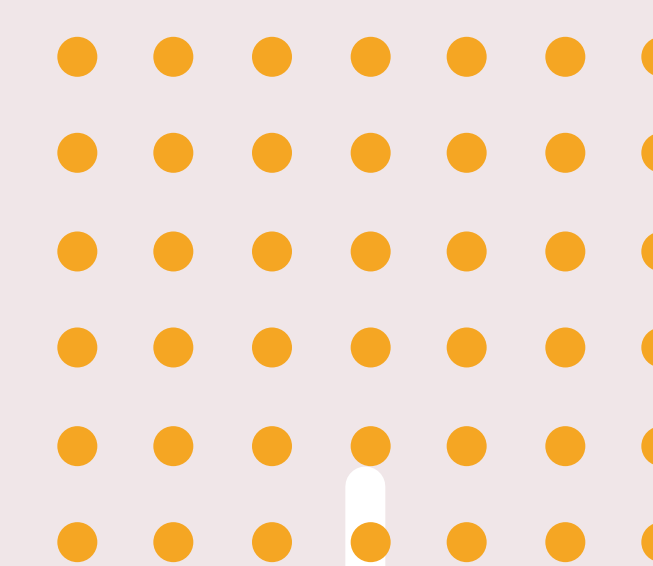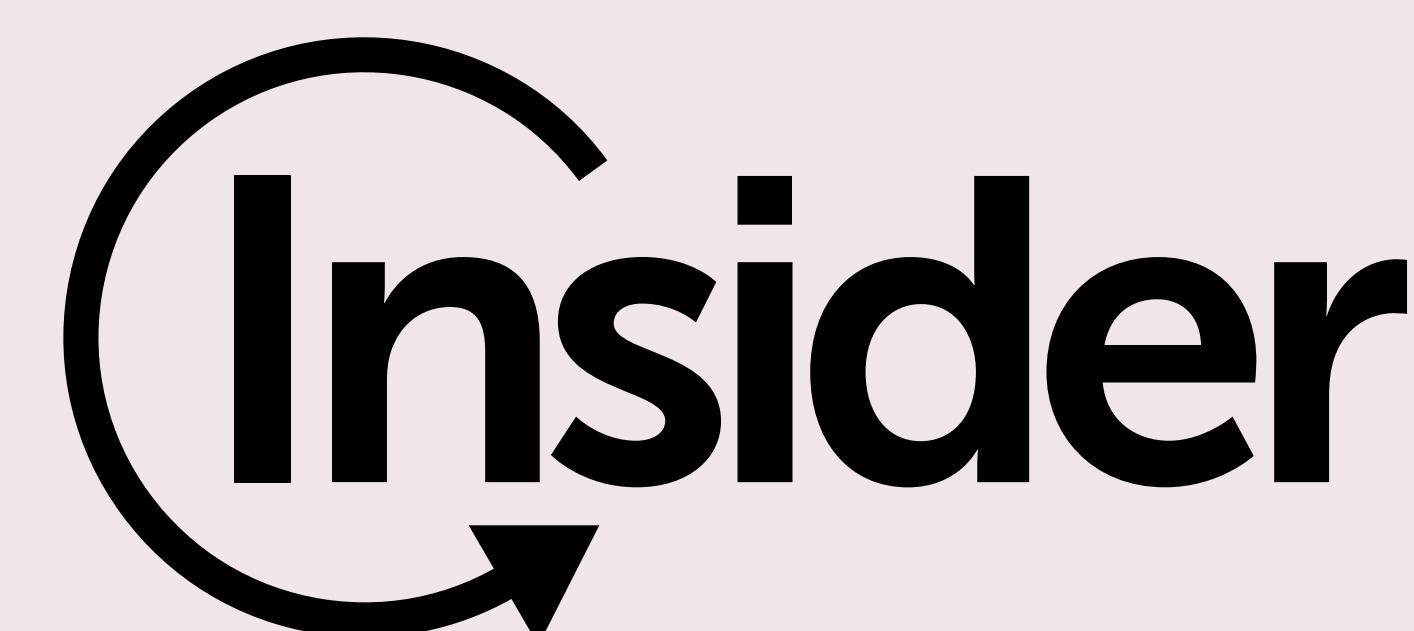# DID YOU FIND WHAT YOU ARE LOOKING FOR?

The Ultimate Guide to AI-Powered
Recommendations
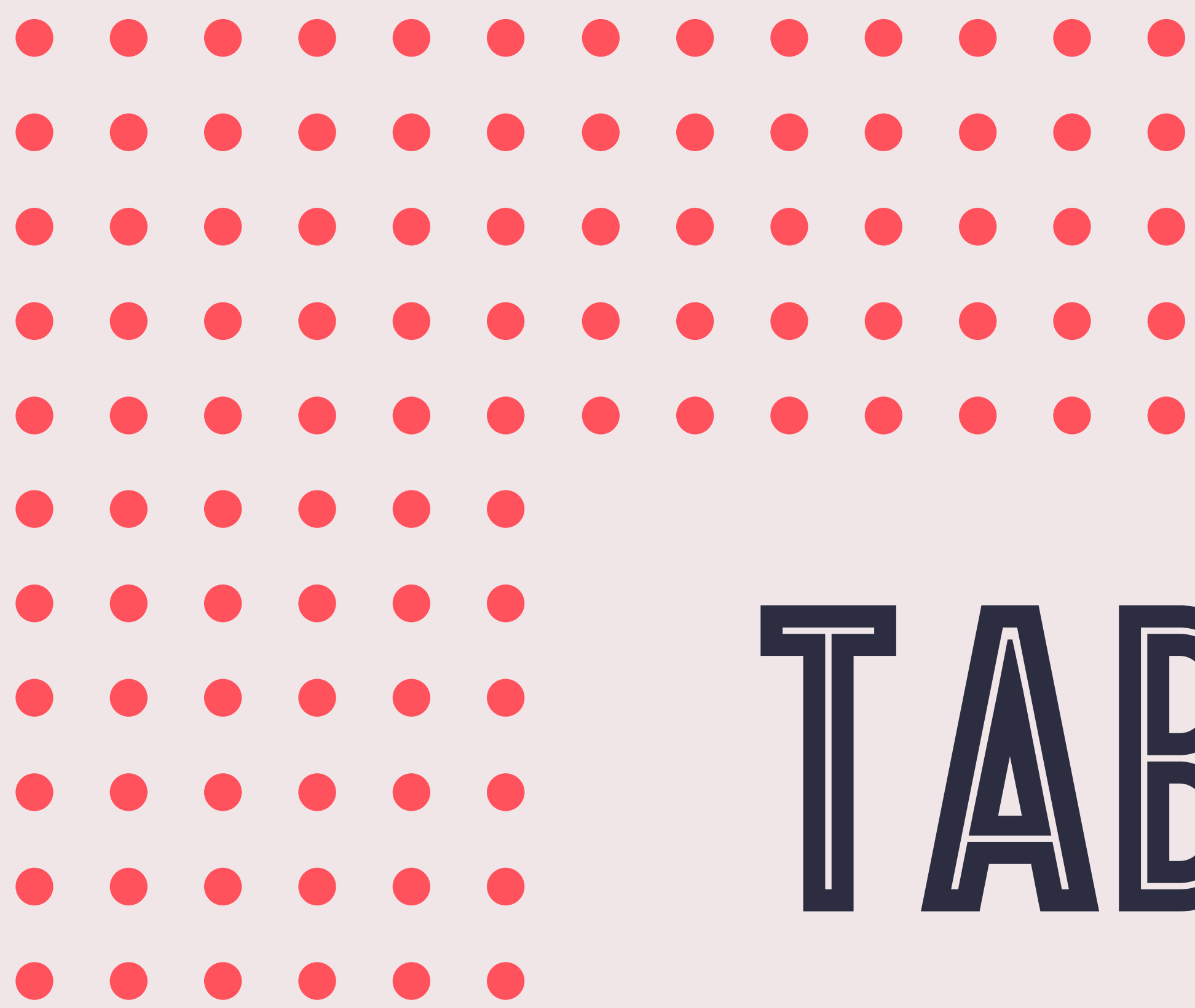
Insider

TABLE OF CONTENTS

WHAT IS A RECOMMENDATION ENGINE?

Assume it's the 17th century and you are at a souq in Babylon purchasing flour to make homemade bread. The grocer proceeds to suggest that you also take some fresh tomatoes and potatoes along with the flour, so you can cook an appetizing broth along with the bread. Maybe you buy them, maybe you don't, but the grocer conveniently provides relevant ingredients that might facilitate your shopping experience and contribute to his sales for the day.

Today's world, however, has become radically digitized and unimaginably diverse. One-on-one personalization is a long shot and the way to beat diversity in this era is to embrace digital techniques. Recommendations have always been a handy tool in the marketer's toolkit. However, mere recommendations alone don't cut it anymore.

Businesses today need to deliver tailored recommendations based on individual preferences and a host of other factors because users look forward to such an experience. How can businesses close this gap?

A recommendation engine fundamentally tracks data around user behaviour, product/content trends, and customer inclination to products and content to identify related items that might interest a customer in making their next purchase. However, evolving technologies and ever-growing customer base mean that businesses need more than traditional digital strategies, as they lack the capacity to conciliate the vast quantity of data involved. That's why marketers need AI and Machine Learning infused adaptive technologies to get their targeting and personalization right.

Insider

HOW EFFECTIVE ARE RECOMMENDATION ENGINES?

Why do businesses need a robust recommendation strategy? That's because not every visitor ends up converting and businesses need to target new users, returning users, dormant users, and various other user profiles, and they need to target these profiles uniquely.

Plus recommendations also help prevent the one-time-buyer problem that all marketers face. This need to drive conversions and returning purchases while providing recommendations that are unique and tailored to individual preferences require the adoption of robust AI-powered recommendations.

" **Did you know that 35% of Amazon's revenue comes from their recommendation strategy?** "

Insider

amazon

35%

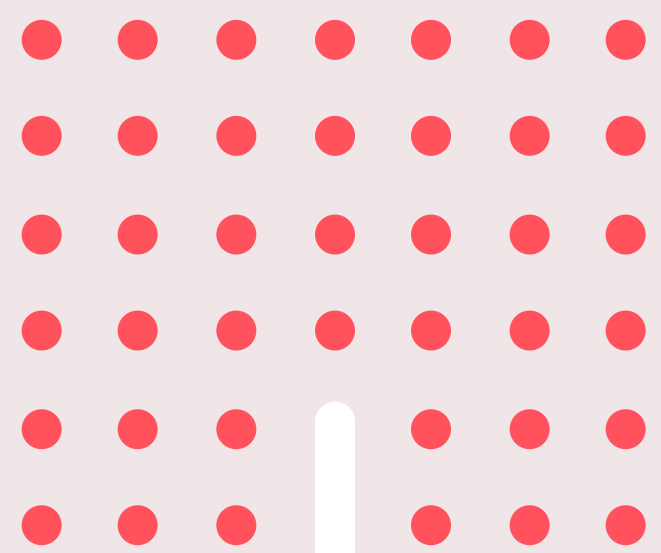revenue from
recommendations

NETFLIX

75%

of the content watched on
Netflix is from
Recommendations

Spotify®

1.75bn

number of times the "Discover
Weekly Recommendations" playlist
was watched in 3 months

Brands like Netflix and Amazon have embraced the power of recommendations
to drive purchases and views on their websites. But it's a lot more than that; the
'related products' section on Amazon or the 'most viewed' section on Netflix play
a big role in helping people find what they are looking for.

Reference: https://www.mckinsey.com/industries/retail/our-insights/how-retailers-can-keep-up-with-consumers
https://qz.com/571007/the-magic-that-makes-spotifys-discover-weekly-playlists-so-damn-good/

Insider

PRODUCT RECOMMENDATIONS – THE AMAZON WAY

Amazon's robust recommendation strategy is employed in at least 10 variations across their digital channels encompassing desktop web, mobile web, and mobile app. This enables Amazon to deliver recommendations that are tailored to individual preferences, location, search history, time zone and most importantly, helps users narrow down on their search query much quicker than any other eCommerce site.
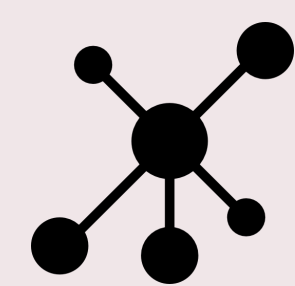
Clustering Algorithms involve clustering similar products between customers, historical clusters based on previous purchases, product clustering based on similarities between products & more.
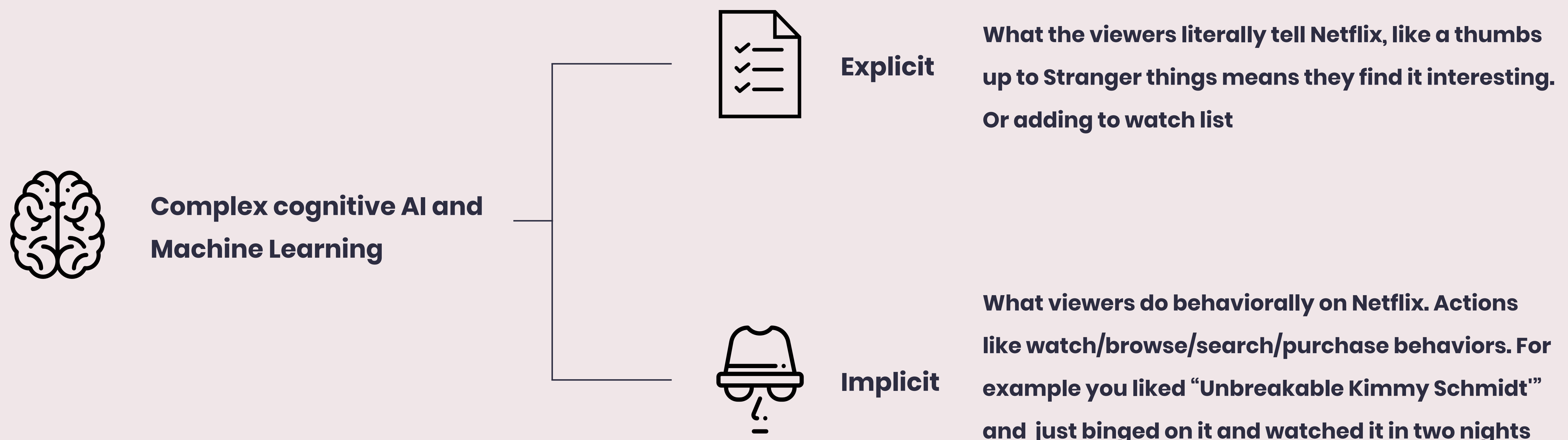
Review-based Recommendations are based on buyers' credibility and reviews' time decay.
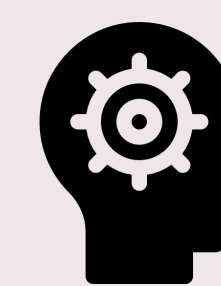
Using cognitive and contextual models you can improve existing recommendation engines.

Insider

CONTENT RECOMMENDATIONS – THE NETFLIX WAY

The greater chunk of content being watched on Netflix owes its number to Netflix's recommendation engine, one of the industry's most powerful recommendation strategy. Their recommendation strategy is able to segment users into distinct profiles based on interests, age, location, and a variety of such factors; they have over 250 million distinct user profiles. This helps Netflix deliver a personalized entertainment experience to each of its subscribers.

Complex cognitive AI and Machine Learning

Explicit
What the viewers literally tell Netflix, like a thumbs up to Stranger things means they find it interesting. Or adding to watch list

Implicit
What viewers do behaviorally on Netflix. Actions like watch/browse/search/purchase behaviors. For example you liked "Unbreakable Kimmy Schmidt'" and just binged on it and watched it in two nights

Reference: https://www.wired.co.uk/article/how-do-netflixs-algorithms-work-machine-learning-helps-to-predict-what-viewers-will-like

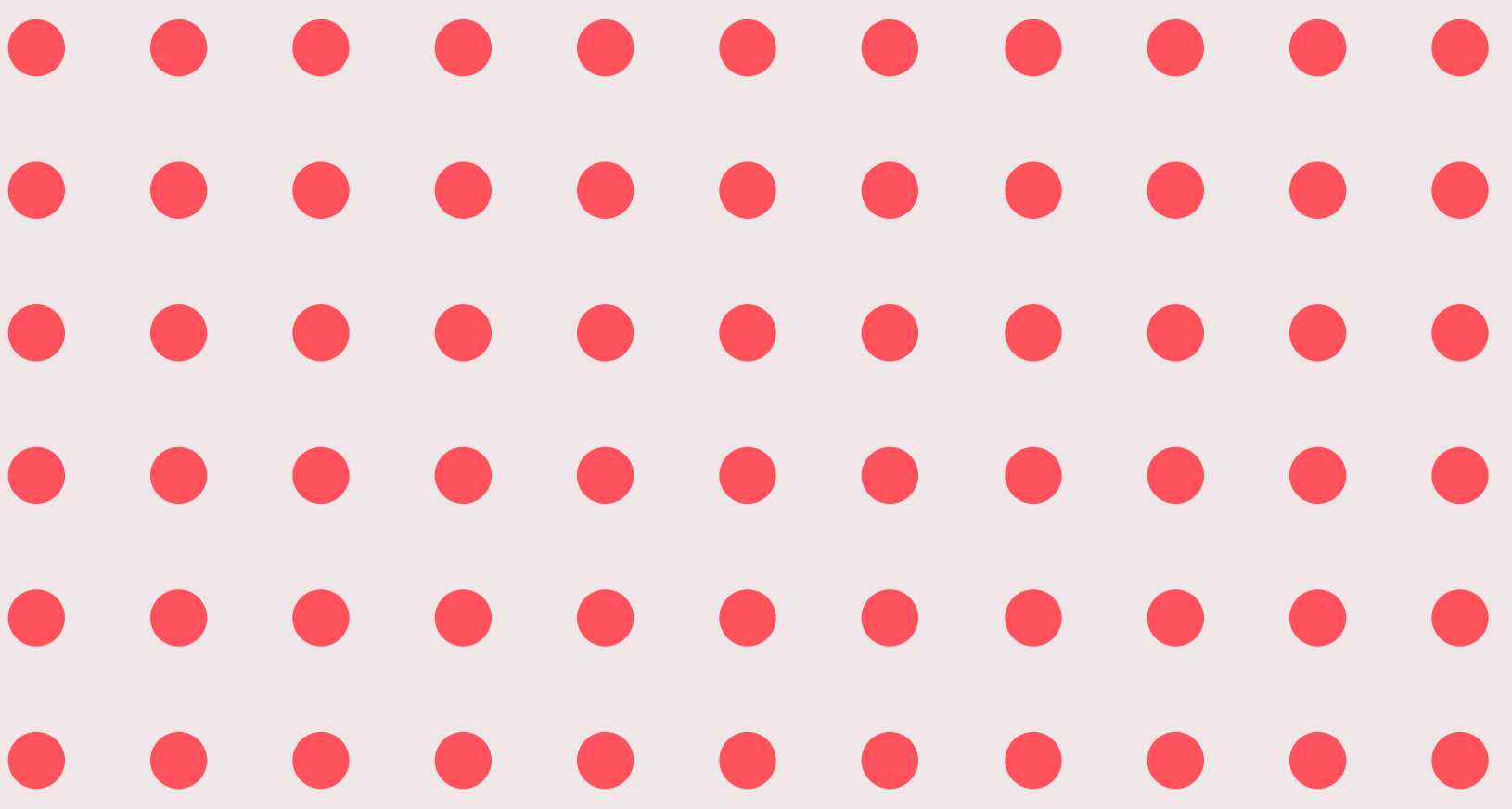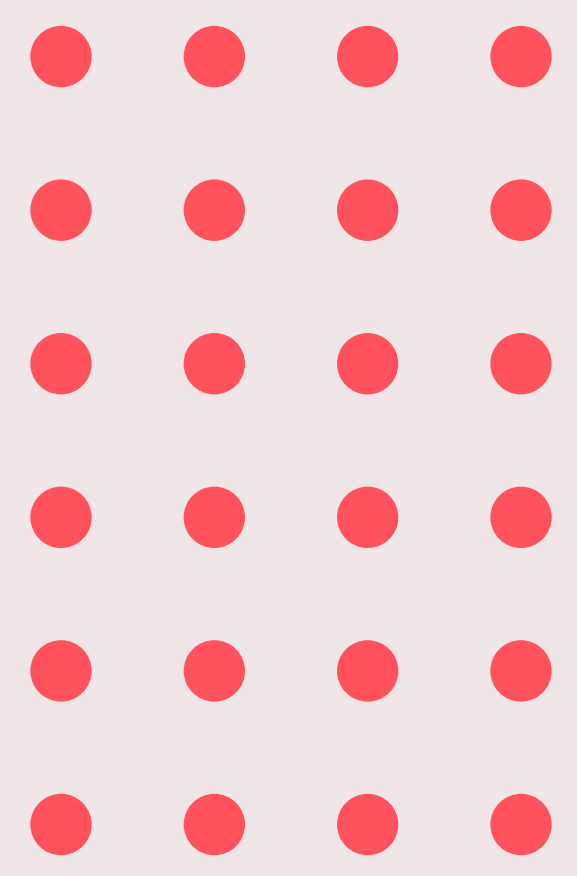Insider

HOW MATURE IS YOUR RECOMMENDATION STRATEGY?

Heatmap research has shown that customers rarely find what they are looking on their first attempt. It's usually a combination of keyword alternations and multiple searches that get the customer to the product they are looking for. A customer who does not find what they are looking for in the first three attempts most likely will drop off.

Recommendations by Amazon and Netflix aim to solve this by tracking similar items that multiple customers have viewed to show the most relevant suggestions. This can help customers find just what they are looking for much quicker and reduce drop-offs.
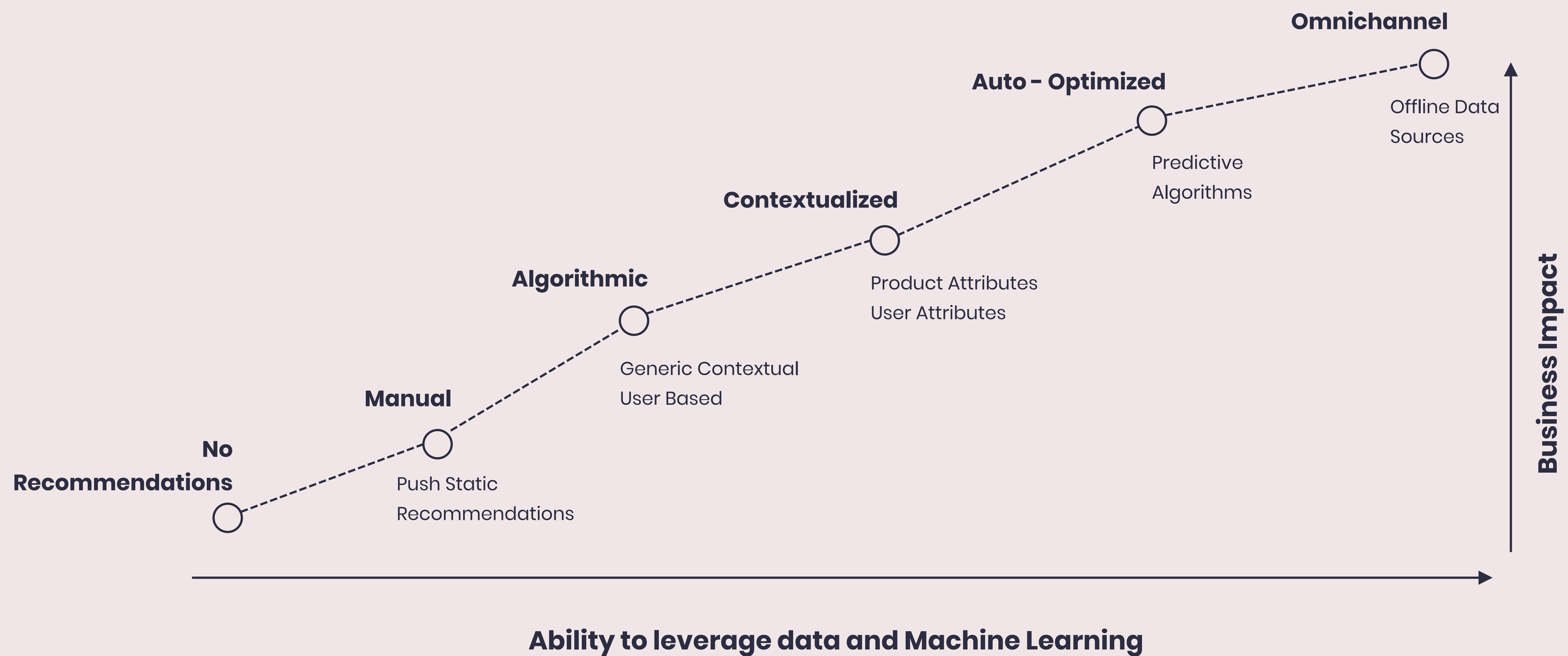
Recommendations effectively drive purchases and encourage customers to come back for repeat purchases. Among other personalization strategies, AI-powered recommendations that actively analyze user behaviour are highly effective here. Just like Apple's motto of 'customers don't know what they want until you give it to them,' customers also rely on relevant recommendations to help them make their next purchase.

A robust recommendation strategy is a game changer for any brand. The maturity of your recommendation engine decides the ROI on your recommendations. The impact of your recommendation engine depends on its ability to leverage data and Machine Learning capabilities. The business impact is proportional to the maturity of your recommendation strategy.

Insider

WHAT IS THE MATURITY OF YOUR RECOMMENDATION PROGRAM?

Omnichannel
Offline Data Sources

Auto - Optimized
Predictive Algorithms

Contextualized
Product Attributes
User Attributes

Algorithmic
Generic Contextual
User Based

Manual
Push Static
Recommendations

No Recommendations

Business Impact

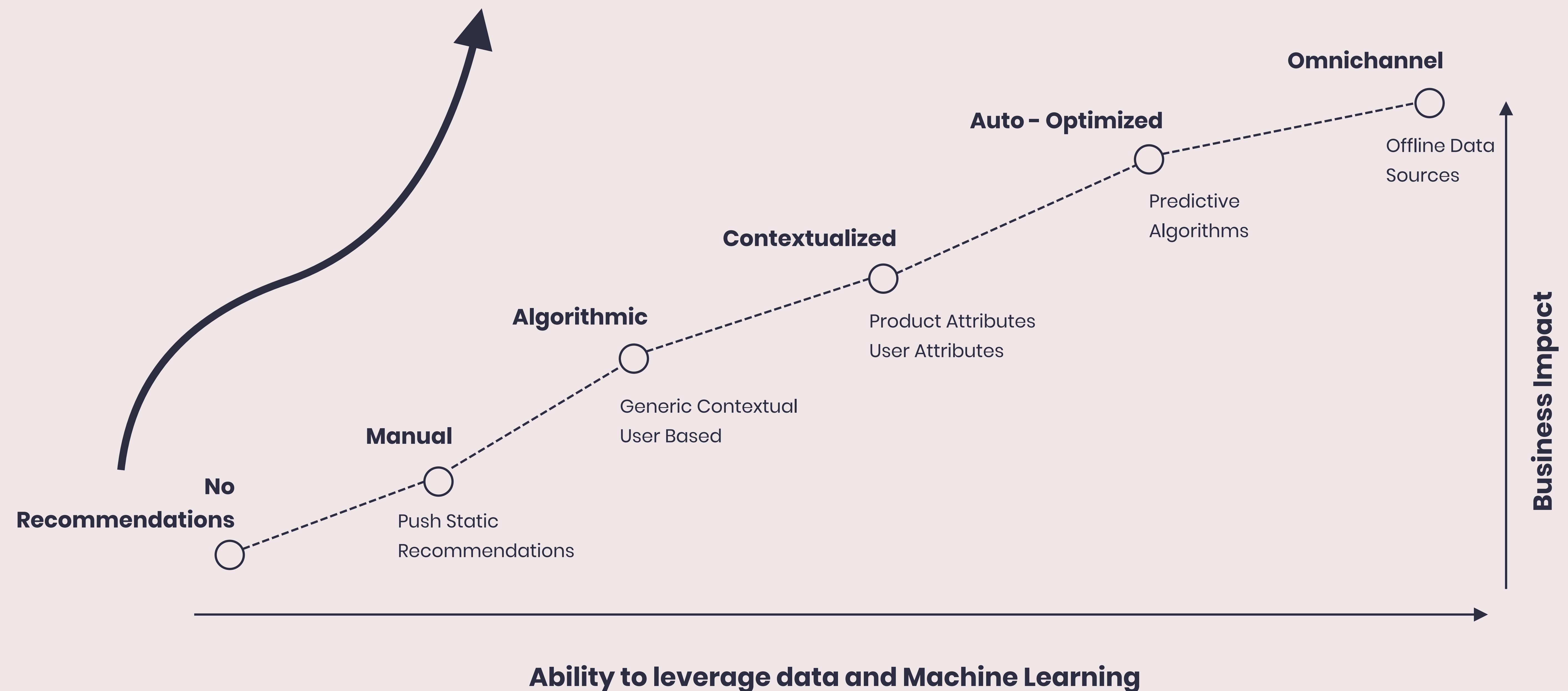Ability to leverage data and Machine Learning

Insider

NO RECOMMENDATIONS

This is not an ideal situation for any business with an online presence. The lack of a recommendation strategy implies a self-service modus-operandi and while this probably works at gas stations, is a deal-breaker for websites with products/content or services to offer.

From a sales/revenue perspective, this also implies that you are losing out on potential conversion/income.

IMPACT: 0   YOU'RE LOSING MONEY.

Omnichannel
Offline Data
Sources

Auto - Optimized
Predictive
Algorithms

Contextualized
Product Attributes
User Attributes

Algorithmic
Generic Contextual
User Based

Manual
Push Static
Recommendations

No Recommendations

Business Impact

**Ability to leverage data and Machine Learning**

Insider

MANUAL RECOMMENDATIONS

This is the most basic recommendation engine which makes use of a 'Product Feed'. There is a recommendation strategy in place, however, it is based only on data that has been pre-fed into the platform.

This is great for showing inventory recommendations but lacks relevancy and Machine Learning algorithms that tailor recommendations to individual preferences. It's not the most effective form of recommendation out there, but merely a beginner's strategy.

IMPACT: Good for showing basic recommendations. Works for small-scale businesses. Close to zero impact in generating relevant recommendations and converting customers or generating revenue.

Our Top Picks

Turquoise Pants
£59.00

Dark Blue Pants
£59.00

Beigge Pants
£59.00
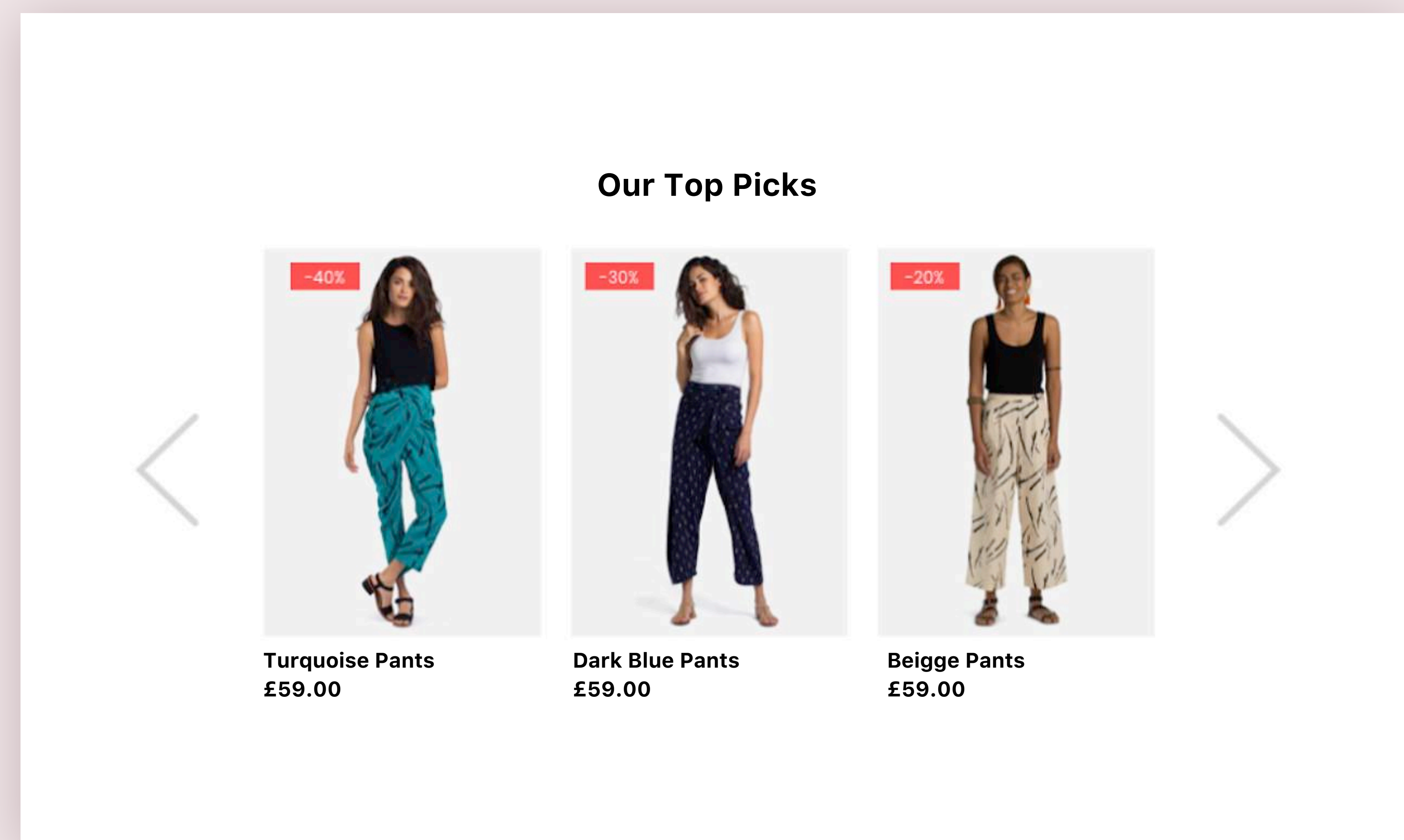
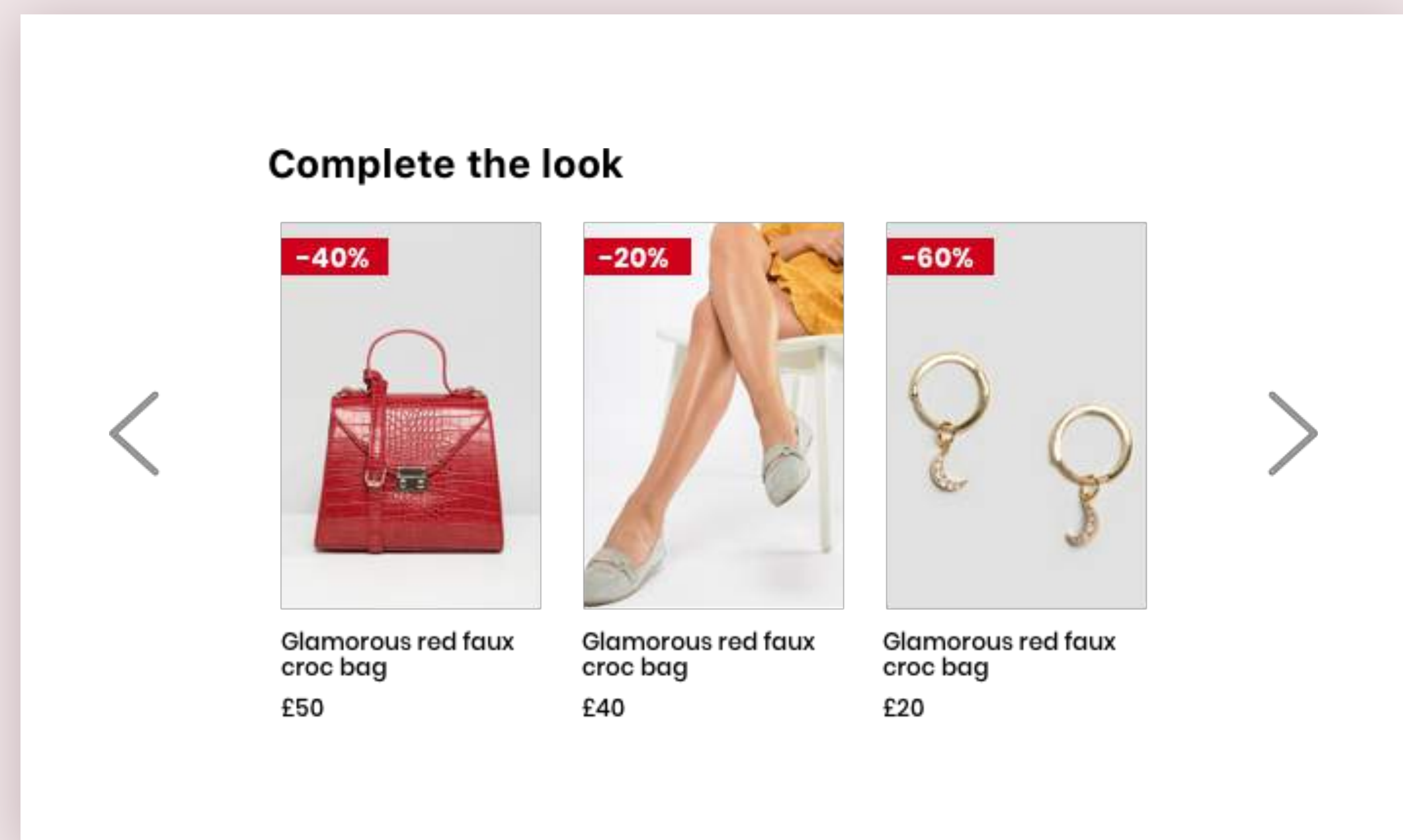**Data**
Product Feed

Machine Learning
None

ALGORITHMIC RECOMMENDATIONS

This is a more advanced version of recommendations that make use of both product-feed data and Machine Learning algorithms to deliver contextual and relevant recommendations such as 'viewed together', 'bought together', 'most popular' and much more.

This is the basis for the more advanced AI-based recommendation engines. Algorithmic recommendations are capable of delivering better refined and 'search query' specific suggestions to a user. Definitely a step up from manual recommendations.

IMPACT: Delivers more business impact in terms of conversions, purchases, and revenue.

Complete the look

-40%

Glamorous red faux croc bag
£50

-20%

Glamorous red faux croc bag
£40

-60%

Glamorous red faux croc bag
£20

Data

Product Feed
Visitor Behavior
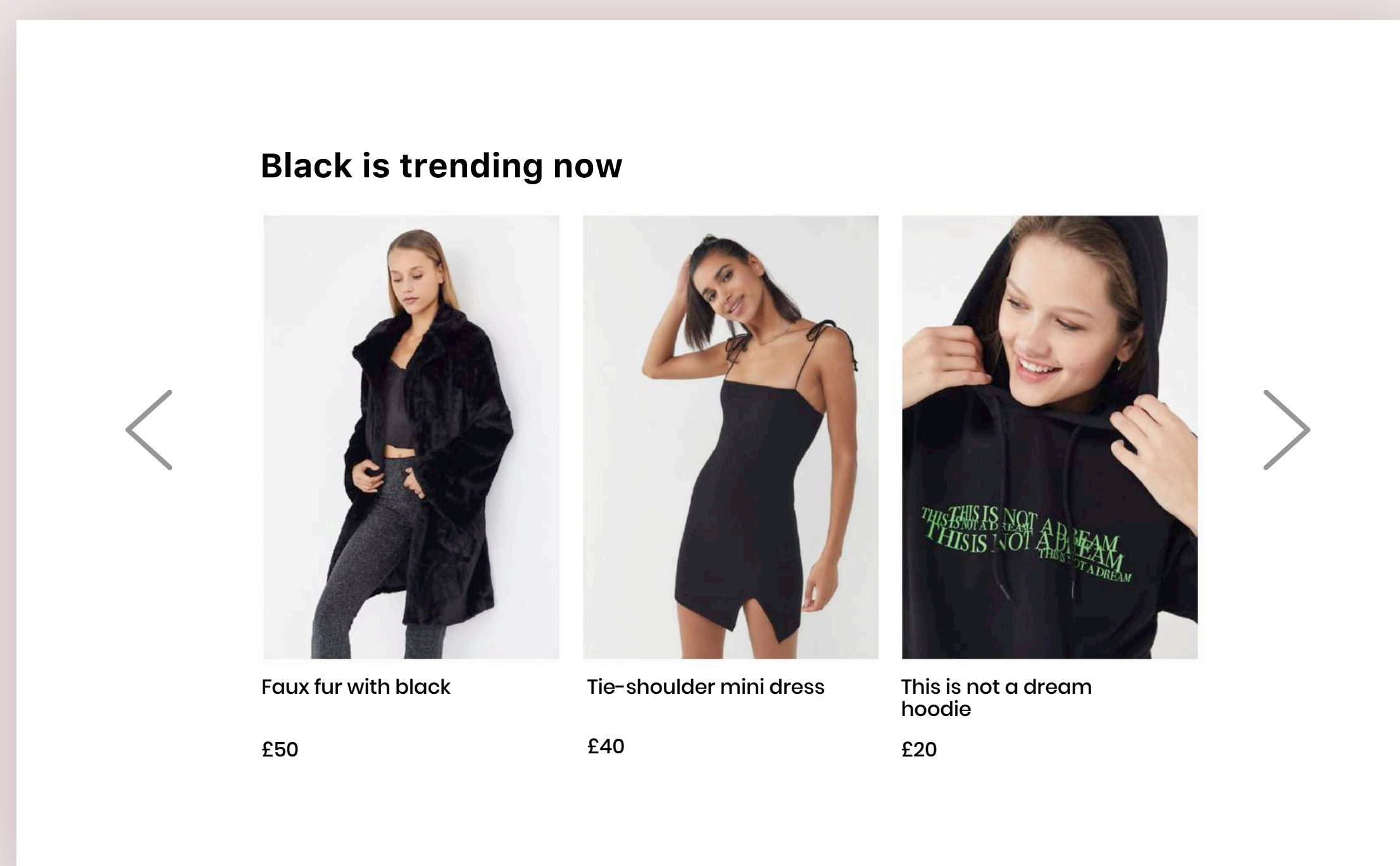Conversions
Purchase Data

Machine Learning

Machine Learning
Viewed Together
Bought together
Location Based
Most Popular
User Based
+many more

Insider

CONTEXTUALIZED & AUTO-OPTIMIZED RECOMMENDATIONS

An improvement on the algorithmic model, these strategies are also powered by Machine Learning algorithms and in addition to product data, they also take into account parameters such as price, colour, stock, etc.

We have now entered the world of AI-powered recommendation strategies that help a user narrow down on his search criteria and help them access relevant products quicker. Most brands around the world use a variation of this recommendation strategy.

**IMPACT:** Highly effective at driving purchases by helping users narrow down on their search.

Black is trending now

Faux fur with black
£50

Tie-shoulder mini dress
£40

This is not a dream hoodie
£20

Recommended only for you

-40%   -30%   -20%

Turquoise Pants
£59.00

Dark Blue Pants
£59.00

Beigge Pants
£59.00

Data

All Data +
Product Attributes (Price, Color, Stock etc.)
User Attributes

Machine Learning
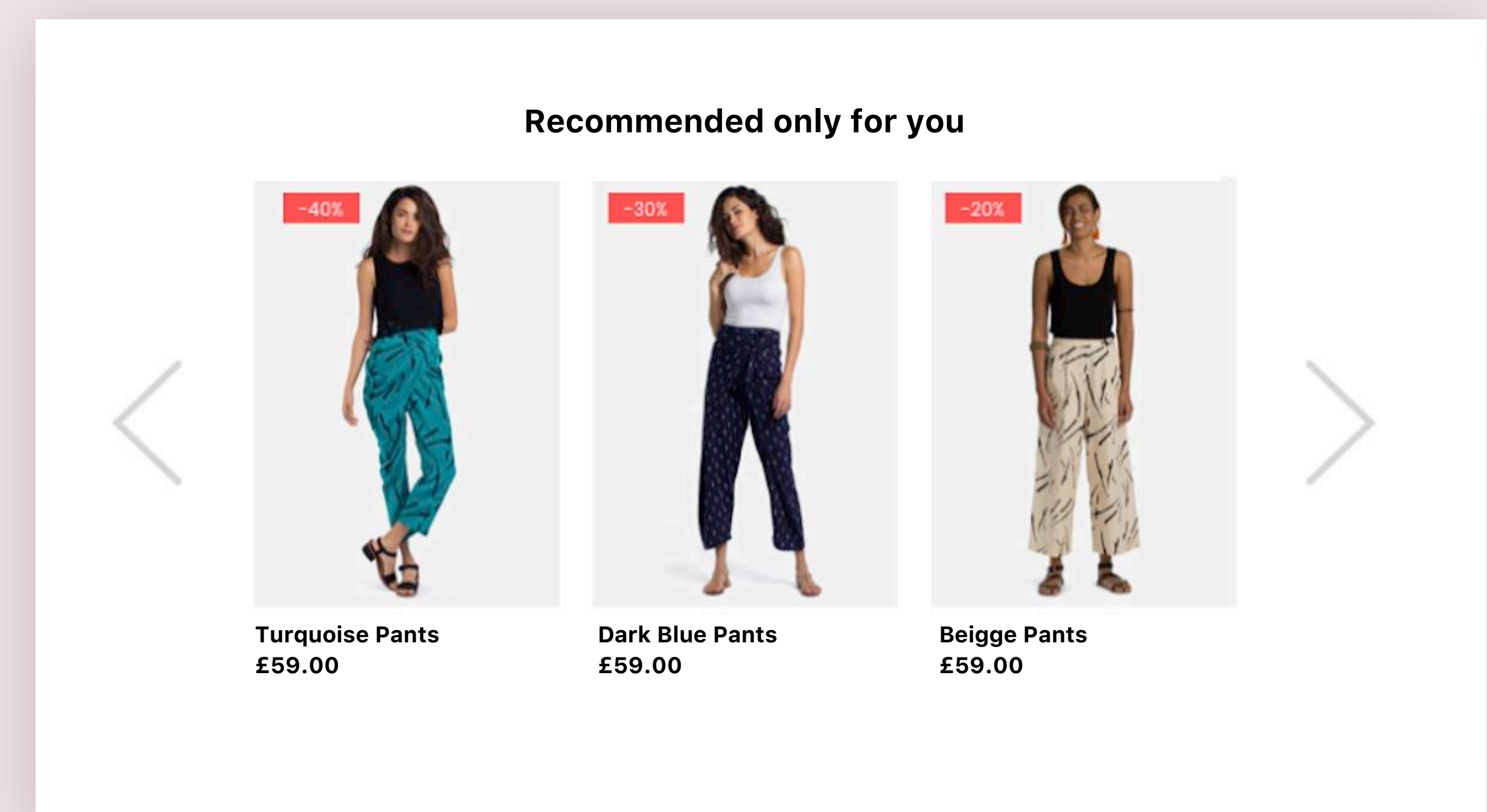
All Algorithms

Data

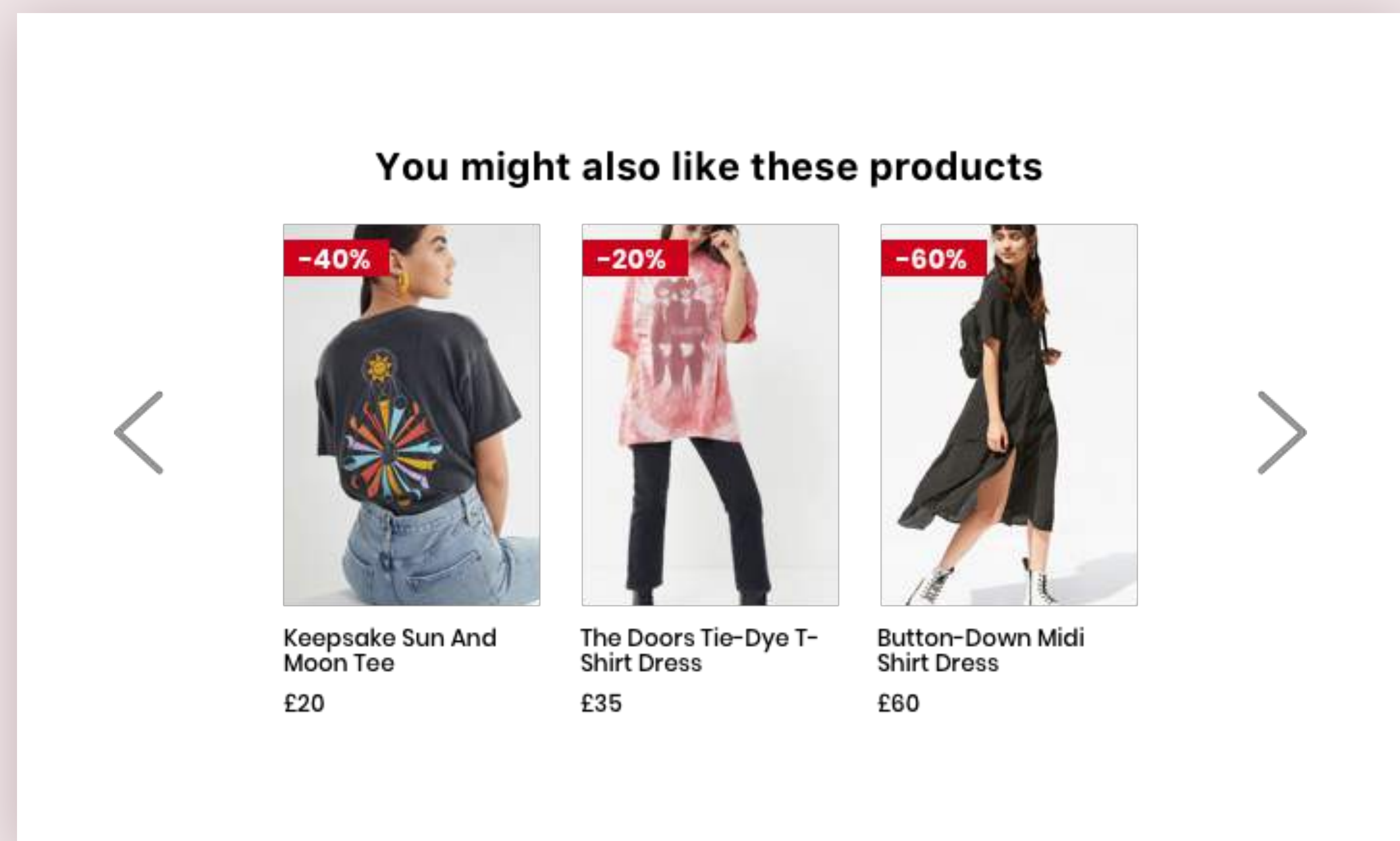All Data

Machine Learning

All Algorithms + Sorting

Insider

OMNICHANNEL RECOMMENDATIONS

The future of recommendations is here. Omnichannel recommendations combine the best of everything and also makes use of offline CRM data such as POS data, in-store behaviour etc. to build the complete user profile.

Marketers are constantly looking for ways to gain an edge over competitors and provide a stellar user experience across channels. These advanced recommendation engines make this possible by making use of online and offline insights like never before. The AI and Machine Learning algorithms then translate this plethora of data into highly relevant suggestions tailored to individual preferences and contribute to an impactful experience for the user.

IMPACT: Most effective recommendation strategy to drive conversion and engagement. Bespoke and individualistic recommendations also lead to more purchases.
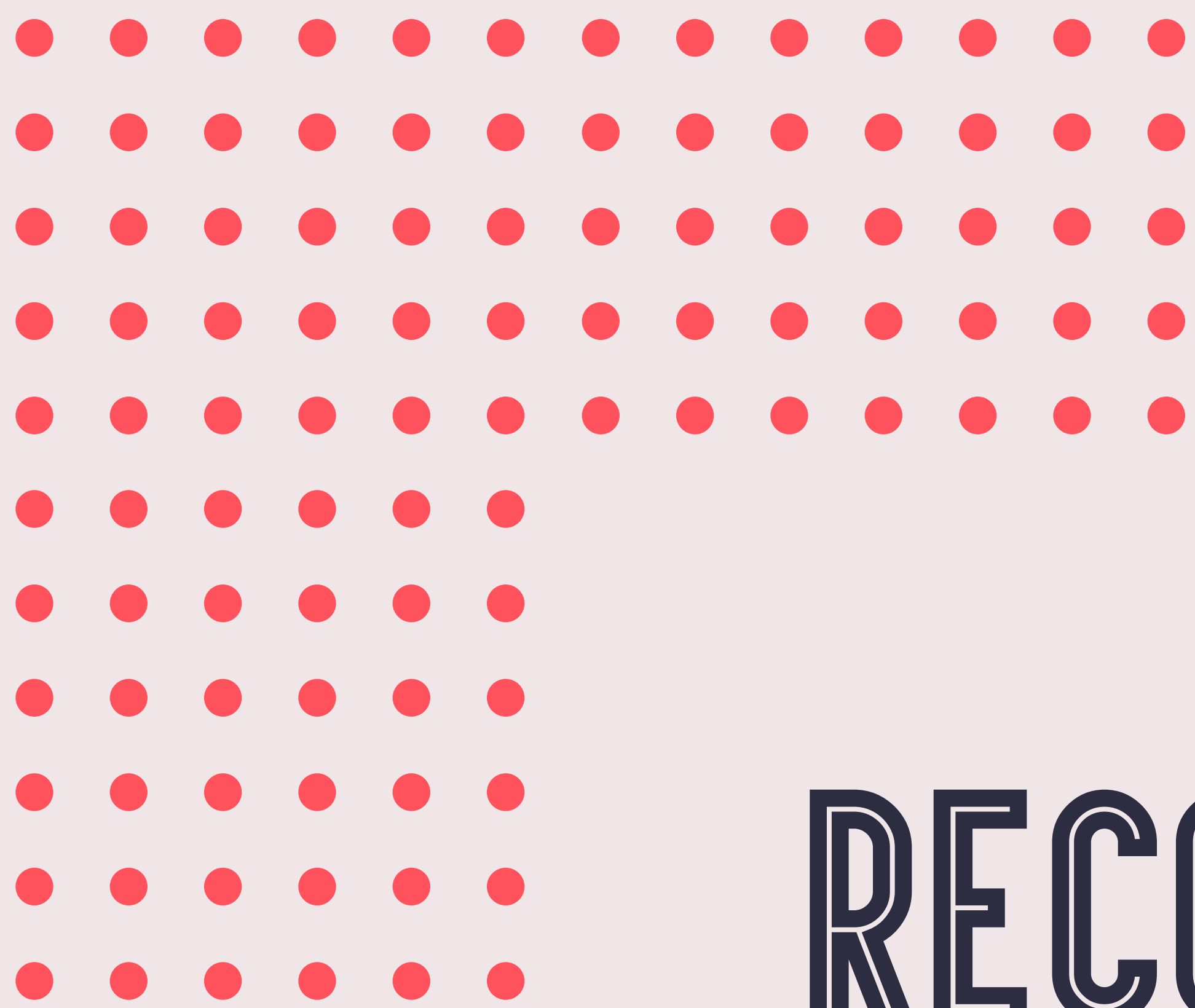

You might also like these products

-40%	-20%	-60%
Keepsake Sun And Moon Tee	The Doors Tie-Dye T-Shirt Dress	Button-Down Midi Shirt Dress
£20	£35	£60

Data
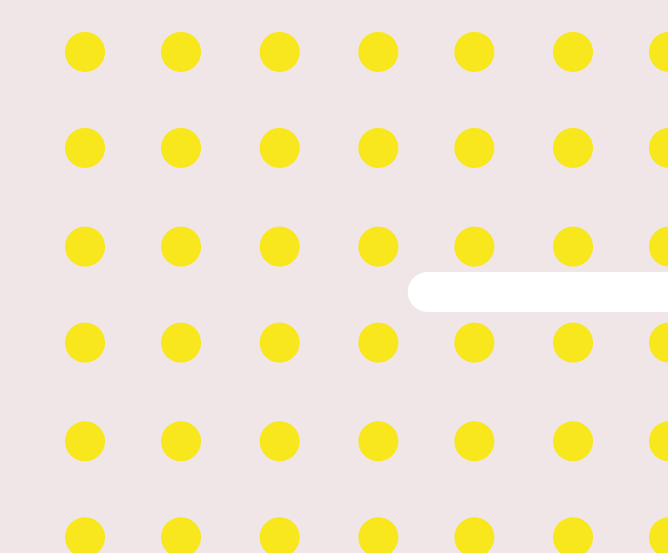All Data + Offline CRM Data (POS Data, in-store behaviour, etc)

Machine Learning
All Algorithms

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RECOMMENDATIONS FOR EVERY INDUSTRY – THE INSIDER WAY

To help you understand how Smart Recommender can impact your personalization strategies, we have crafted some examples of how this will work across market segments.
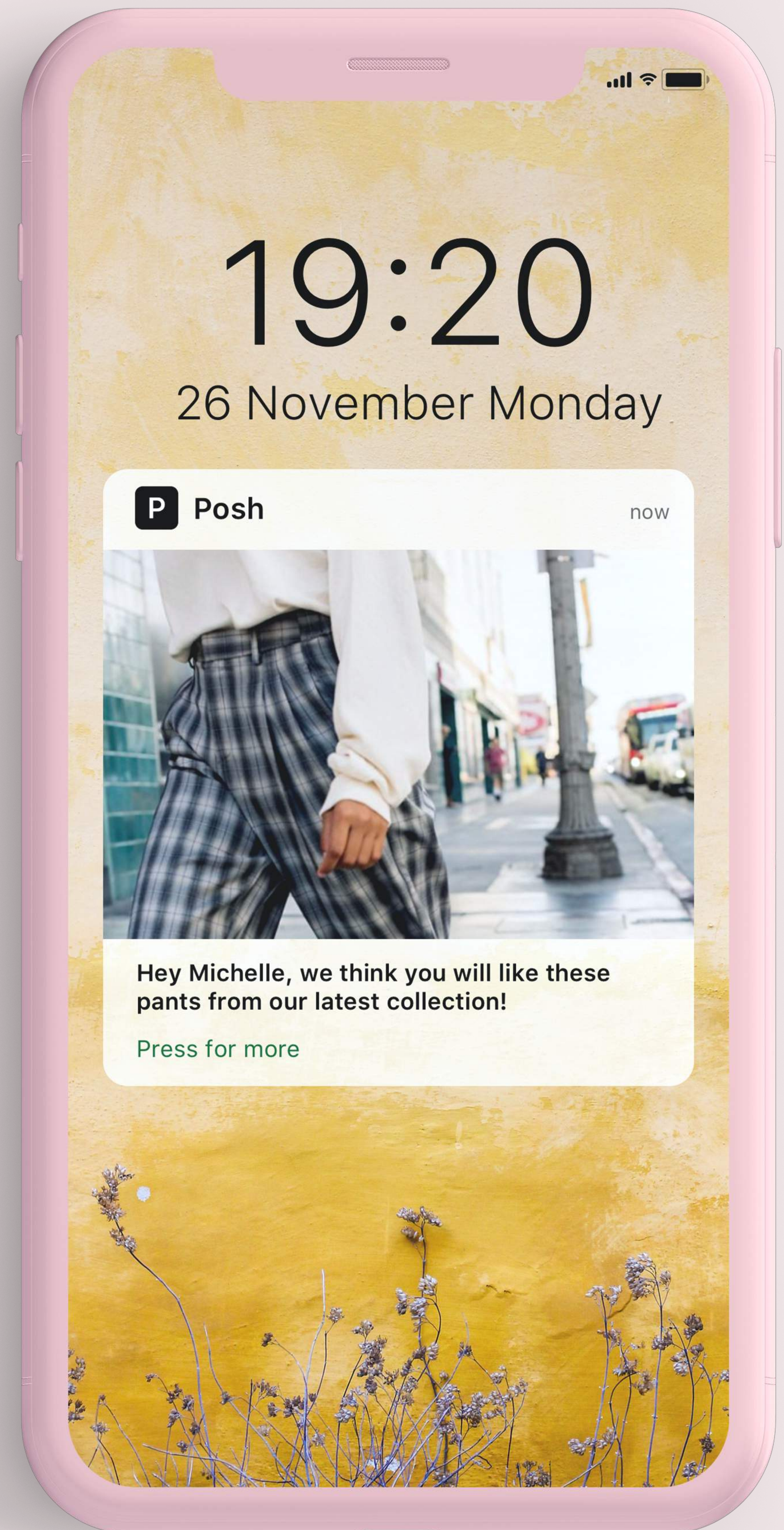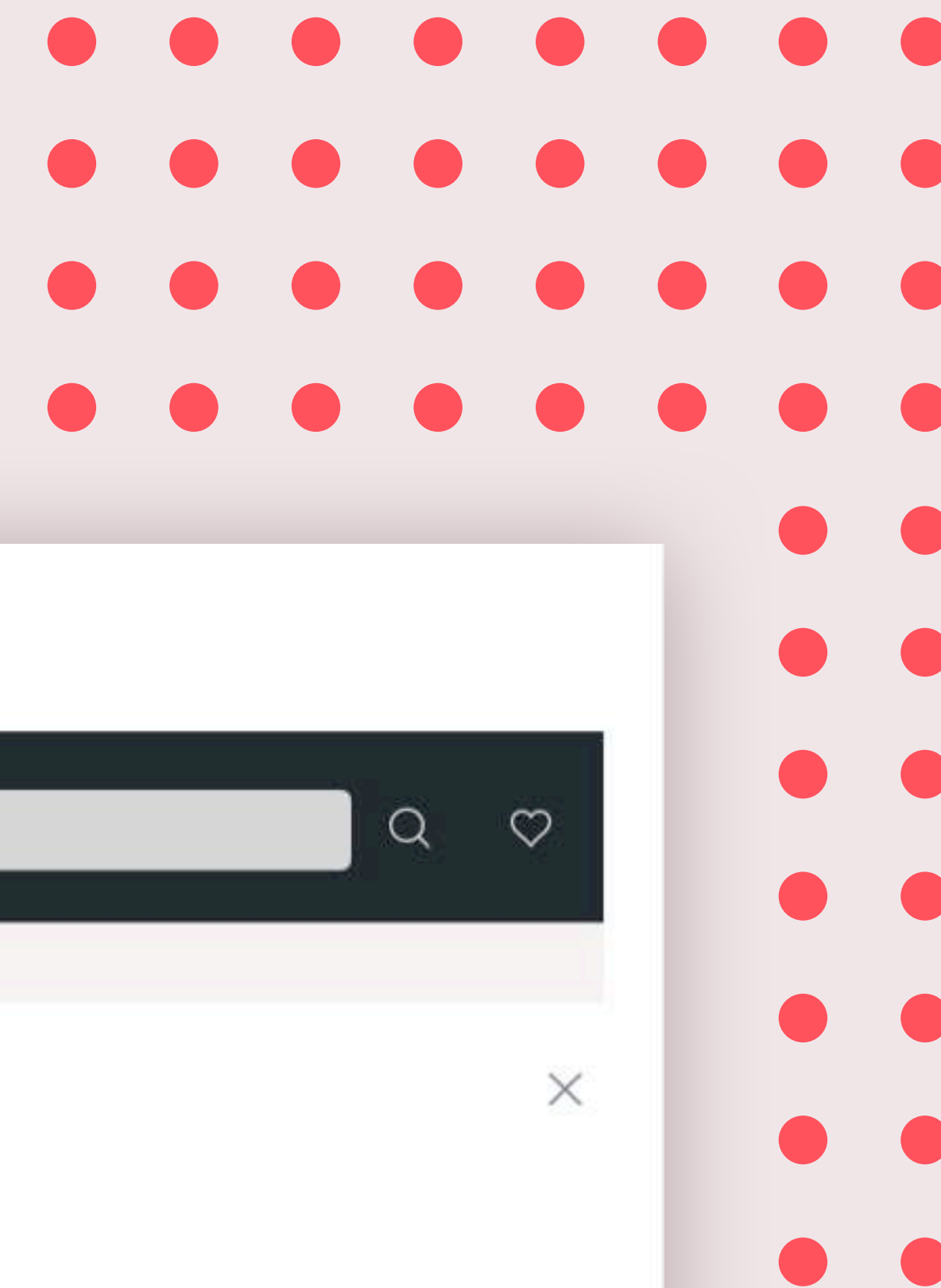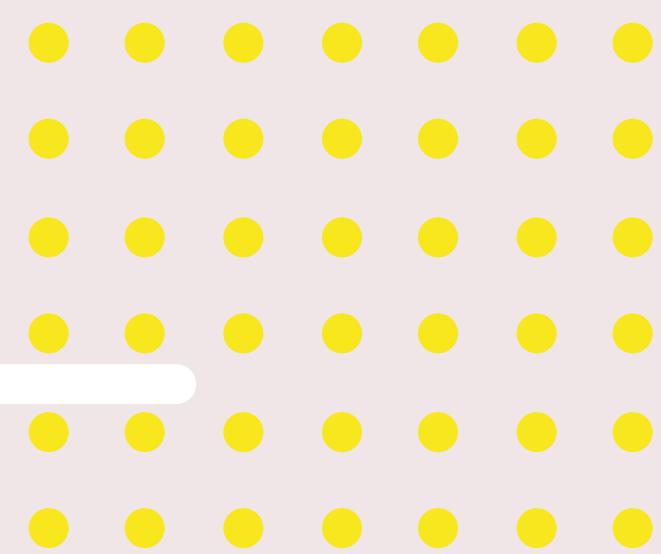
Insider

ECOMMERCE

Show them what they're looking for, keep them coming back for more.
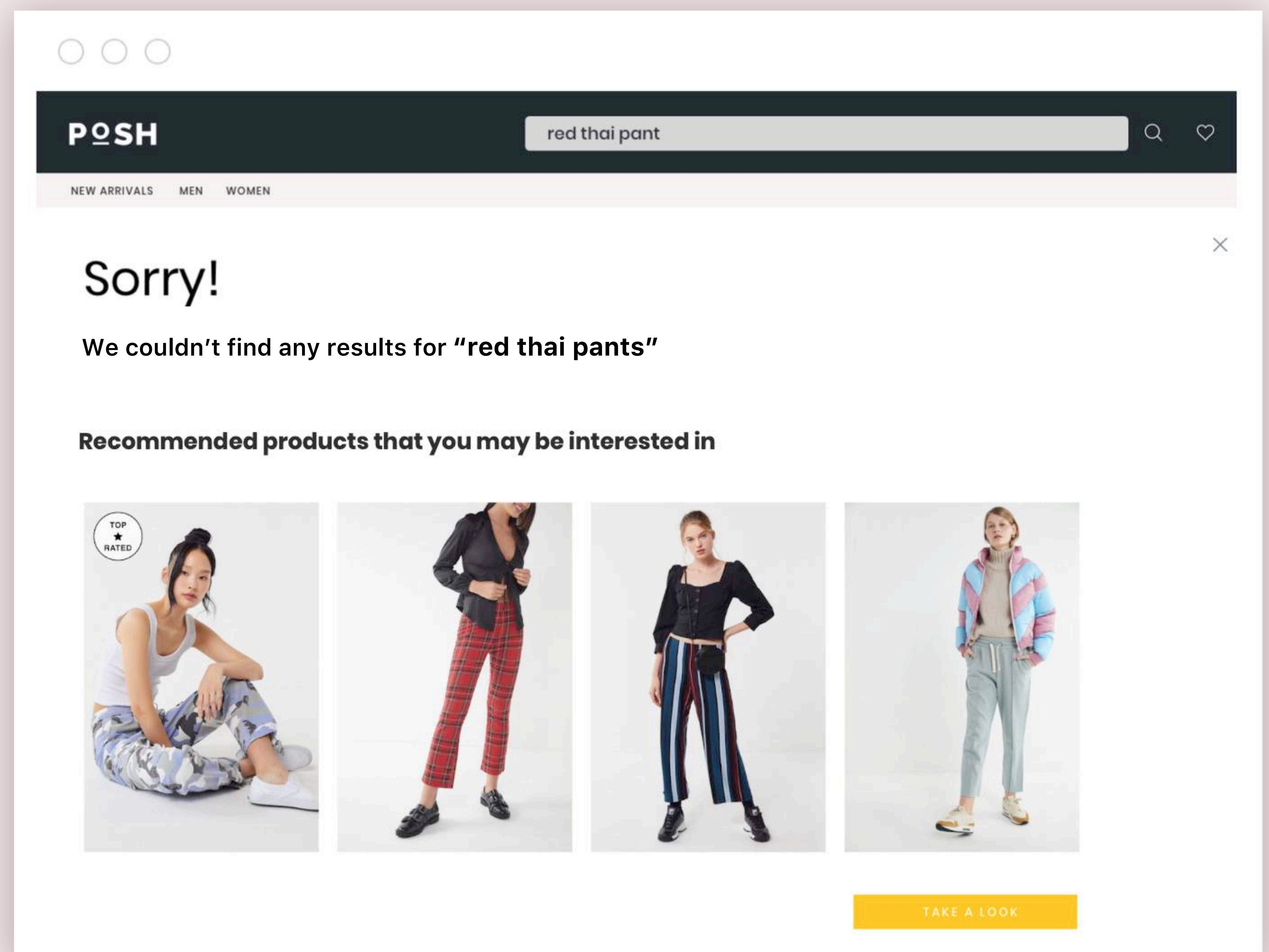
Michelle is an active browser on your eCommerce store. Her user engagement on the platform is high and she is one of the most active customer profiles you have. She browses through multiple products before making a purchase. Sometimes her searches run into days or weeks before she completes a purchase. Most recently, she has been searching for some cool 'chequered thai trousers'.

Now, with Smart Recommender you can send Michelle a web push recommendation to remind her of her ongoing search and send relevant recurring single product recommendations based on her browsing patterns on the web.

19:20

26 November Monday

P **Posh**   now

Hey Michelle, we think you will like these pants from our latest collection!

Press for more

Insider

Since Michelle is very particular about the type of trousers that she wants, she goes to your website and types 'red thai pants' which does not return any search results. With Smart Recommender, instead of showing a 404 ERROR, you can show recommended products using collaborative filtering (closest and most relevant suggestions based on search query) and help keep Michelle engaged with your website.

POSH

red thai pant

NEW ARRIVALS   MEN   WOMEN

Sorry!

We couldn't find any results for **"red thai pants"**

Recommended products that you may be interested in

TAKE A LOOK

Insider

As Michelle proceeds to the Order Summary page she realizes that she needs to add more items to her cart to reach the Minimum Order Value (MOV) to be eligible for free shipping. With Smart Recommender, you can show her suggestions for related products with the closest pricing to MOV so she can benefit from free shipping. A good percentage of shoppers drop off at checkout for this reason. Make sure you do not lose customers like Michelle for this reason.

For the eCommerce industry, it is vital to engage first-time visitors, encourage returning visitors and create a lifetime value with users. Recommendations are an effective way to tackle the one-time-buyer problem faced by all marketers. And just like Amazon, an effective recommendation strategy can exponentially increase user engagement on your website.

TRAVEL

Help them book a trip this year, earn their trust for the following years.

Richard is an accountant who loves to take off and discover a new place every year. Around the same time each year, he is on your website looking for the cheapest flights and best deals on hotels for his next destination. Now, with Smart Recommender, you can show Richard top trending destinations from his city (based on popular user behaviour in that city).
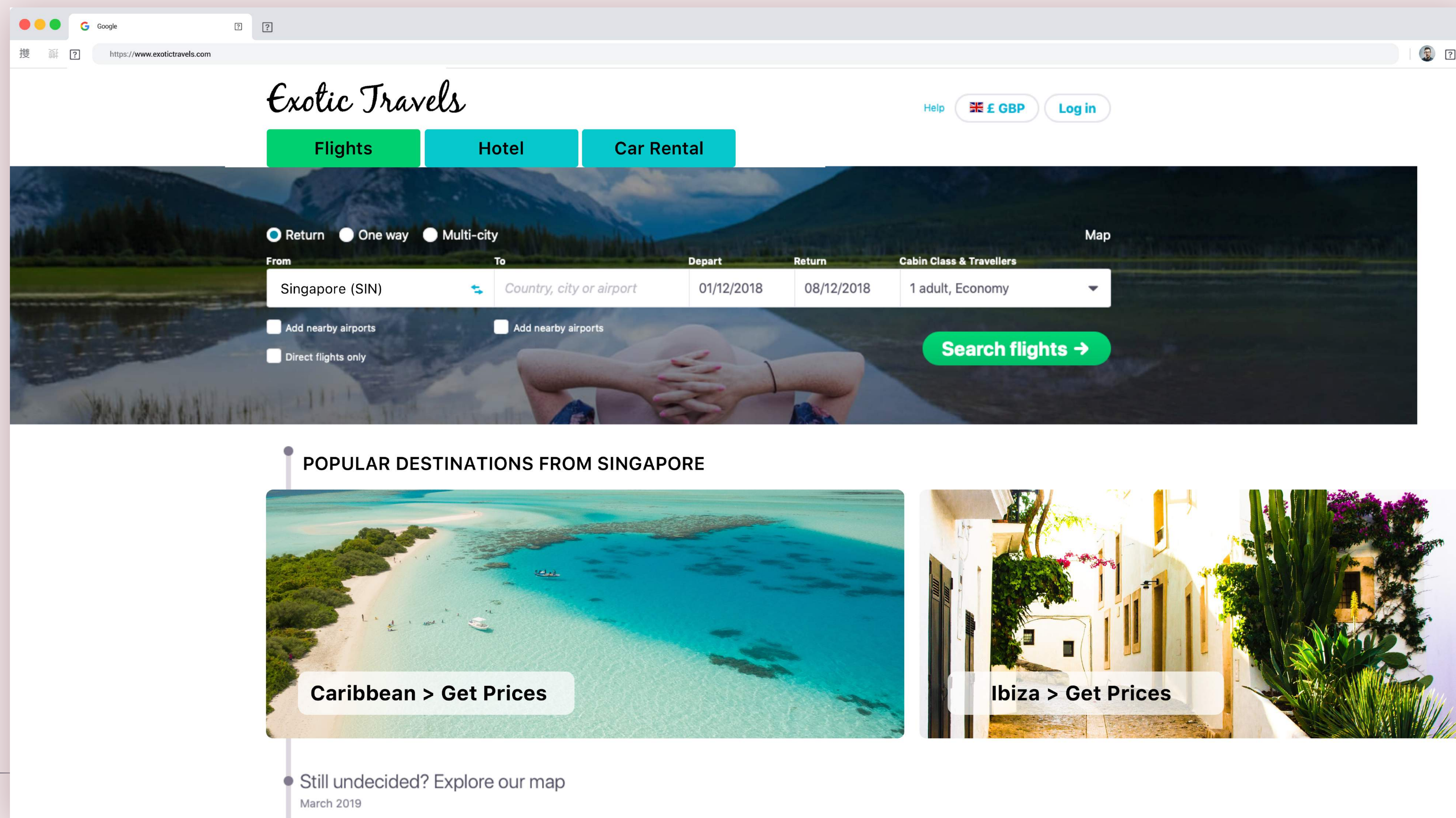
Once Richard has purchased the flight tickets to his destination, you can continue to engage him post-purchase with ancillary recommendations such as 'travel insurances', 'hotels', and 'car rentals'. Add value to Richard's experience with your brand by suggesting relevant add-ons to his purchase, so he can get everything sorted in one place.
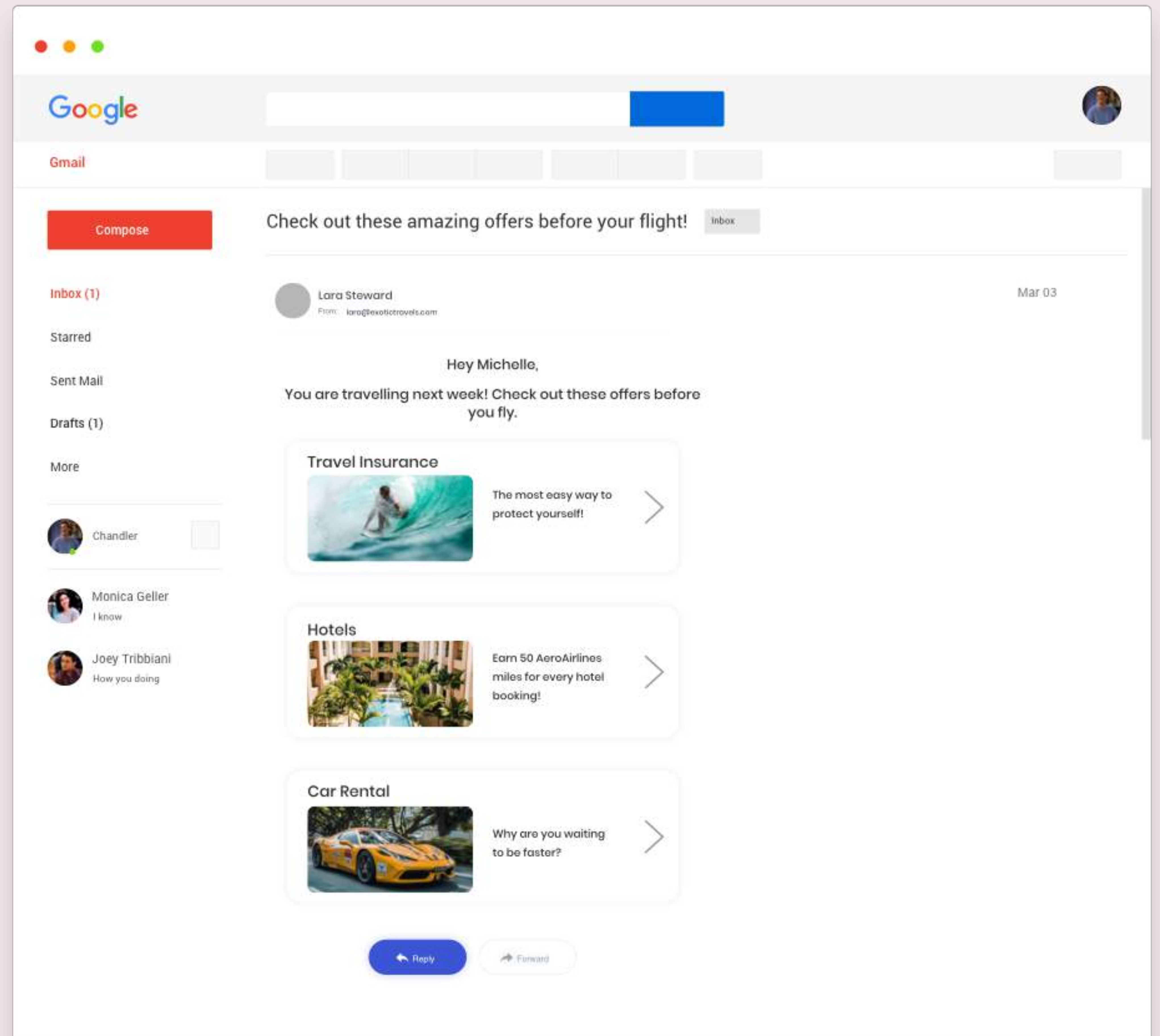
Based on ancillary recommendations, Richard proceeds to book a hotel for his vacation. With Smart Recommender, you can help him narrow down his search considerably, by using product attributes to filter hotel recommendations based on his preferences from past bookings. Eg. by showing a filter for only 4-star hotels, or hotels which offer complimentary breakfast.

For the travel industry, being able to send real-time and relevant recommendations to users is critical as the prices can often fluctuate within minutes. Combine Smart Recommender with our Web Push Price Alerts to notify users instantly about a drop in prices, increase in prices or fast-filling airline seats.

PUBLISHERS

Books have their own way of being found – a librarian. For digital, there are recommendations.

Patricia is a blogger and 80% of her online presence revolves around reading articles on media and publishing sites. She is also keen on what she reads and has a curated list of topics and sites that she follows. With Smart Recommender, you can show Patricia 'Next Article' recommendations based on her behaviour, so as to keep the suggestions as relevant to her preferences as possible.

http://wdn.com

W D N

Get started

advantages beyond more moderate regimens (i.e., that allow for some whole fruits, legumes, whole kernel grains, root vegetables and perhaps a touch of added sugar).

In conclusion, our study cannot "prove" the CIM is true. But our findings do suggest that recent claims to have "falsified" this new way of thinking, are premature at best. A credible case can now be made that *all calories are not alike to the body*, and that novel effects of food might make a big difference in the long-term success of weight loss treatment.

With the latest data indicating continuing upwards trends of obesity in children and

Next article is recommend for you

Also tagged Mental Health

The Attention Economy Is Eating Our Brains

2.3K

Insider

Patricia, being a blogger, also reads a lot for her research, which means she reads several articles on a given topic. With Smart Recommender, you can show her 'Most Read' and 'Most Popular' content in a category using content-based and category-based recommendations. Apart from helping Patricia complete her research faster, you can also deliver a seamless user experience across desktop web, mobile web and apps.

WDN Wellness

diet that is "healthy" for everyone.

Through my recovery, I have also experienced the negative stigma that is associated with this disease and other mental illnesses. When I was first diagnosed, I was too embarrassed about my disorder to open up to my friends. I was ashamed of having such an illness, afraid what people would think of me if they found out. However, I have learned that eating disorders are more common than one would think, and that in order to truly recover, I needed to break down the brick wall of shame I started building around myself and open up.

Recovery has taught me insights about myself and the world around me, making me a whole and complete person. I have strengthened my inner voice and have worked on becoming confident with who I am and where I need to go. In writing this, I hope to support others who are struggling and help them understand that they are not alone in the struggle. I wish to encourage people to challenge the diet mentality and unrealistic body demands we receive via media sources and understand the harmful effects these advertisements can

Most popular articles in this category

More from Kristen Hovet
Dose-Dependent Link Between Alcohol and Certain Cancers by…
Kristen Hovet
4 min read   21

Also tagged Obesity
Understanding Obesity
Dr. Jason Fung
7 min read   8.7K

Also tagged Health
How to Configure Your iPhone to Work for You, Not Against You
Coach Tony
74 min read   37K

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Just like Patricia, users visiting your site are looking to be engaged with personalized recommendations. Smart Recommender enables highly contextualized recommendations for your homepage to boost engagement. Make use of 'most read', 'most shared', 'top trending', 'location based news' and much more to generate maximum engagement and provide relevant content to users.
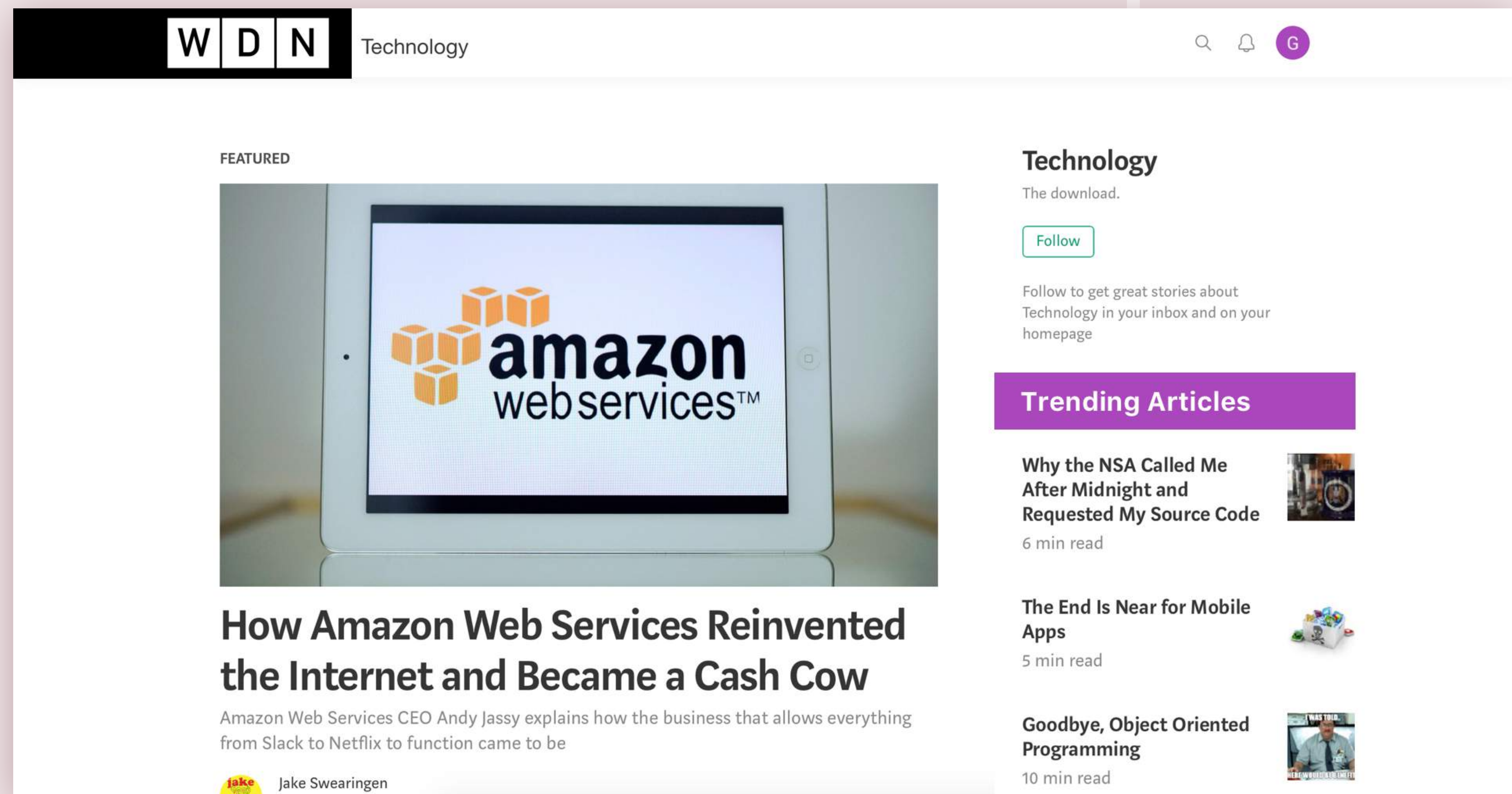
The online media is overflowing with content and content archives. The size of content data being generated every day is staggering. Media and publisher websites need sophisticated AI and Machine Learning algorithms to push relevant content tailored to individual preferences.

WHAT'S YOUR TAKE ON RECOMMENDATIONS?
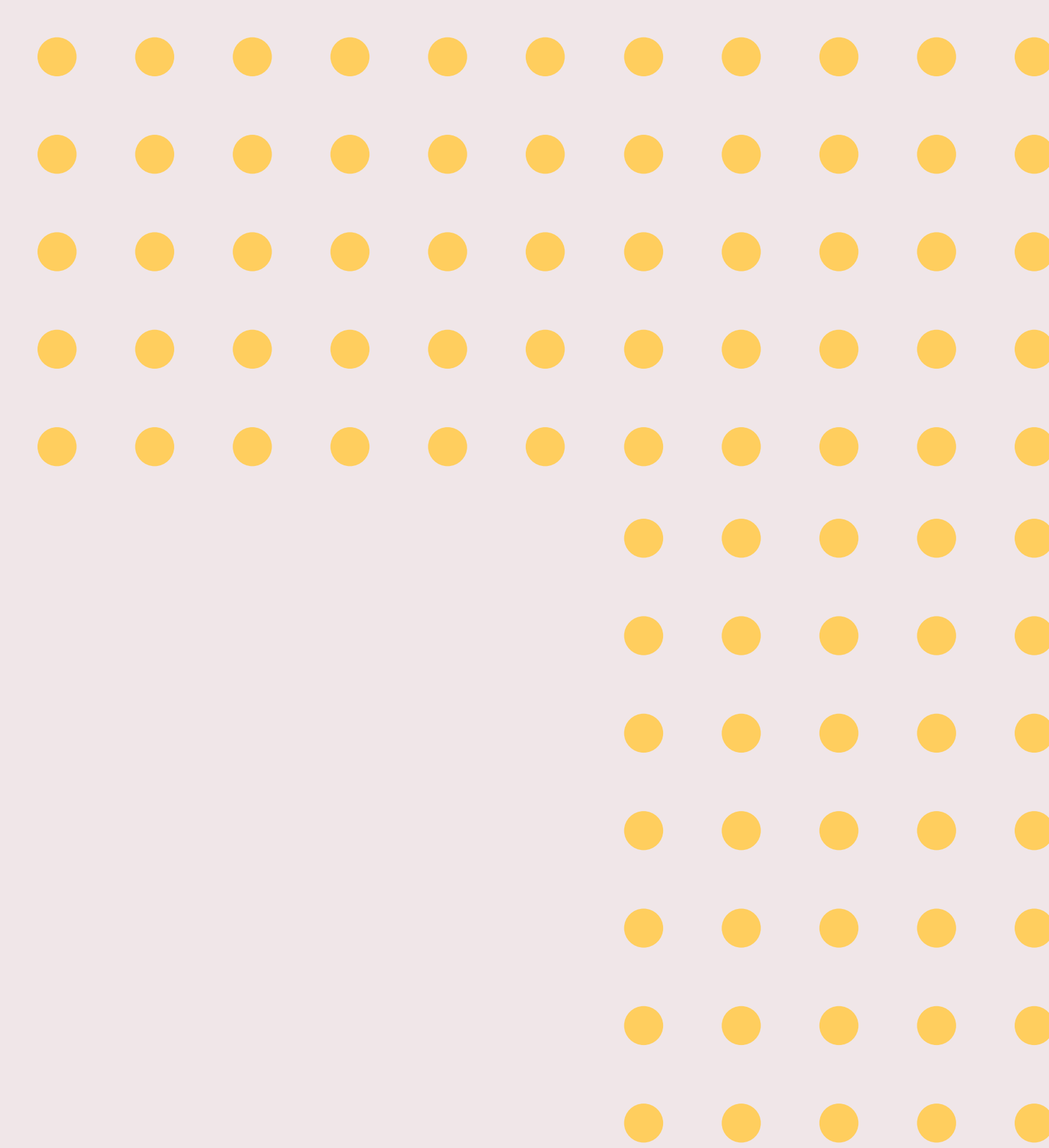
Business with an online presence? Rely on your website for conversions and purchases? Have a wide spectrum of products/services/content and an equally diverse customer base?

If the answer is 'yes' to one or more of the above, then you need a recommendation strategy.

Businesses can still generate sales and revenue, even without a recommendation strategy. But as the market and research have shown,

no recommendation = opportunity lost.

A robust recommendation strategy is like a pocket square that enhances the appeal of your website and promotes engagement. With the help of advanced AI-backed and Machine Learning algorithms fueling recommendation engines, marketers across industries today can deliver even more relevant and contextualized recommendations to their users. Which apart from helping them narrow down their search and purchase efforts also lend a personal and impactful user experience.

Insider

ABOUT INSIDER

Insider Growth Management Platform (GMP) helps digital marketers drive growth across the funnel, from Acquisition to Activation, Retention, and Revenue. We work with more than 400 partners across industries worldwide, including prestigious Fortune 500 companies and top brands in retail, travel, automotive industries and more.

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