



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.



Prof Georgi Gospodinov
CTO

Georgi hails from Walmart, where he served in his tenure as a leading data scientist and director of insights and analytics. 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 patents in blockchain application in retail.



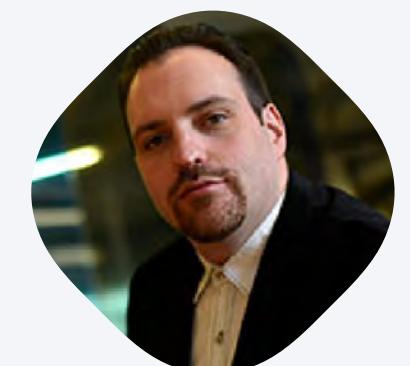
Henrik Rasmussen
VP Biz Dev & Investor Relations

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.



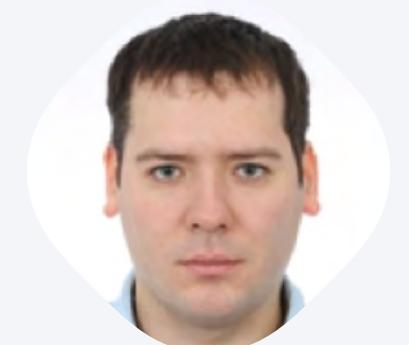
Vladimir Ustinov
Senior Dev-Ops Engineer

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

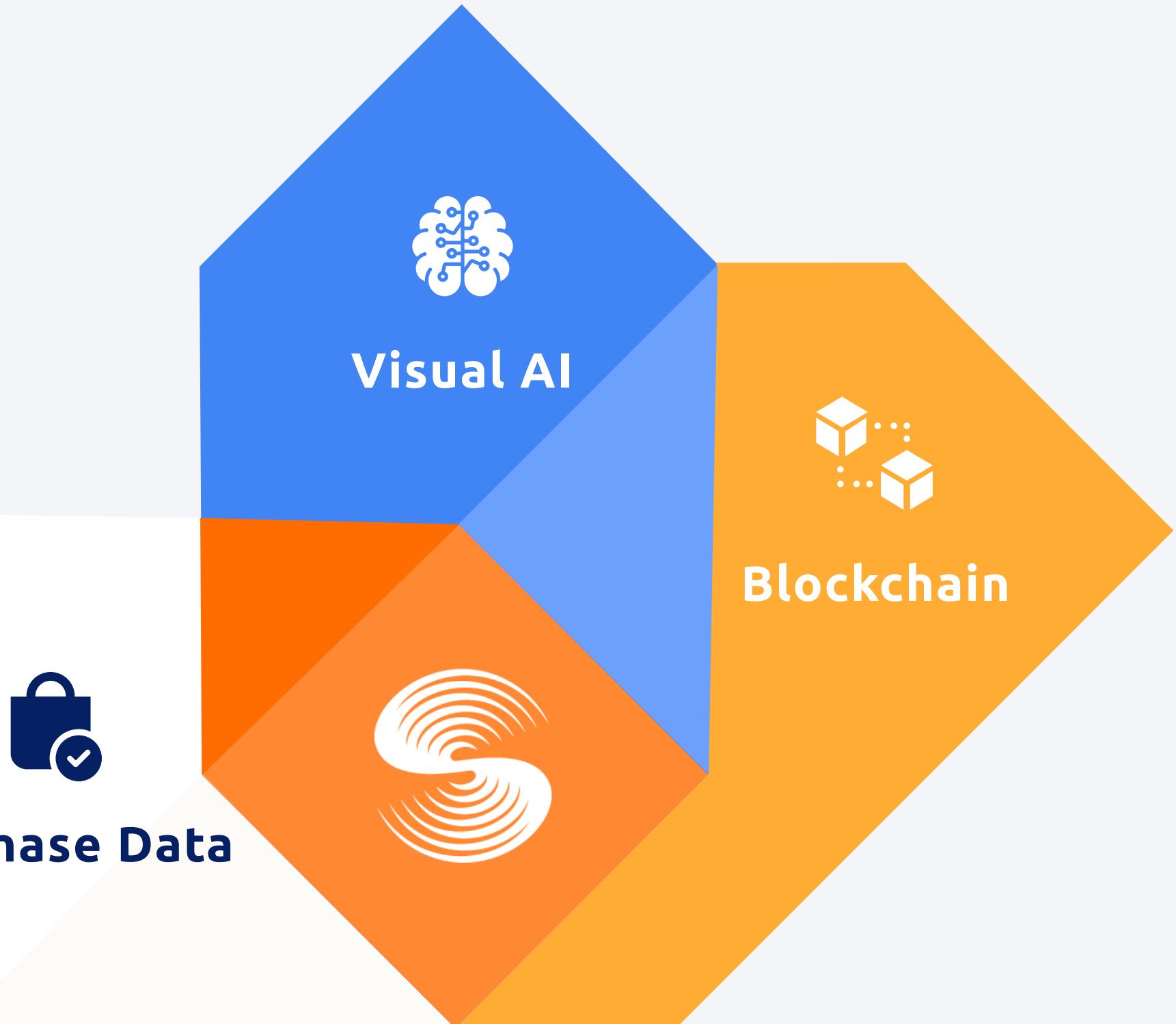


What the
MONOPOLIES like
Amazon have as a
choice...

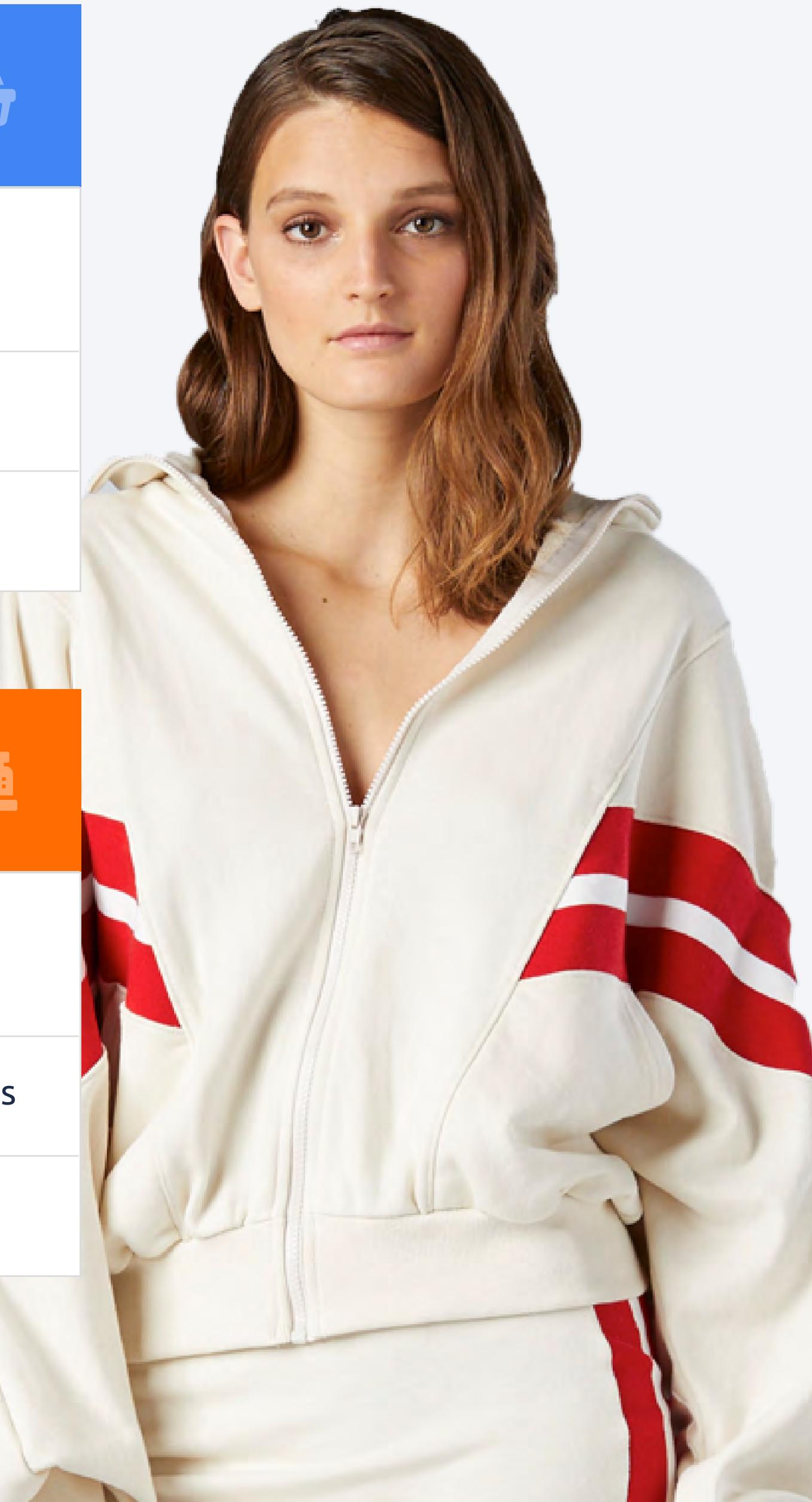


And offer every retailer,
brand & shopper as a
HUMAN RIGHT?

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.

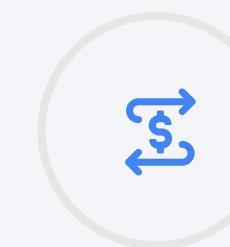


Forecast which products are statistically likely to be bought with products in your existing catalogue.

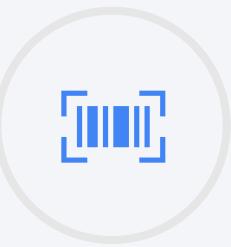


Unveil the dangers of removing brands and products from your catalogue.

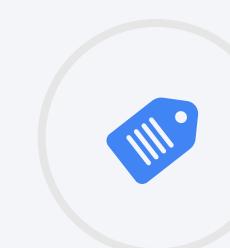
Purchase data insights:



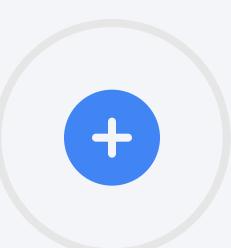
4 BN
transactions parsed



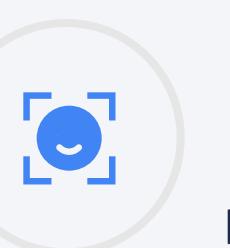
200 MM
SKU co-occurrences



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

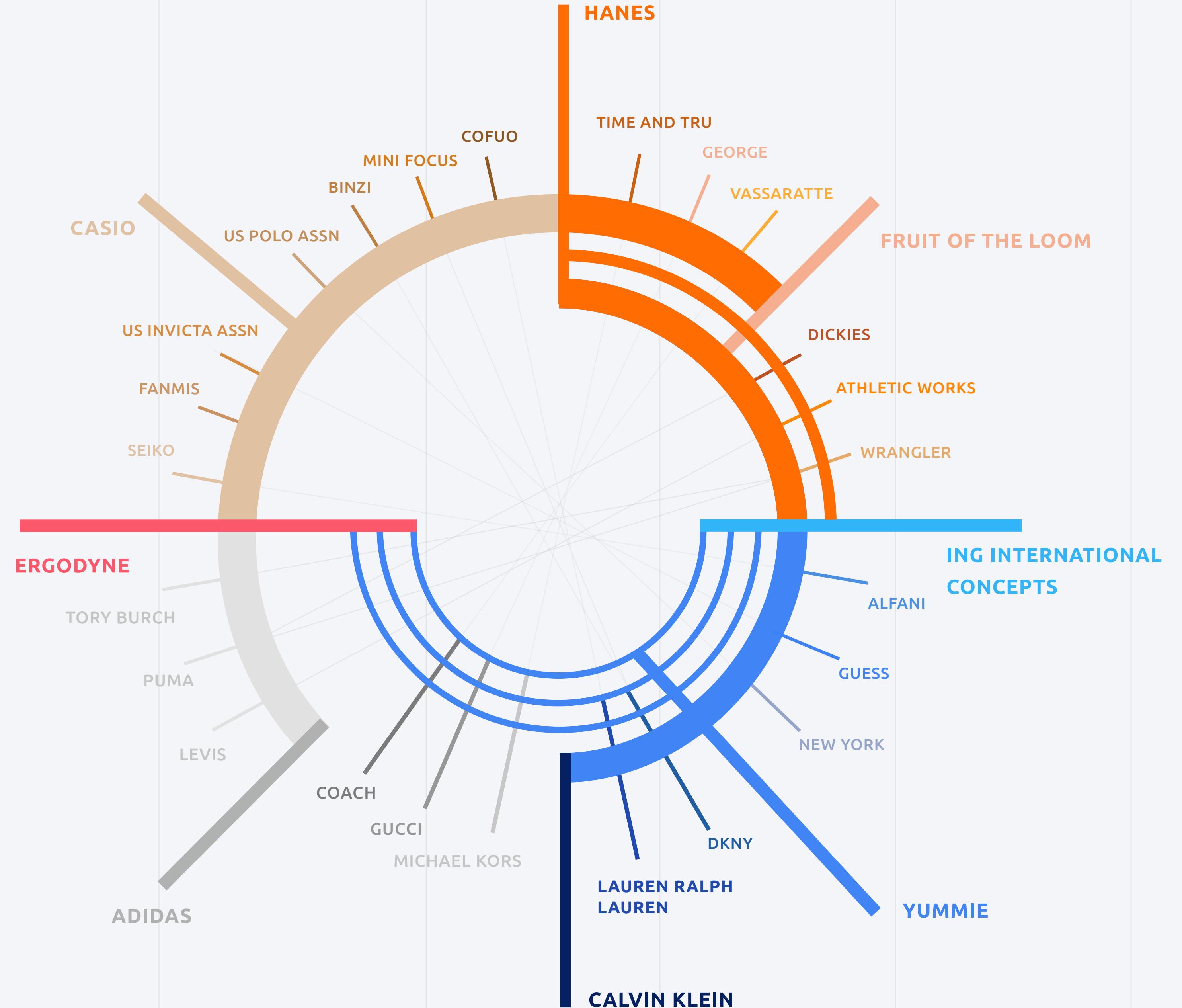
and personalization, and add an experiential value proposition, an essential part of the current retail innovation and transformation:

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



Recommendation Engine + NLP



- Co-occurrence Model
- ShopScore (entire industry)
- i-ShopScore (internal)
- Brand/ SKU Strength
- Add/ Delete Recommendations
- Marketing Recommendations

Visual AI



- SKU Similarity Model
- Universal Catalogue
- Customer Preference Profile
- Complete-the-look
- Image Decomposition Model

Taxonomy Model



- Brand & Category Taxonomy Dynamic Model
- Style & Pattern Categories
- Occasion & Context Categories

R.I.D.E. Components:

01

A global data fabric, with a **Visual AI** and **NLP** powered analytics and recommendation system

04

Customer-transaction based **source of truth** and **intelligence**

02

Brand-level intelligence (strength, dominance, criticality, brand substitutes and competitors) **of over 90,000 brands**

05

Category-level intelligence (**over 65 categories and 8 super-categories/classes**)

03

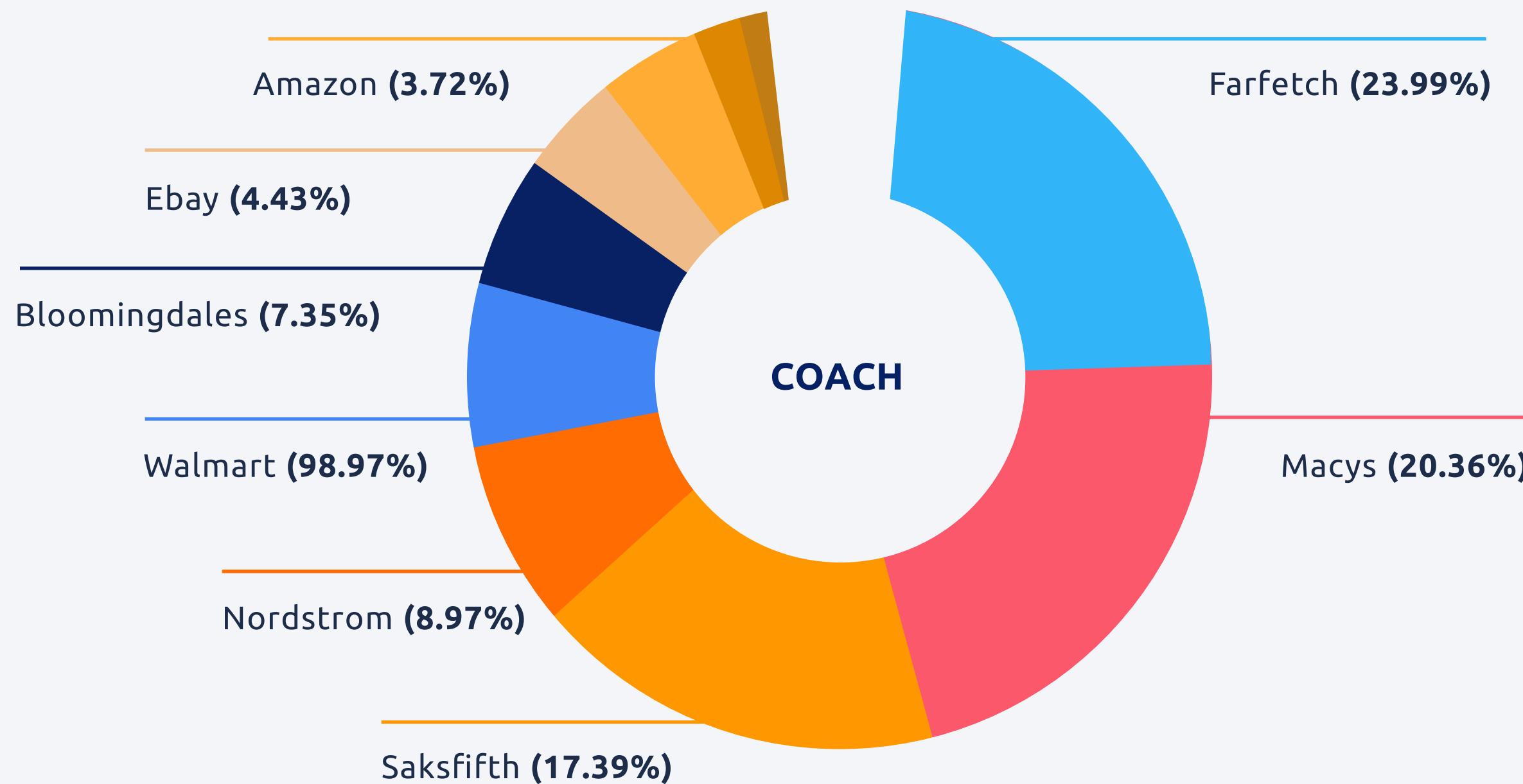
SKU-level intelligence (**over 40 million SKUs and over 4 Billion transactions represented in the data fabric**)

06

Customer preference profile model and recommendations

Global Catalogue: Coach

(unique SKUs, excluding colors/sizes)



This is a global view of the Coach brand representation **by unique SKUs across the retail industry**

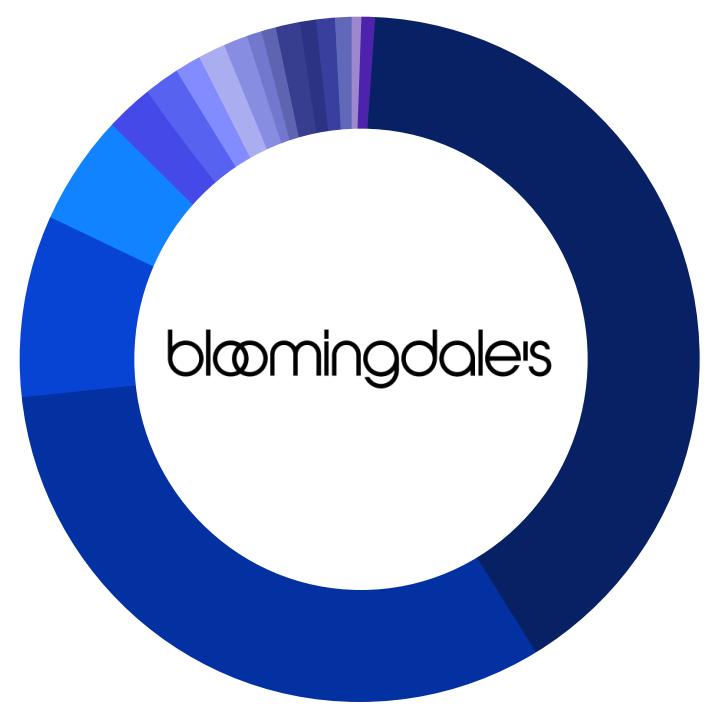
The SKU data used for this analysis **enables a deeper look at the Coach categories**, and the portfolio balance at each retailer

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

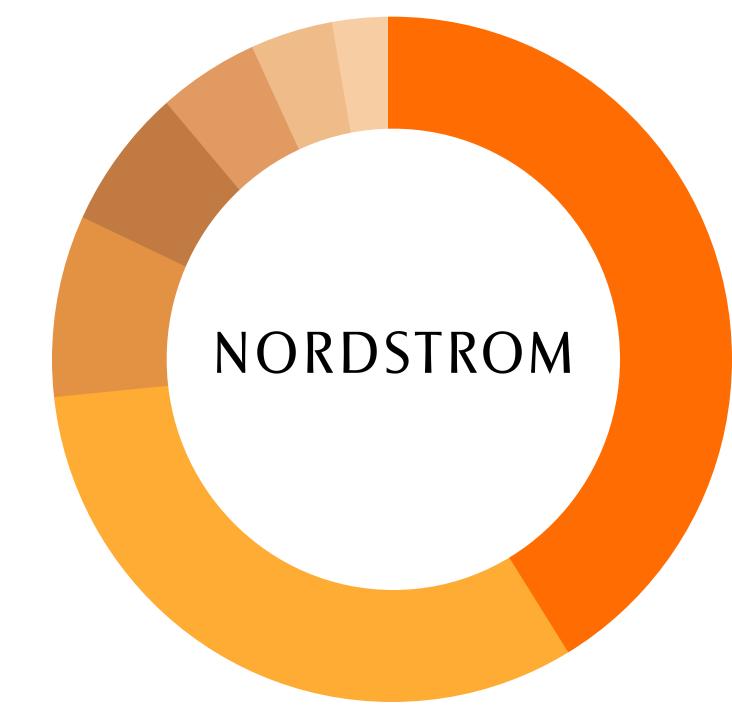
Global Catalogue: Coach

(unique SKUs, excluding colors/sizes)

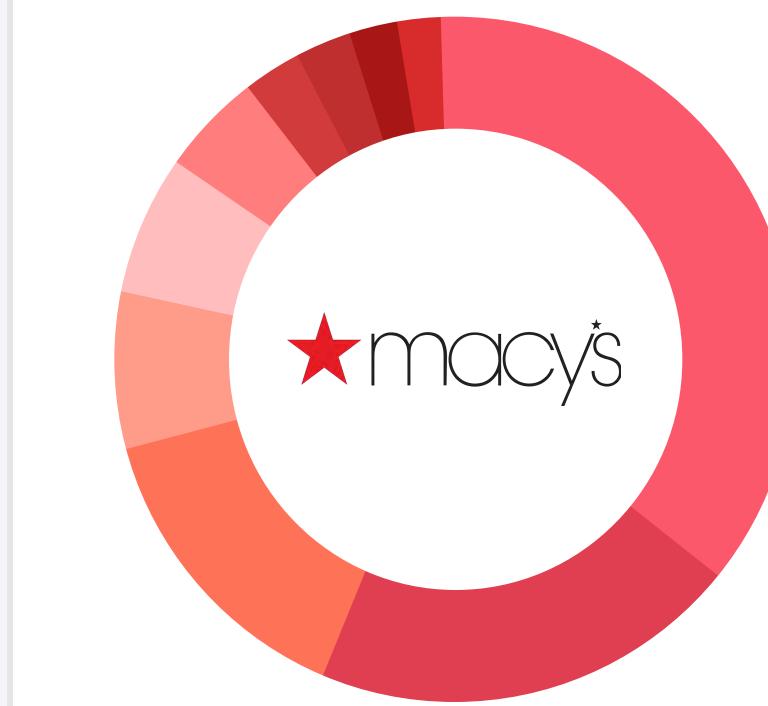
The Coach portfolio at **all three mega-retailers** is dominated by bags, wallets, and jewelry, with sandals and eyewear coming at fourth place.



Bags 41,77%
Wallets 34,54%
Sandals 7,63%
Shoes 4,82%
Beauty 2,01%
Shorts 1,61%
Other 0,4%



Jewelry 40,35%
Wallets 30,26%
Sandals 10,96%
Shoes 7,89%
Eyewear 4,39%
Beauty 3,51%



Jewelry 32,98%
Wallets 21,57%
Bags 18%
Eyewear 6,6%
Sandals 6,6%
Boots 4,63%
Shoes 2,85%
Beauty 1,96%

The biggest difference is in the top category: at Bloomingdale's, **bags** come in at:

41.8%

at Nordstrom exhibit a heavy focus on **jewelry** with

40.4%

and at Macy's, we have **jewelry** at

33.0%

Smaller retailers show even bigger variations of the Coach's portfolio, categories like bags often **move over 50%**. These are different faces of the global Coach catalogue.

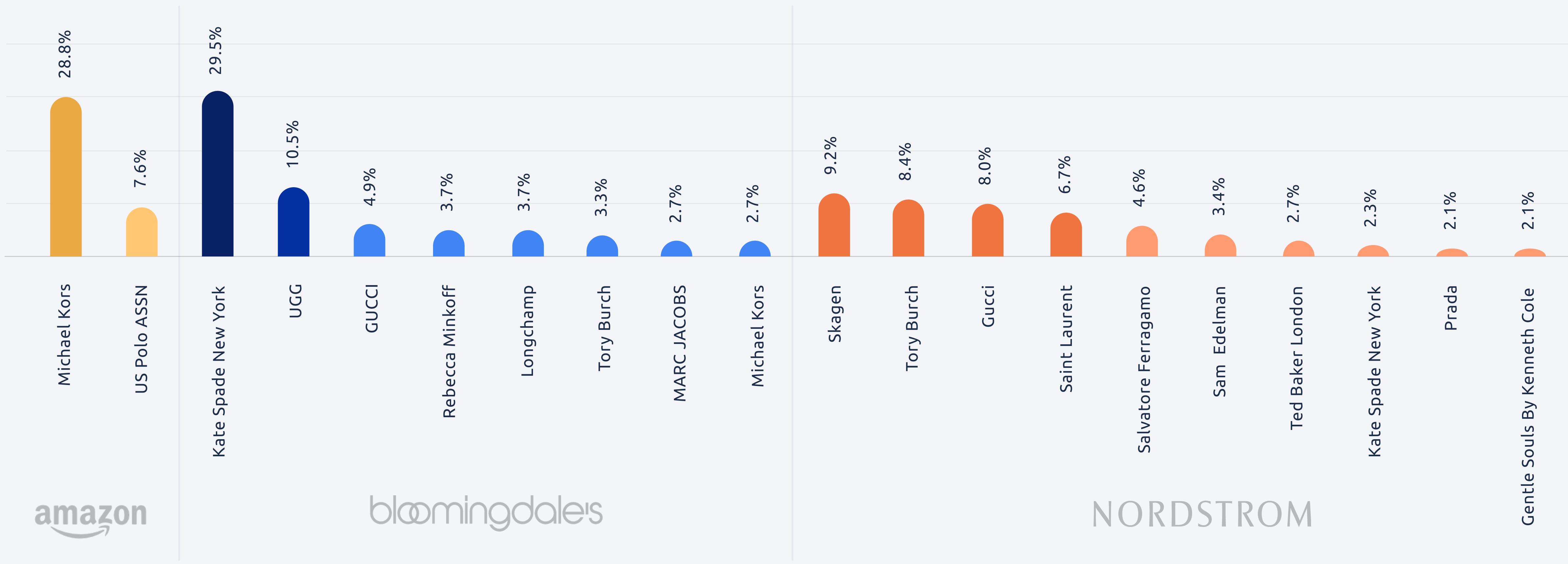
We are able to superimpose those with customer conversion data (transaction data) and draw conclusions about customer choices and preferences.

Brand Co-Occurrence

Brand to brand co-occurrence is an aggregate view of all co-occurring SKUs from a pair of brands.

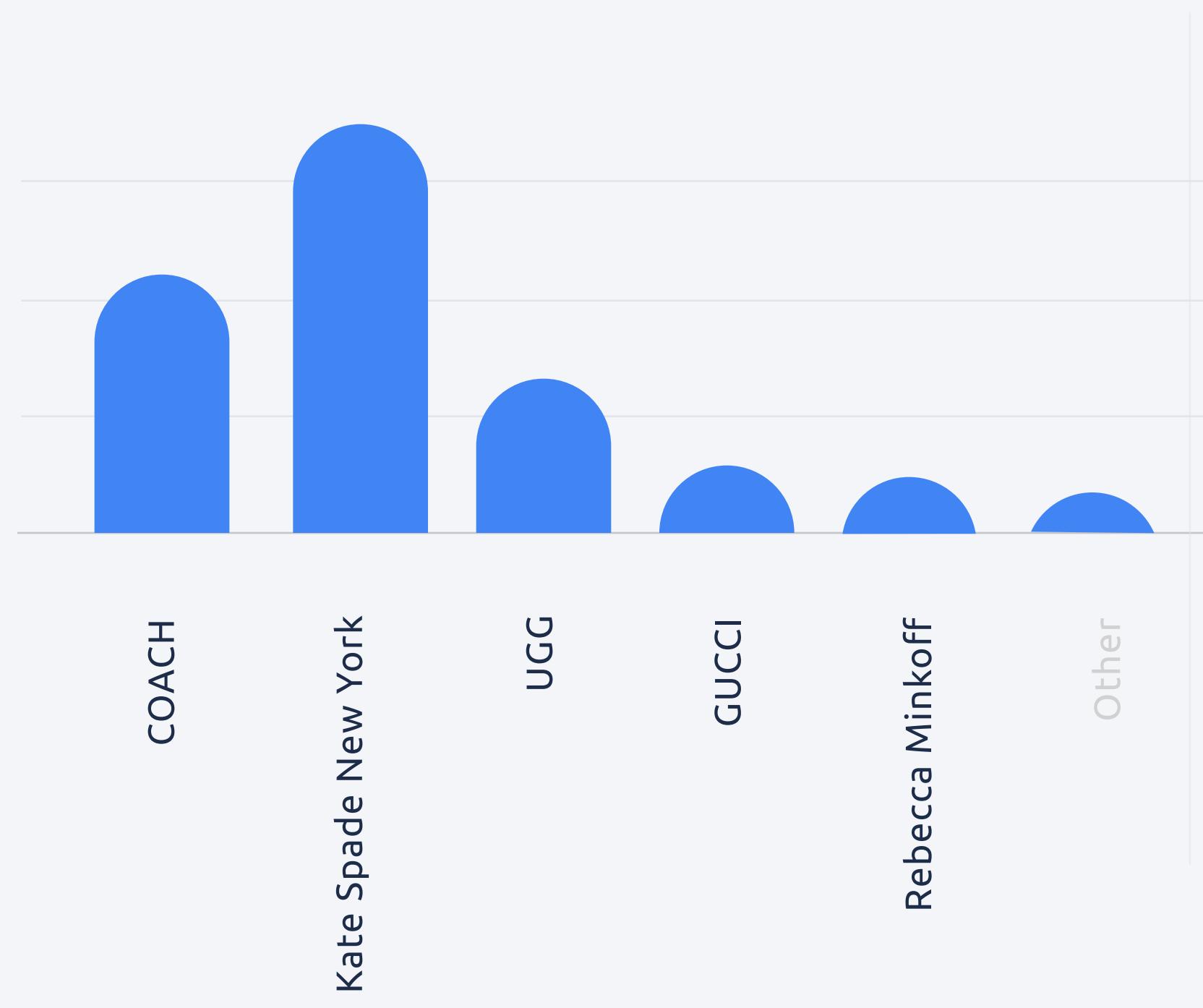
At this level, we can see significant patterns and trends that represent shift and direction of customer preferences and purchase behavior at a retailer and across the industry.

Then we have the ability to zoom in and look at the category and SKU level

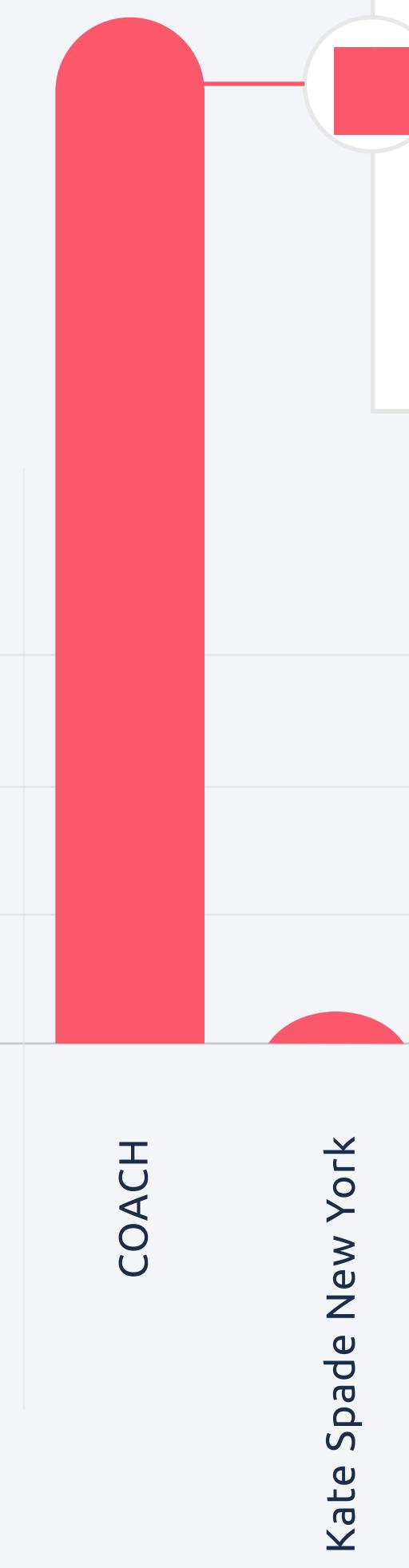
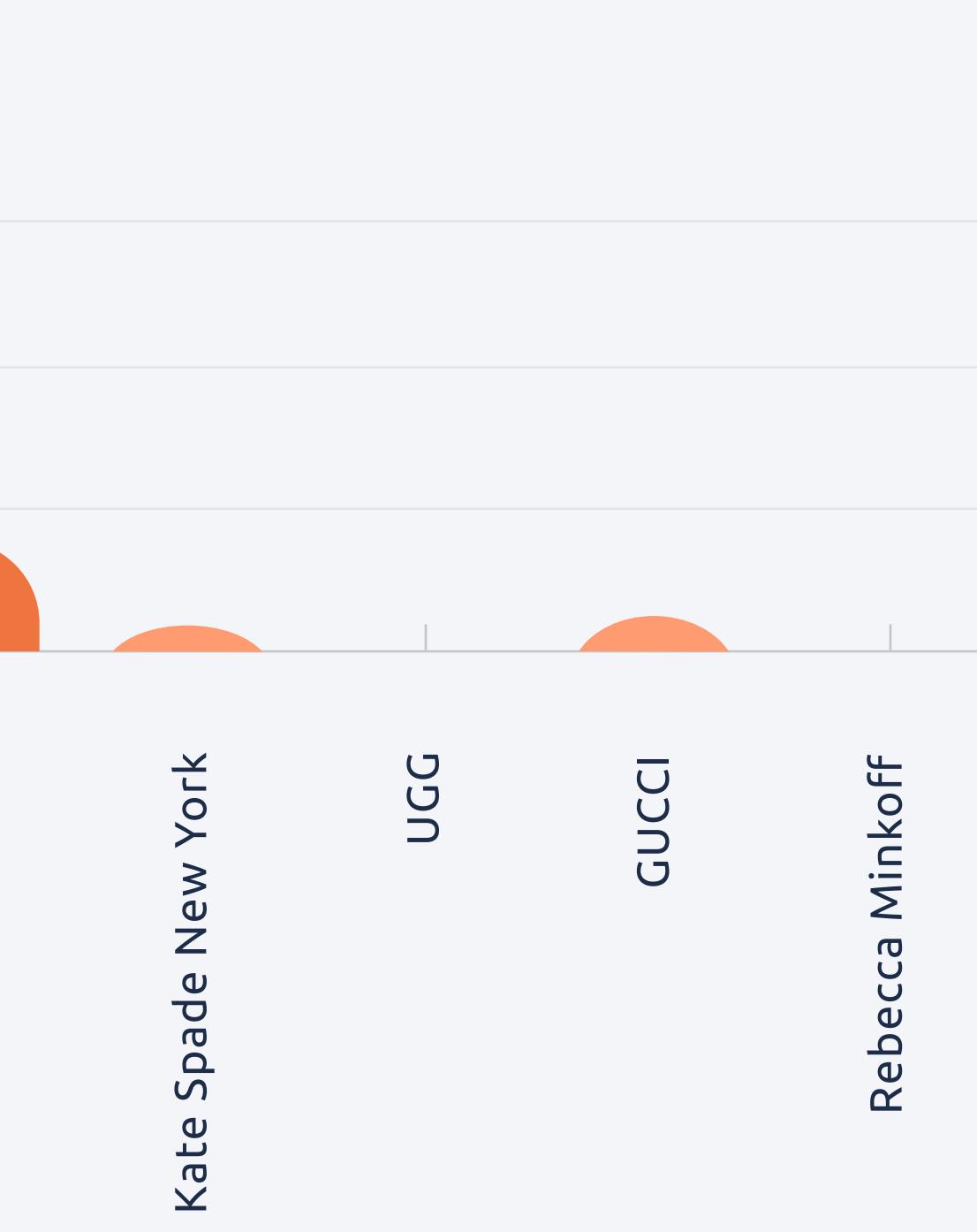


Brand Co-Occurrence: Coach

Bloomingdale's shows a moderate self-co-occurrence at the brand level, which means that Coach customers shop for other categories and brands at the retailer. This highlights opportunities for basket analysis and **category expansion** for Coach.



A balanced brand co-occurrence at Nordstrom indicates opportunities for growth and potential for **expansion within the customer base**.

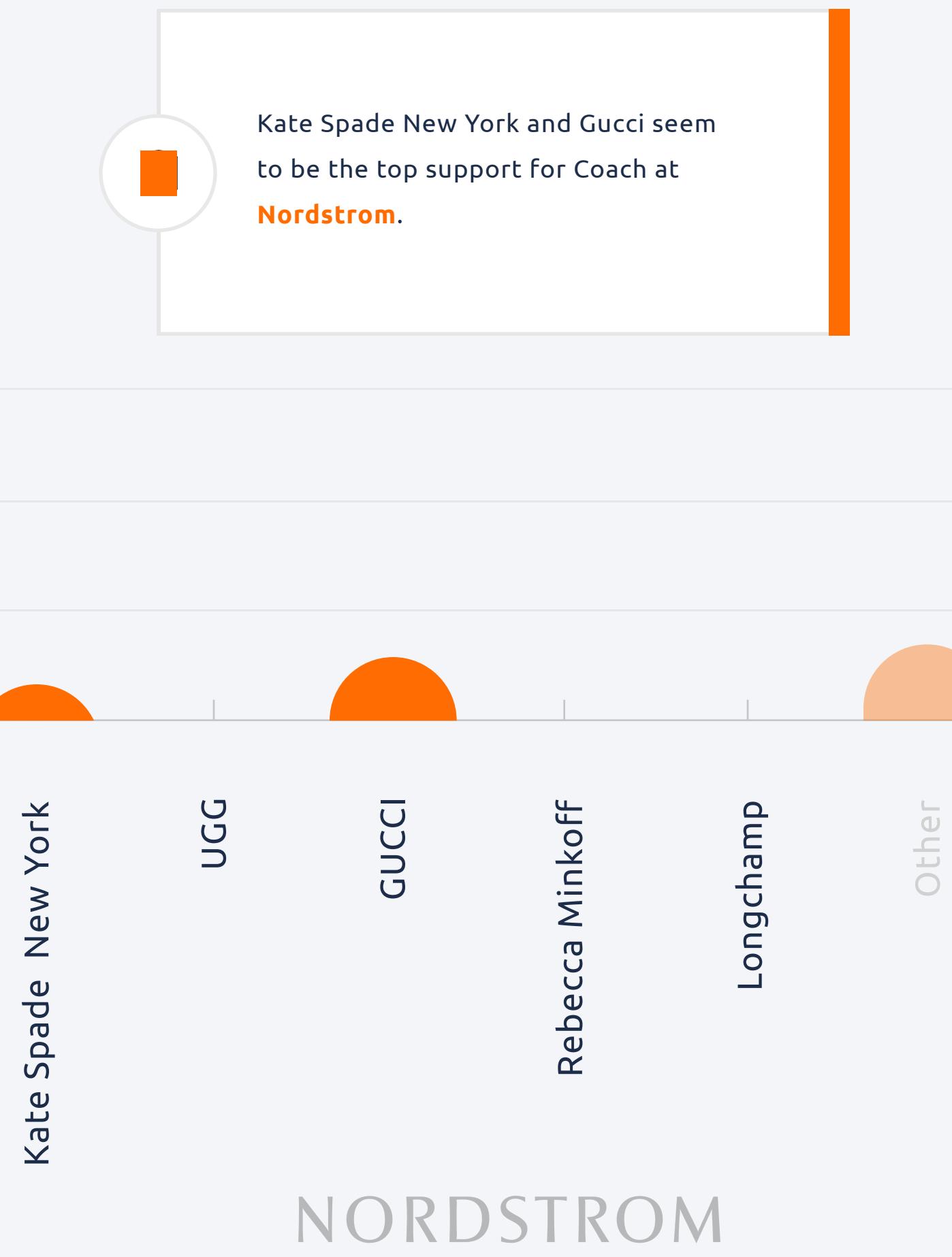


Macy's shows an overwhelming self-co-occurrence at the brand level for Coach, which means customers shop specifically for the brand at the retailer.

The customer base is anchored entirely on the brand, and customers are buying complementary categories or accessories elsewhere.

Brand Co-Occurrence: Coach

Analysis of brand interactions for Coach with other brands.



bloomingdale's

NORDSTROM

macy's

Brand and category co-occurrence

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

bloomingdale's



UGG®
Women's Bandara Round Toe Leather



kate spade new york
Small Quilted Bifold Wallet



COACH
Skinny Continental Leather Wallet



COACH
Women's Melody Pointed-Toe Booties



MICHAEL Michael Kors
Medium Cece Leather Shoulder Bag



COACH
Parker Leather Shoulder Bag



MARC JACOBS
Snapshot Leather Camera Bag



COACH 1941
1941 Willis Leather Satchel



Tory Burch
Kira Small Chevron Camera Crossbody

Brand and category co-occurrence (cont'd)

Brand	Cooc_brand	Retailer	Category1	Category2	Cooc_pct
COACH	KATE SPADE NEW YORK	BLOOMINGDALES	wallets	wallets	60.76
COACH	COACH	BLOOMINGDALES	wallets	wallets	30.17
COACH	UGG	BLOOMINGDALES	boots	boots	90.70
COACH	GUCCI	BLOOMINGDALES	jewelry	jewelry	58.56
COACH	LONGCHAMP	BLOOMINGDALES	bags	bags	12.28
COACH	COACH	BLOOMINGDALES	wallets	wallets	10.56
COACH	REBECCA MINKOFF	BLOOMINGDALES	jewelry	jewelry	41.44
COACH	MICHAEL KORS	BLOOMINGDALES	bags	bags	8.45
COACH	TORY BURCH	BLOOMINGDALES	bags	bags	7.87
COACH	MARC JACOBS	BLOOMINGDALES	bags	bags	7.68
COACH	SALVATORE FERRAGAMO	BLOOMINGDALES	bags	bags	5.57

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

We observe significant Coach category co-occurrences with the same categories from other brands, specifically Kate Spade New York (wallets), UGG (boots), Michael Kors (bags), Tory Burch (bags), and Marc Jacobs (bags).

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



Although the data indicates that

of Coach wallet co-occurrence connections are to wallets of Kate Spade New York, there are certainly instances where a Coach wallet is purchased with a different category and a different brand.

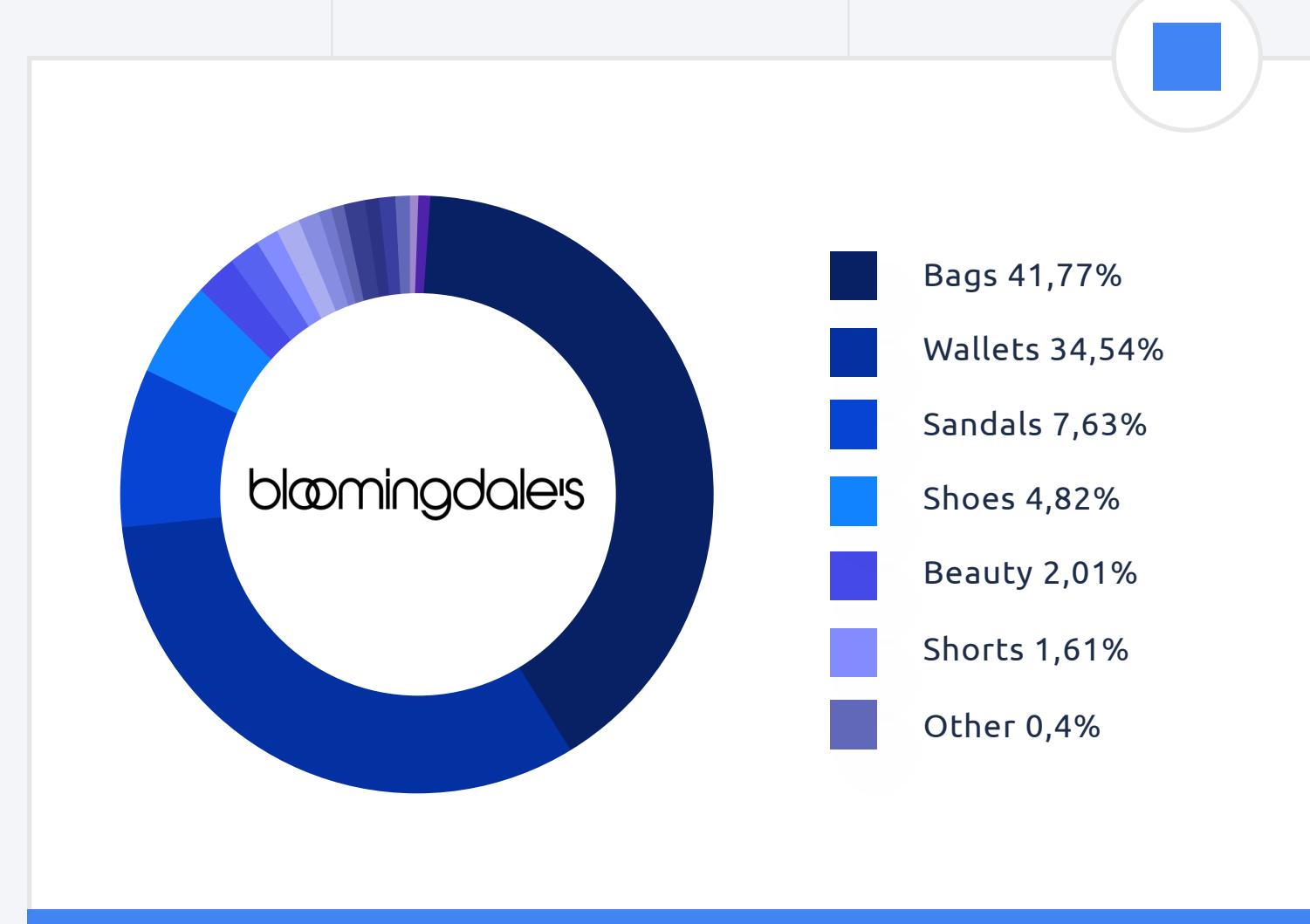
90.1 %

So the **90.1% figure shows that from the statistically significant instances**, customer purchase Coach and Kate Spade New York together in the wallets category.

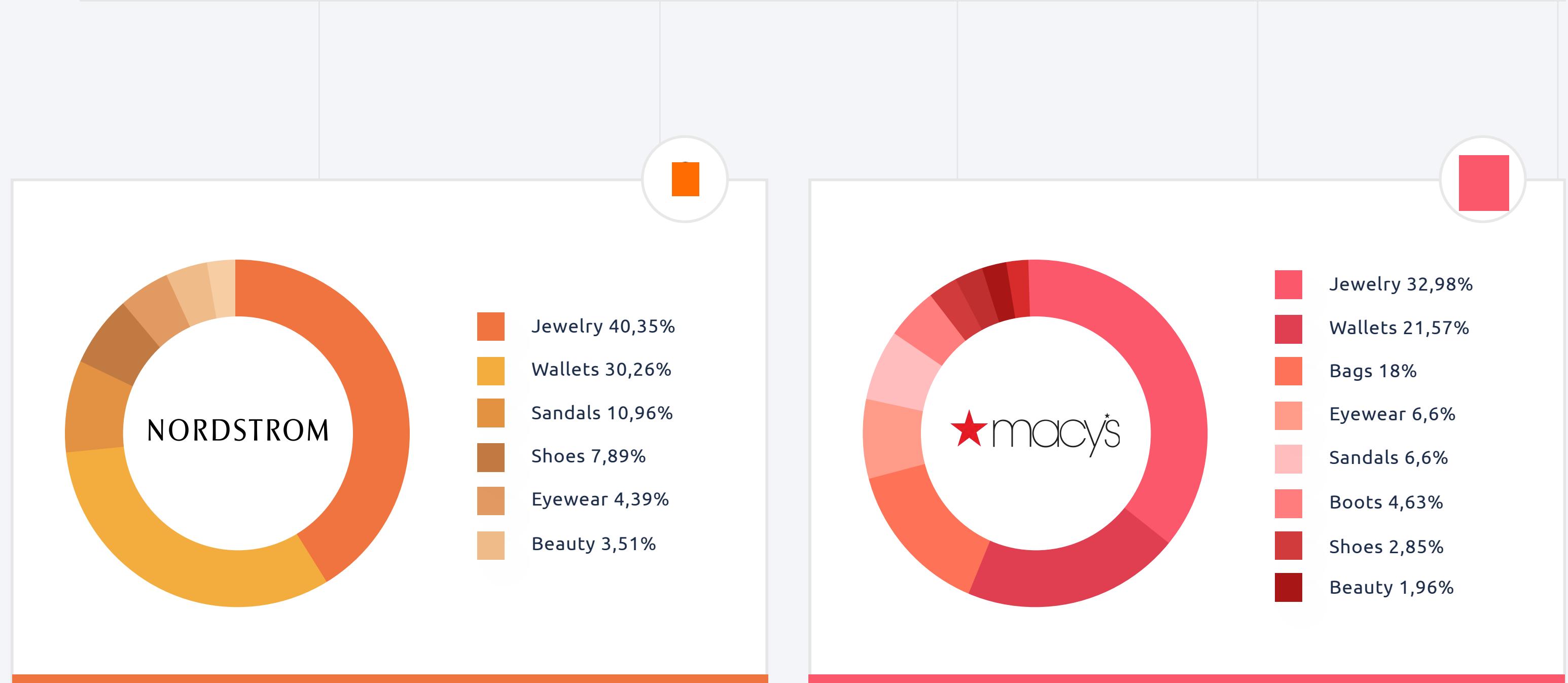
Brand Strength

Coach is strongest and best positioned for growth at Bloomingdale's, according to the R.I.D.E. metric **brand strength** which takes into account the customer base and SKU-cooccurrences relative to all other brands at the retailer.

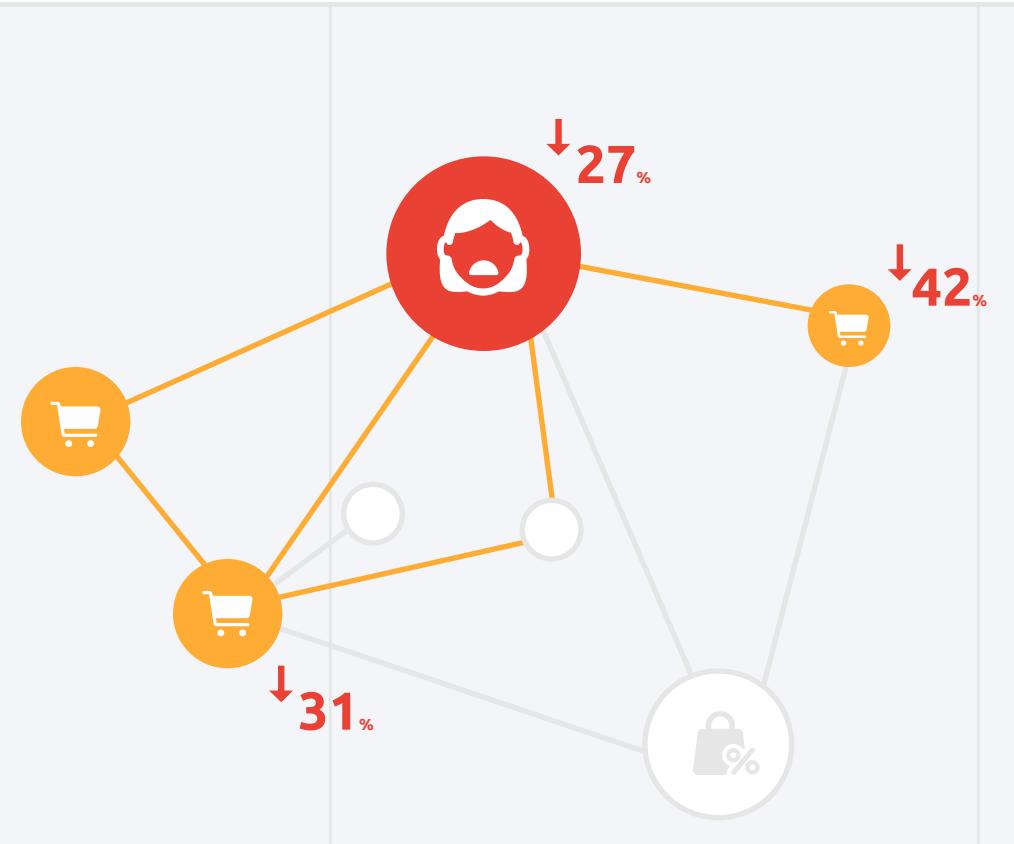
A stronger brand typically has many mixed-brand and mixed-category connections, from large and diverse customer baskets, as opposed to a dedicated one-item/one-brand shopper.



Brand	Retailer	Brand_strength	Brand_influence	Critical_brand
BLOOMINGDALES	COACH	0.669	0.787	0.586
MACYS	COACH	0.109	0.349	0.167
NORDSTROM	COACH	0.346	0.363	0.048



Brand	Retailer	Brand retailer_brand_strength	Retailer_brand_hub
BLOOMINGDALES	TORY BURCH	0.4480252	1.0000000
BLOOMINGDALES	KATE SPADE NEW YORK	0.8218821	0.9164843
BLOOMINGDALES	PAIGE	0.7510386	0.8609072
BLOOMINGDALES	AQUA	0.1978662	0.7987277
BLOOMINGDALES	GUCCI	0.7393817	0.7665254
BLOOMINGDALES	CALVIN KLEIN	0.3623303	0.7323363
BLOOMINGDALES	J BRAND	0.7942386	0.6916556
BLOOMINGDALES	AG	0.7942841	0.6705062
BLOOMINGDALES	7 FOR ALL MANKIND	0.7802160	0.6215310
BLOOMINGDALES	BURBERRY	0.4334146	0.6105946
BLOOMINGDALES	SPANX	0.4113320	0.6076948
BLOOMINGDALES	WHISTLES	0.0789601	0.6017752
BLOOMINGDALES	THEORY	0.1703310	0.5925210
BLOOMINGDALES	COACH	0.6686604	0.5858621
BLOOMINGDALES	ADIDAS	1.0000000	0.5854719
BLOOMINGDALES	MZ WALLACE	0.5865544	0.5678749
BLOOMINGDALES	UGG	0.4117046	0.5668006
BLOOMINGDALES	MICHAEL KORS	0.2487048	0.5626138



Critical Brands

A critical brand is a brand which is a “hub”, bridging other brands and their customer bases in a unique and critical way.

Easiest way to interpret criticality is through the scenario of removing the brand, the impact would be very significant beyond its own customer base due to the unique strategic position of the brand, so we expect losses of baskets/trips, or even loss of adjacent sectors of the retailer's customer base

For **COACH** at **Bloomingdales**, having opportunities to grow the brand (increase strength) and having already high criticality, means that the relationships to other brands, even if not the most, are very important for Bloomingdales.

Typically, the strongest brands are also critical, but not always. Coach is an example of the converse at Bloomingdale's, and this shows a particular kind of customer base.

ShopScore product roadmap 2019



Your future with



**QUESTIONS /
NEXT STEPS**

Eran Eyal
eran@shopin.com

