RETHINK TOURISM 2024

HOW IS TOURISM USING

Traveltech

AP







Al, Data-Driven Innovation and Tourism

Data Skills Lead for Scotland

BBC Horizon

Civil Servant - London Olympics

With the second secon

Bosnia & Herzegovina









Europe's Leading Traveltech Hub

Over 200 Traveltech businesses...

Scotland is one of Europe's leading traveltech hubs, alongside Amsterdam, Berlin and Barcelona.







THE UNIVERSITY of EDINBURGH Edinburgh Futures Institute "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run" AMARA'S LAW

What can be generated?

The 'outputs'

Text:



Insights and Code:





Midjourney

Pika







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Music:

Suno

udio

What can be interpreted?

'The 'inputs'

Text



Data, Code and Software



Video







THE UNIVERSITY of EDINBURGH Edinburgh Futures Institute

Images, Audio and

Web Content (RAG)



MULTI-MODAL AI

DATA AND SOFTWARE

IMAGES, AUDIO AND VIDEO







TEXT

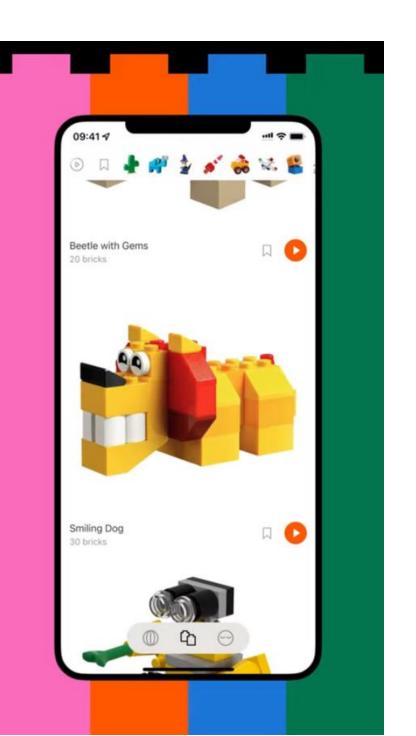


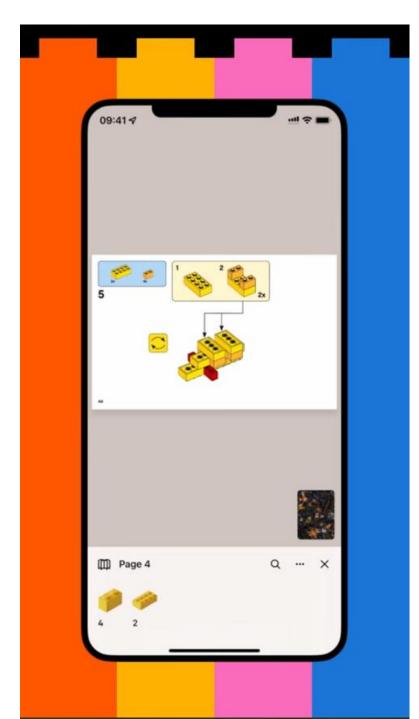
WEB CONTENT



Lego Companion











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https://brickit.app

Using GenAl in Tourism







Customer Service

Handling





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Itineraries 'Things to do'

AI ADOPTION



Using the 'Tools'

Like Google Gemini, Claude, ChatGPT



Buyer & Builder

'Productionise - often using open source models or enterprise AI







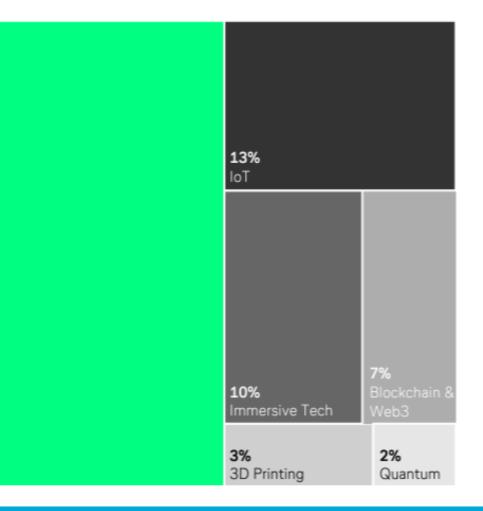
Traveltech Investing Patterns

Al: The Most Pivotal Technology Area Across Travel and Mobility Sectors

TECHNOLOGY-FOCUSSED DEAL ACTIVITY (#) OF TRAVEL AND MOBILITY CORPORATIONS, BY TECHNOLOGY AREA, SINCE 2018

65% AI & ML

Source: Luthansa







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Customer Service / Engagement

Handling customer enquiries

Automated Enquiry Handling

In just two days work (April 2023)...





Receive 100's of bespoke, non-standard emails

Used AI to 'read', 'understand' and identify the next action



Initiates the next action for 80% of enquiries





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Trialled using automated voice messages

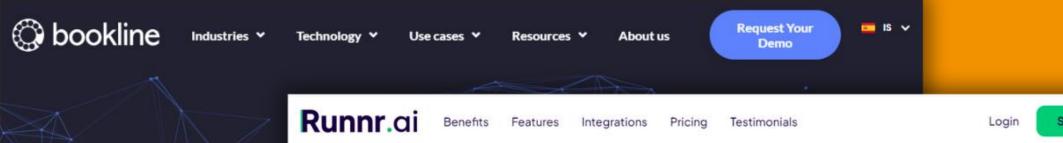
Now over 1 million emails sent





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Whatsapp dialogue



The best conversational intelligence for exceptional ser

Increase customer satisfaction and save tim and WhatsApp interactions.

REQUEST YOUR DEMO

Enhance guest engagement and **boost revenue**

Your virtual hotel concierge, elevating guest experiences through proactive WhatsApp communications and automated upselling

- O Delight your guests
- Reduce operational workload

Start for free Steven, thank you for booking a sial hotel employee for anything thing I can do for you right now

in Beach Front Hotel, I am yo

ed to your stay. Is there

65% guest engageme





Edinburgh Futures Institute





Introducing Anna!

The smart AI hospitality concierge that creates a super smooth guest experience with zero hassle!

11:06	.u ≑ (4	
Hi, I'm Anna!		
Your friendly AI travel buddy. with anything?	Can I help you	
What's the wifi password?		
Any good restaurants nearby? I want more pillows		

.

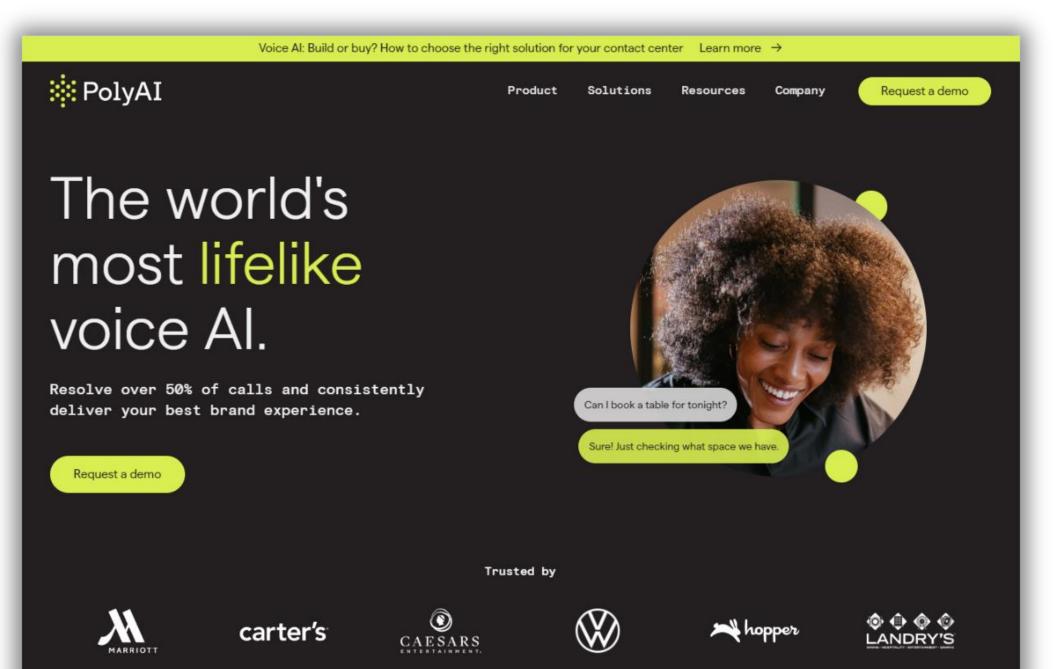
Ioin Waitlis

5	-	~	
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~	~		

Join Waitlist

Contact Centre as a Service

Text to voice, in conversational, natural language







Edinburgh Futures Institute

PolyAI - Used in Hotel customer service

Accurate Translation

In so many languages...



Traveltech for Scotland



642

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3D Models and Content

Much faster to create interactive VR and AR experiences...

3D Al Studio

Recent Creations

See what our Users have been generating. Get inspired and start creating your 3D Models today!



ABSTRACT Prompt: An sculpture in the form of convolutions

11.03.2024

View in 2D





STONE Prompt: A golem made of stone

29.03.2023

Manula 2D



ANIMAL Prompt: A 3D Model of a T-Rex

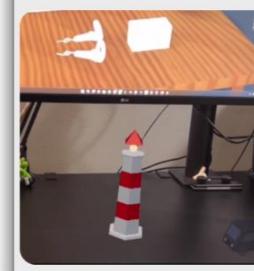
25.03.2024

View in 2D



0

Lunaris Scott Martins Barreto



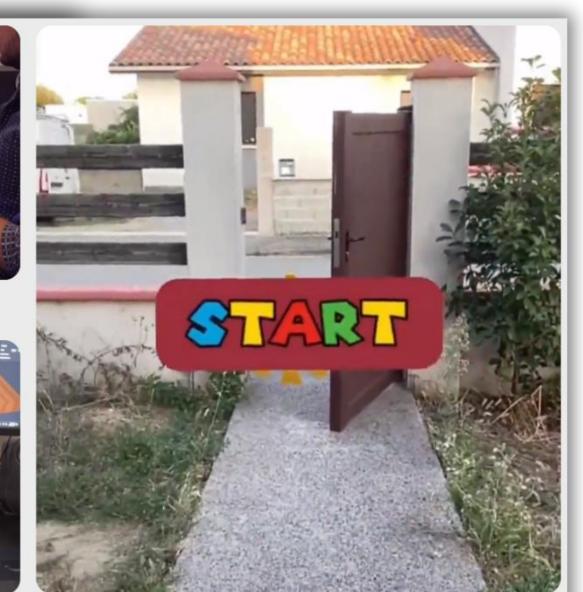
AD Notification Lighthouse

Bezi





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Super Marie Outdoor

Play the part

Characters produce better ideas?





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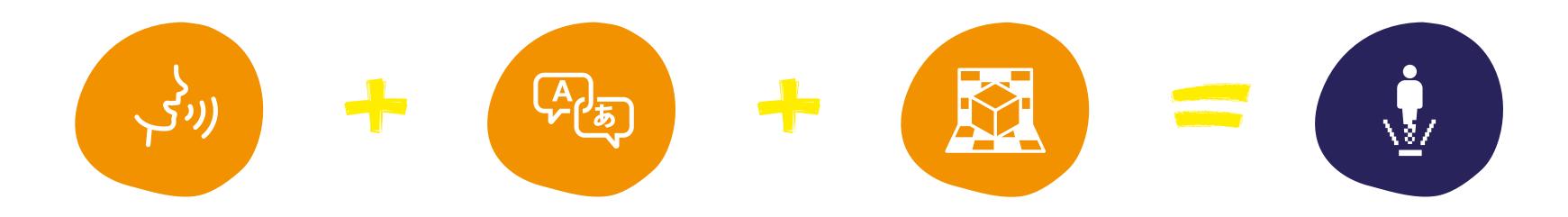






Avatars and Holograms..?

AI capable of....



Accurate complex dialogue (with character)

Multi-lingual, real-time translation

Creating detailed avatars and 3D models





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Avatar / embodied Assistants?

(In your own likeness!)

Dial Dali

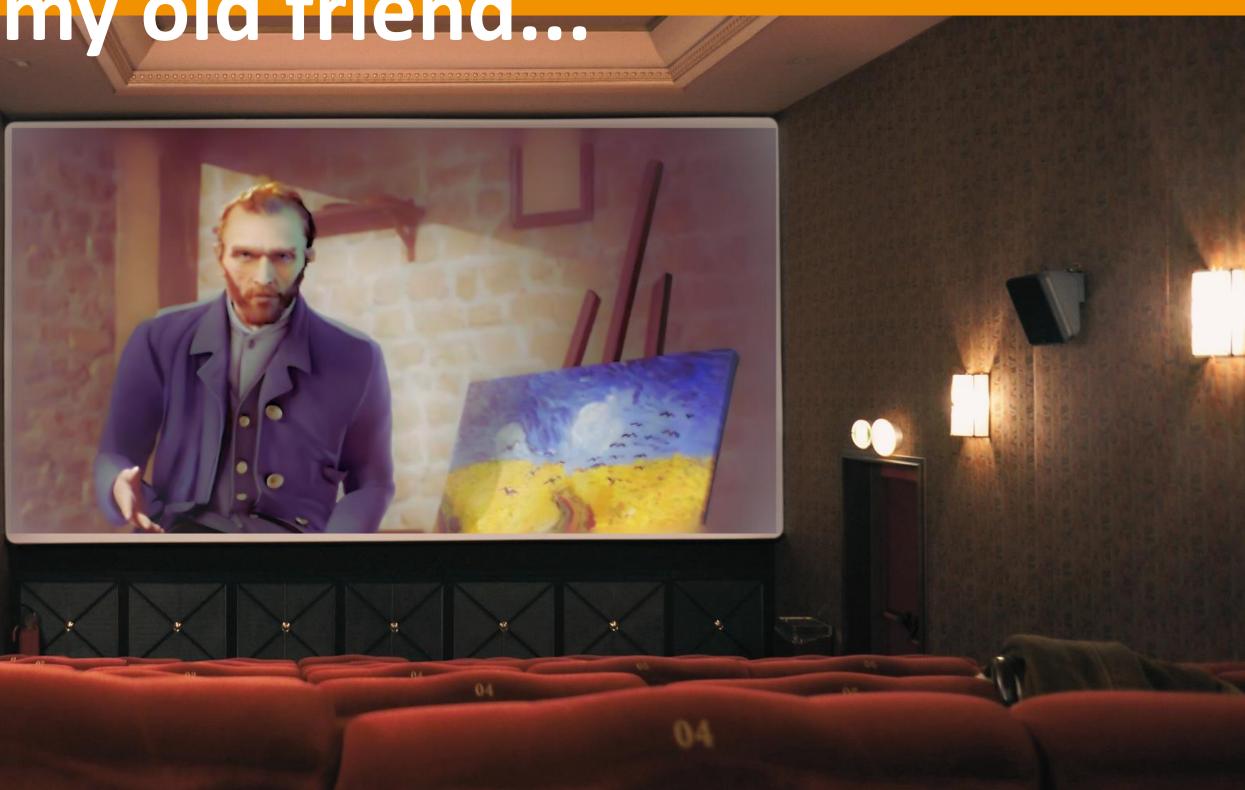
Ask Dali anything you want...







Hello Vincent, my old friend...



03









Edinburgh Futures Institute

Promotion, marketing & discoverability

Encouraging and influencing responsible tourism



When all of the colours get mixed together...

You get a generic brown sludge and everything looks the same







66

"fosters..."



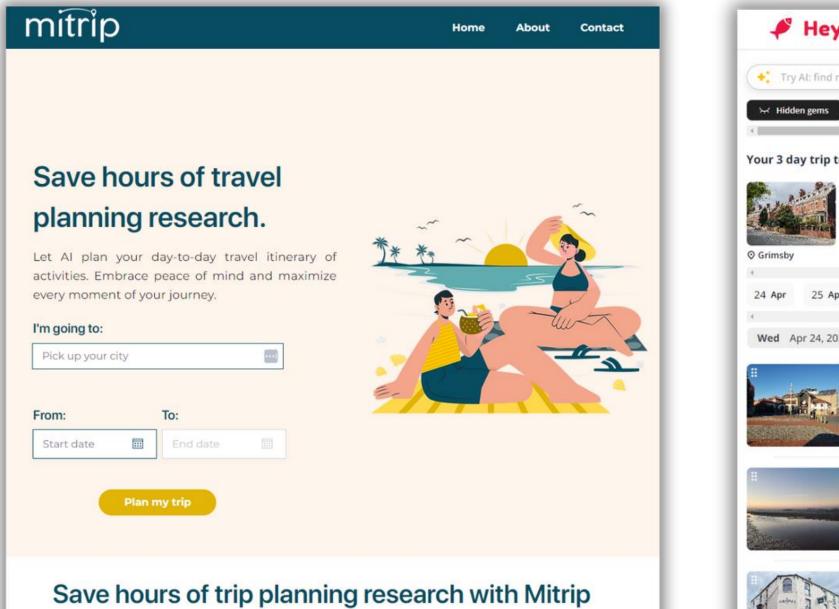


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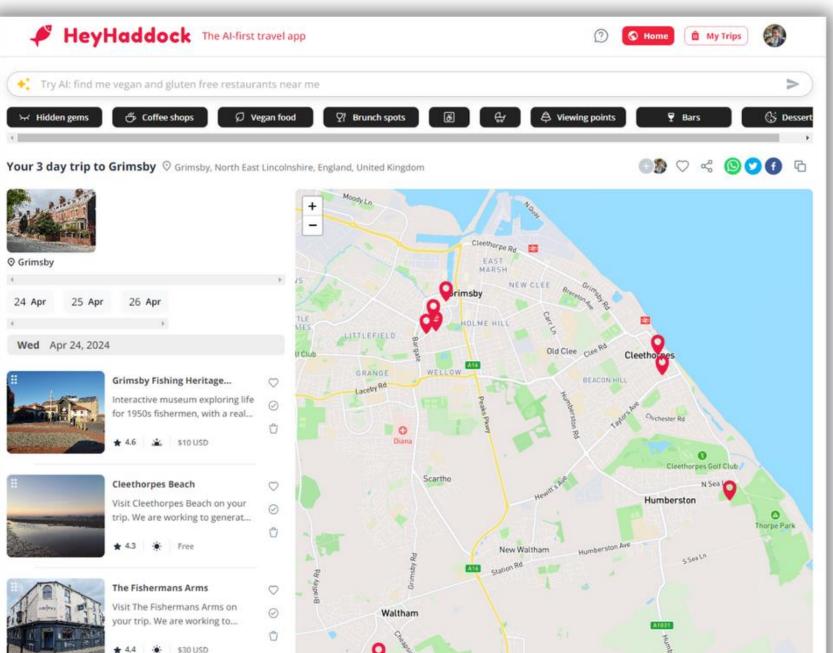


Al Itineraries and planning

1000s of startups...not so much traction



Experience stress-free trip planning with Mitrip! Save hours of research and avoid information overload. Our AI generates personalised day-to-day



© Grimsby	27 ²	
4		+ 15
24 Apr 25	Apr 26 Apr	1
4	8	TLE
Wed Apr 24, 2	2024	IT Clut
		(reiu)
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-	Interactive museum exploring life	0
TO DA AND	for 1950s fishermen, with a real	÷ =
	★ 4.6 🖄 \$10 USD	U
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	Visit Cleethorpes Beach on your	
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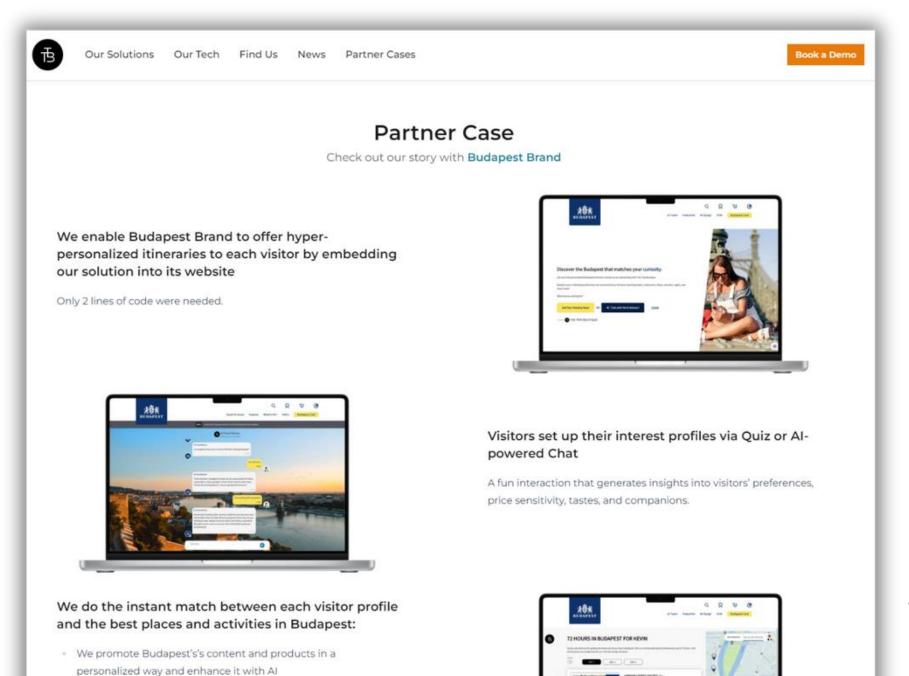




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Al Itineraries and planning

Business to Business



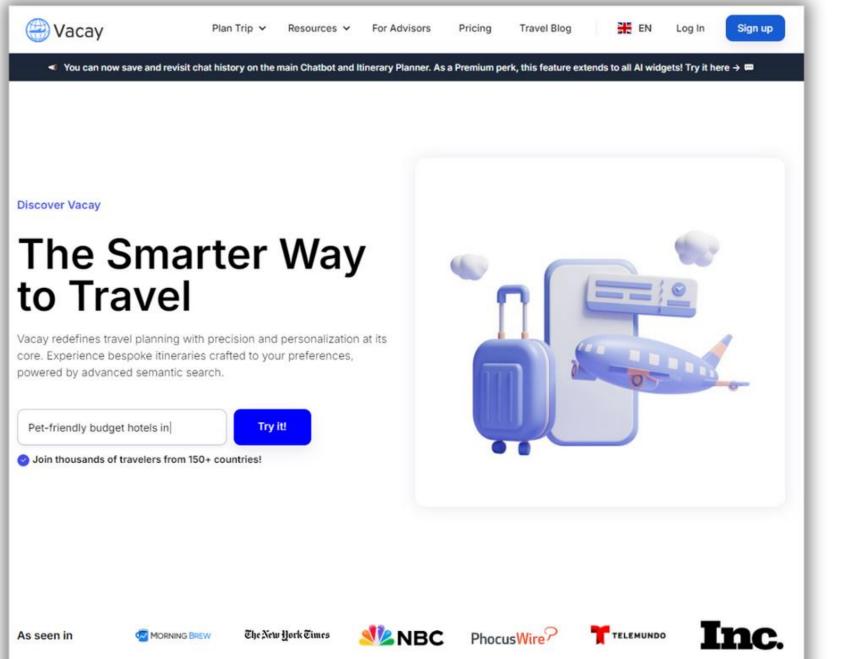
Trip Boutique





For Travel Agents

Productivity tooling for established agents...



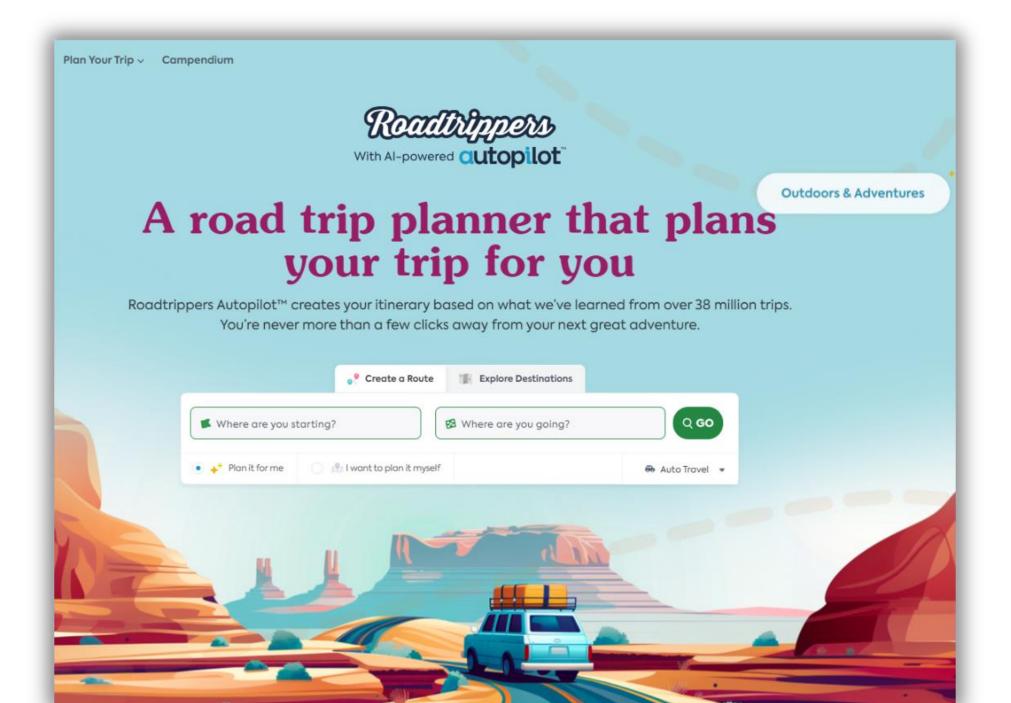
Vacay





The Niche path

Plan my roadtrip, my bike trip...

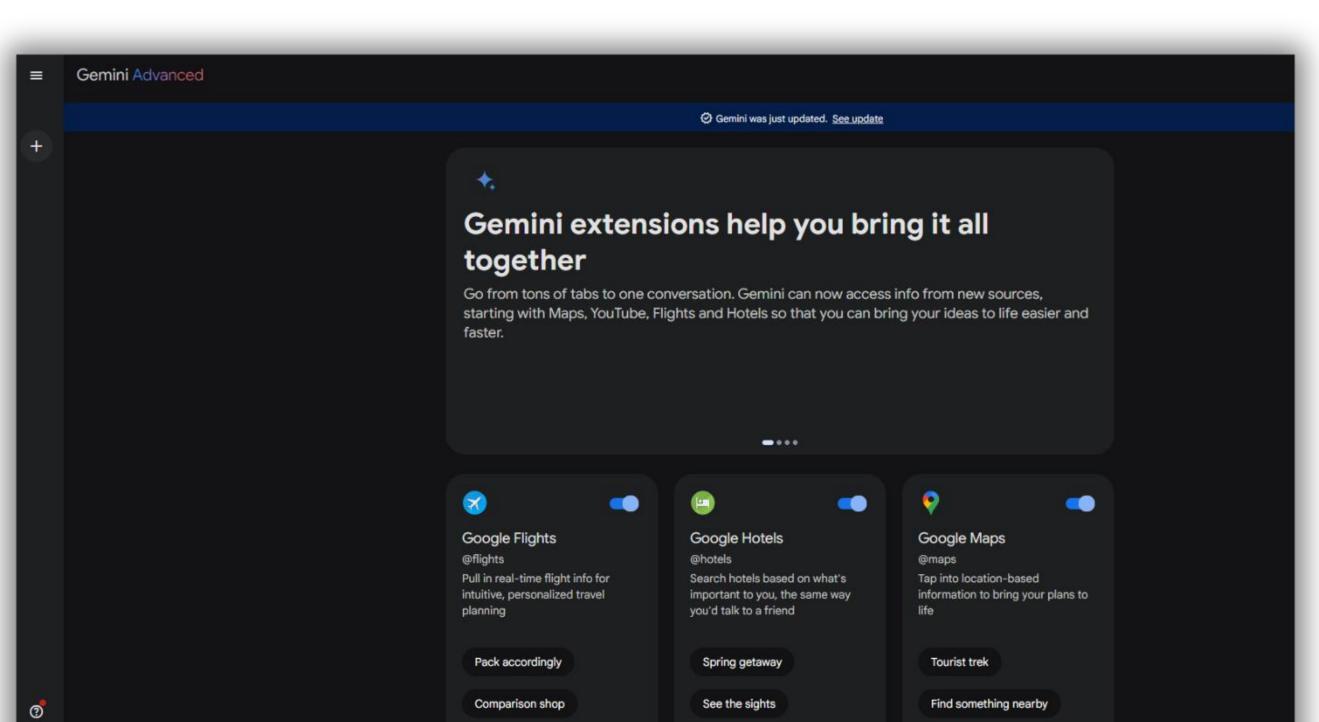






Google Gemini

The world's most powerful travel app(s)?

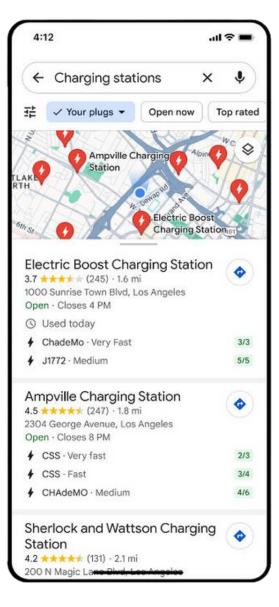




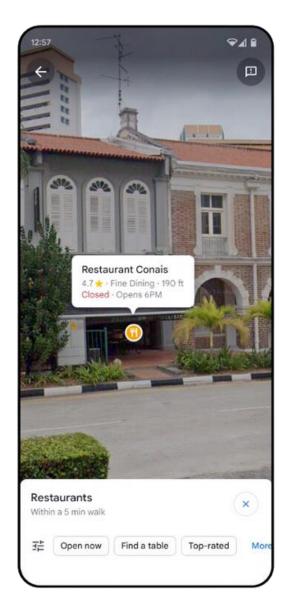


Google Maps

The world's most powerful travel app(s)?











Travel Assistants

Backed by the biggest names in Traveltech

Log in to start planning your next trip	Layla	×
Log in		Things you
Don't have an account? Sign up		I'm here to help you about the destinati
♡ Bucketlist		that people already
Blog		Common Questi
		• Where can I go fo
Today Inspiring Dream Destinations		Trending 1 Ask L
		I want to propose
		Trending / Ask L
		• Where can I go fo
		Frequently asked 1
	Hey Layla here, excited to help you with anything travel	• Where to stay in I
	related. Ask me where to go, when is best, what to do there, how to get there, or something else entirely. I'm on the edge of my seat, tell me what you're thinking.	Frequently asked 1
		 I don't want to fly options?
	Today	51
Information and Support V	inspire me where to go	Frequently asked 1
⑦ About	Alright lette get these travelisions flowing! Are you in	 Find me the cheat
○ What Can I Ask?	Alright, let's get those travel juices flowing! Are you in the mood for something like sipping wine in the rolling	Frequently asked i
仍 Invite Friends	hills of Tuscany, getting lost in the neon streets of Tokyo, or maybe chilling with penguins in Antarctica?	
Contact	Give me a hint of the vibe you're after, and I'll whip up some travel magic.	
Terms of Service	6 7 B	
LAYLA	Ask me anything	





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I can ask me!

u plan your next adventure. Ask me anything ion, I'll have the answer. Here are a few things y asked me...

ons:

or Spring break?

ayla

e my girlfriend. Where can I do that near me?

ayla

or a safari in Africa?

Ask Layla

Dubai?

Ask Layla

to my next holiday. What are my sustainable

Ask Layla

pest flights close by.

Ask Layla





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Not so Ordinary People?

Travel Technology

Musician John Legend Releasing App to Counter 'Negative' Google and Yelp Reviews

Justin Dawes, Skift October 17th, 2023 at 2-51 PM EDT







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Curated influencer experiences

Exceptional ALIEN

→ Destinations ♥

Destinations Tra

Places

People

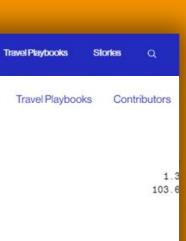
. Download App

Destinations

SINGAPORE

Singapore sg

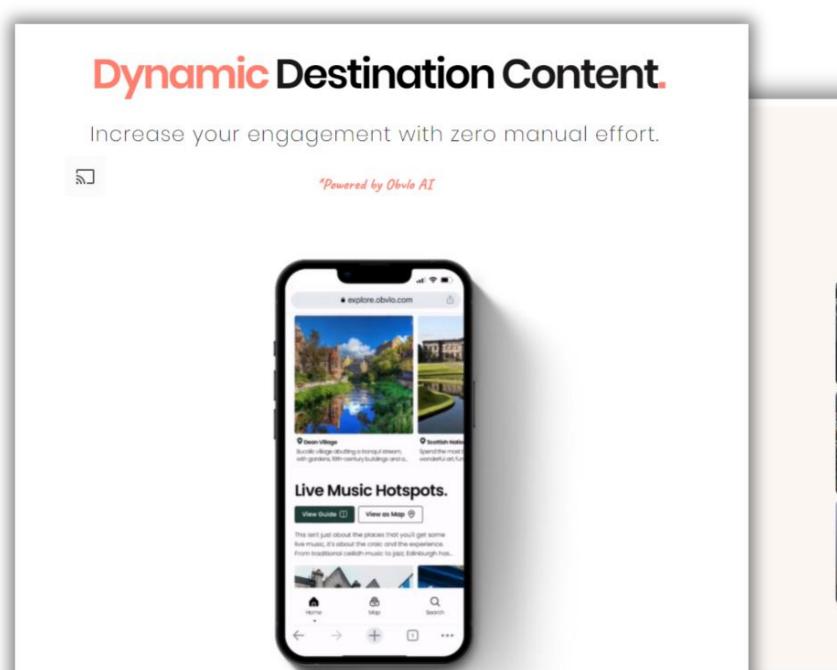






Obvlo

Curation is having a comeback....



Curated Local Guides.

Content that is curated using Al into local guides, delivering the most relevant recommendations to drive engagement.







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"guides for <u>families</u> with young kids "guides for couples on a <u>romantic</u> break ^{*}guides for <u>culture</u> lovers or <u>foodies</u>



Stretching Risk Appetite?

The importance of serendipity and surprise







Stretching Risk Appetite?

The importance of serendipity and surprise

Traveltech for Scotland





Do we have the data?

NEW ISLAY FERR

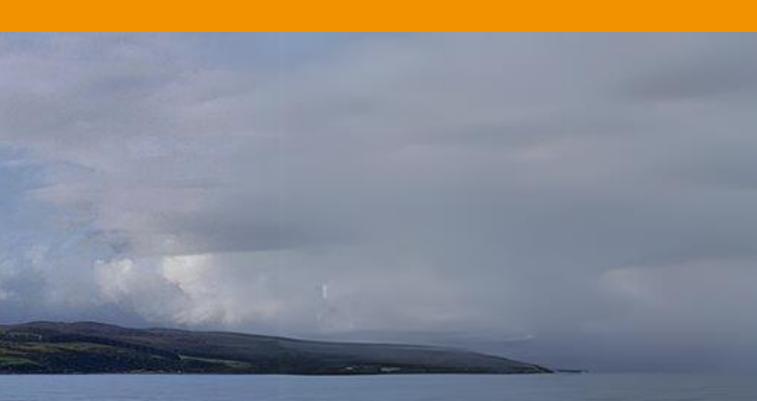
Opening hours, reliability, no longer operating?

Caledonian MacBravne

00000

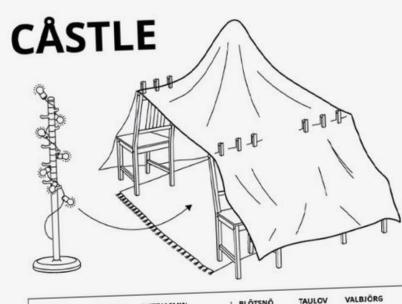


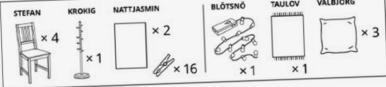




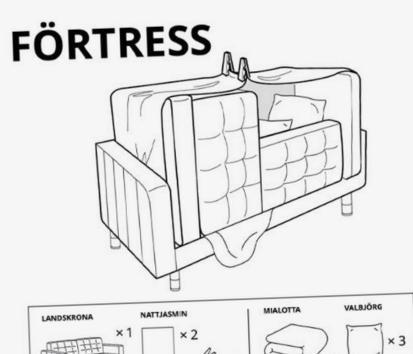
IKEA Effect

People place higher value on things they helped to build or create.





Make sure that the structure is safe. Do not leave children unattended. The suggested examples are not ofcial IKEA user guides for IKEA products. If you can't And the products referred to in the instructions, use similar ones.



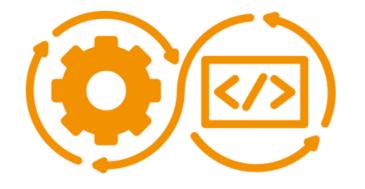
Make sure that the structure is safe. Do not leave children unattended.

Make sure that the structure is safe. Do not leave children unattended. The suggested examples are not ofcial IKEA user guides for IKEA products. If you can't And the products referred to in the instructions, use similar ones.









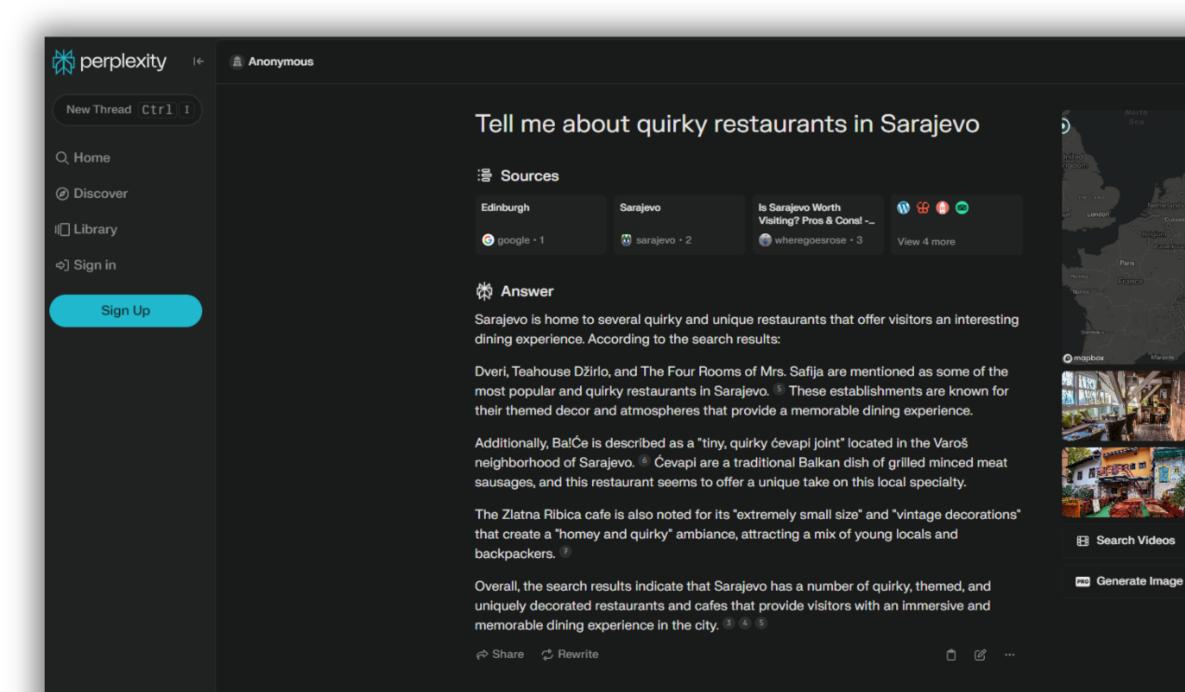
AUTOMATION



AGENCY

Improved Search?

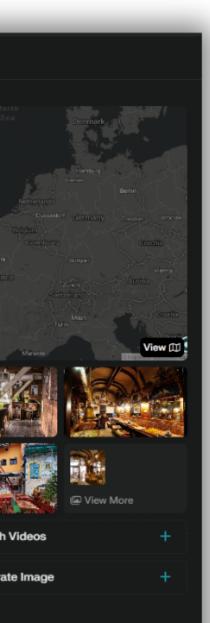
Finding the right thing, not just those that paid the most







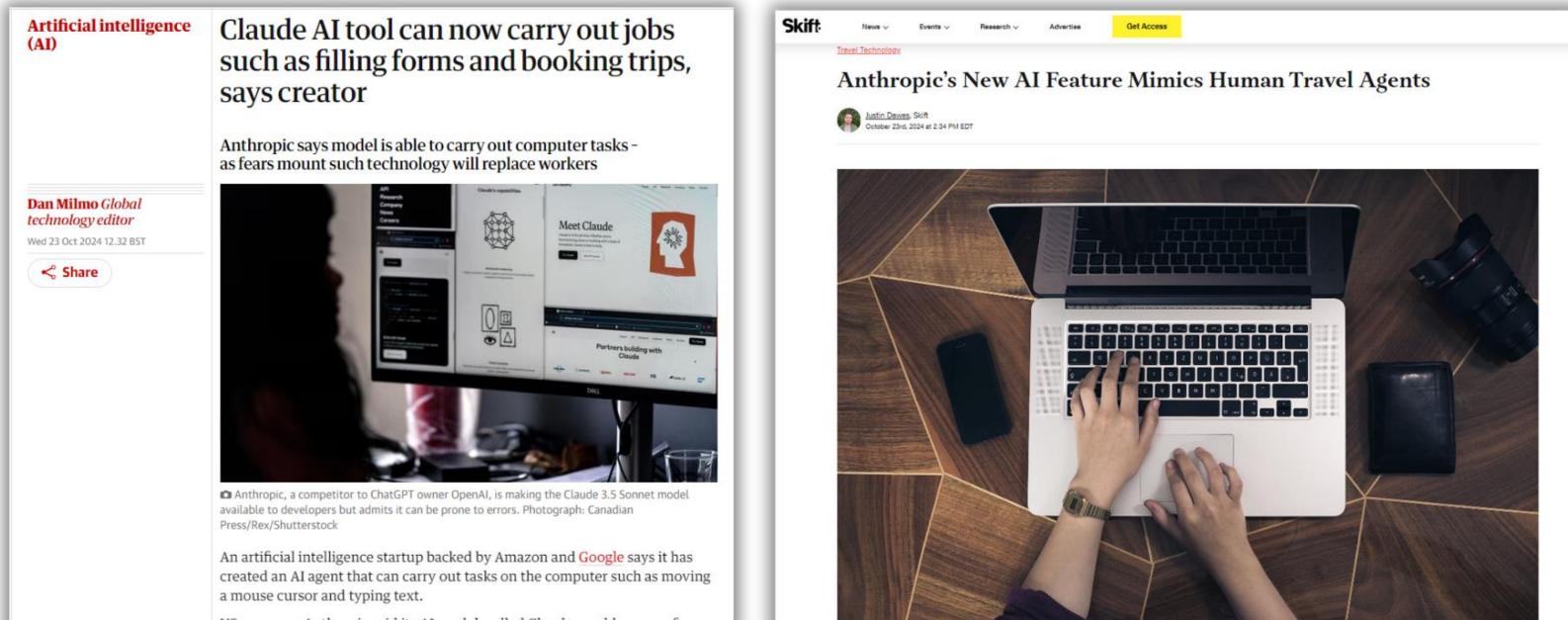
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Perplexity.ai

Al Agents

The importance of serendipity and surprise



US company Anthropic said its AI model, called Claude, could now perform computing tasks including filling out forms, planning an outing and building





Direct Booking

Will AI Agents defeat the Online Travel Agents?

Booking.com GBP 进 🕐 Lie	ist your property Register Sign in 🕞 🙆 🔍 ᢞ 🗙
은 Stays 玲 Flights 🖓 Flight + Hotel 🖨 Car rentals 🎲 Attractions 🎟 Airport taxis	
🛱 Copenhagen X 📅 Fri, Nov 8 — Sat, Nov 9 📿 2 adults ·	1 child · 1 room v Search
Home > Hotels > All serviced apartments > Denmark > Zealand > Copenhagen > Adina Apartment Hotel Copenhagen (Condo Hot	otel) (Denmark) Deals Other travelers have found
Overview Info & prices Facilities House rules The	e fine print Guest reviews (1.964) better deals on the direct website
★★★★ ⁽ Sustainability certification) IIII Free taxi available ⑦ Adina Apartment Hotel Copenhagen	♥ ∞ Reserve
Amerika Plads 7, Østerbro, 2100 Copenhagen, Denmark – Great location - show map – Train Access	We Price Match
	Excellent 8.6
	Guests who stayed here loved "Its close to the little mermaid and the apartments are very good."
	C Camila H Mexico
	Staff 9.0
	Strandbow Strandbow
	NER ØSTERBRO ØST Show on map ØST Cocole Man dete @2014





Get detailed and specific...

Helping visitors find their specific niche and needs







Free form chat enables more nuanced questions...

Actively work to rank highly in the most popular models

Gather specific and detailed local knowledge





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Refresh the data and use the latest models!





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How is Al practically helping SMEs?

The organisational models to innovate with AI

Traveltech for Scotland

R2 Dinner for 2?

The role of tech in alleviating the impact of staff shortages in the hospitality sector

1.00 A

The opportunities offered by existing and emerging digital solutions and technology rechnology is likely to be one of many important Technology is likely to be one of many important

Digital and tech tions for hospitality





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Back to Front

Source: An accurate diagram of an independent hotel tech stack







00

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RPA + AI



Collecting financial data from various systems

Compiles data into a standard format

Automatically generating a financial report

00



Rapid insights, trends, and forecasts

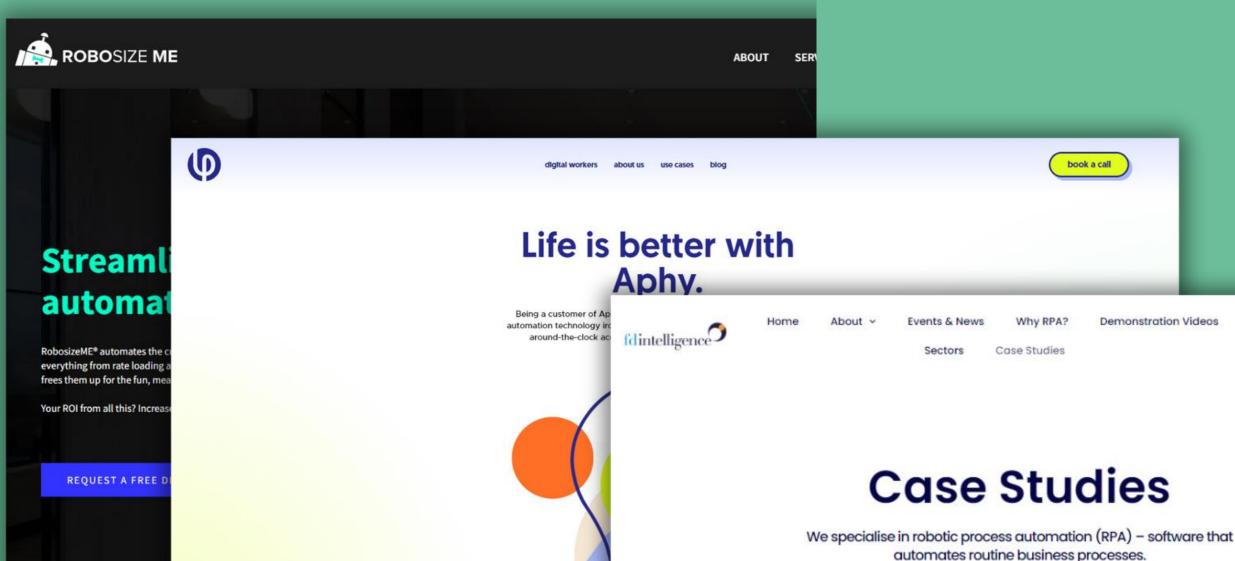
Business Decision-Making





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Process Automation (RPA) + AI



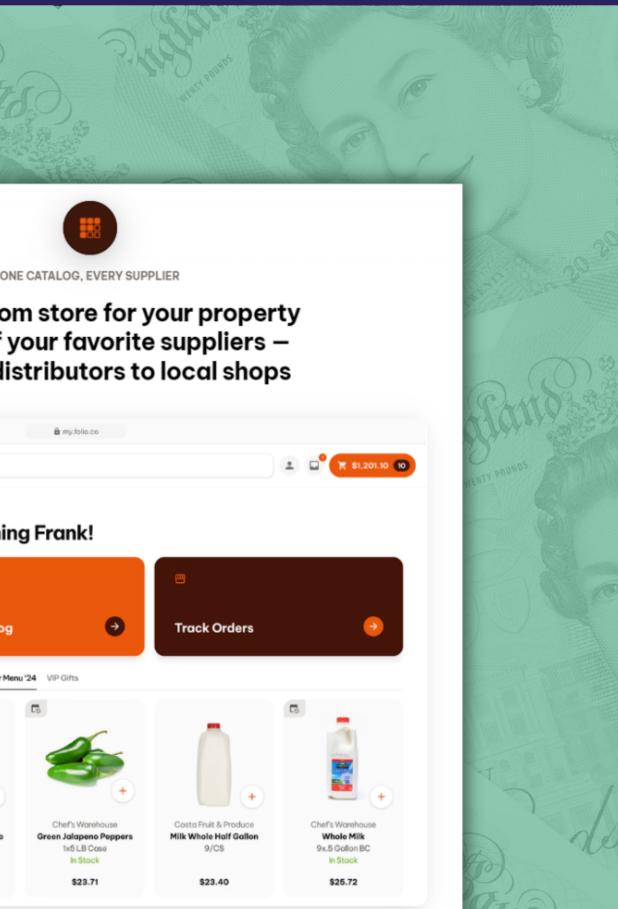


Get in Touch

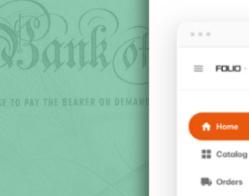




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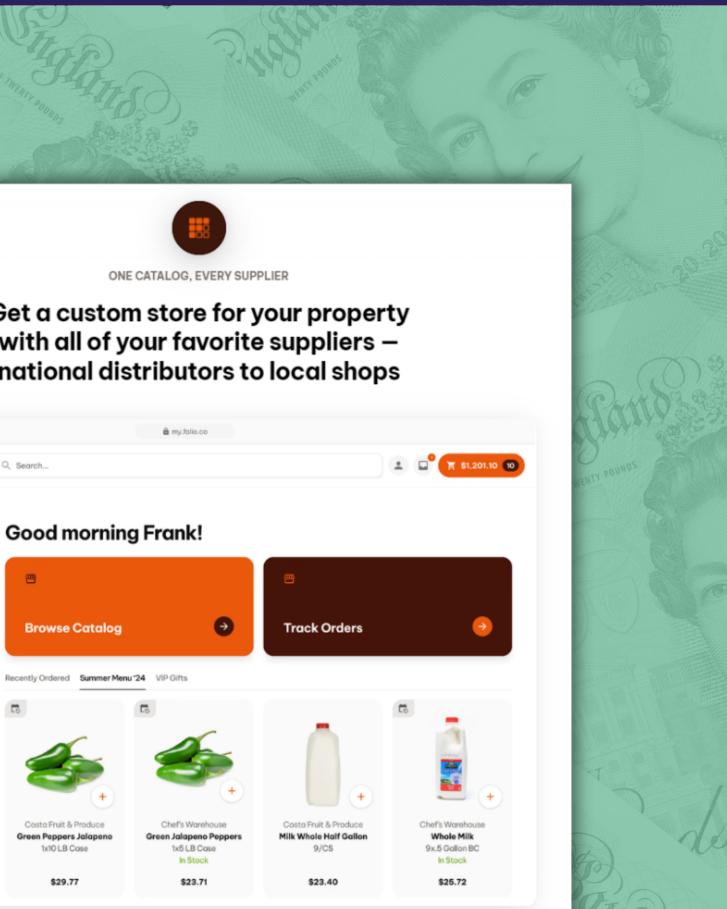


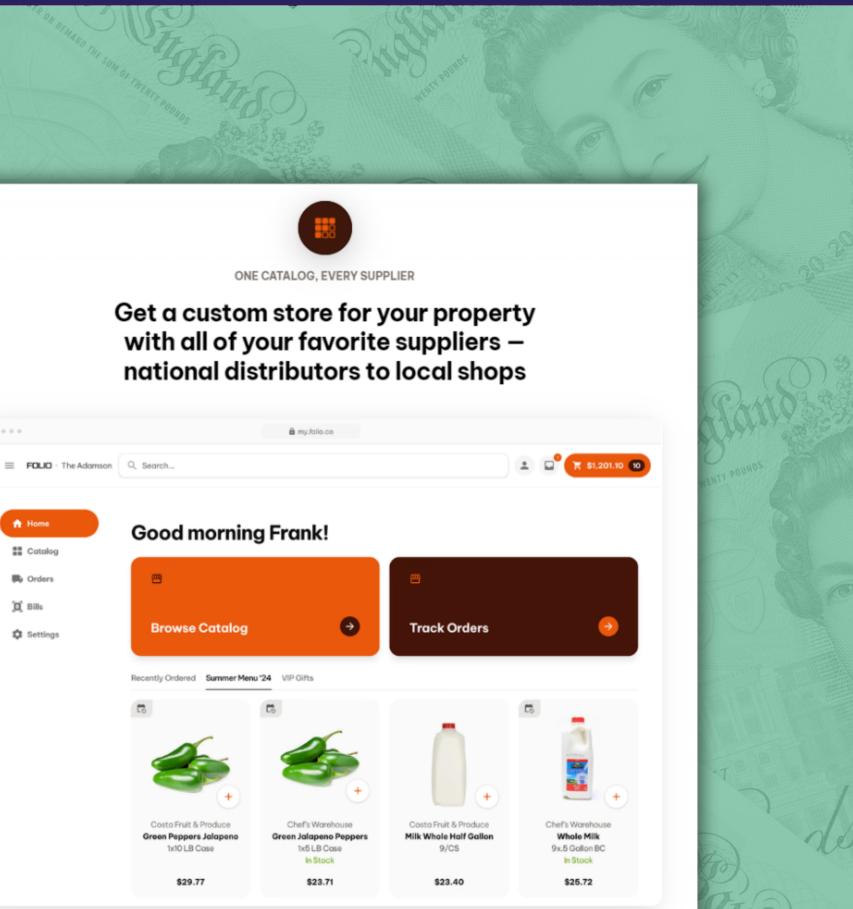
Procurement



Ton

🔲 Bills







Be My Eyes

Making the inaccessible, accessible

Build in detailed info for accessibility

Faster descriptions and labeling

Multi-modal AI for multi-sensory communication



Introducing Be My AI (formerly Virtual Volunteer) for People who are Blind or Have Low Vision, Powered by OpenAI's GPT-4

We are thrilled to announce Be My Eyes Virtual Volunteer[™], the first-ever digital visual assistant powered by OpenAl's new GPT-4 language model.

Introducing Virtual Volunteer™

Al powered Visual Assistant









-				_	_
	Solutions \checkmark	Products V	Community	About	Downloa



Custom GPTs

Activating Turin Castle's internal knowledge bank

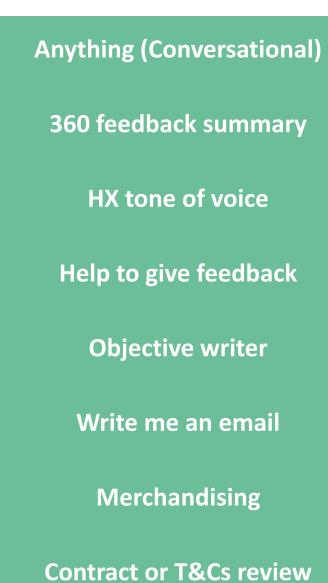
for Scotland



Holiday Extras

Al embedded across the organisation...









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Report writer

German/English translator

Jargon buster

Query chat scoring

Booking opportunity scoring

Email scoring

Growth Strategy

Image Creator

General Purpose Technology









Al Adoption Journey

How should businesses do this?

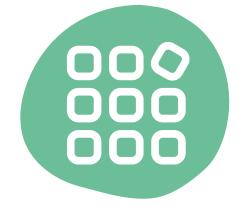


Consider staff 100% dedicated to Al

(prompt engineer?)



Where can you automate / add the most value / save the most time



It's (still) all about the data





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Practical Prototyping





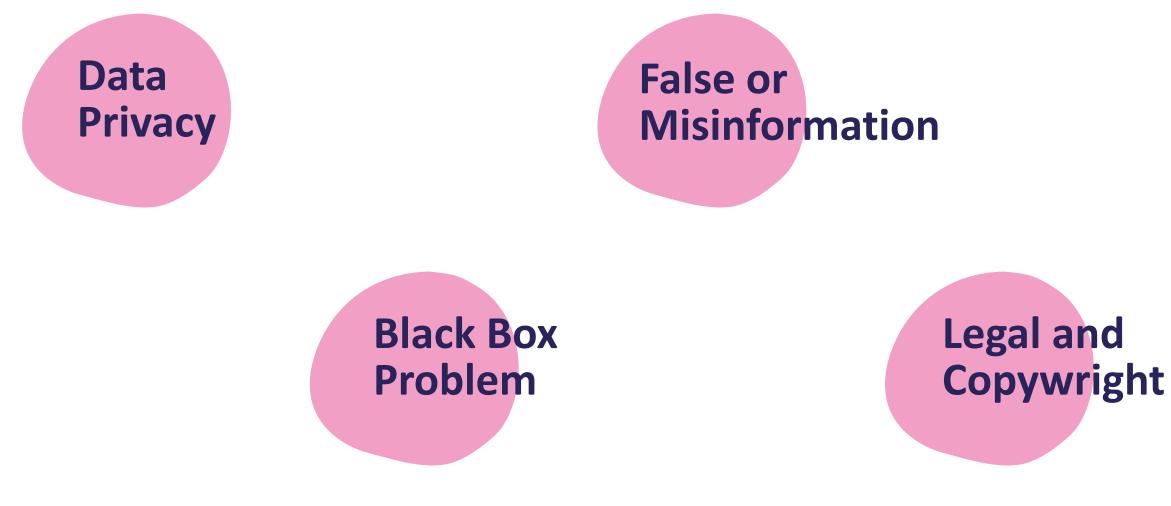
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Being responsible

Considering the ethical and environmental dimensions when using Al...

The Ethical Questions

How can we use this ethically?







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Biased Responses



Hallucinations

Failure to implement sufficient AI guardrails

Air Canada ordered to pay customer who was misled by airline's chatbot

Company claimed its chatbot 'was responsible for its own actions' when giving wrong information about bereavement fare



The judge wrote that Air Canada's customers had no way of knowing which part of its website including its chatbot - relayed the correct information. Photograph: NurPhoto/Getty Images

OUT-LAW NEWS



Photo by Gary Hershorn/Getty Images 27 Feb 2024, 10:43 am

Follow Artificial Intelligence

Air Canada has been held liable for a negligent misrepresentation made to a customer by one of its chatbots in a case that one expert said highlights broader risks businesses must consider when adopting AI tools.





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"We generally trust others until given a reason to do otherwise. However, as the output from large language models and generative AI becomes increasingly indistinguishable from that produced by humans, it's time to consider a new paradigm: "default to distrust"

SHELLY PALMER

We must aim to be trusted Institutions



Mitigating the Air Canada mishap!



Dial down model autonomy



Only using your data

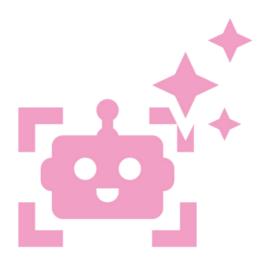


Quality Assurance Al

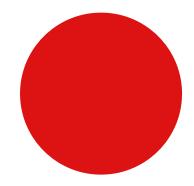




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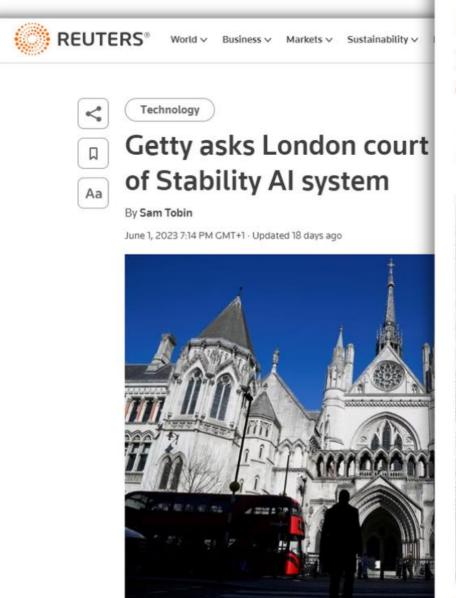
Al Agents checking Al Agents



Red Team test and refine

The Ethical Questions

How can we use this ethically?



The Times Sues OpenAI and Microsoft **Over A.I. Use of Copyrighted Work**

Millions of articles from The New York Times were used to train chatbots that now compete with it, the lawsuit said.





Court cases roll in and regulators are beginning to act







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Analysis May 18, 2023

Why Harry Potter is the copyright timebomb under generative AI models

Kai Nicol-Schwarz and Tim Smith 5 min read



Traveltech for Scotland

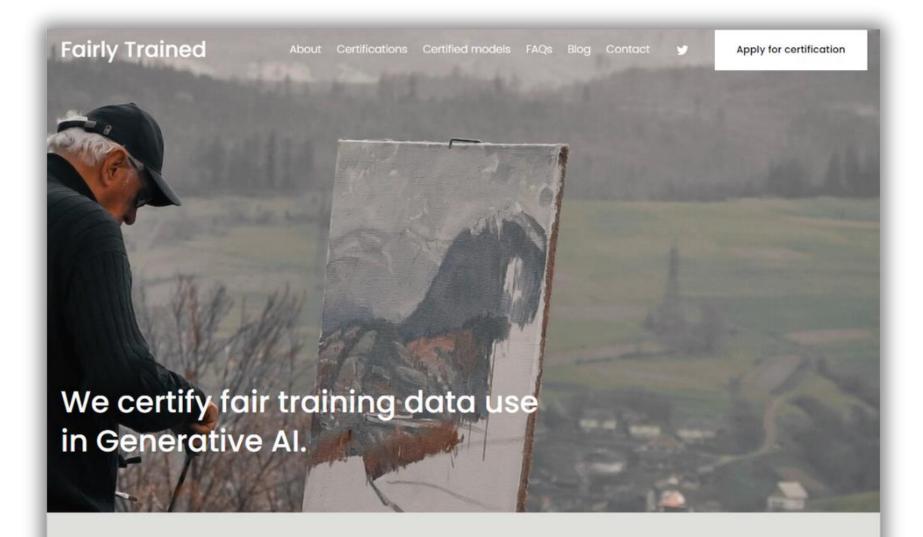


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Source: Nesta 'Future Signals' - Illustration by Chen Wu

Consent needed

Only trained on images where consent is explicitly granted



Generative AI models are trained on the work of human creators.

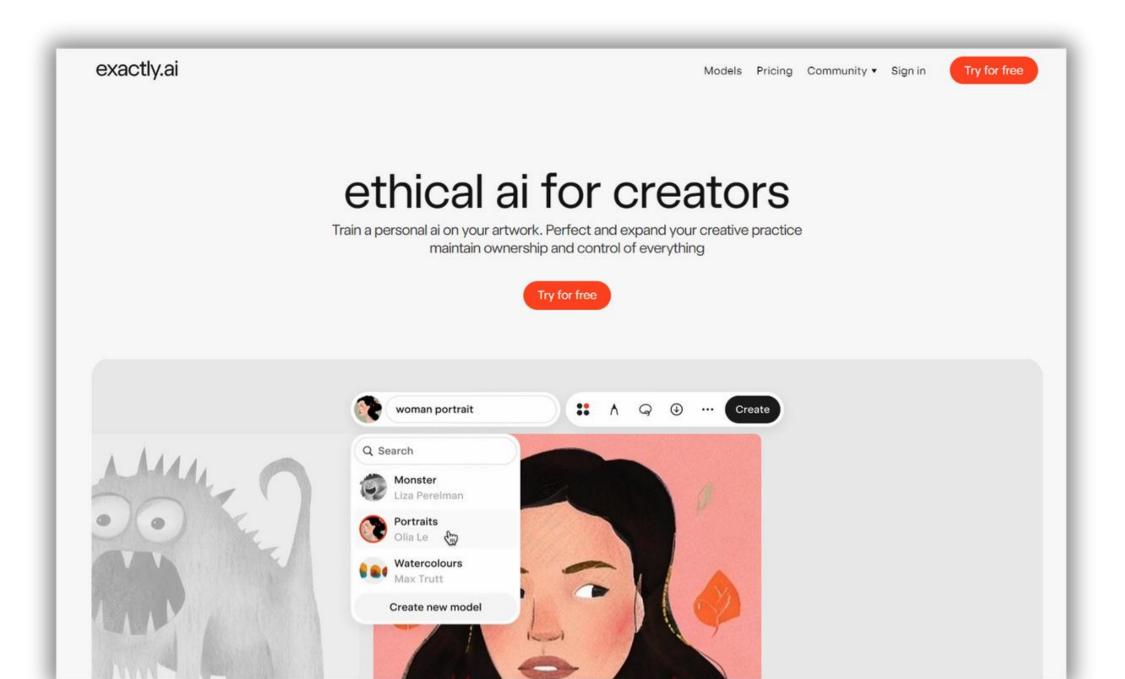
Our mission is to make sure those creators are being treated fairly.





In my style...

Al image generation in the style of unique creators







Scraping the barrel?

New economics of AI?

Login

Search Q Startups Venture Apple Security Al Apps Events Startup Battlefield More

Cloudflare's new marketplace will let websites charge Al bots for scraping

Maxwell Zeff / 6:19 AM PDT • September 23, 2024





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Comment

HUGE Climate Impact



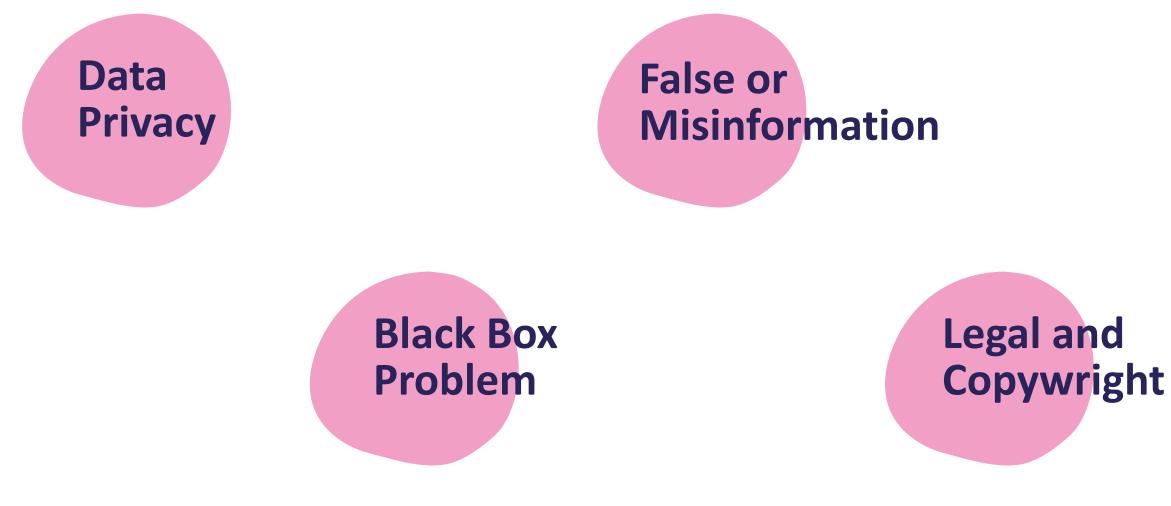




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The Ethical Questions

How can we use this ethically?







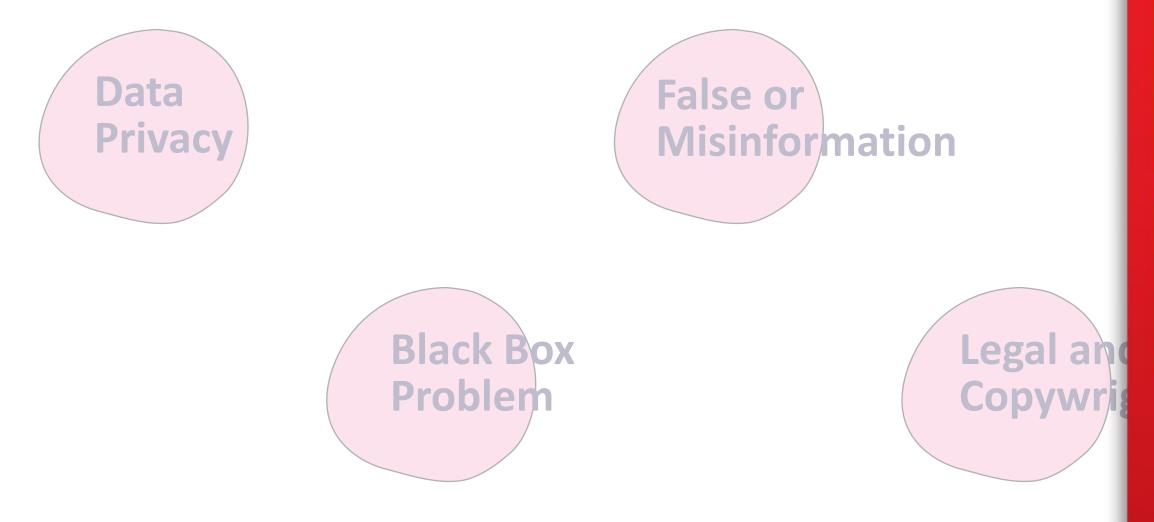
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Biased Responses



Collective Intelligence

Working with AI

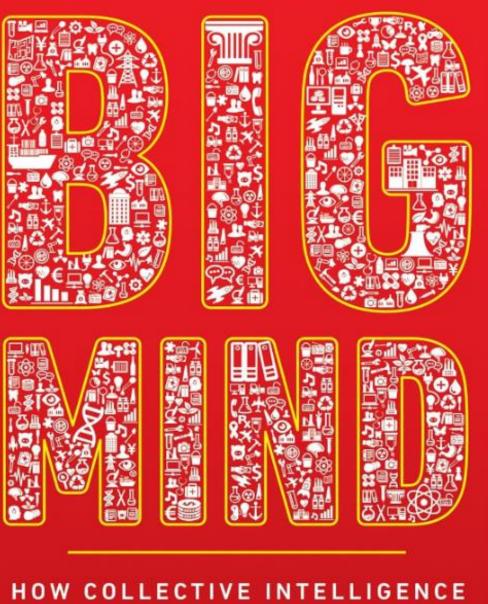






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GEOFF MULGAN



CAN CHANGE OUR WORLD

Edinburgh Futures Institute

and the state of the state of the state



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Traveltech



AI DESIGN



CONVENIENT



CURATION



CHALLENGE

Traveltech for Scotland



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joshua.ryan-saha@ei.ed.ac.uk www.traveltech.scot

