers to your brand.

DISCOVER

Drive awareness and trigger interest.

ASK

Empower self-service and customer support that solves problems quickly.



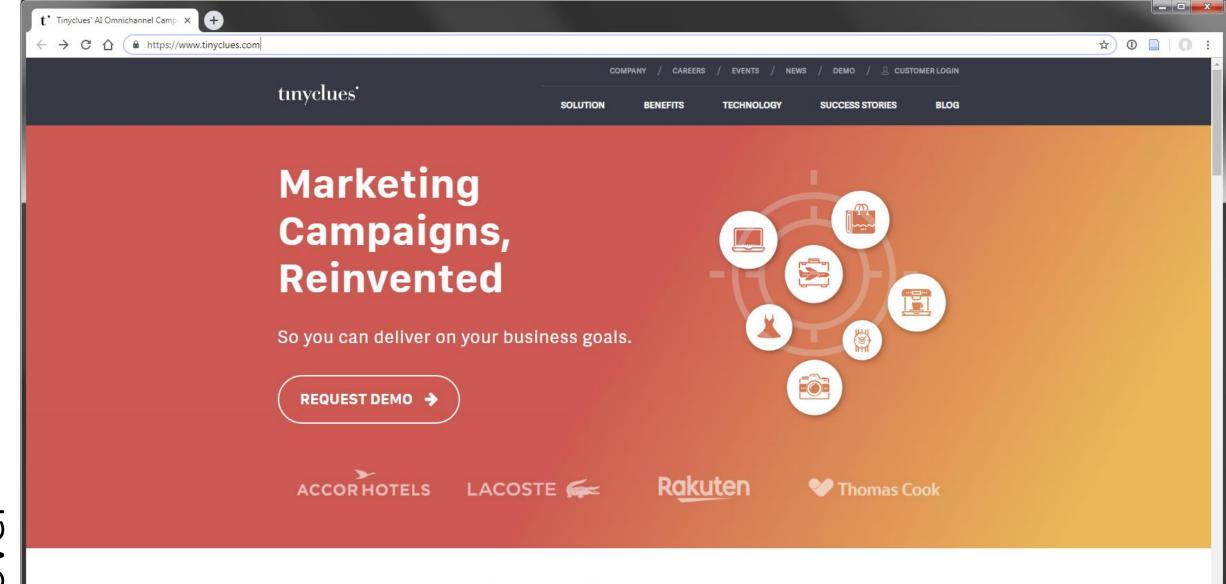
EXPLORE

Offer tools to help customers evaluate options and develop preference.

Drive delight and usage of products.

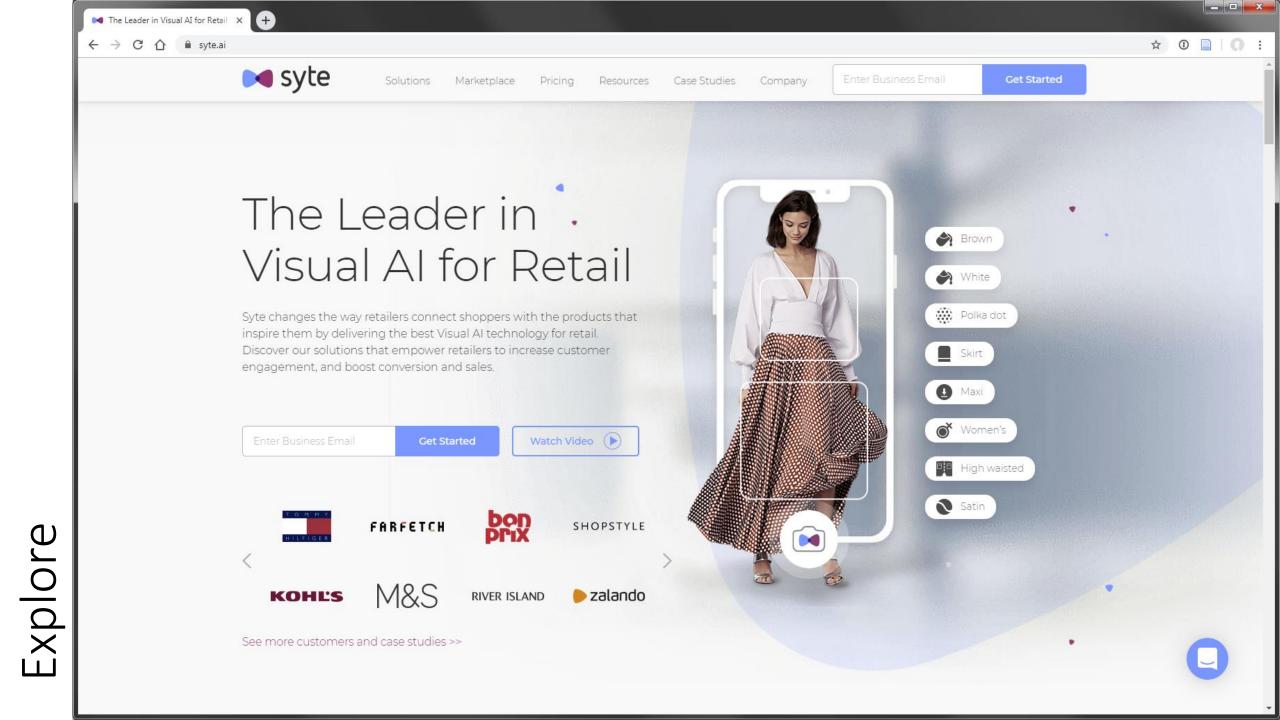
Help customers execute fast, convenient, and secure transactions.

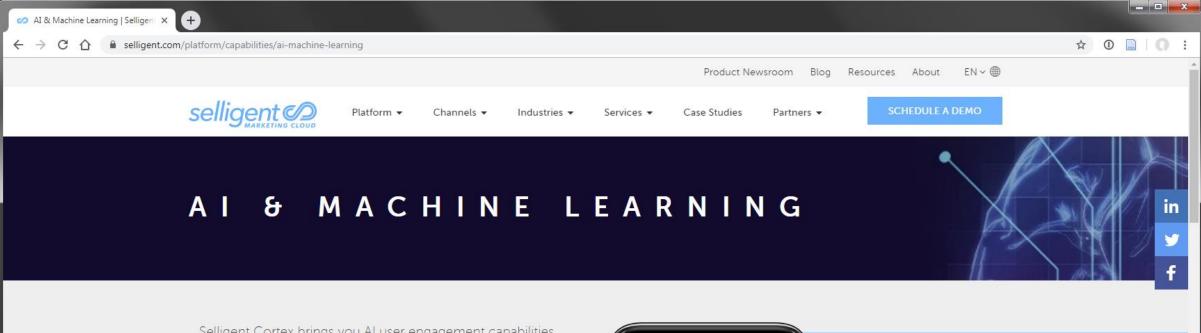


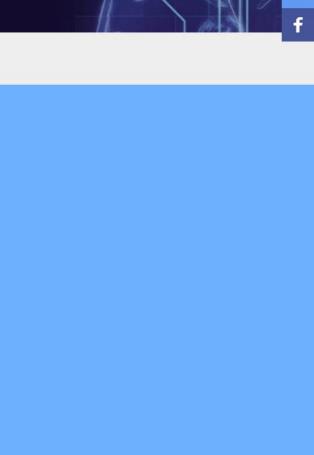


Segment, Plateau, Repeat?
There's a better way. It's Campaign Intelligence.

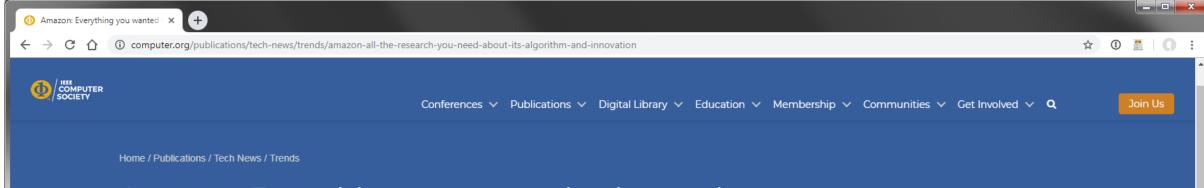
Just bring your marketing goals. Using advanced AI on your first-party data, Tinyclues finds which customers will buy your next offer and maximizes your campaign plan across channels.











Amazon: Everything you wanted to know about its algorithm and innovation

By Michael Martinez

Amazon is such a tech colossus that it can't help but make headlines. It's the world's largest retailer, by market cap. And its chief, Jeff Bezos, is becoming the world's richest man.

Behind Amazon's success is its algorithm and innovation.

Since Amazon's early years, Computer Society researchers have been studying the e-commerce juggernaut and the strategy behind its recommender system, the tool that has changed the way the world shops online.

Our studies into Amazon rank among the most read content in our oeuvre of research and articles, which amounts to more than 650,000 in total, assembled in the Computer Society Digital Library. In fact, a search on "Amazon" yields 14,194 hits in our database.

Here are the highlights of the peer-reviewed research and other articles into Amazon, beginning with a report this year that is now our most popular piece of any content in almost three years.

A recommendation algorithm like no other

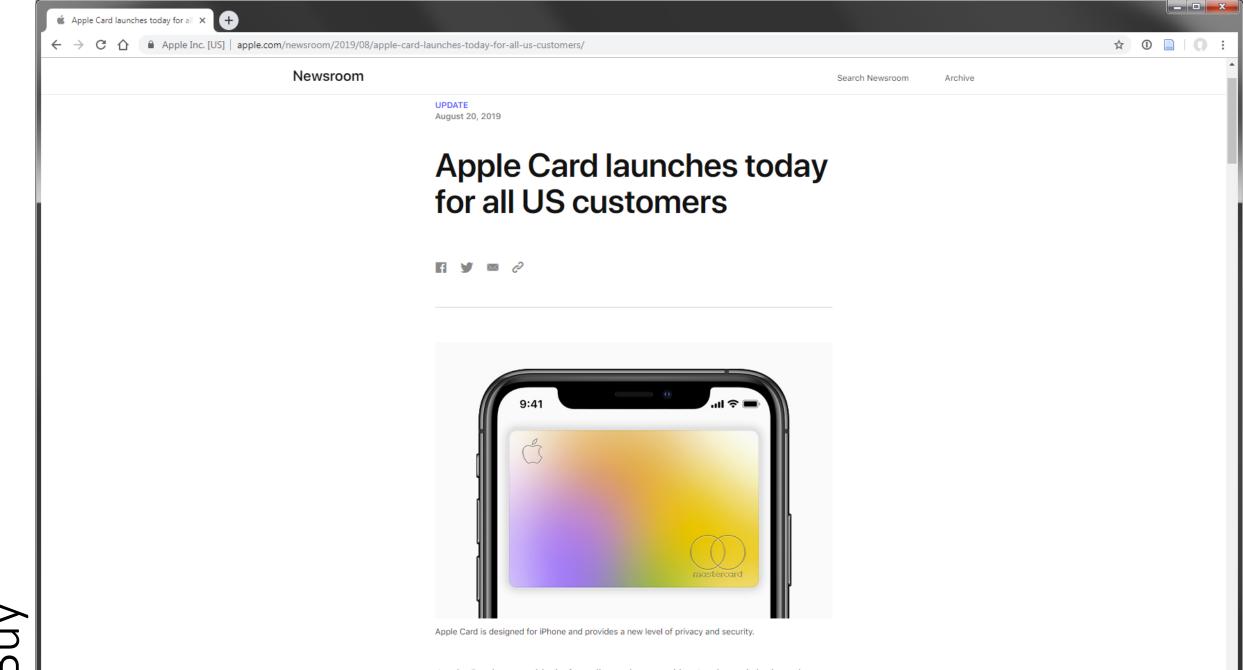
The beauty of Amazon's algorithm is how it uses far less data space, by up to three orders of magnitude.

"Nearly two decades ago, Amazon.com launched recommendations to millions of customers over millions of items, helping people discover what they might not have found on their own.

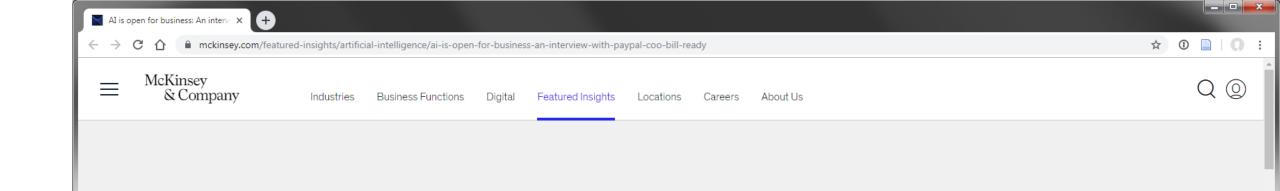
"Since then, the original algorithm has spread over most of the Web, been tweaked to help people find



Amazon's Chief Technology Officer



Apple Card, a new kind of credit card created by Apple and designed to help customers lead a healthier financial life, is available¹ in the US starting today. Customers can apply for Apple Card through the Wallet app on

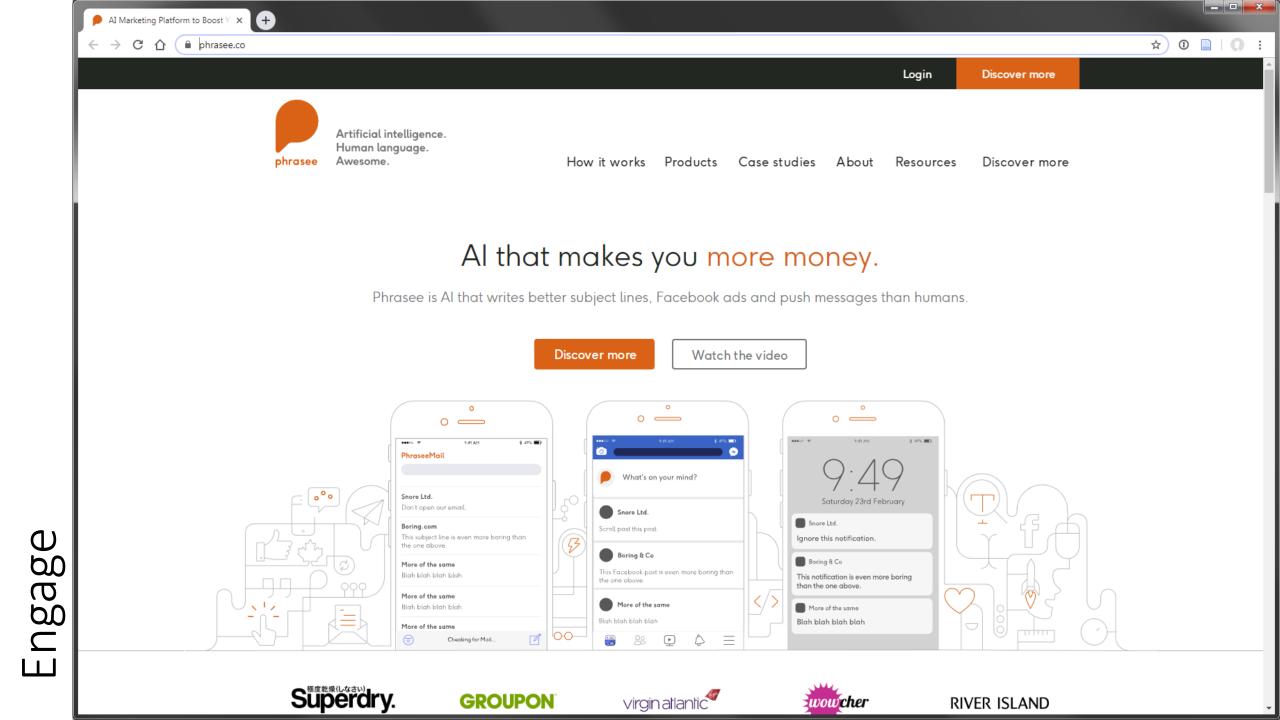


AI is open for business: An interview with PayPal COO Bill Ready

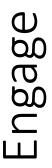
April 2018 | Video

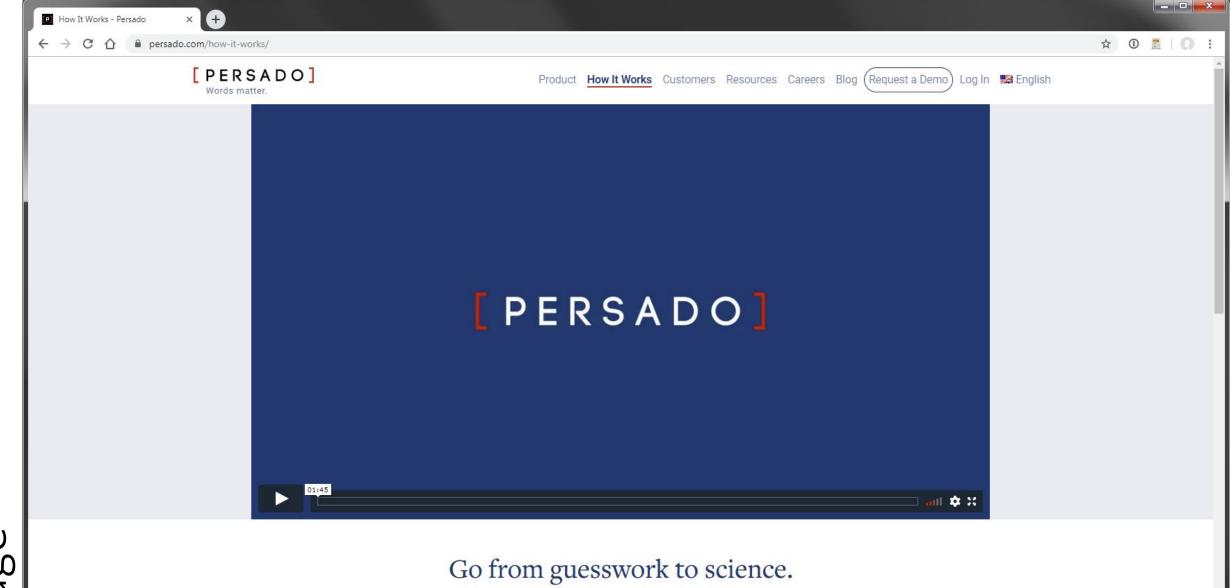


Cloud platforms have begun democratizing artificial intelligence, ushering in a new wave of Al innovation.









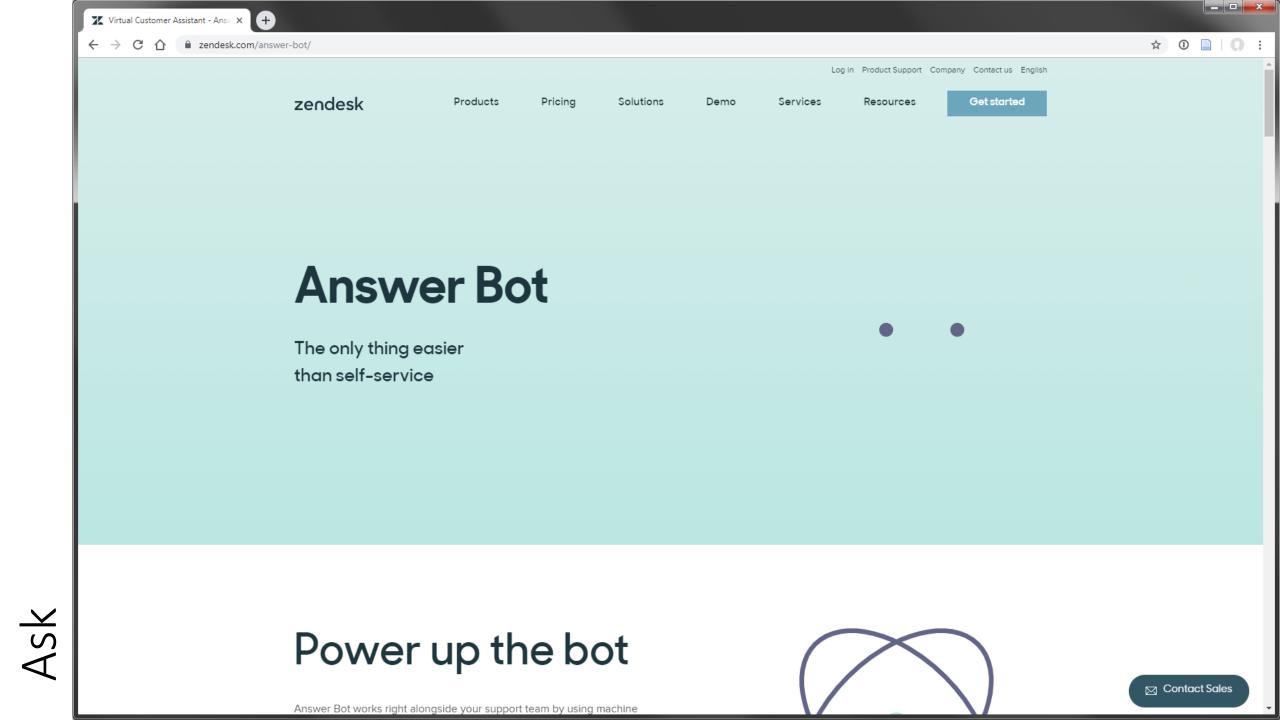


Natural Language Generation

Our Al-powered message machine understands language and breaks down marketing creative into its critical elements: narrative, emotion, descriptions, calls-to-action, formatting, and word positioning.

The machine applies its understanding of language to a marketing brief from your team, creating the best message



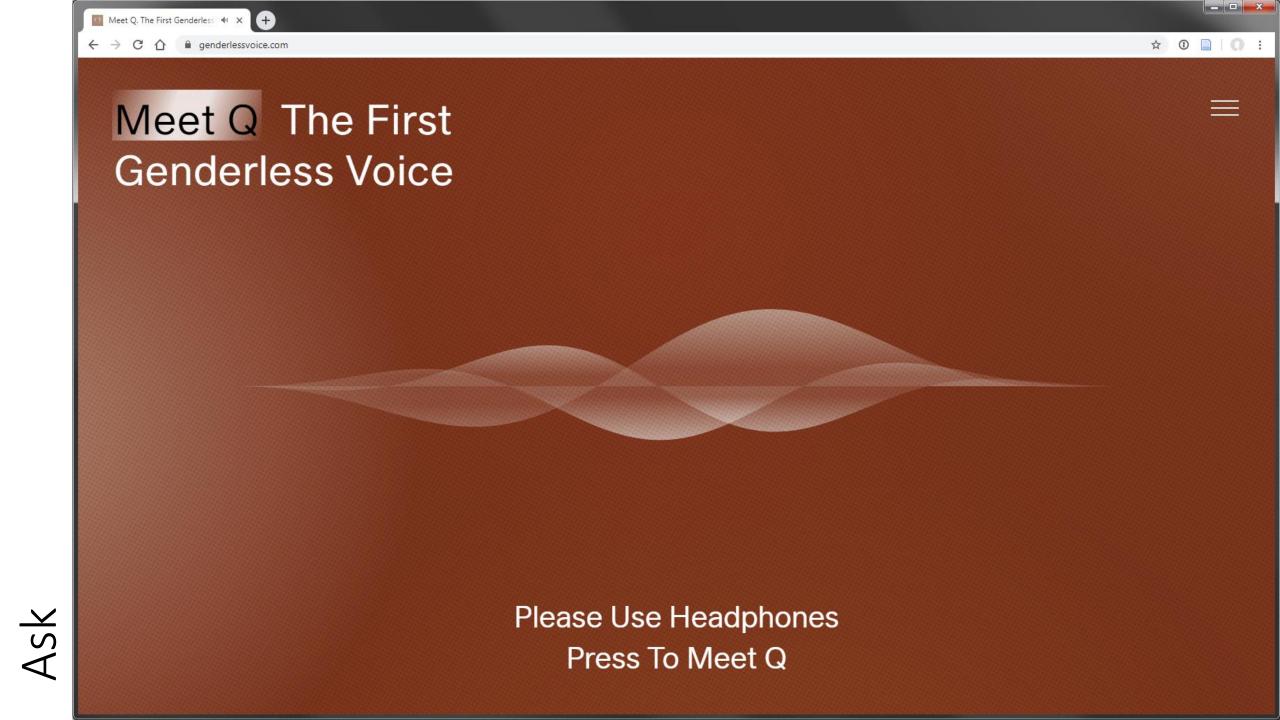




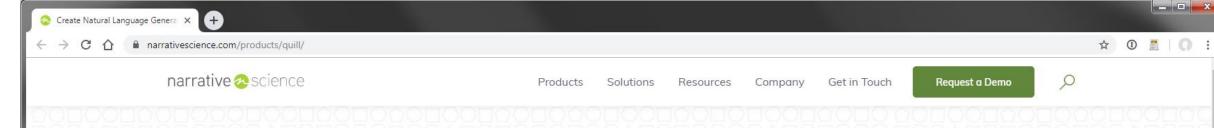












Products: Quill

Create Natural Language Generation (NLG) Applications To Automate Reporting

Meet Quill, a platform for leaders who believe their people should be focused on growing their business, not writing the same reports over and over again.

Quill creates applications that use natural language generation or NLG software to ingest data and then completely mimic the steps an analyst would take to write a report. Users of Quill have complete control over the language, analytics and formatting to customize just about anything they want.

Request a Demo



Here's Why It Matters To You



Gives You Time Back

You'll have a ton of time saved on your hands. Redeploy that human capital to things that



More Insightful Reporting

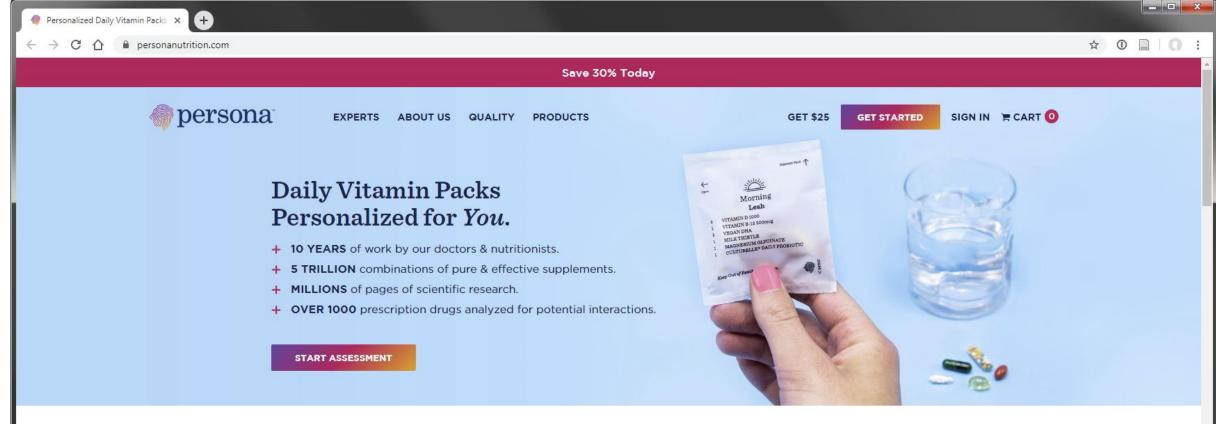
Quill is powerful. It will help you improve the scale, quality, and consistency of your



Hey there. We see you have been taking a look at our intelligent automation platform, Quill. Are y...

When content is personalize

can guarantee you that your audience will



We Make It Easy



STEP 1

Take our 5-minute assessment.



STEP 2

Get doctor-approved recommendations.

START ASSESSMENT



STEP 3

Daily packs are delivered to your door.



Check Out Our Independent Customer Reviews



5. quels enjeux pour les marketeurs et les responsables d'entreprise ?

quelques pistes...

- analyser son usage de l'IA, à travers ses outils marketing, dans une perspective d'eXpérience Client et d'efficacité opérationnelle
 - les mettre en place (données, outils)
 - les mettre à jour, les compléter, les intégrer
 - se former pour mieux les exploiter
 - challenger ses prestataires
- suivre l'évolution du domaine pour détecter des opportunités, (sans céder aux sirènes des éditeurs)

- surveiller l'évolution de l'IA par rapport aux canaux d'interaction client qu'elle ouvre, notamment les interfaces vocales

mise en perspective

- des technologies très liées au big data

- la quête d'une plus grande...
 - précision (ciblage)
 - contextualisation (moment clé)
 - personnalisation (mass customization) pour atteindre l'hyper-pertinence (Criteo)
 - rapidité (real-time)
 - automatisation (cobotique, RPA) et scalabilité (scalability)
 - humanité simulée (empathie, convivialité)
 - discrétion (invisibilité, imperceptibilité, acceptabilité)

- pour une meilleure efficacité opérationnelle et commerciale...

Exhibit 2: Steps in Adopting Artificial Intelligence

1. Develop an AI strategy aligned with your overall business strategy

- Integrate AI into your existing digital and analytics plans
- Decide which businesses to disrupt and which to enhance
- Consider new business models based on improved productivity
- Plan long-term investments in autonomous intelligence

2. Develop an enterprise-wide AI capability

- Redesign products and services to incorporate machine learning
- Use AI to upgrade your most critical distinctive capabilities
- Use automation to improve your current decisions
- Automate your existing business processes or develop new ones
- Recruit engineers and other professionals who understand Al

3. Institutionalize your portfolio of AI capabilities

- Embed Al throughout your business processes
- Embrace cloud platforms and specialized hardware
- Foster a decision-making culture open to ideas from Al support

4. Ensure appropriate governance

- Establish clear policies with respect to data privacy, decision rights, and transparency
- Set up governance structures to monitor possible errors and problems (for example, overreach in program trading)
- Set up communications practices to explain AI-related decisions
- Consider the impact on employment and invest in developing the workforce that AI will complement

Prof. Arnaud Dufour arnaud.dufour@heig-vd.ch

Département COMEM / Institut MEI HEIG-VD Avenue des sports 20 - CP 521 CH-1401 Yverdon-les-Bains



pour aller plus loin

- Meta-media n°17, <u>Médias automatiques ou complicité hommes-machines</u>?, par Éric Scherer, France Télévision
- Criteo L'IA au service du display : le guide ultime (Juillet 2019)
- Altimeter The Age of AI How AI is transforming organizations Jan 2017
- GumGum Al and Marketing Guide 2017
- Jim Sterne, Artificial Intelligence for Marketing Practical Applications, Wiley, August 2017, ISBN 978-1-119-40634-1
- Jim Sterne, Video Intro to Artificial Intelligence for Marketing, July 2018
- Forrester blog on AI https://go.forrester.com/blogs/tag/artificial-intelligence/