



# ViSenze Visual AI Quarterly Index

Q1 2021

PRESENTED BY





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# Welcome to the ViSenze Visual AI Quarterly Index

As AI-powered product discoverability, shoppable content and retail analytics grow more popular, we thought it was time to share the data points that we track as the world's largest provider of Visual AI services in retail.

Each quarter, we'll share with you data-driven insights and industry perspectives, drawn from the unique position we have, as the operator of the world's biggest mobile Visual Shopping Network (VSN).

In 2020, visual AI adoption skyrocketed, and we've seen this trend continue to increase in Q1 2021. With advanced technology more widely available to brands of all sizes, we're seeing competition for consumer spend heat up to a level not seen previously. The data we've uncovered points to a major shift in how brands earn the trust and loyalty of their customers.

Our VIP guest slot will represent a different industry viewpoint each quarter, and for our inaugural report, we're thrilled to have industry stalwart and 30 year Retail Director of Ted Baker - Chris Browne share his views.

So, let's get into it.

*Brendan O'Shaughnessy*  
CHIEF COMMERCIAL OFFICER



## INTRODUCTION



Visual intelligence, or visual AI, represents one of the most significant integrations of advanced computer science and marketing expertise in recent history. This technology has already benefited some of the world's most well-known retail brands by optimizing customer experiences at scale and maximizing operational efficiencies.

Now, this powerful technology is attainable for brands and retailers of all sizes. Across North America, Europe and Asia, adoption of visual AI is skyrocketing, with widespread deployment all but inevitable in the first half of this decade.

As retail expert Chris Browne discusses in this report, the way consumers shop has changed fundamentally and will continue to evolve rapidly. Visual intelligence, and the hyper-personalized experiences it enables, will be a key differentiator between brands and retailers that coast into the future on past successes and those that will thrive and grow for years to come.

## EXECUTIVE SUMMARY

Visual AI is rapidly changing the way retailers and ecommerce brands exceed their customers' expectations. Accelerated by the COVID-19 pandemic, the trends covered in this report have gone from simmering to a full boil. Already in Q1 2021, the numbers point to a massive increase in the adoption of Visual AI and the capabilities this technology supports.

### Key Findings: Megatrends

#### Product discoverability

The process of understanding how your shoppers find products and what inspires them to make a purchase.



*Visenze-powered product searches have increased 56.2% between Q1 2020 and Q1 2021*

#### Smart product recommendations

Delivering a personalized shopping experience without the need to intrusively collect visitor data.



*Shoppers who click on product recommendations are 4.5x more likely to add items to their cart and 4.5x more likely to complete their purchase.*

#### Shoppable content

Monetizing online content in a way that encourages engagement without disrupting the reading experience.



*Publishers see a high click-through rate of 7% - 10% after implementing AI-powered shoppable content.*

#### Human-centered SEO

Creating responsive web experiences that feel natural and support site visitor intentions.



*Google processes more than 2 billion visual searches, accounting for 22.6% of all searches.*



# Chris Browne (30 year Global Retail Director at Ted Baker) on Visual Intelligence, Product Discoverability and the Future of Retail

Many retailers don't realize how badly they're doing at the moment. They think the style of the imagery they present to their customers is the most important thing — but really it's the information contained within those images.

Put any six people in a room together and ask them to find a product on a retailer's site, and they will describe the same product six different ways. And most of them won't actually find the item, because the retailer doesn't have the time nor the capacity to accurately and thoroughly tag every piece of merchandise in their inventory.

The way forward is through visual search and visual intelligence. Why waste time manually building product recommendations and Shop the Look features when we now have the ability to automate them at scale?

## Today's shoppers are visually motivated to a shocking degree

The most popular social media influencers don't even have to mention a product by name. If they post an image of themselves wearing a brand, it immediately skyrockets as their followers chase the trend.

Consumer interactions are now photography-first. The motto of shoppers today is "I'll know it when I see it." Intelligent shoppable content significantly shortens the journey between the moment when shoppers see something they love and when they can make a purchase. This satisfies the customer's needs whilst saving a significant amount of time.

## Automation enabled by visual AI is game-changing for retailers

There are a lot of retail leaders who don't know what they're missing out on. A primary benefit of visual intelligence is the ability to automate processes that are incredibly time-consuming or not done at all.

Visual AI enables retailers to surface more of the right products to exactly the right people at the right moment. It's a matter of improving how retailers present products so their customers can find and shop them more easily.

## The future of retail is incredibly positive

Visual intelligence and other technologies make shopping more exciting and more fun for consumers. Technology is now an integral part of retail, and that's a good thing, because it will make online shopping less mundane and far more productive.



“

There are a lot of retail leaders who don't know what they're missing out on.”

Chris Browne  
TED BAKER

## MEGATREND: PRODUCT DISCOVERABILITY

Enabling great product discoverability is how brands sell more products, faster. It is the process of understanding how your shoppers find products and what inspires them to make a purchase and then delivering to them the products they're actually looking for.

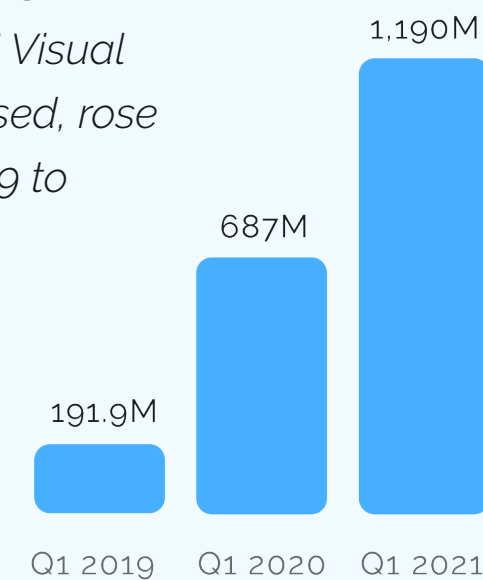
Visual search is one piece of the discoverability puzzle. This is the process of using a digital image as a search query rather than text. The popularity of visual search has grown steadily in recent years, in large part because consumers recognise that it is far easier to search for what you want via an image of your desired product, than it is to try to describe it in detail:

- ▶ Today, Google processes more than 2 billion visual searches, accounting for 22.6% of all searches.
- ▶ Pinterest processes 600 million visual searches monthly.
- ▶ Users conduct more than 400 million visual searches on the ViSenze Visual Shopping Network every month, with growth recently accelerated by the pandemic.

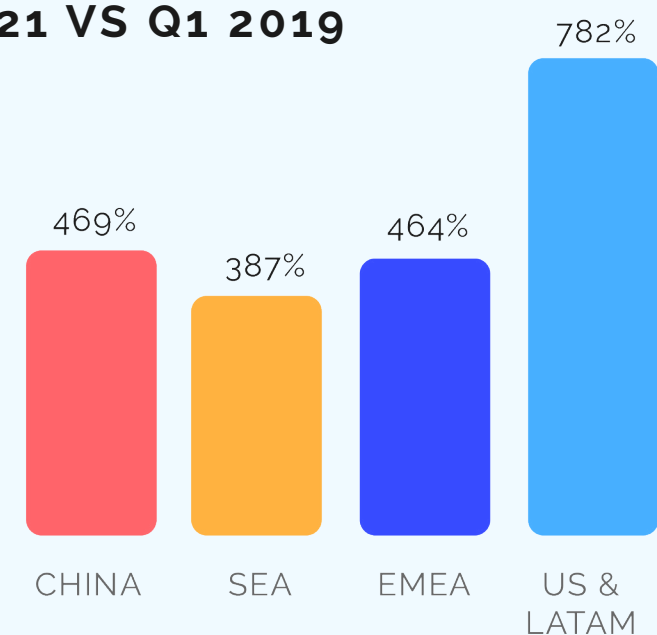
Visual search also works in conjunction with other popular technologies, such as chatbots, which can help guide consumers to make more informed purchasing decisions.

### 6X GROWTH OVER 3 YEARS

The number of AI Visual Searches processed, rose from 191M in Q1'19 to 1.2B Q1'21

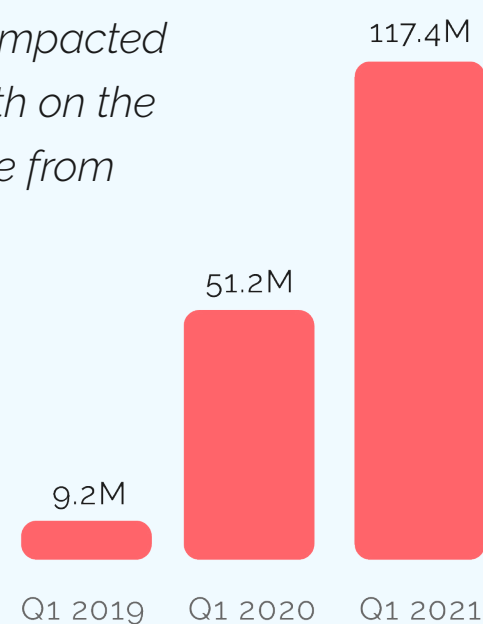


### Q1 2021 VS Q1 2019



### 13X GROWTH OVER 3 YEARS

Across a COVID impacted 2020, MAU growth on the VSN network rose from 50M in Q1'20, to 120M in Q1'21



In today's ever-growing online environment, shoppers are bombarded with brand messages from every angle. Even when they're searching for something specific, consumers are apt at digging through dozens of product lists before finding what they really want.

Optimizing for product discoverability is closely linked to optimizing for search results. Whether shoppers are searching for products on Google or on a brand's website, their ability to find what they're looking for greatly depends on the quality and accuracy of available product data.

In a SKU-based cataloging model, merchandisers must tag each product with descriptive attributes. Not only is this process tedious and time-consuming, but it's also prone to inaccuracies and inconsistencies.

Visual AI solves these issues and optimizes product discoverability by automatically enriching product SKUs with hundreds of descriptive attributes, at scale.

Therefore, combining visual and AI-optimized text searches provides shoppers with a more natural and intuitive experience while delivering better results every time.





## MEGATREND: HUMAN-CENTERED SEO

In recent years, the major search engines have placed increasing importance on user experience. Specifically, Google has made impressive strides in ensuring that SEO efforts are human-centered. Where in years past, content creators could stuff sites full of keywords to rank highly, that's no longer the case.

Human-centered SEO means creating experiences that feel natural and support site visitor intentions. Visual intelligence supports this in a number of ways, but chief among them is the ability to rapidly enrich product catalogs with descriptive attributes that make products more search friendly. This produces an 85% reduction in time needed to populate metadata, compared with doing so manually.

With this approach, different shoppers can use distinctive phrasing to search for the same products, and still end up at the right destination. This is crucial for a world where shoppers aren't just using text to make search queries, but also images and voice.

AI enabled Product Enrichment also supports the development of dynamically created product pages. With automatically optimized product attributes, brands can generate personalized collection pages that encourage stronger customer engagement.

Likewise, visual AI ensures that when shoppers do make text queries on site, fewer no-results pages are returned. Fast, consistent and complete product metadata allows keywords to quickly surface contextually relevant products, helping to gain customer trust and build loyalty.



floral dress for cocktail party

SEARCH RESULTS



floral halter neck a-line dress

## MEGATREND: SMART PRODUCT RECOMMENDATIONS

Ecommerce sales, which were already growing rapidly, saw a major boost in 2020 which has continued into Q1 2021.

In the U.S., consumers spent \$861.12 billion online in 2020, a 44% increase from 2019.<sup>1</sup> Retail sales were pushed higher in March 2021, rising a seasonally adjusted 9.8%, due in part to the federal government's \$1,400 stimulus checks.<sup>2</sup>

Visual AI supercharges these already growing trends by enhancing up-sell and cross-sell capabilities. According to Forrester market analysis, 10% to 30% of all online sales are done through cross-selling or up-selling.

A study conducted by Barilliance found that shoppers who clicked on recommendations were 4.5x more likely to add items to their shopping cart and 4.5x more likely to complete their purchase.<sup>3</sup>

This trend is supported by data from other major online retailers, including Amazon, which attributes 35% of its revenue to its recommendation engine.

In 2021, major brands continue to leverage visual intelligence to improve customer experience and increase revenue.

### EYEBUYDIRECT

Recently, EyeBuyDirect, an Essilor brand, adopted ViSenze's Discovery Suite to help shoppers find their product of choice faster using Smart Recommendations with more relevant style suggestions. The company also created a new visually similar products page which gives shoppers greater breadth of choice aligned to their style preferences. Implementing ViSenze's Smart Recommendations produced a 29x return on investment.



29x ROI  
with Smart  
Recommendations

1. [digitalcommerce360.com/2021/02/15/ecommerce-during-coronavirus-pandemic-in-charts/](https://digitalcommerce360.com/2021/02/15/ecommerce-during-coronavirus-pandemic-in-charts/)  
2. [apnews.com/article/retail-sales-economy-2f20ee18d72ed056412fde0feg4fgae](https://apnews.com/article/retail-sales-economy-2f20ee18d72ed056412fde0feg4fgae)  
3. [barilliance.com/personalized-product-recommendations-stats/](https://barilliance.com/personalized-product-recommendations-stats/)



# MEGATREND: SMART PRODUCT RECOMMENDATIONS

Smart recommendation engines are fast becoming the driving force in the adoption of visual AI technologies.

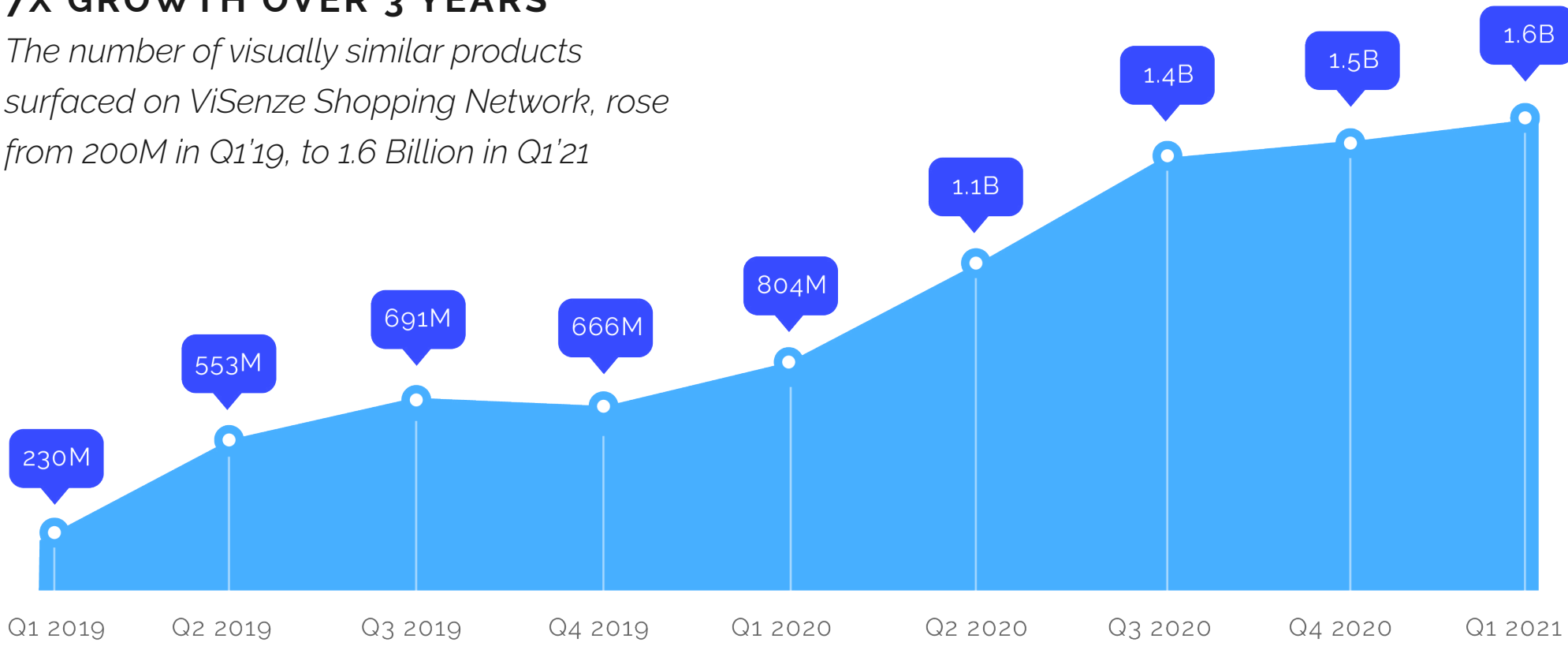
Intelligent product recommendations deliver an optimized shopping experience without the need to intrusively collect visitor data or make presumptions on consumer intent.

ViSenze Shopping Network's number of visually similar products surfaced has increased by 7x in the past 3 years.

From the customer's point of view, smart recommendations generate brand loyalty and encourage continued engagement. When shoppers arrive on a product detail page, the product itself is the strongest indicator that signals to retailers what the shopper is interested in and looking for. By providing similar product and lifestyle images, the shopper can act instantly to quickly find those related products and purchase from trusted brands. Brands benefit from AI-powered recommendations by reducing the tedious manual effort needed to link product SKUs with similar offerings.

## 7X GROWTH OVER 3 YEARS

The number of visually similar products surfaced on ViSenze Shopping Network, rose from 200M in Q1'19, to 1.6 Billion in Q1'21



## Visual AI in Action



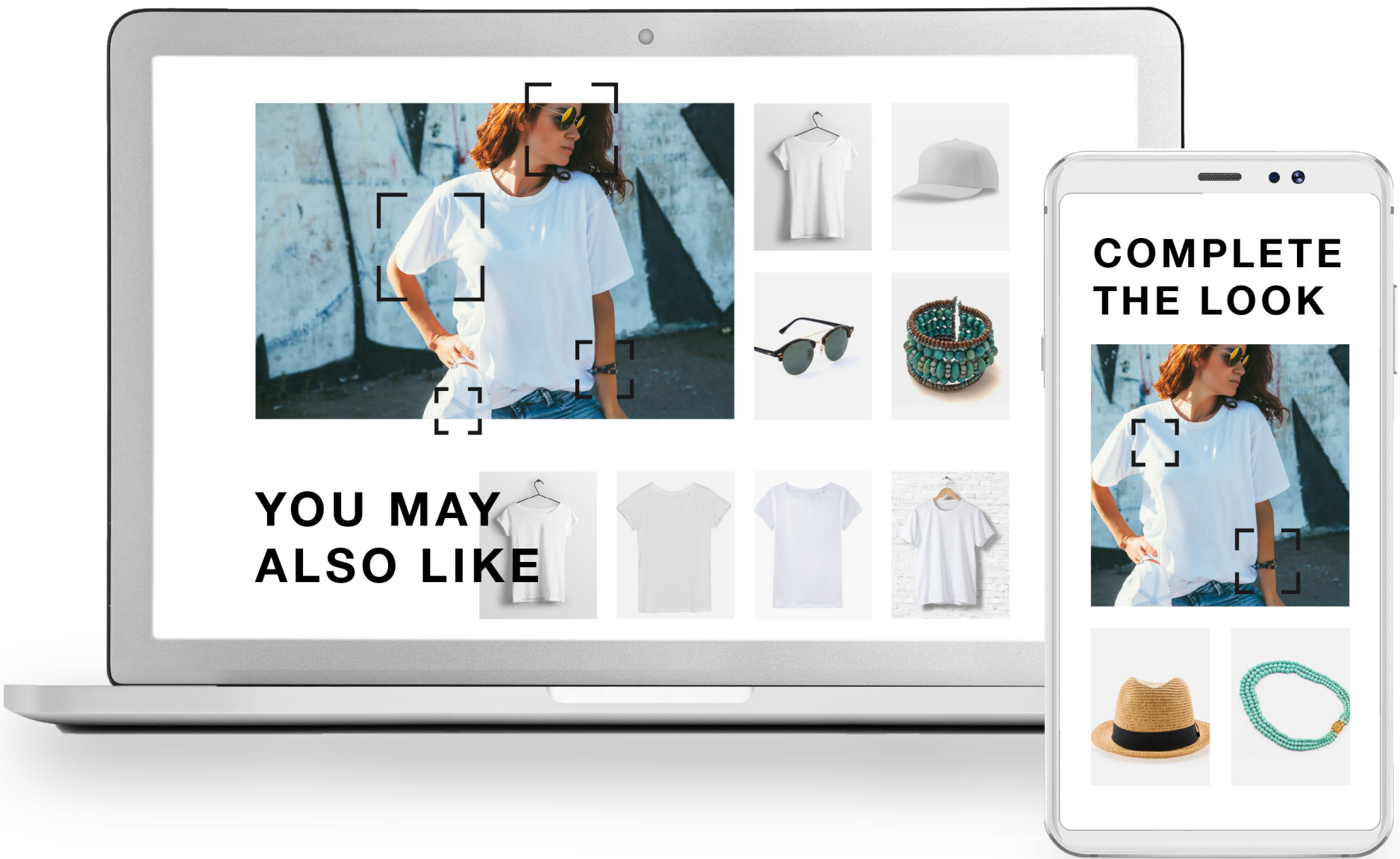
Powered by ViSenze, a global powerhouse retailer in the fashion and cosmetic sector, recently released a 'Buy The Look' feature that solved the company's merchandising frustrations with the time and effort needed to assign matching products to the hero image on their product display pages. ViSenze technology allows the retailer to offer 'Buy the Look' on almost all products across global regions, with live feedback from stock status to automatically provide more offerings once products sell out.

**TOTAL REVENUE INCREMENTAL GROWTH OF 1.5%**

## OX STREET

It's no secret that sneaker prices can be off the chart for some rare collabs. But it can be hard to find up to date local market prices quickly on exactly the same or similar styles. Ox Street are solving this for their customers. With the Ox Street app, customers can easily compare between 'similar products'. Since integrating ViSenze Smart Recommendations in February, they've already seen a shift in user behavior, with a 12.5% increase in conversion from people that open at least one product page.

**INCREASE IN CONVERSION OF 12.5%**





## MEGATREND: SHOPPABLE CONTENT

Monetizing online content has been a consistent struggle for publishers continuing their decades-long transformation away from traditional media. Digital advertising networks have played an important role in generating revenue, but they leave much to be desired. Often, these ads are not entirely relevant to the content they appear within, or they are far too dependent on third-party cookies, which the major browsers will stop supporting in 2021.

Visual intelligence provides a ready-made alternative, accurately offering up product ads aligned to the content of what a reader is exploring at any time.

In 2020, when Vogue Polska was looking at ways to improve monetization of its digital content without disrupting the reader experience, the publication partnered with ViSenze to revolutionize its advertising model.

By integrating ViSenze's Smart Ads module into Vogue's website, highly relevant products driven by AI contextual alignment appear on each editorial page. With complete control of where and how ads appear, the Editorial team can avoid any conflicts with other sponsored content. Without any manual work, these ads show highly contextual, and relevant product ads that shoppers are more likely to click than traditional pay-per-click ads.

Taking just two weeks to implement, the ViSenze Smart Ads module quickly produced early positive results, including a high click-through rate of 7%, and more than 50,000 searches per month. This proves that AI technology encourages customers to engage with advertisers by delivering contextual ads where they make the most sense.

7%  
click-through  
rate

50,000+  
searches  
per month



Sunglasses

Buy Now



# GLOBAL ECOMMERCE TRENDS & MARKET INSIGHTS

Through ViSenze's hundreds of millions of search queries processed through its network on a monthly basis, we have the advantage of seeing the changes in consumers' tastes as global economy reopens and social activities return to normal, by comparing data between Q4 2020 and Q1 2021.

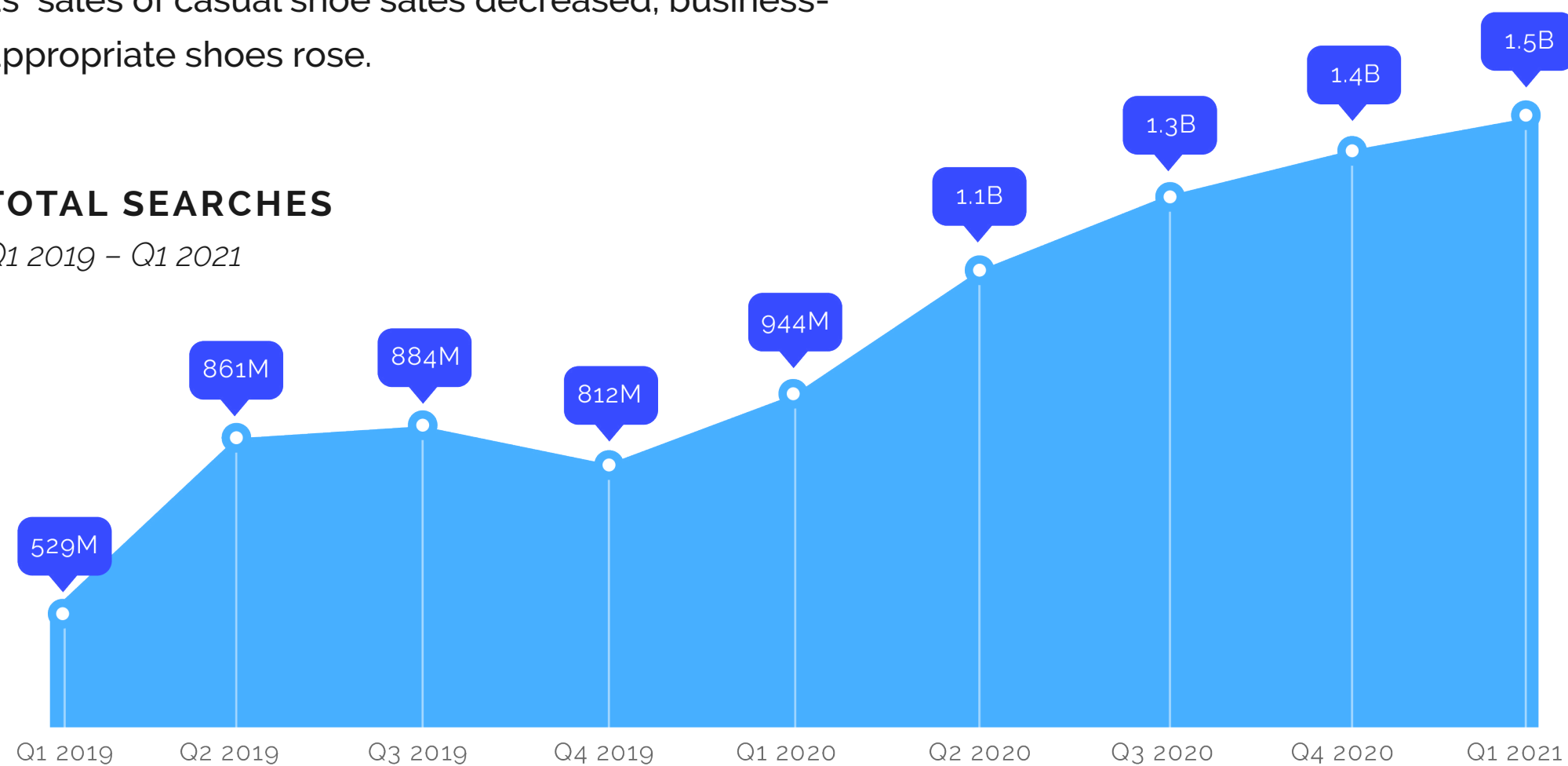
AI adoption has ensured eCommerce stickiness with consumers remains post-Covid. Despite actively planning for the shift away from 100% remote working and lockdowns, how people shop for products has remained strongly geared towards the convenience and choice offered online.

With return-to-work protocols becoming more frequent and office capacities expanding in 2021, we are seeing a shift away from comfort lounge wear and back to a semblance of normality in work attire shopping habits

A notable fashion example is the dress shoe segment: as sales of casual shoe sales decreased, business-appropriate shoes rose.

## TOTAL SEARCHES

Q1 2019 – Q1 2021



### \*SHOES

Ready for office, and outings

Pumps  
+44%

Heeled Sandals  
+29%

Wedge Sandals  
+20%

Platform Shoes  
+15%

Lifestyle Sneakers  
-4%

Performance Sneakers  
-5%

Flat Sandals  
-8%



Similar trends materialized across other fashion segments as back-to-office and outing arrangements became the standard. The rise of going-out outfits over comfort is clear from the data:

### \*BOTTOMS

Enough of elastic waistbands, please!

Shorts  
+48%

Jeans  
+35%

Pants  
+30%

Athletic Pants  
+2%



### \*TOPS

Time to update business-wardrobe

Blouse  
+46%

Camisole  
+36%

Shirts  
+31%



### \*BLOUSE

Ready for a trendy look

Puff Sleeve  
+46%

Bell Sleeve  
+30%

Sleeveless  
+6%

Shoulder Strap  
-12%



\*Every month ViSenze enriches hundreds of millions of consumer image searches occurring on ViSenze Shopping Network to generate these insights.



# GLOBAL ECOMMERCE TRENDS: LUXURY RETAILERS

According to management consulting firm Bain & Company, online luxury purchases were worth \$58 billion in 2020, compared with \$39 billion in 2019, nearly doubling the sector's share of the market for global luxury sales from 12% to 23%.<sup>4</sup>

## 10% \*AVERAGE PRICE DIFFERENCE PER ITEM



SHOES
YOOX: \$260
SHOPBOP: \$285
BLOOMINGDALES: \$298



BAGS
YOOX: \$370
SHOPBOP: \$334
BLOOMINGDALES: \$432



CLOTHING
YOOX: \$270
SHOPBOP: \$208
BLOOMINGDALES: \$179

There is an intense level of competition among luxury retailers. In every category, the price difference between one competitor and its closest rival is 10% per item on average, giving them very little room to differentiate their offerings.

Multi-brand luxury retailers such as these are competing for customers in a fashion market where supply outweighs demand. Discount culture has taken hold, where stores online and off routinely slash their prices (and margins), even at the point of unprofitability.

Among the five luxury retailers using the ViSenze Shopping Network that we examined, each one offers, on average, a 35% discount on items in every category, with the heaviest discount category being Clothing, which is also the hardest to differentiate.

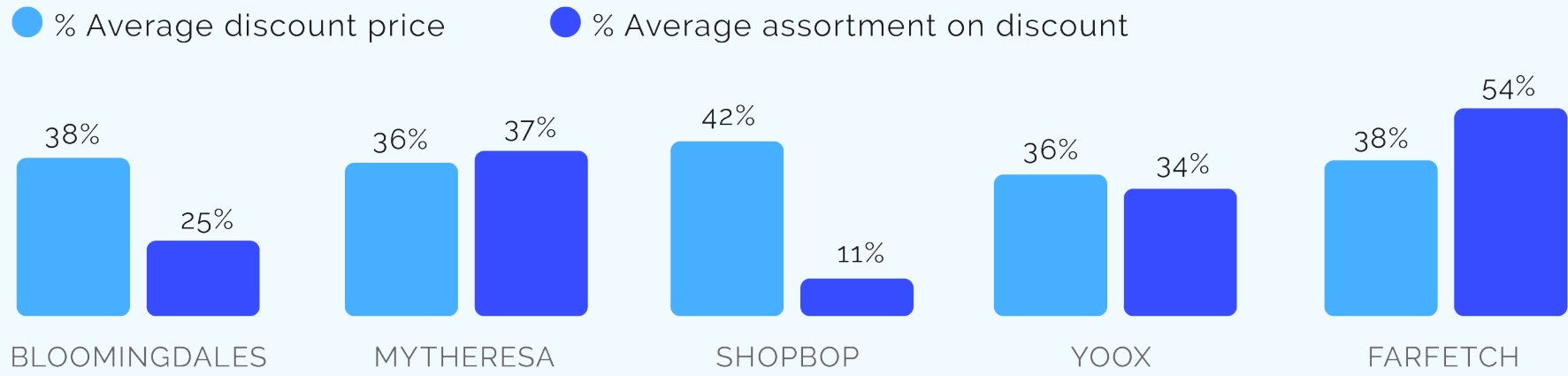
For example, all retailers examined have products with similar popular patterns such as 'Stripes,' 'Checkered' and 'Floral' — the top three patterns predicted by 'Who What Wear' to be the top trends this year.

However, when customers search the term 'luxury floral dress' on Google UK, Farfetch is the only brand out of five that appears on the first page, even though only 11% of their catalog has floral prints, compared to others which have as much as 23%.

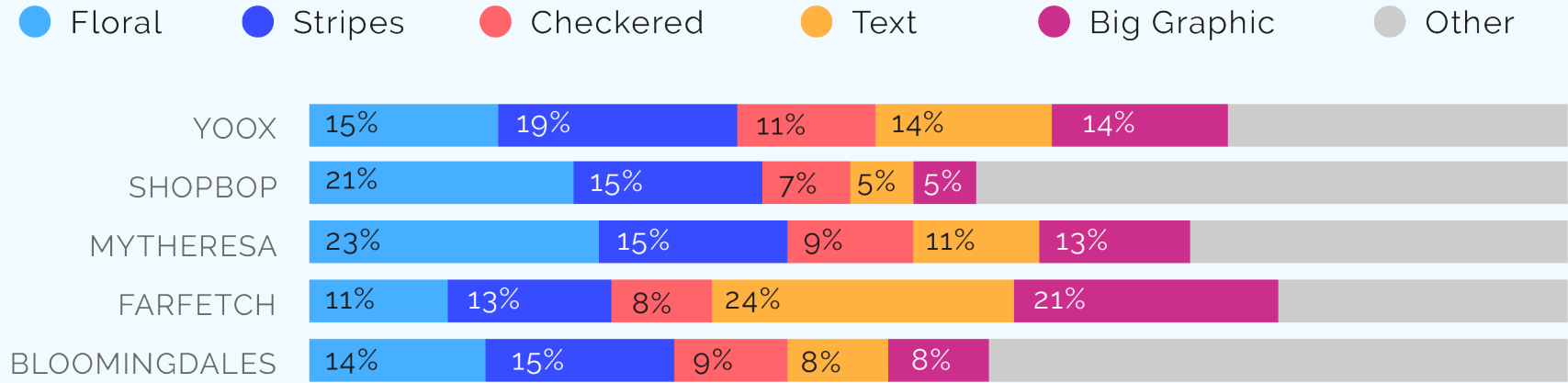
So why does Farfetch appear while the others don't?

Farfetch uses Visual AI to enrich its products' information with automatic taxonomy. This automatic process eliminates potential human errors and significantly increases the chance that consumers can find and discover products that they want. This technology is crucial for luxury retailers to stay relevant in a highly competitive environment.

## \*CLOTHING AVERAGE DISCOUNT



## \*BREAKDOWN OF CLOTHING'S SPECIAL PATTERNS



4. bizjournals.com/charlotte/news/2020/11/30/the-luxury-e-commerce-wars-heat-up.htm

\*Data Source: The data is extracted and enriched from ViSenze's hundreds of millions of products from merchants across more than 200 countries globally, as of Q1 2021.

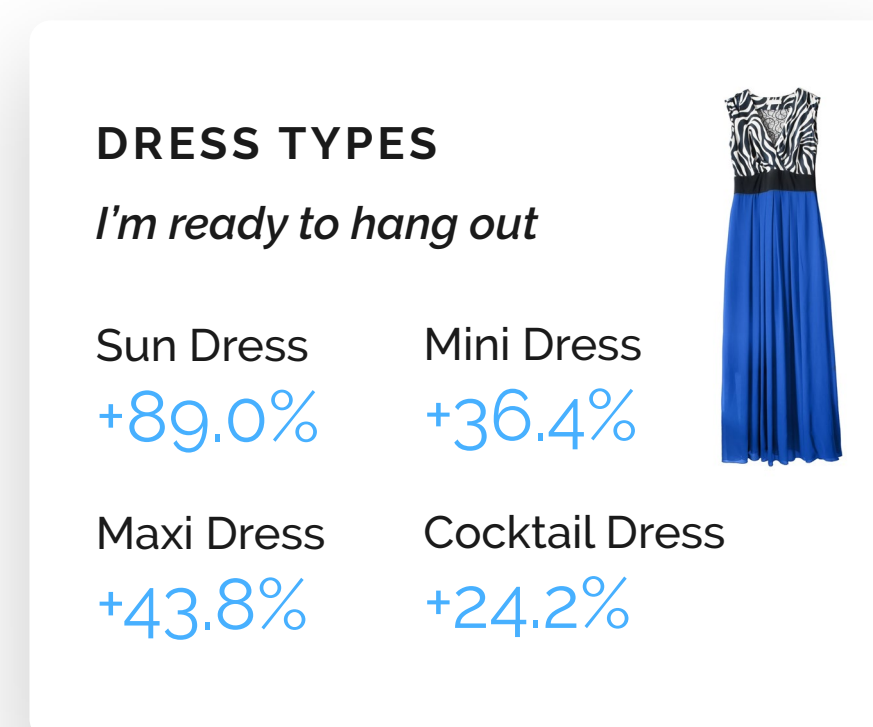


# GLOBAL ECOMMERCE TRENDS: FOCUS VIEW ON CHINA

It's been over a year since China lifted the 76-day lockdown in Wuhan — the epicenter of the COVID-19 outbreak. Since the reopening of Wuhan, China has successfully re-established the country's social and economic activities.

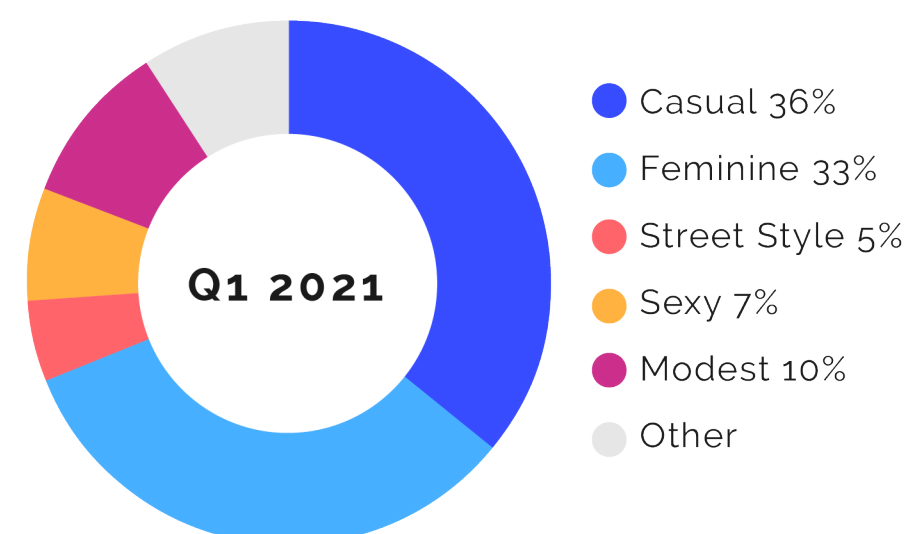
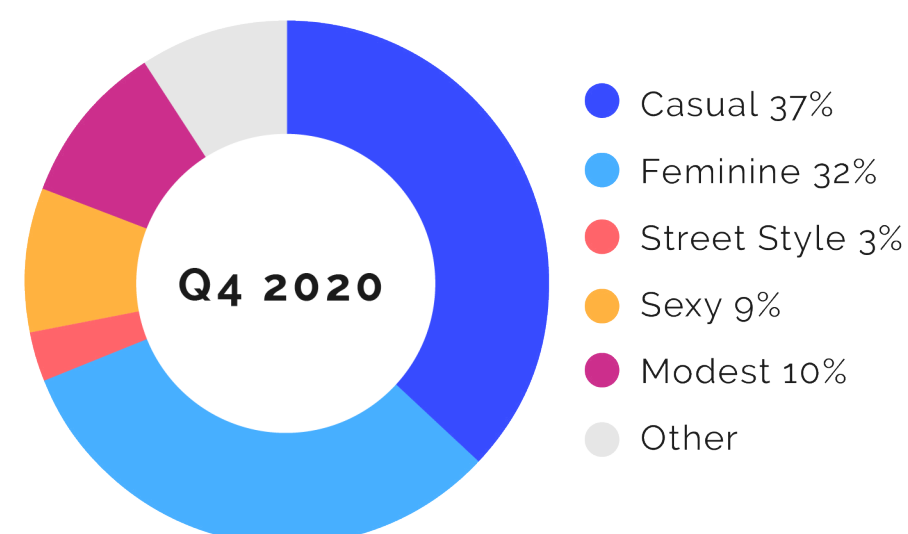
Through ViSenze's hundreds of millions of search queries processed through its network on a monthly basis, we have the advantage of seeing the changes in consumers' tastes as China's economy reopens and social activities return to normal, in real-time.

Data observed during Q1 2021, compared to that observed in Q4 2020, indicates that Chinese consumers' choices have shifted toward out-of-home items; This is exemplified in their dress choices:



It's also represented in their choices of dress style, where there's a decrease in the representation of 'casual' dresses from Q4 2020 to Q1 2021, but an increase in the representation of 'feminine' and 'street style' styles in Q1 2021.

### \*TOP DRESS SEARCH QUERIES



## 2021 Fashion Trends

Recently, Cosmopolitan predicted that bolder fashion trends would become the top choices for consumers during Spring/Summer 2021, exemplified by items such as 'Crop top,' 'Puffy Sleeves,' and 'Wide-leg trousers.'<sup>5</sup>

Real data corroborates these trends:

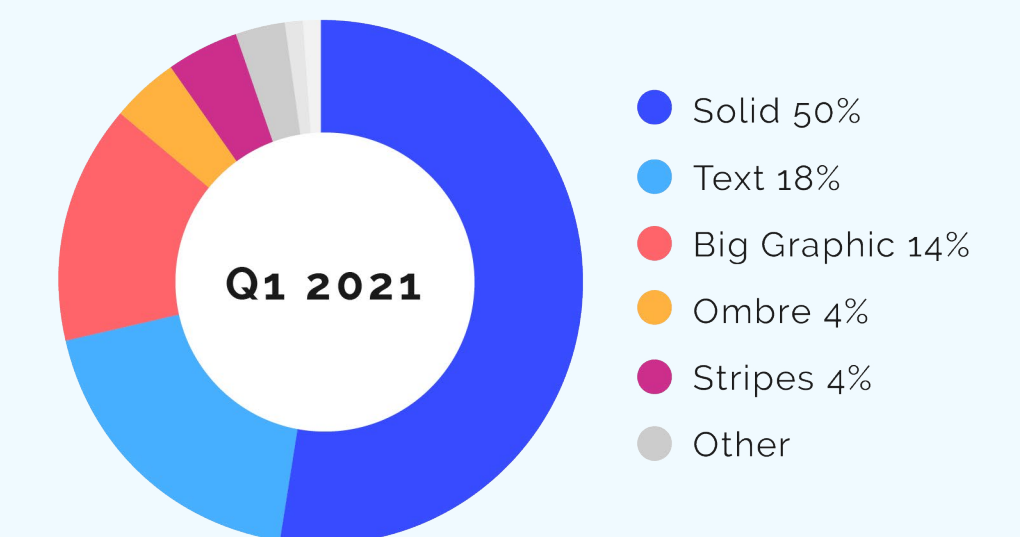
Searches for 'crop top' indeed increased by 21.2% QoQ, 'Puffy Sleeves' increased by 45.2% and 'Wide-leg Pants' increased by 66.7%.

Broad market trends can help retailers make decisions, but merchandisers still lack the detailed insights to help them actually make any purchase decisions. What specific 'Crop top' should they buy? Should they put 'Puffy Sleeves' into all categories, from dress to tops, to blouses? These questions can only be answered by breaking down and analyzing trends on a per-product attribute level.

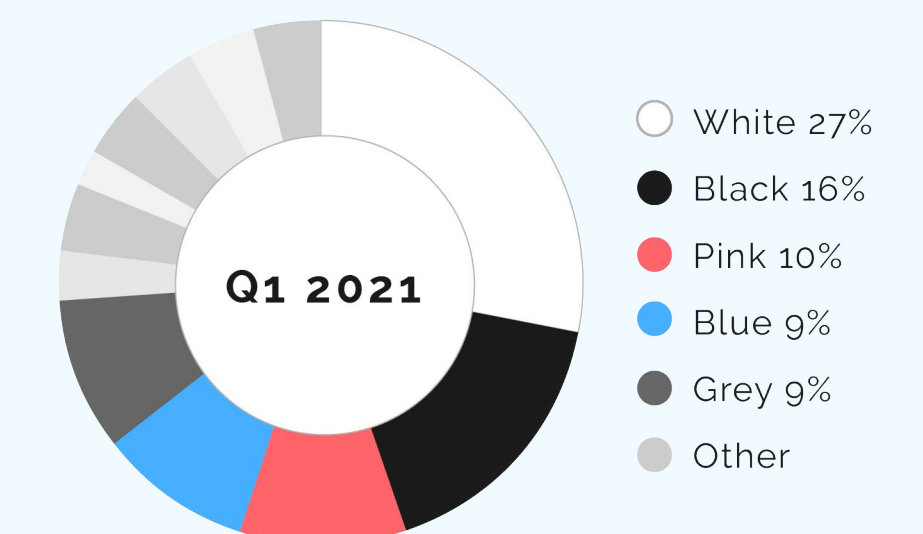
For example, the data shows that 'solid' is the most popular attribute of 'crop top' products, representing 50% of all 'crop top' searches, with 'black' and 'white' being the most popular colors.

By providing this granular view of fashion trends as they happen, retailers are better equipped with specific data to make truly informed decisions based on what consumers really want.

**\* MOST POPULAR  
CROP TOP PATTERN:**



**\*MOST POPULAR  
CROP TOP COLOR:**



5. [cosmopolitan.com/uk/fashion/style/a35267349/spring-summer-2021-fashion-trends](https://www.cosmopolitan.com/uk/fashion/style/a35267349/spring-summer-2021-fashion-trends)

\*Data Source: Every month ViSense enriches hundreds of millions of consumer image searches occurring on ViSense Shopping Network to generate these insights.



## SUMMARY

In a hypercompetitive retail and ecommerce environment, visual AI powers personalized customer experiences and greatly enhances product discoverability. This enables brands to win customer loyalty and increase sustainable revenue faster. The trends described in this report are just beginning to take off. No longer is advanced AI limited to big players — brands of all sizes now have the ability to leverage intelligent technology to support their goals and win more customers.

Look out for the next issue of the ViSenze Visual AI Quarterly Index in July, where we will continue to share our views on the growth of Visual AI and adopted trends that we see week after week.

Until then, keep shopping.



# ViSENZE

### ABOUT VISENZE

ViSenze enables retailers to increase revenue whilst exceeding shoppers' expectations. We do so by optimizing each stage of the customer journey through intelligent search, personalization and AI-powered recommendations. The ViSenze Shopping Network is the world's largest visual shopping network, with more than 90 million monthly average users.

[VISENZE.COM](https://www.visenze.com)

