



RETAIL 3.0:

Decentralizing Monopolies, Ecommerce, & Adtech



WINNERS

MoonShot of the Year:

The Lead retail "Leading 100"

Best Startup:

North American Bitcoin
Conference CoinAgenda

Most Promising Startup:

Bitcoinference Europe

Honorable Mention:

WBF Dubai Top 5

BACKED BY

Passport

BLOCK5

NIMA
CAPITAL

FEAUTERED ON

Bloomberg

CNBC

Forbes

TD Ameritrade

FORTUNE

TEAM leadership

We're a group of entrepreneurs
striving to ensure timeless brands
will remain timeless.

Our management team encompass over 15
decades of experience ranging from Senior AI
development at Walmart, a professor at M.I.T.,
The right through to building startups from the
ground up to their first \$10MM of revenue or
taking mature



Eran Eyal

Co-Ceo & Founder

Eran is a serial entrepreneur with three exits as a founder and more than a decade of experience in retail and ecommerce. He is the winner of the United Nations World Summit Award for Innovation, Fast Company's Most Innovative Startup, and he is an investor and advisor for many startups.



Georgi Gospodinov

CTO

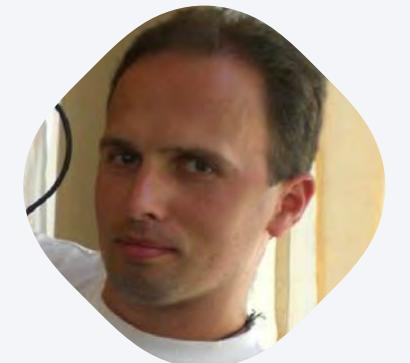
Georgi hails from Walmart, where he served in his tenure as a leading data scientist and director. After earning his PHD in Mathematics, he turned his interests to topological data analysis, complex networks, and dynamical systems and worked as an applied mathematics professor in Boston and NYC. Georgi also holds a patent in blockchain application in retail.



Henrik Rasmussen

VP Biz Dev & Investor Relations

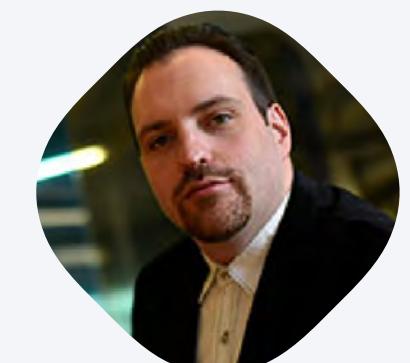
Henrik is an experienced technology executive who has worked across several sub-sectors in technology related industries as a business developer over the past 20 years. Educated as a process engineer, Mr. Rasmussen has held management positions in technology since the late 90's and has successfully branded and launched multiple products.



Vladimir Ustinov

Senior Dev-Ops Engineer

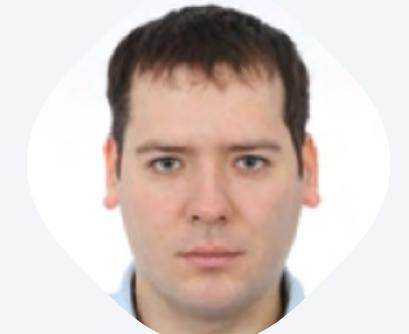
Vladimir has served as a senior engineer at Maker's Brand, Flow Health, EigenGraph, and other technology startups. He holds a Master's Degree in Radio Physics and has a strong data mining and numeric analysis background.



Lane Campbell

Advisor: Strategy & Development

Lane is a lifelong entrepreneur who has realized five exits in his career. He is a founding member of the Forbes Tech Council and the CTO and CoFounder of Humble Advisors, a wealth management firm for high net worth companies and individuals.



Alexey Kyulkin

Senior Dev-Ops Engineer

Alexey served as a front-end engineer at Maker's Brand and as the backend engineer at Flow Health. Prior to his startup career, he was formerly Head of Department at Tomsk Polytechnic University.



Randy Shifrin

VP of Revenue

Randy is a veteran of the retail industry. He was the founder and CEO of Shoezone, and Chernin Shoes, both of which were acquired.



Mark Plaskow

Advisor

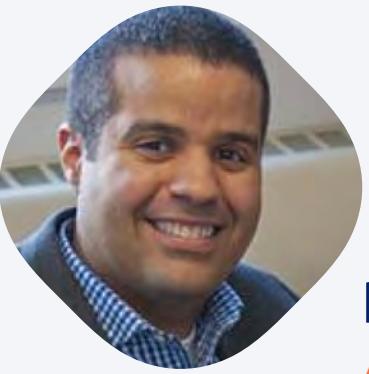
Mark Plaskow, founder of Scientific Clinics, is a Machine Learning thought leader. He has recently worked with some of the greats such as Sears and before that companies like Ebay.



Amadeo Brenninkmeijer

Advisor

Amadeo is an accomplished angel investor with a strong background in retail from the C&A family, Europe's largest Dutch retailer.



Prof Richard Linares

Advisor

Professor Linares is a Charles Stark Draper Assistant Professor of Artificial Intelligence at M.I.T. Before his tenure in Cambridge, he served as assistant professor at University of Minnesota.



Shahriar Sikder

Advisor

Shahriar is an accomplished and well recognized CTO specializing in artificial intelligence and blockchain development. He serves as CTO of RecordGram and TuneToken and has consulted with NFL, Walmart, Samsung and many other Fortune 500 companies.

TEAM core

Our team comprises of and is strongly supported by industry leaders

Amazon & Alibaba

35
%

of amazon's revenue comes from their product recommendation bar driven by purchase data.



89
%

"**of our revenue** is attributable to personalization based on purchase data"

- Jeff Bezos

Yet the rest of retail doesn't look great...

Inconsistent

retailer data living in legacy systems

1 out of 10

in-store shoppers actually makes a purchase

3 out of 100

online shoppers actually makes a purchase

40%

average return rate

Amazon

knows your customer better than you do

Hacked

On average, more than 1 retailer hacked per month

HOW DO WE PROPOGATE

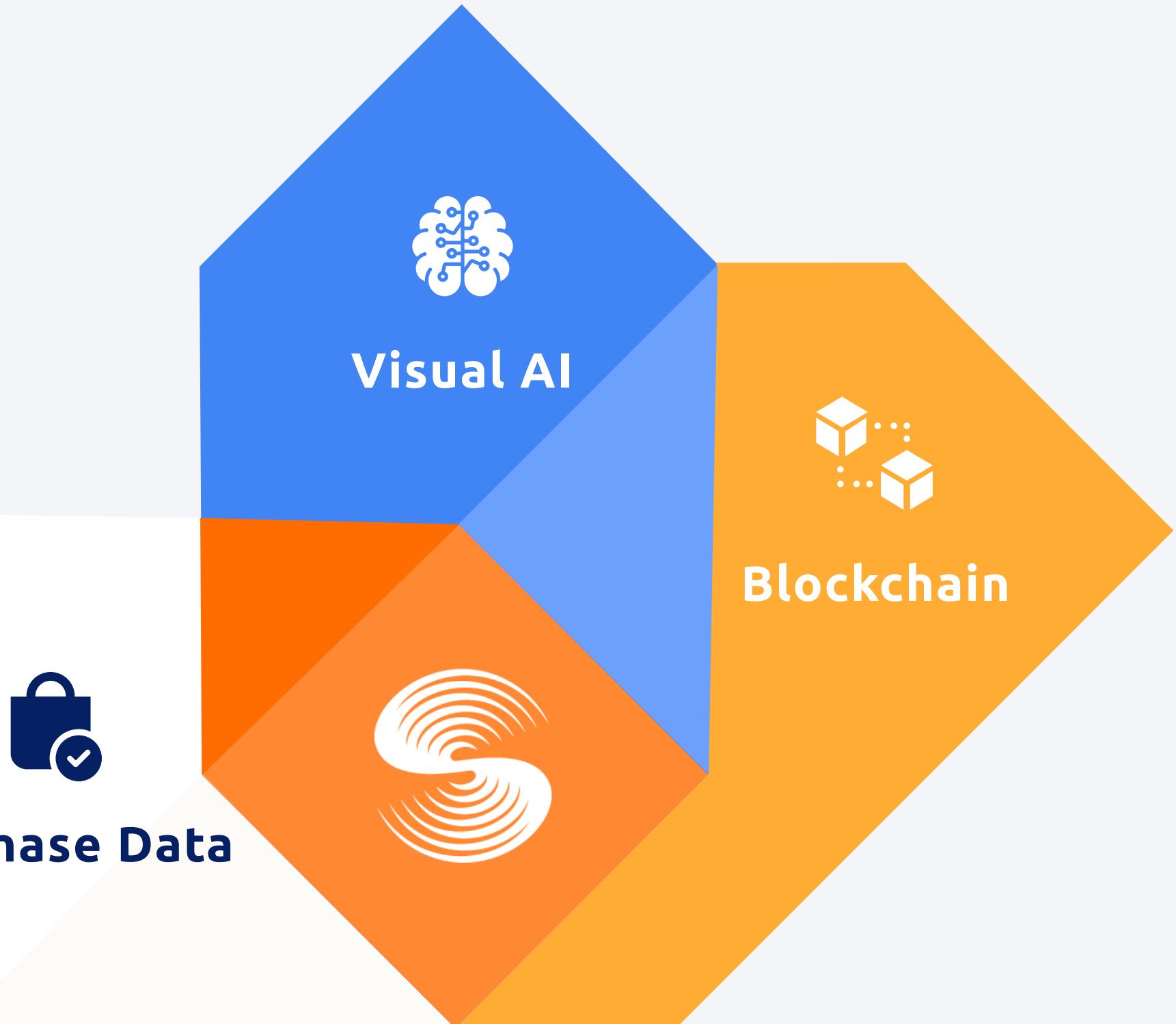


What the
MONOPOLIES like
amazon have as a
choice...

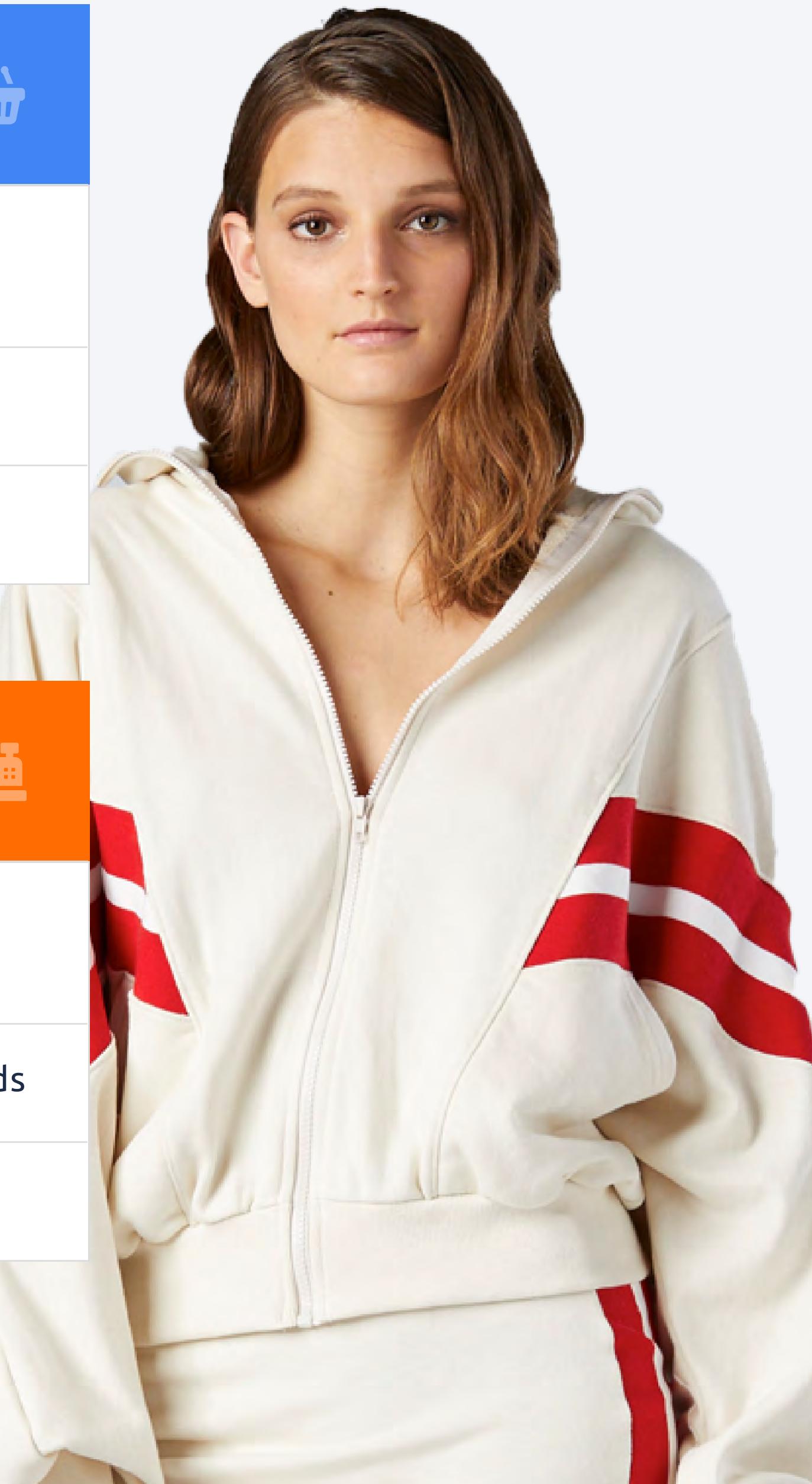


And offer every retailer,
brand & shopper as a
HUMAN RIGHT?

TECHNOLOGY that drives conversions



- | RETAILER |
|---|
| <ul style="list-style-type: none">• Increase sales conversions• Reduced attrition• Enhance security |
-
- | SHOPPER |
|---|
| <ul style="list-style-type: none">• A new paradigm in personalization• Tailored dynamic rewards• Ownership and security |



INTRODUCING



Phase 1: R.I.D.E. Retail Intelligence Data Engine

Discover unseen relationships among retailers, brands and products. It's the Amazon-like data fabric for a decentralized world of retail.

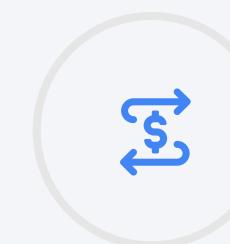


Forecast which products are statistically likely to be bought with products in your existing catalogue.

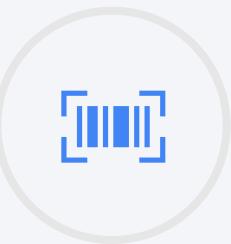


Unveil the dangers of removing brands and products from your catalogue.

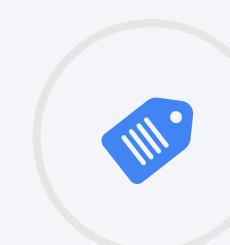
Purchase data insights:



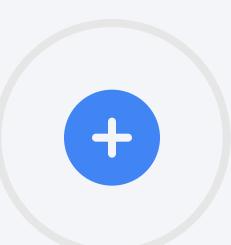
4 BN
transactions parsed



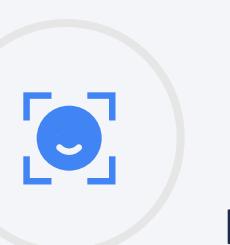
200 MM
SKU co-occurrences



45 MM
SKUs



200 K
SKUs added daily



150 K
Brands identified

A first ever global view of the retail industry's purchase data, revealing a quantitative oracle of which are the influencer products and brands drive conversions-to-sales.

Available through reports to refine your business and supply chain decisions, or API for programmatic performance in personalization, content and social.

Parnida Muley



VP of Innovation & Business Development at Macy's.

"Companies like Macy's are just inundated with data... but a lot of times it's not about having access to data, it's "how do you use the insights from that data to actually make recommendations and implement... The product that Shopin had, which was looking at your portfolio and not only providing insights and analytics, but then taking it one step further and saying "here are some recommendations, and how we would look at correlation of inventory at the SKU-level..." - *I thought that was different. It's unique.*"

gds



Omnichannel
Insight Summit



TURNING DATA INTO
ACTIONABLE INSIGHT





MEETING REPORT

Meetings requesting follow-up

Attendee	Company	Rating	Follow Up?	Suggested Follow Up Date	Comments	Email
Dale Davis	Coach	10/10	Yes	05/24/2019		Dale.Davis@coach.com
Debesh Khattoi	Finish Line	10/10	Yes	08/15/2019		Debesh.Khattoi@finishline.com
Angela Gruszka	MILLY	9/10	Yes	05/27/2019	No	Angela.Gruszka@milly.com
Angela Pih	Halston	9/10	Yes	05/21/2019	Very innovative technology	Angela.Pih@halston.com
Wadih Haddad	Ascena Retail Group	9/10	Yes	06/15/2019		Wadih.Haddad@ascenaretailgroup.com
Sara Amrani	Michael Kors	8/10	Yes	06/14/2019		Sara.Amrani@michaelkors.com
Lawrence McMahon	Kohl's Corporation	8/10	Yes	05/25/2019		Lawrence.Mcmahon@kohls.com
Karen S. Howard	Renfro Corporation	7/10	Yes	01/07/2019	Let's touch base once I am settled in my new role. We have connected on LinkedIn, that will help	Karen.S.Howard@renfro.com

How R.I.D.E. works

(provisional patents)



Data Lake

Actionable insights arise

Consumer Data direct from
retailer added (optional)



R.I.D.E. analyzes
the retail industry



Analysis of purchase data



SKUs are
identified



Bought with
connections
identified



Deep data
analysis



Visual A.I. adds attributes
and normalizes SKU data
and connections

NEW PERSPECTIVES



Global customer base:

including brand store and ecommerce customers, as well as at authorized resellers and ecommerce sites



Limited access to the customer, while the customer has constant access

across multiple channels - to a range of offers and information that influence lifestyle choices and behavior, puts the company at a severe disadvantage with the mega retailers like Amazon



Transition to a robust customer-centric model

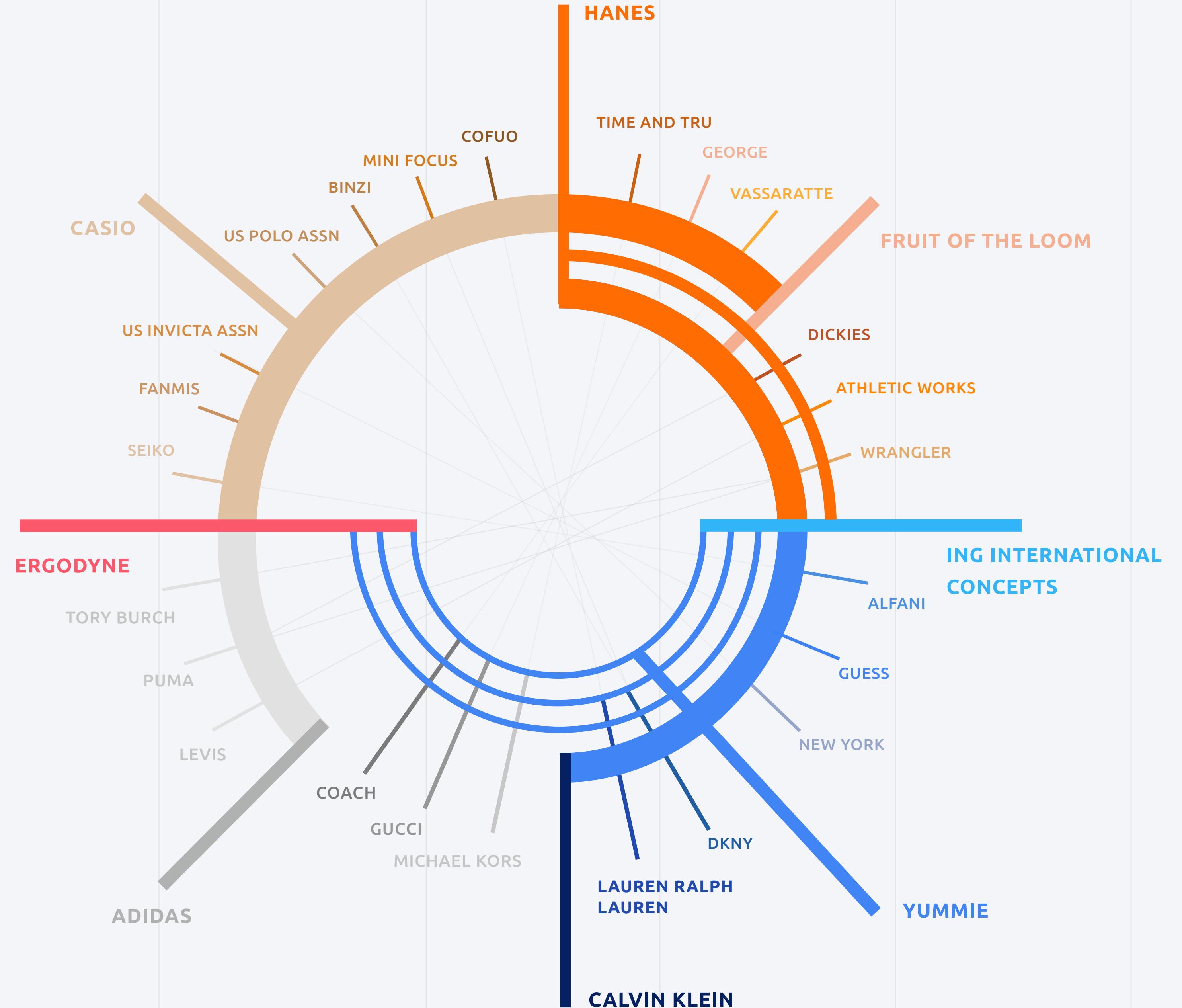
and personalization, and add an experiential value proposition, an essential part of the current retail innovation and transformation:

to not only offer a great product, but to the right customer, when they want it, for a good price, and through a positive and gratifying shopping experience (online or in store)

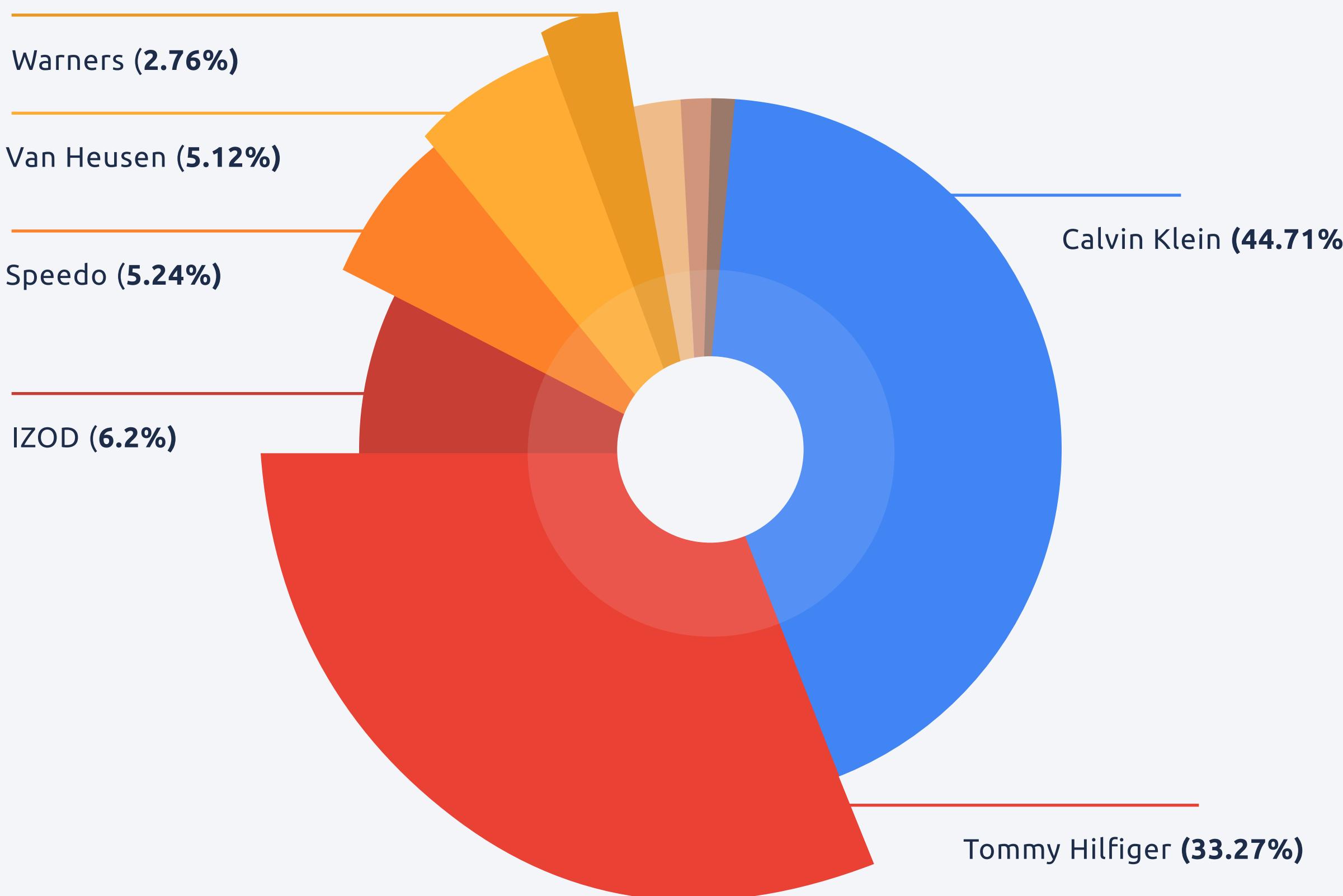


R.I.D.E. Capabilities

- Product and category profile analysis
- Comparative global analysis
- Brand and SKU co-occurrence essential trends and behaviors
- Identify strength, influence, criticality of the brand
- Identify big opportunities that may be overlooked
- Present state of affairs and predictive (future) insights
- Examples of our data-driven reasoning and intelligence



Global Catalogue: PVH



(unique SKUs, excluding colors/sizes)

This is a global view of the **top PVH brands** representation by unique SKUs across the retail industry

The SKU data used for this analysis **enables a deeper look at the PVH categories**, and the portfolio balance at each retailer

The comparative brand and category analysis **will be used for describing and ranking the strongest** and most successful PVH portfolio

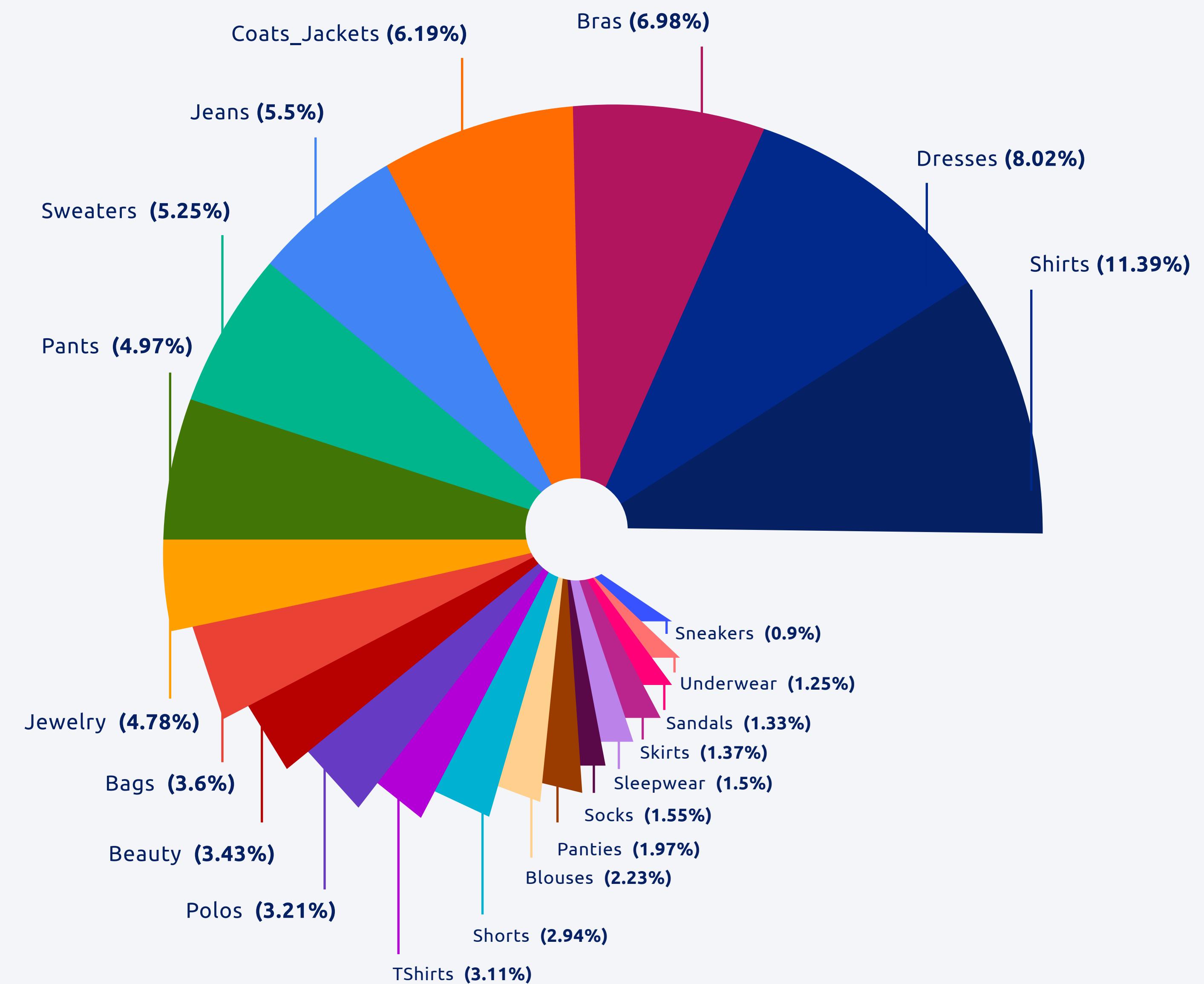
Global Catalogue: PVH

(unique SKUs, excluding colors/sizes)

This is a global view of the **top PVH catalogue representation** by category, using unique SKUs across the retail industry

The SKU data used for this analysis **enables a deeper look at the PVH categories**, and the portfolio balance at each retailer

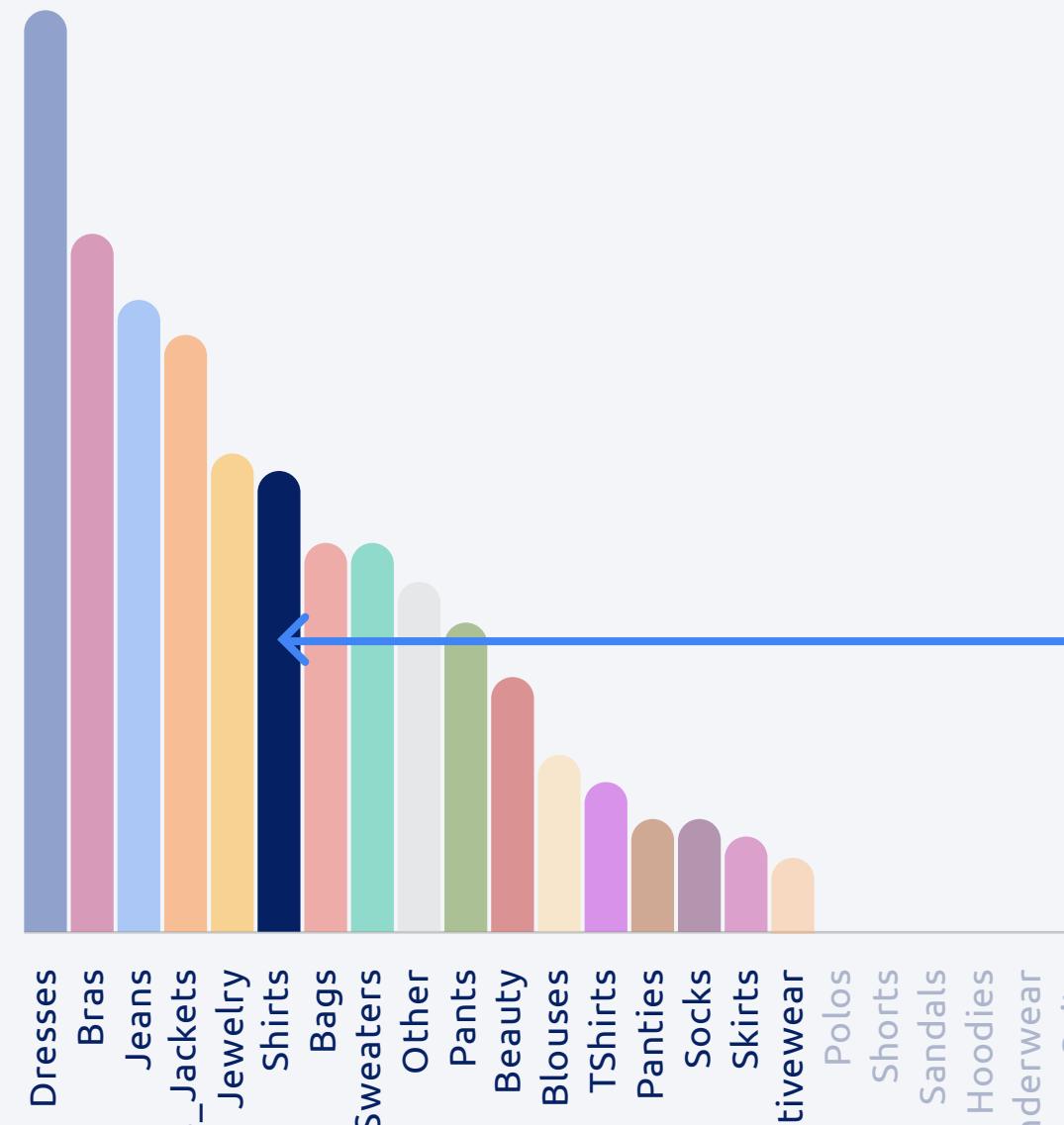
The comparative brand and category analysis **will be used for describing and ranking the strongest** and most successful PVH portfolio



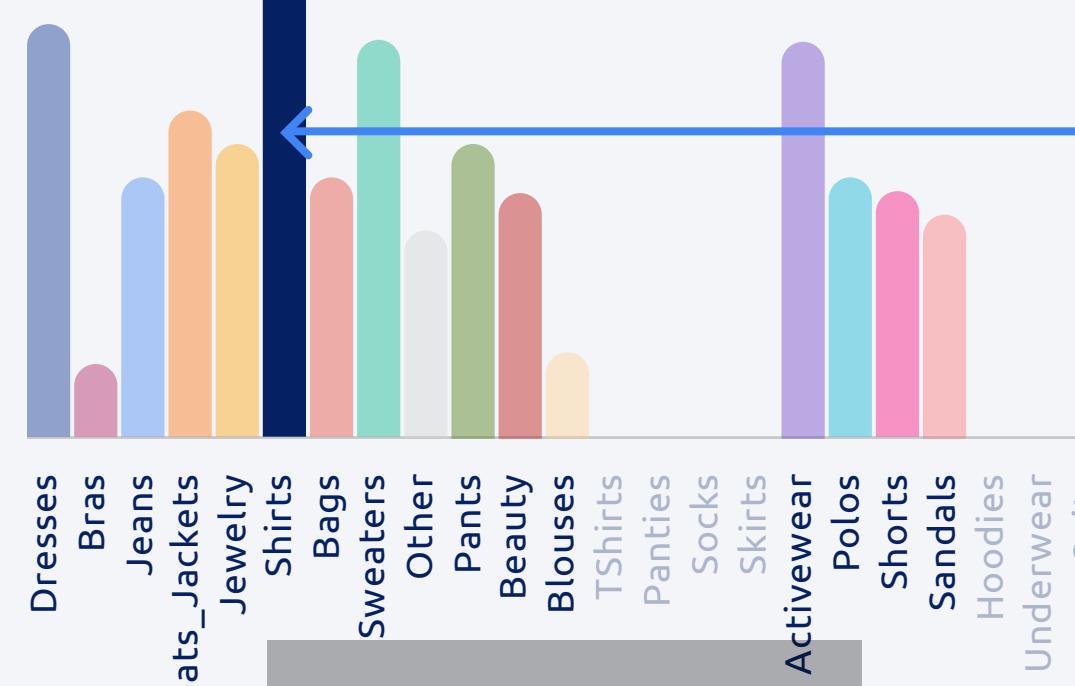
Global Catalogue: PVH

(unique SKUs, excluding colors/sizes)

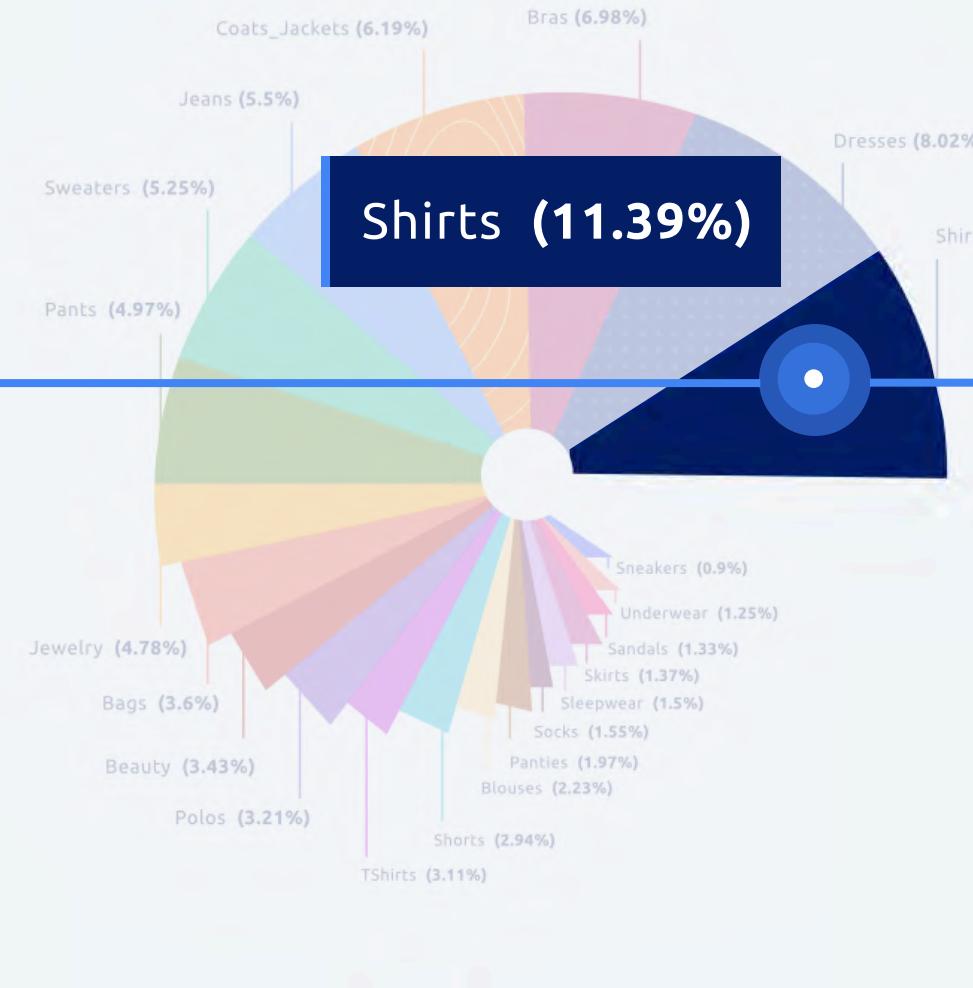
Global category PVH profile and how individual brands contribute to each category



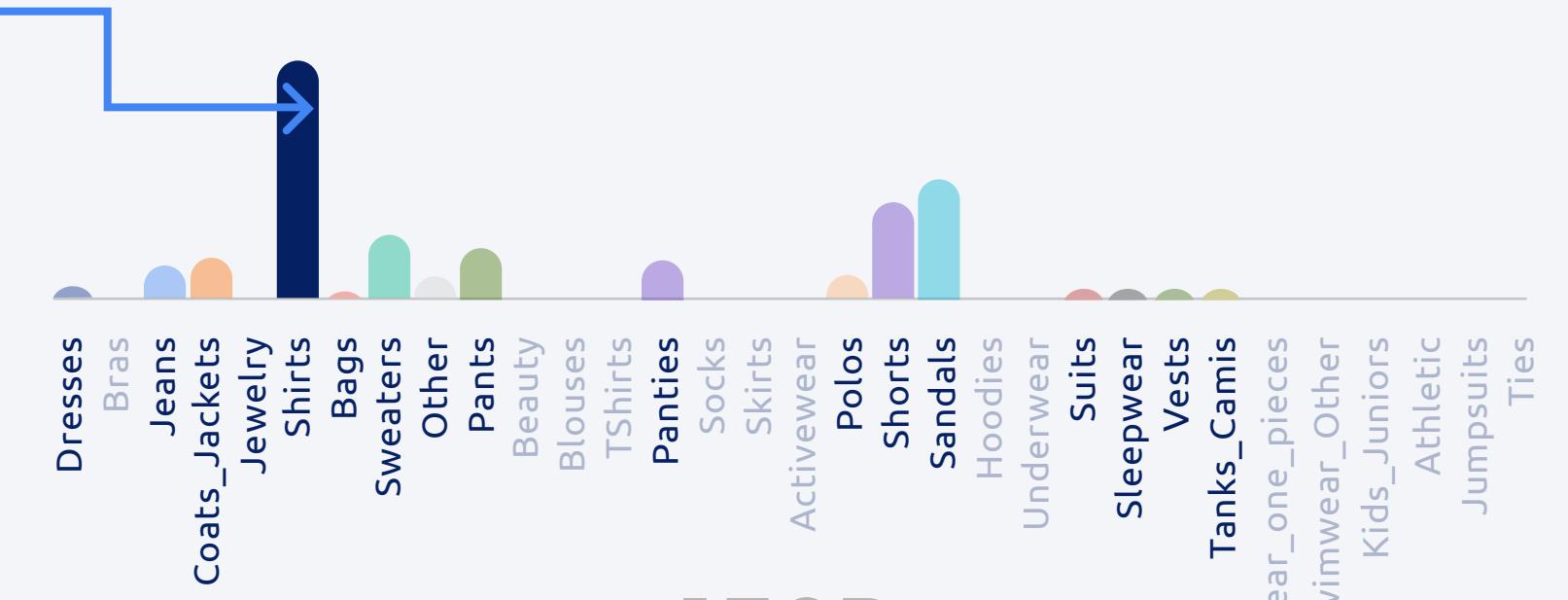
Calvin Klein



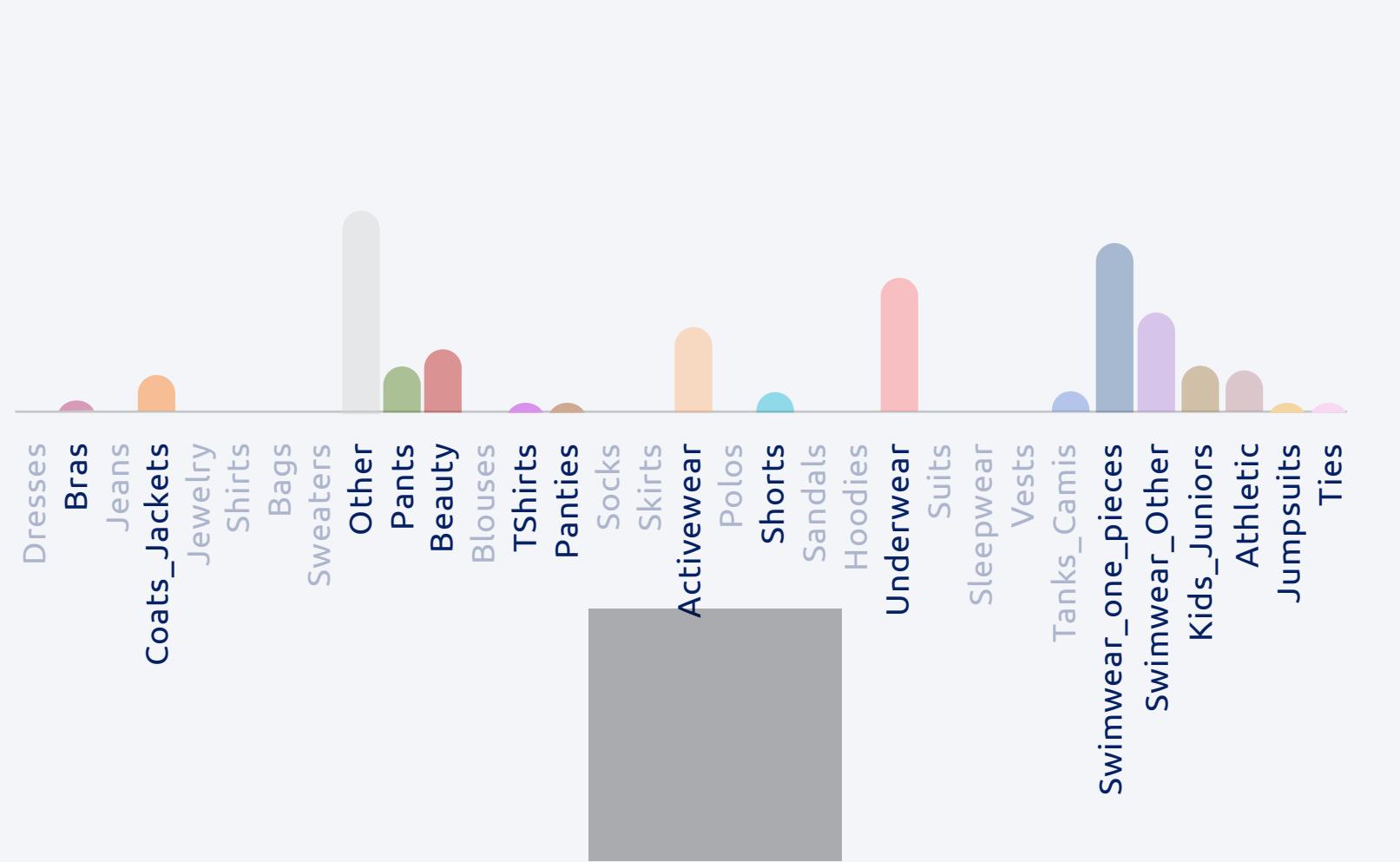
VAN HEUSEN



Shirts (11.39%)



IZOD



Global Catalogue: PVH

R.I.D.E. offers a global view of the PVH brands representation by unique SKUs across the retail industry:

(unique SKUs, excluding colors/sizes)

- brand stores (Calvin Klein, Tommy Hilfiger)
- retailers (Amazon, Ebay, Walmart)



This analysis enables a deeper look at the PVH categories and portfolio at each retailer. Opportunities are immediately visible at these and other mega-retailers. Shopin's global catalogue view helps identify and quantify the entry points for PVH brands.

The comparative brand and category analysis will be used for describing and ranking the strongest and most successful brands in the PVH portfolio.

Brand Co-Occurrence: PVH

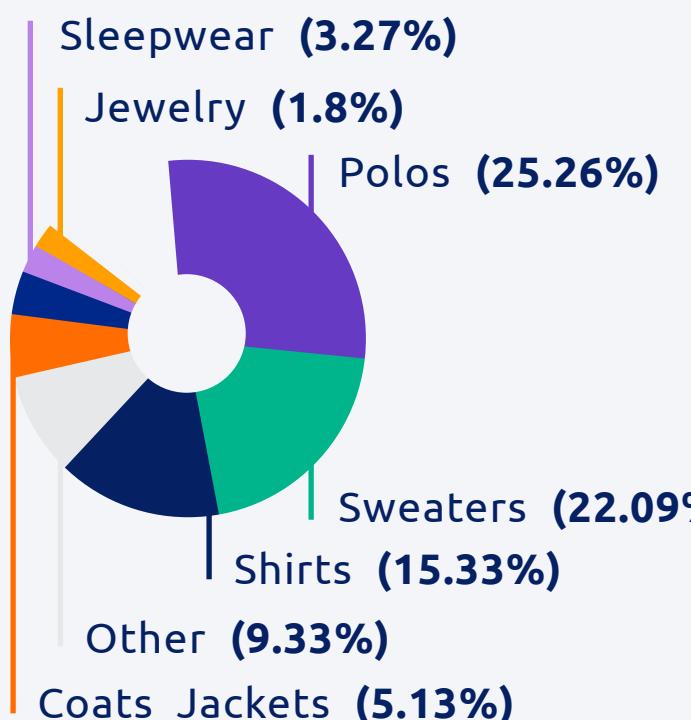
(unique SKUs, excluding colors/sizes)

A view of the PVH brands representation by unique SKUs, **allowing us to better see the position of each PVH brand** within the mega-retailers.

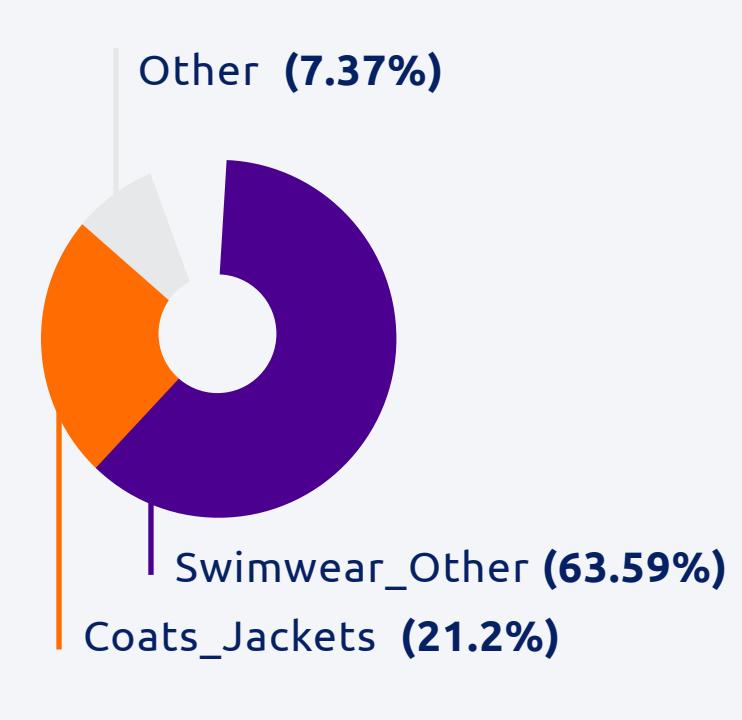
Tommy Hilfiger and Calvin Klein are undoubtedly the top brands, but Amazon has some very strong representation by Speedo and Warners.

This analysis can be carried out at the category and SKU level, and contributes in the ranking for some of the Add/Delete recommendations.

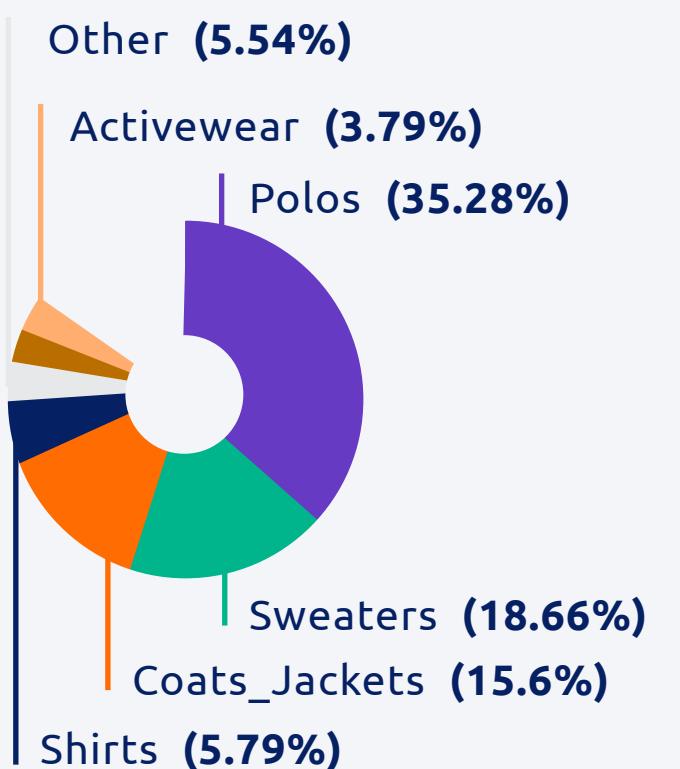




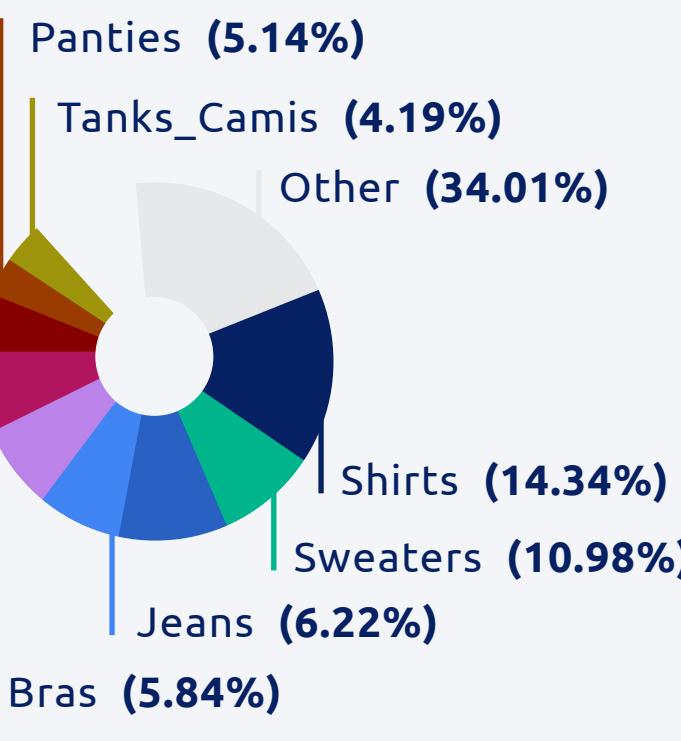
Tommy Hilfiger



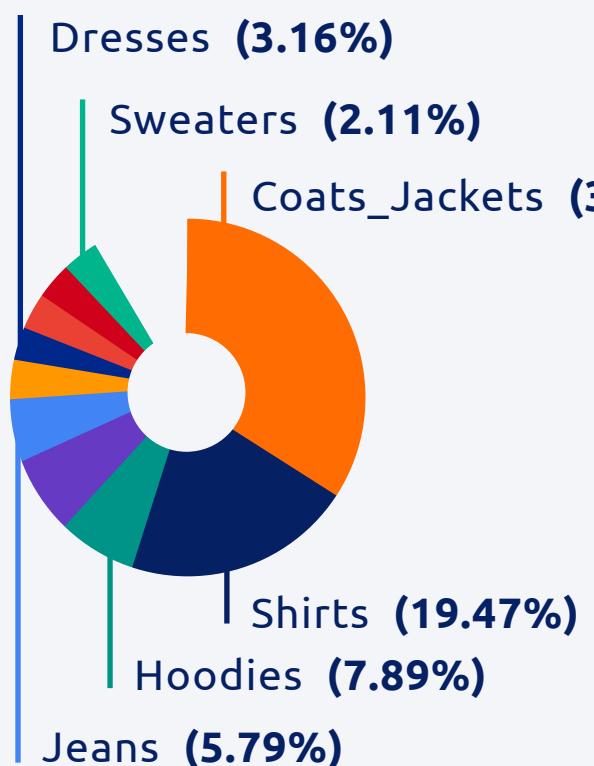
Speedo



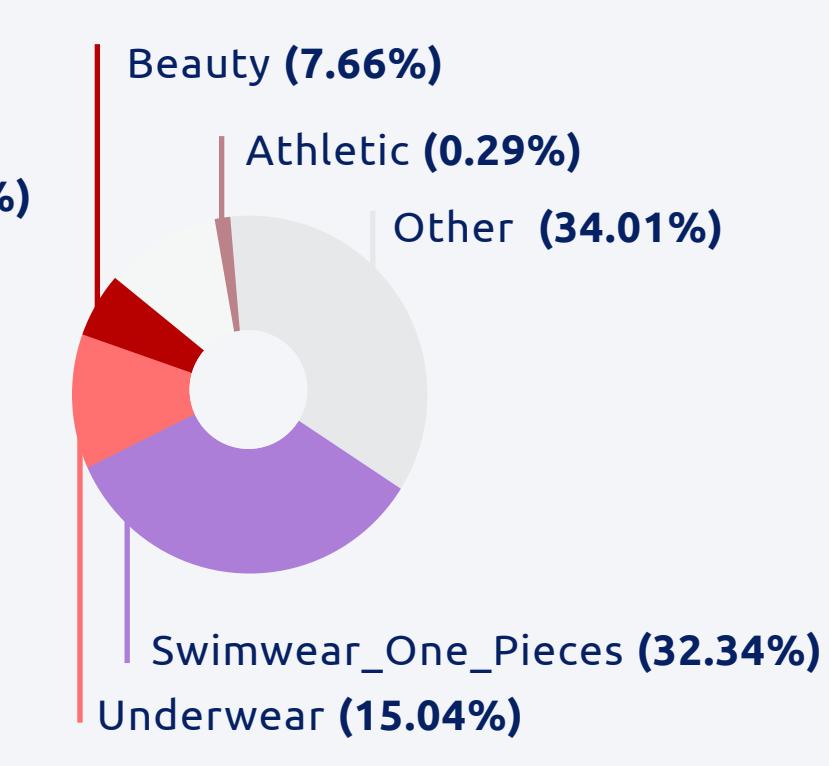
IZOD



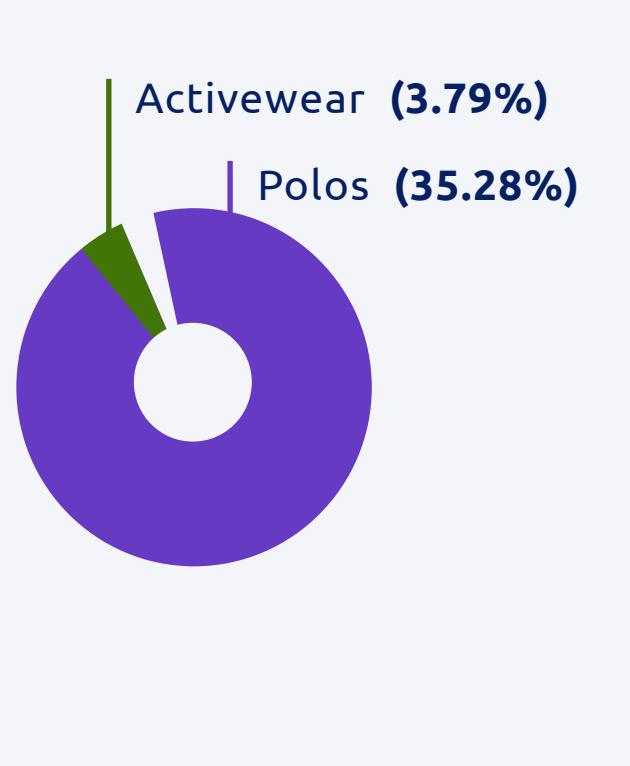
Calvin Klein



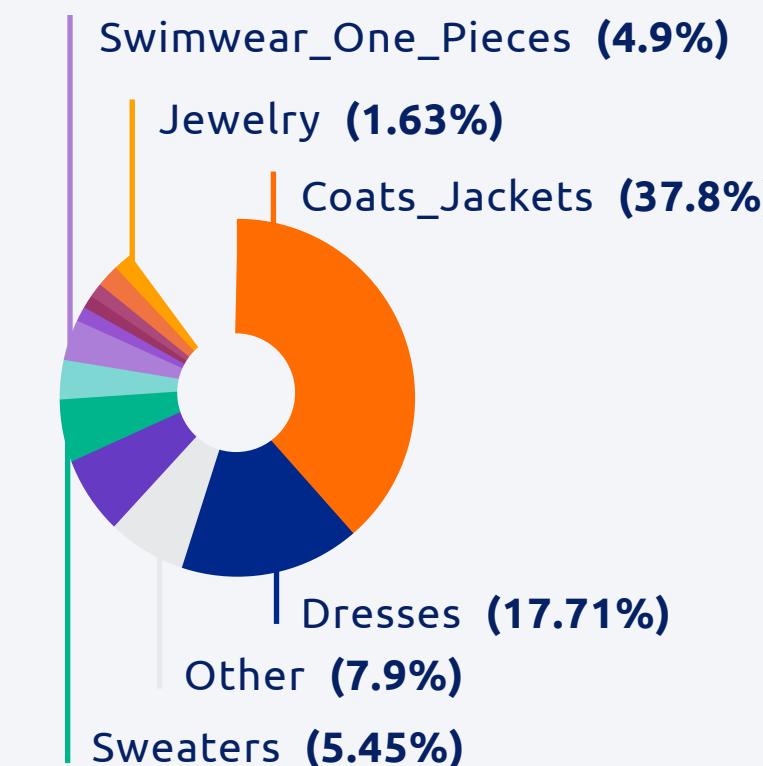
Tommy Hilfiger



Speedo



IZOD



Calvin Klein

Brand Co-Occurrence: PVH

(brands order changes based on overall SKU count)

A quick look at the top PVH brands at eBay and Amazon, with a breakdown by top categories for each brand.

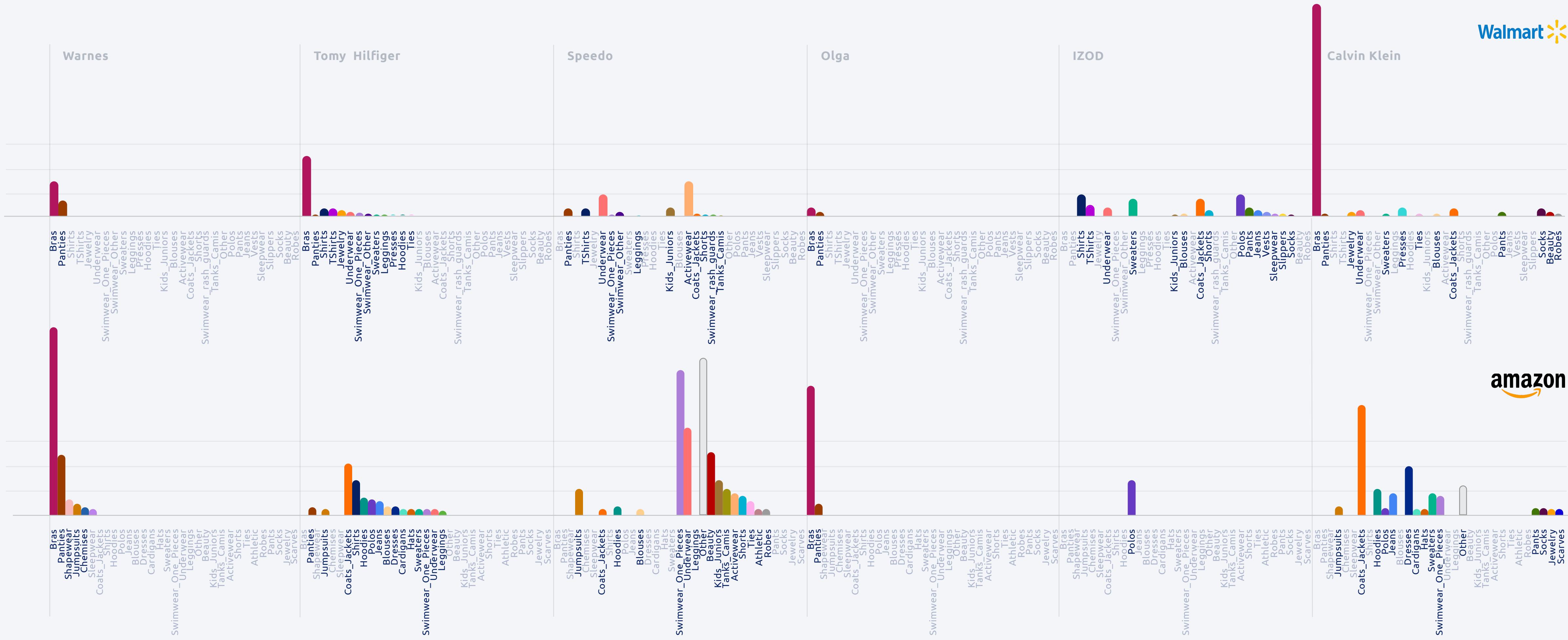
We superimpose the visuals in order to see the **differences between brand profiles** at each of the retailers.

For example, Tommy Hilfiger is represented by sweaters and shirts at eBay (**over 50%** of the catalogue of the brand) *versus* outerwear (**about 36%** for the brand catalogue) at Amazon.

Global Categories: PVH at the Mega Retailers

Another comparative look across the **two mega-retailers** **Amazon** and **Walmart**, demonstrating the cases where we see one or two dominant categories per brand, but we also see cases where the catalogue is fairly balanced.

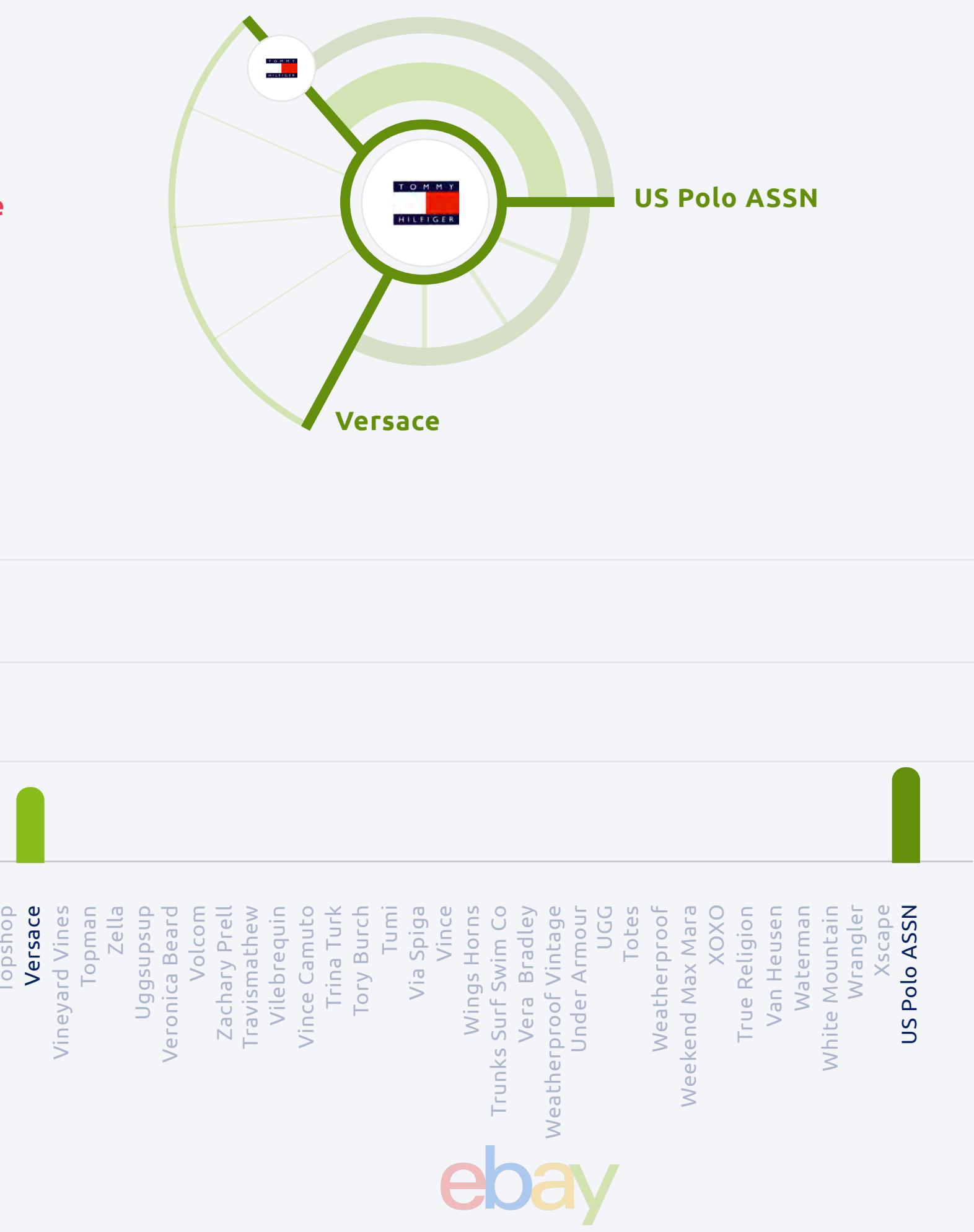
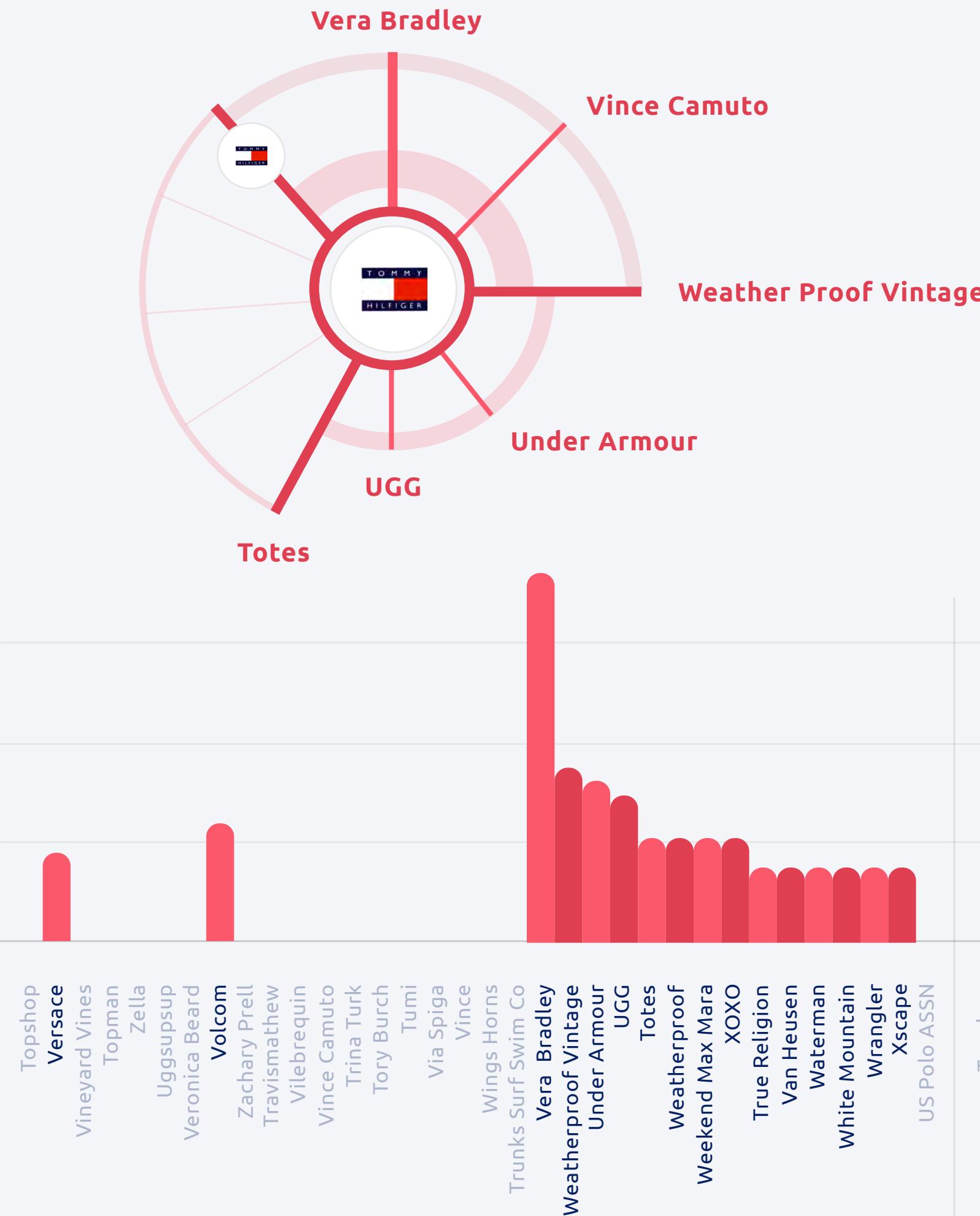
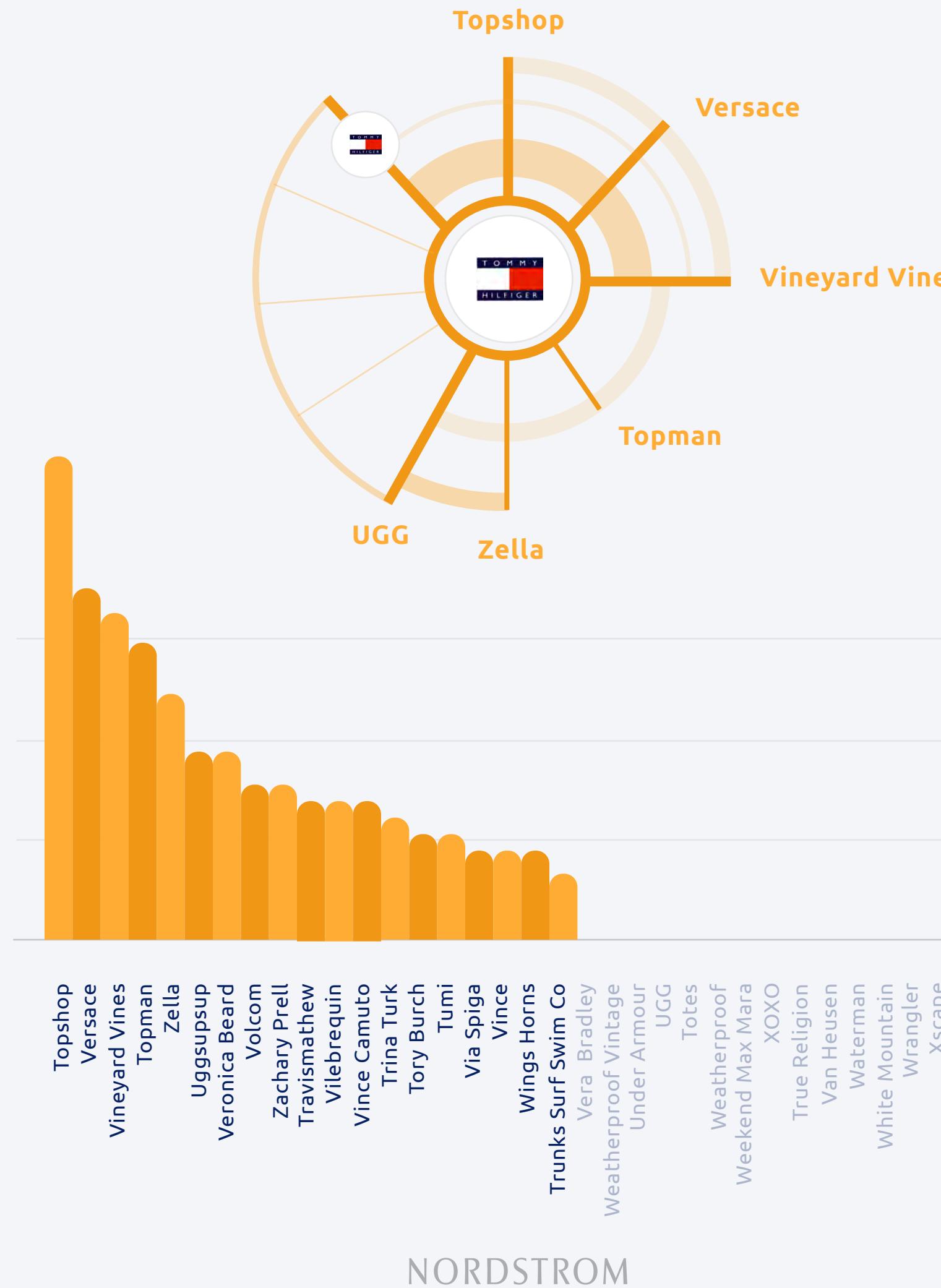
You see the Calvin Klein catalogue at both retailers - but especially Amazon! - being dominated by the brand's self-cooccurrence, while other brands have much more balanced profiles.



Brand Co-Occurrence: PVH

Top Brand Tommy Hilfiger

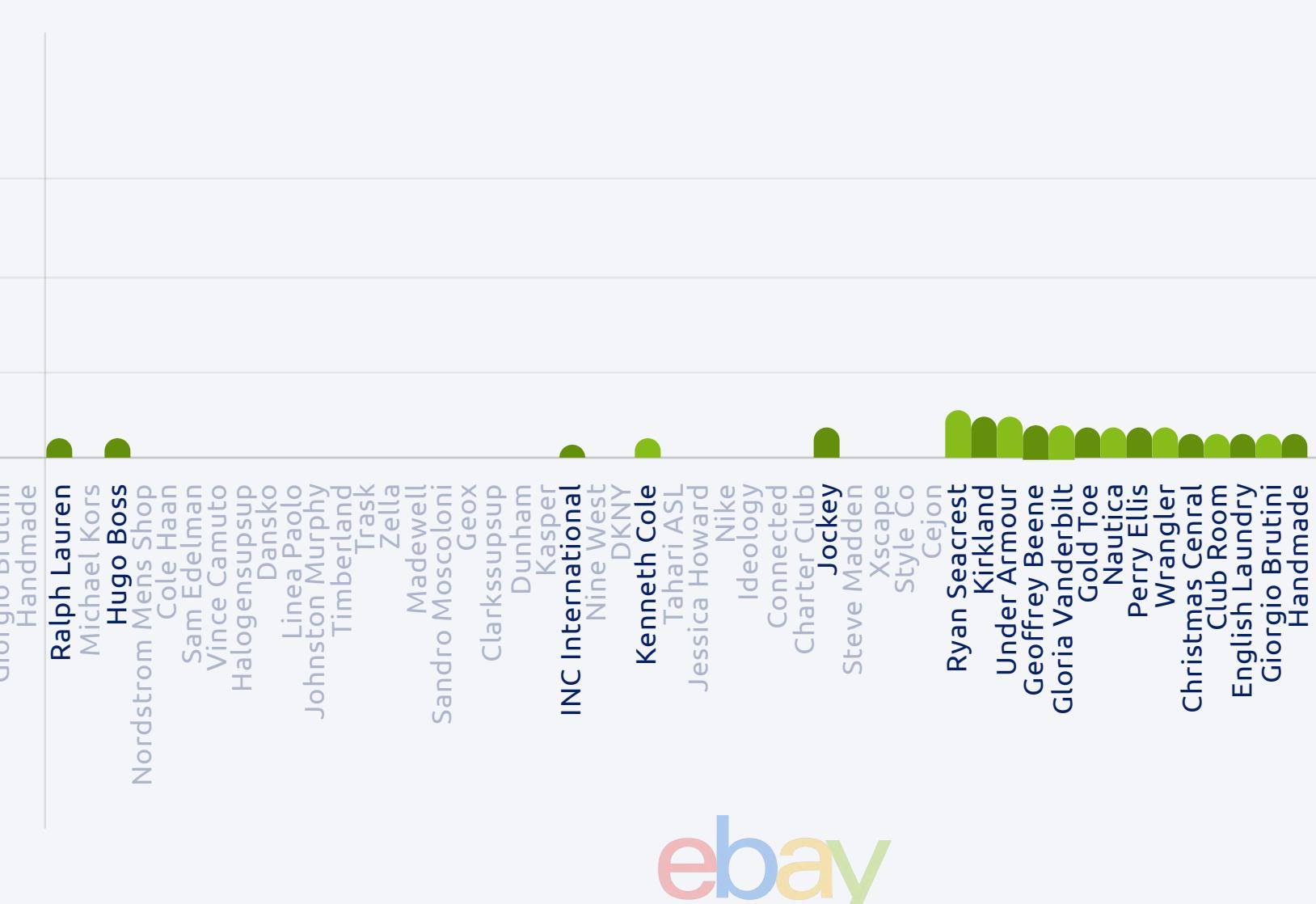
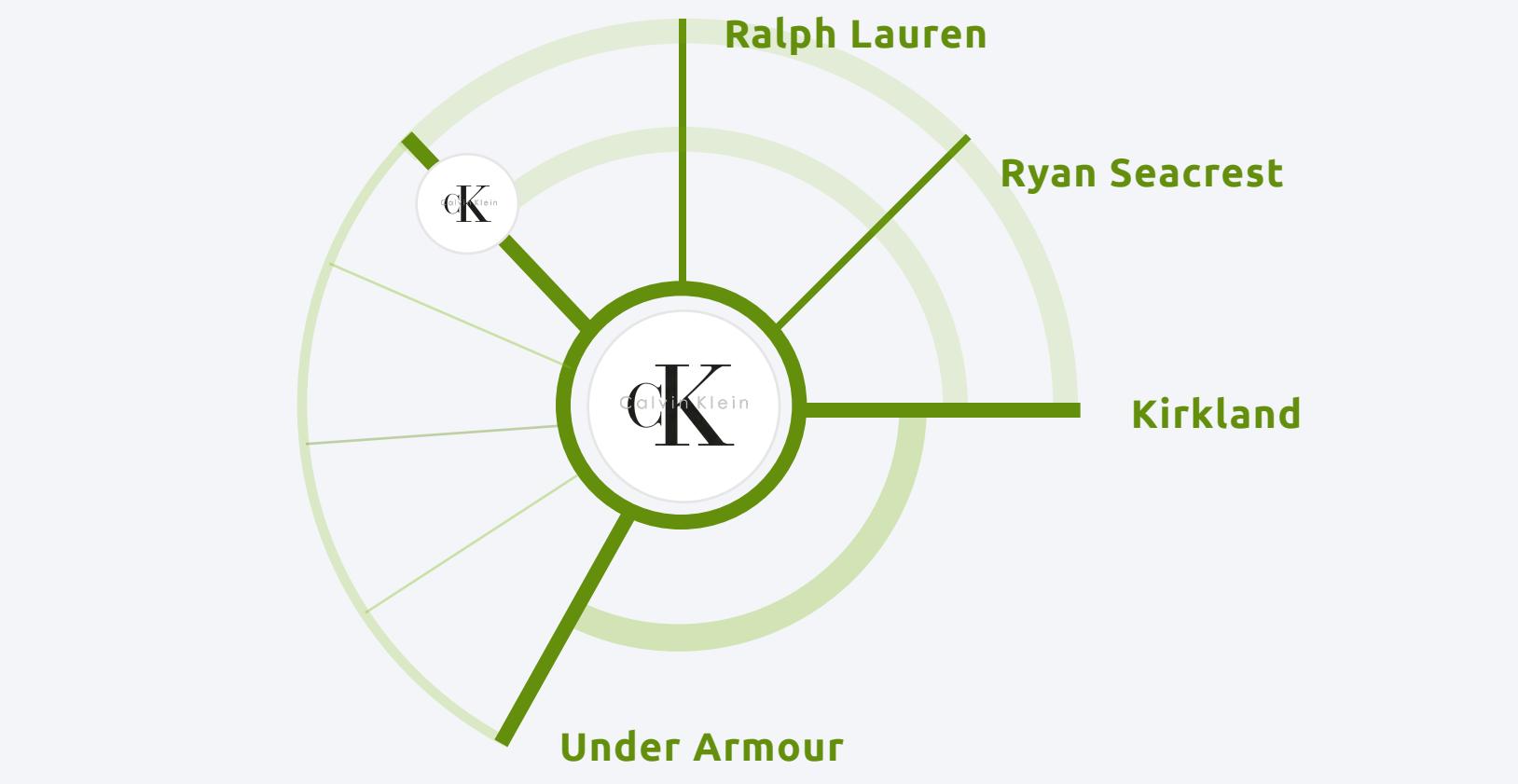
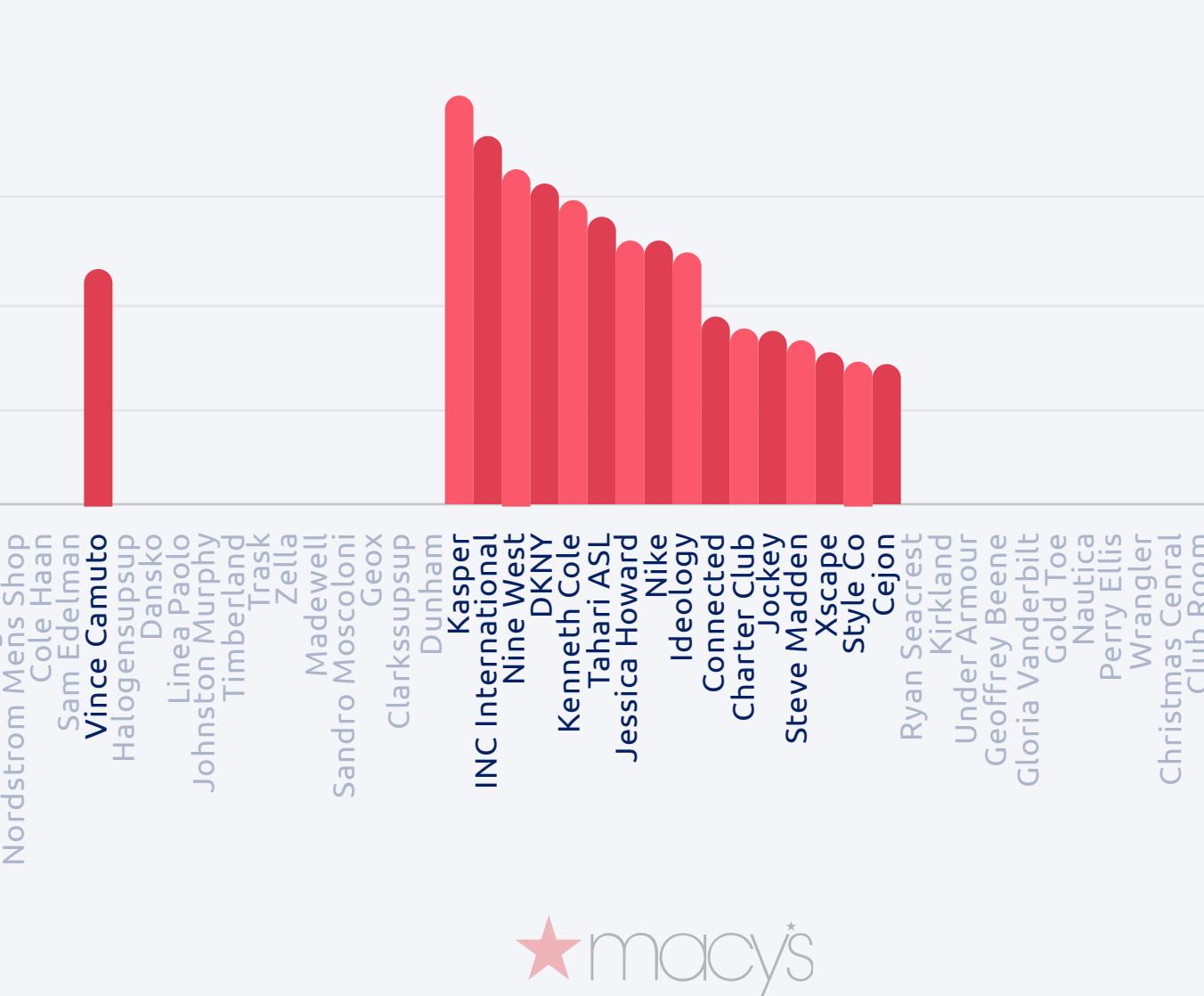
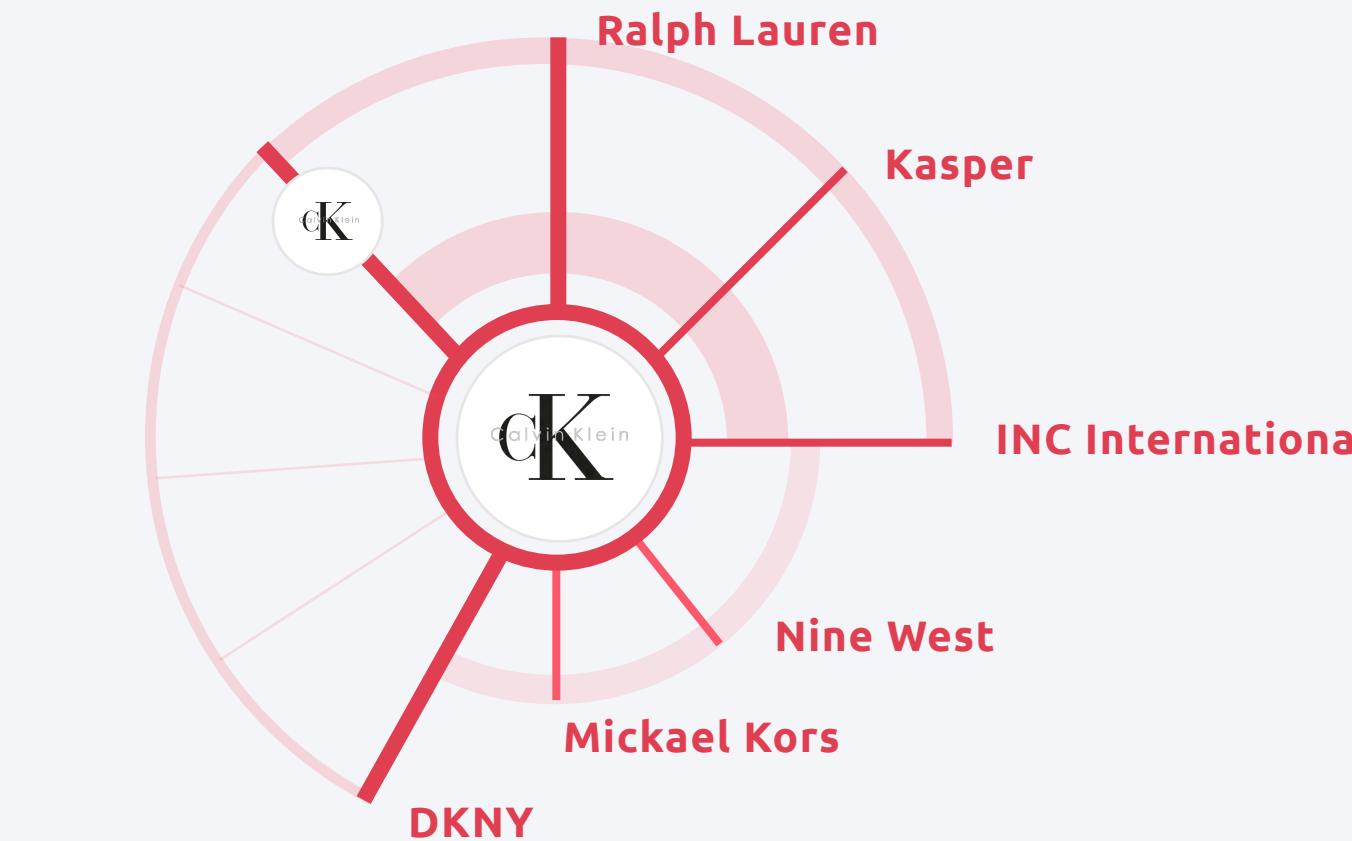
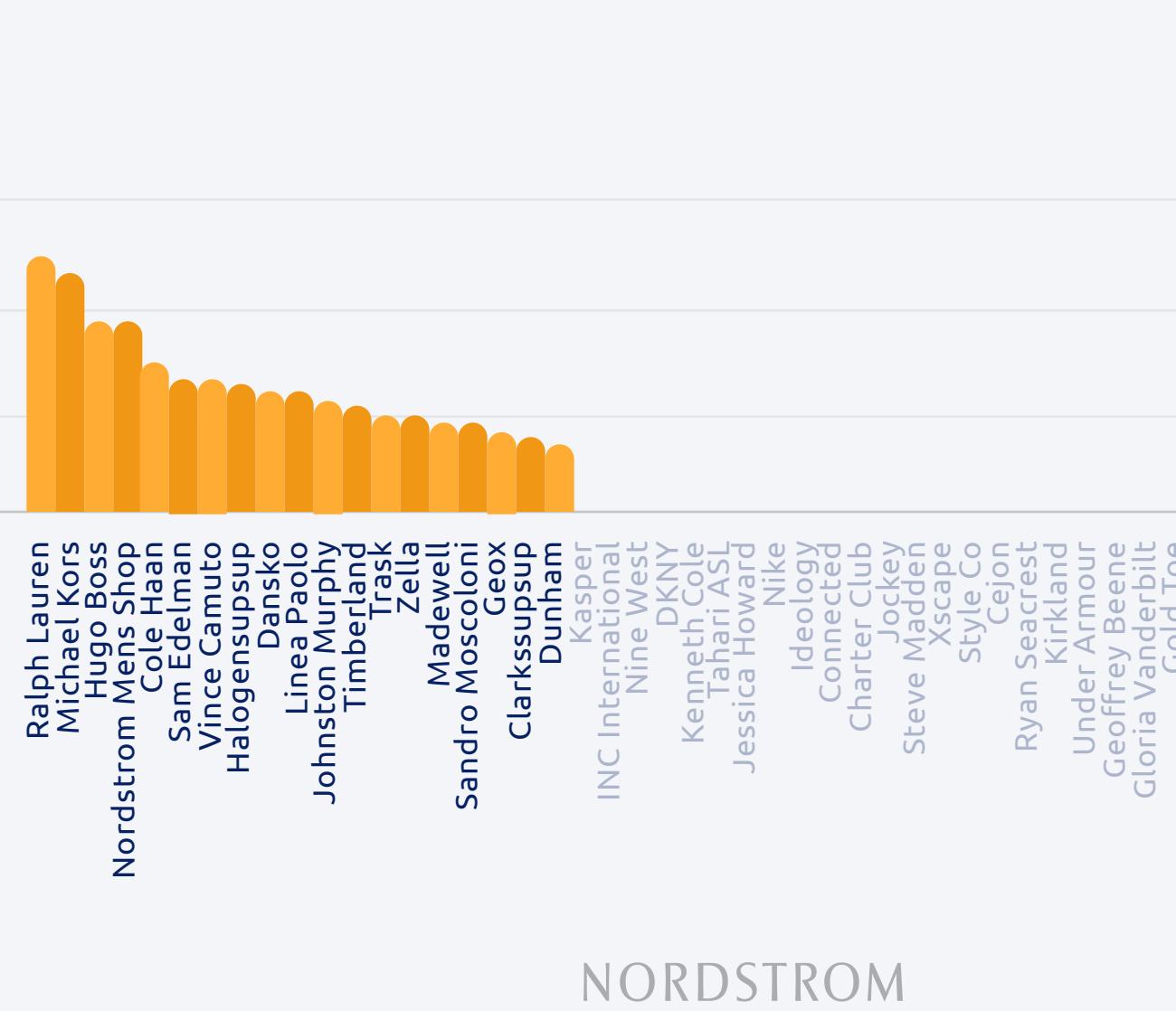
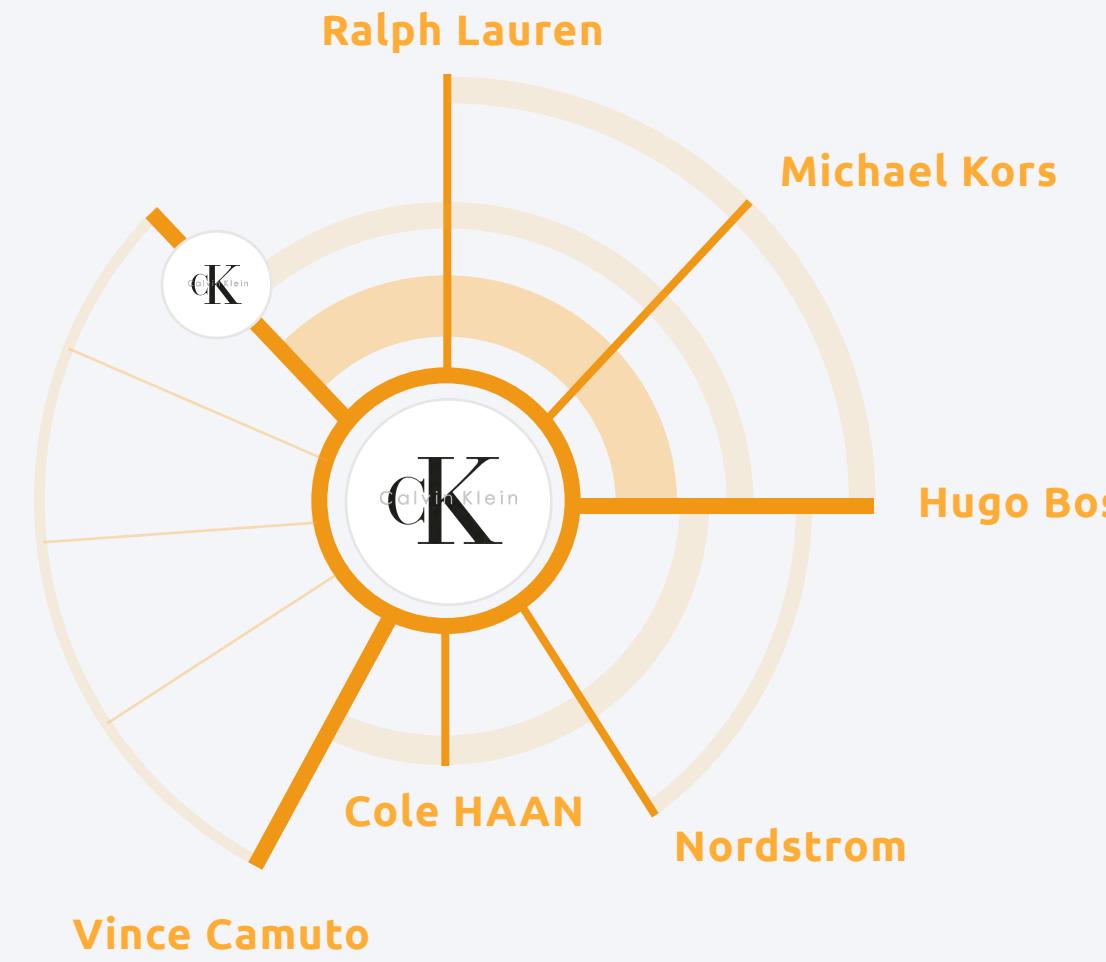
Brand to brand co-occurrence is an aggregate view of all co-occurring SKUs from a pair of brands. At this level, we can see significant patterns and trends that represent the different customer footprint at each retailer.



Brand Co-Occurrence: PVH

Top Brand Calvin Klein

Brand to brand co-occurrence is an aggregate view of all co-occurring SKUs from a pair of brands. At this level, we can see significant patterns and trends that represent the different customer footprint at each retailer.



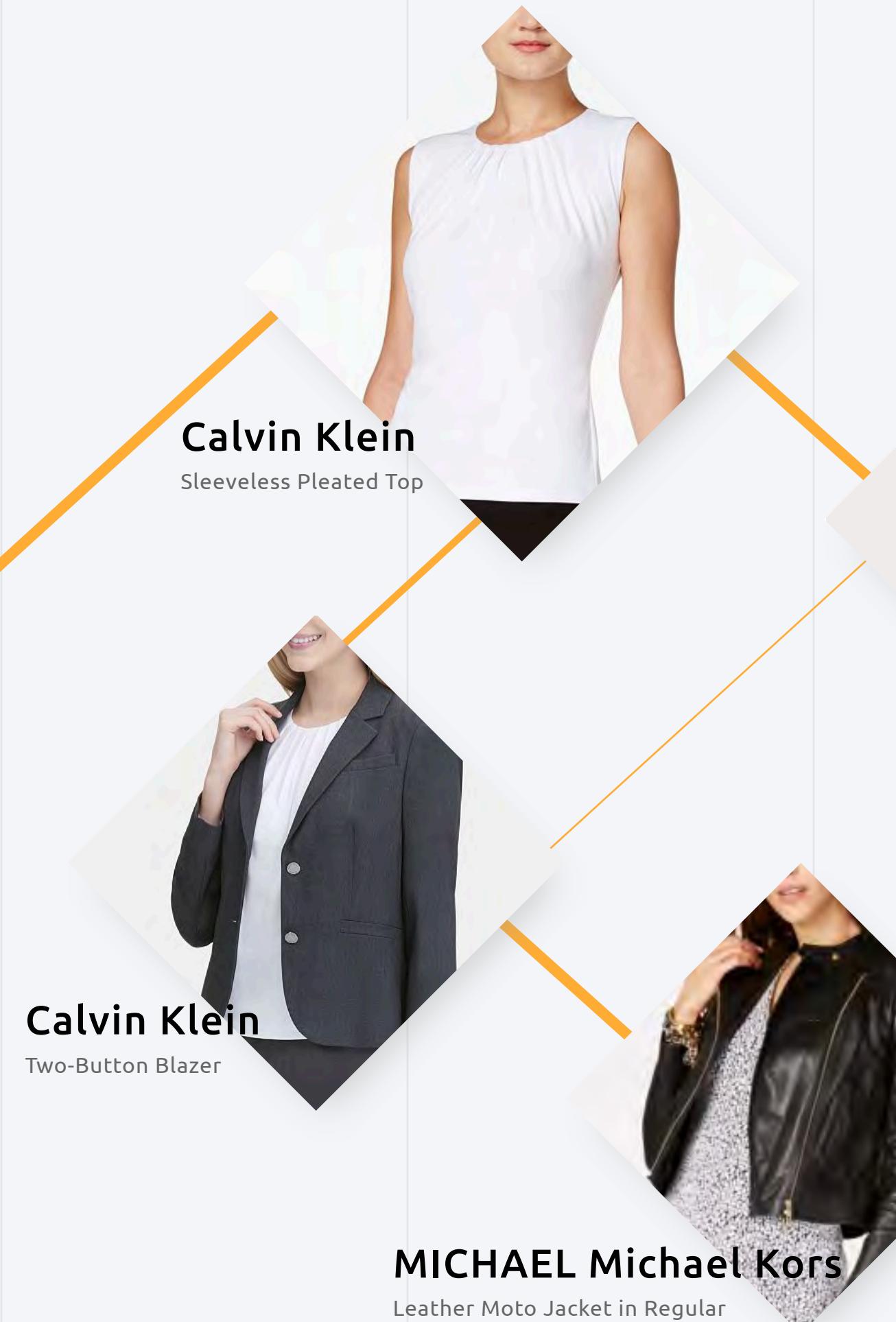
Brand Co-Occurrence: PVH

Top Brand Calvin Klein

Dominant category co-occurrences are represented by scaled thicker connections.



Kasper
Crossover Cutout Top



Calvin Klein
Floral Printed



Calvin Klein
Lane Messenger



INC International Concepts
I.N.K. Alisa Nylon Crossbody



Lauren Ralph Lauren
Floral Print Dress

Brand and category co-occurrence (cont'd)

Brand	Cooc_brand	Retailer	Category1	Category2	Cooc_Score
Calvin Klein	Ralph Lauren	Macy's	dresses	dresses	154
Calvin Klein	Kasper	Macy's	blouses	blouses	68
Calvin Klein	Jessica Howard	Macy's	dresses	dresses	68
Calvin Klein	INC International	Macy's	bags	bags	68
Calvin Klein	INC International	Macy's	sweaters	sweaters	61
Calvin Klein	Kasper	Macy's	jewelry	jewelry	60
Calvin Klein	Kasper	Macy's	beauty	beauty	60
Calvin Klein	Kasper	Macy's	other	other	59
Calvin Klein	Michael Kors	Macy's	coats_jackets	coats_jackets	54
Calvin Klein	Tommy Hilfiger	Macy's	dresses	dresses	52

Dominant category co-occurrences are represented by scaled thicker connections.

We observe significant Calvin Klein category co-occurrences with the same categories from other brands, specifically Ralph Lauren (dresses), Kasper (blouses), Inc International (bags), and Michael Kors (jackets/blazers).

This indicates existence of substitute at the category level and an opportunity for adjusting the brand's category profile at Macy's.



Although the data indicates that

40%

of Calvin Klein dresses co-occurrence connections are to Calvin Klein dresses, there are certainly instances where a Calvin Klein dress is purchased with a different category and a different brand.

This shows that from the statistically significant instances, customer purchase pairs of Calvin Klein or Calvin Klein and Michael Kors dresses together in the dresses category.

Brand Co-Occurrence: PVH

Top Brand Calvin Klein

Dominant category co-occurrences are represented by scaled thicker connections.

NORDSTROM



Brand	Cooc_brand	Retailer	Category1	Category2	Cooc_Score
Calvin Klein	Michael Kors	NORDSTROM	pumps	pumps	89
Calvin Klein	Ralph Lauren	NORDSTROM	socks	socks	84
Calvin Klein	Hugo Boss	NORDSTROM	socks	socks	41
Calvin Klein	Nordstrom Mens Shop	NORDSTROM	socks	socks	28
Calvin Klein	Sam Edelman	NORDSTROM	pumps	pumps	26
Calvin Klein	Cole Haan	NORDSTROM	socks	socks	25
Calvin Klein	Nordstrom Mens Shop	NORDSTROM	loafers	loafers	25
Calvin Klein	Zella	NORDSTROM	socks	socks	20
Calvin Klein	Hugo Boss	NORDSTROM	jewelry	jewelry	19
Calvin Klein	Mighty Good Undies	NORDSTROM	socks	socks	15
Calvin Klein	Versace	NORDSTROM	socks	socks	14
Calvin Klein	Honeydew	NORDSTROM	panties	panties	14
Calvin Klein	Halogensupsup	NORDSTROM	bras	bras	14
Calvin Klein	Dansko	NORDSTROM	loafers	loafers	14
Calvin Klein	Sup	NORDSTROM	wallets	wallets	13
Calvin Klein	Linea Paolo	NORDSTROM	sandals	sandals	13
Calvin Klein	Halogensupsup	NORDSTROM	panties	panties	13
Calvin Klein	Vince Camuto	NORDSTROM	sandals	sandals	12
Calvin Klein	Strideline	NORDSTROM	socks	socks	12
Calvin Klein	Nine West	NORDSTROM	sandals	sandals	12



Brand and category co-occurrence (cont'd)

Dominant category co-occurrences are represented by scaled thicker connections.

We observe very significant Calvin Klein category co-occurrences with the same categories from other brands, specifically Michael Kors (heels/pumps) and Linea Paolo (heels/pumps).

This indicates existence of substitute at the category level and an opportunity for adjusting the brand's category profile at Nordstrom.

Although the data indicates that

65%

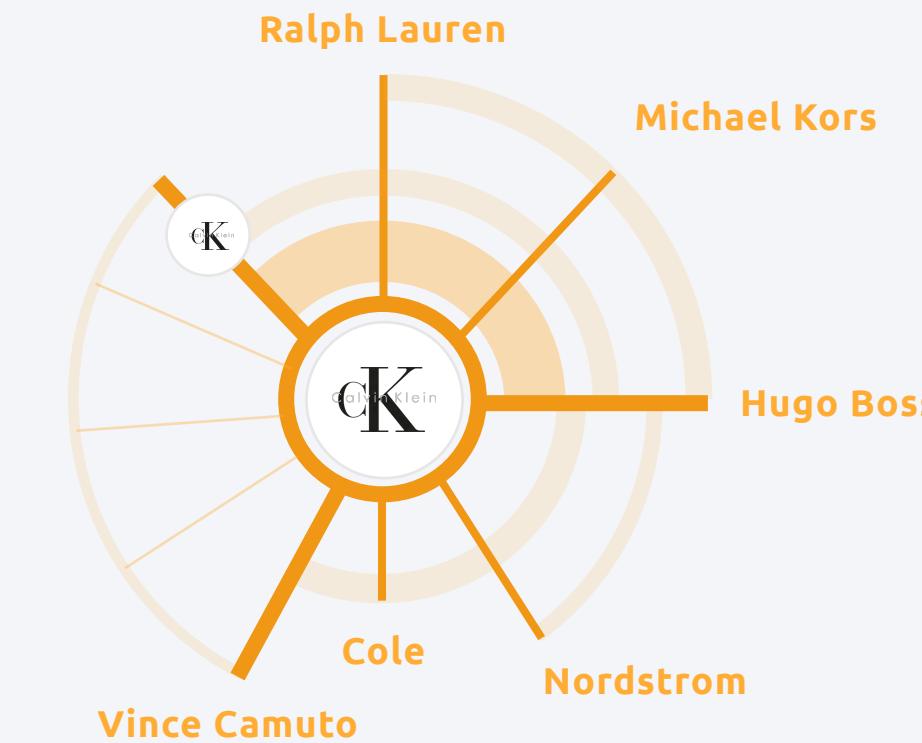
of Calvin Klein dresses co-occurrence connections are to Calvin Klein heels, there are certainly instances where a Calvin Klein heel shoe is purchased with a different category and a different brand.

This shows that from the statistically significant instances, customer purchase pairs of Calvin Klein or Calvin Klein and Michael Kors heels together in the heels/pumps category.

Co-Occurrence Brand Analysis: Final Comparison



At Macy's, Calvin Klein is featured with several complementary items/categories (bags, tops, dresses, jackets) for at least a couple of styles/occasions. This makes Calvin Klein a very strong brand for Macy's with a large and diverse customer base.



NORDSTROM

At Nordstrom, Calvin Klein is featured with mainly substitute items from one category (athletic shoes) and an athleisure category, with SKUs from different brands, but addressing only one style and occasion.



Co-Occurrence Brand Analysis: Conclusions



The comparative analysis of brand and SKU co-occurrences for Calvin Klein revealed that the brand is in a limited position at Nordstrom, with strong substitutes, suggesting a narrow customer base, while at Macy's, we have discovered a diverse integration for the brand with complementary categories and for multiple occasions.



Additionally, the comparative analysis **reveals opportunities** for Calvin Klein to create and promote items and categories in order to achieve the diverse presence of Calvin Klein that we see at Macy's.



Our subsequent analysis of brand strength **helps quantify this by ranking the brand's position** within each retailer against all other brands according to measures that include influence, centrality, pagerank-like metrics.



ShopScore product roadmap 2019



Your future with



**QUESTIONS /
NEXT STEPS**

Eran Eyal
eran@shopin.com

