



What's happening in Retail

Using data for
innovative insights

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Topics Covered

01

NRF takeaways

02

Sourcing trends

03

**Intelligent
forecasting**

04

Customer analytics

Key themes from the NRF 2023 conference

Overall tone: cautious optimism

- The sector has shown its resilience through the pandemic
- So far it has resisted to recessionary pressures
- Significant levels of savings and pent up spending in pockets
- But the pressures on margins are real

Brick and mortar is not dead

- The acceleration of online shopping has subsided after the explosion during the pandemic
- Consumers are seeking human interaction and are driven by experiences

Back to front investments : stores first

- Consumers are returning to stores
- Stores are increasingly strategic assets
- Head Office and leadership repositioned to serve the stores
- Technology investments skewed to the front of house

Employees as the new influencers

- Consumers seek interaction with authentic brands
- Employees are consumers and members of the communities: they are best placed to lead consumer engagement
- Increased employee empowerment and new incentivization models

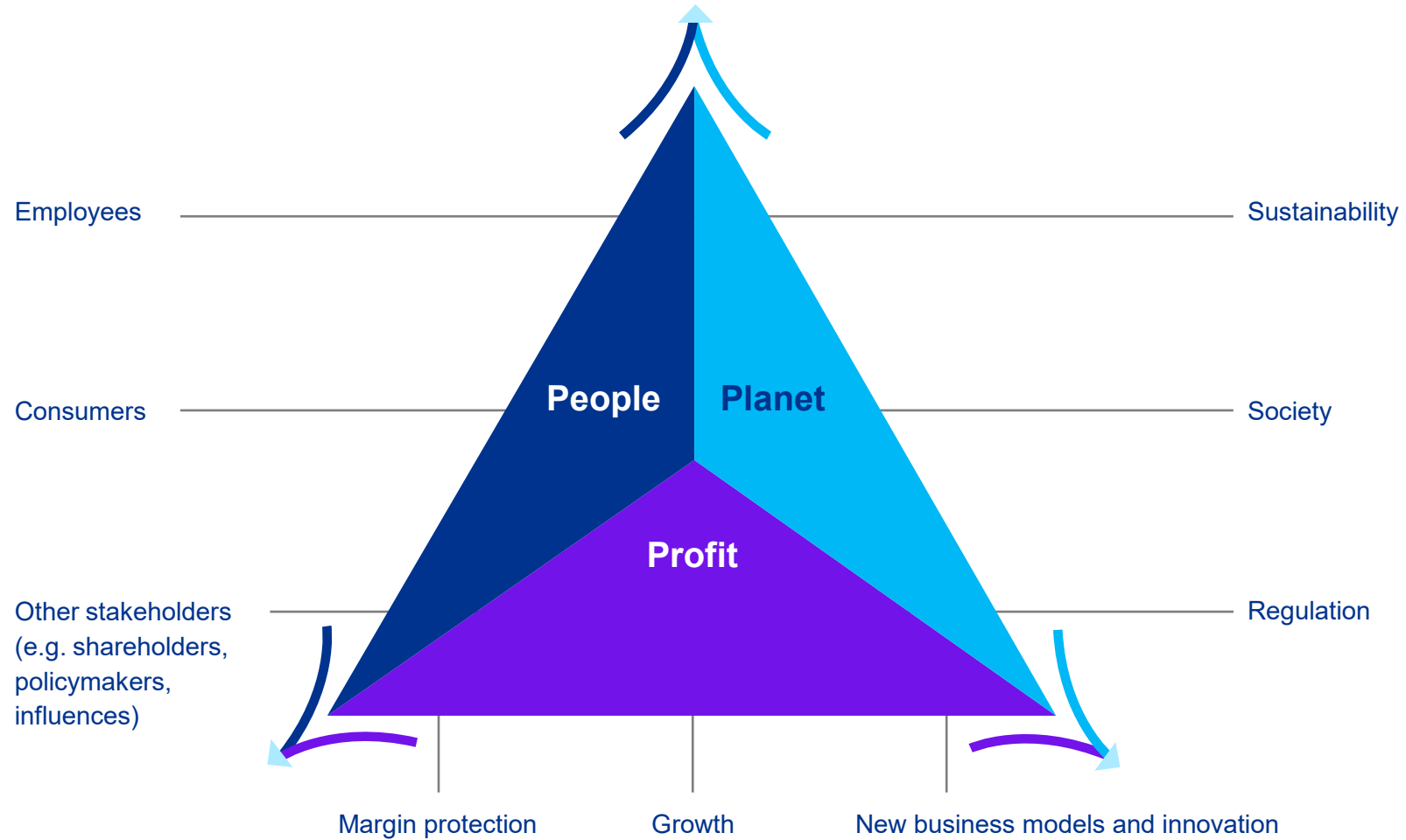
Keeping up with consumer channel-hopping

- Brands need to show up where their consumers are (e.g. resale, metaverse)
- Channel silos and legacy performance KPIs coming in the way
- Consumer-centric business model easier said than done

From just in time to just in case supply chains

- Multiple geopolitical pressures to consider
- Increasingly regional and local supply chains
- Optimization no longer through a cost lens only
- ESG considerations add to complexity in the absence of the right infrastructure

Three P's and tension framework



Three key tensions for retailers in 2023

Profit & planet

Margin protection and sustainability

Retailers will need to adopt sustainable practices across the whole value chain that will allow them to deliver on promises to ALL stakeholders.

People & Planet

Employees and society

The intersection between employees, consumers, and communities can help drive consumers, attract/retain talent and sustain a business.

People & Profit

Employees; margin protection; and business models and innovation

Technology may be the answer to labor shortages, remaining consumer-centric and maximizing revenue.

Profit & Planet – Margin protection and sustainability

1. Introducing resale business models.
2. Creating the right balance between passing higher costs to consumers versus absorption is key
3. Using services to rehab goods for owners to address potential waste and reducing carbon footprint
4. Pulse check on the markets that retailers operate in to anticipate regulatory change and leverage for business opportunities
5. Importance of retailers to be authentic and transparent
6. Sustainable supply chain

62%

Of Gen Z and millennial consumers shop for second hand items before purchasing new goods and

46%

Consider resale value before buying.

127%

The global second hand goods market is expected to grow by 2026 – **3X faster** than the global apparel market

Source: *thredUP 2022 Resale Report*

Case studies

1. H&M-owned Cos brand has created a marketplace for consumers to buy and sell its used fashions
2. IKEA's Buy Back & Resell program
3. Levi Strauss & Co. helps consumers understand how to extend the life of a pair of jeans through clear and sustainable “wash less” directions as well as offers in-store tailoring to repair or repurpose vintage denim

People & Profit – Employees; margin protection; business models and innovation

51% of US retailers equip store associates with mobile devices to assist consumer but only 13% can check them out.

Just 10% have kiosks for self-checkout.

Source: Omnichannel Retail Index 2022, OSF Digital

1. Post pandemic front-line workers became critical for smooth running of society and, ultimately, irreplaceable leaders in the consumer journey
2. Continue to see increased investment in technology to tackle labor shortages and focus on revenue opportunities and make focused decisions. This will also enable tackling the supply chain challenge
3. Adopting omnichannel strategies to empower employees in the storefront
4. The halo effect that Technology can bring – using automation increases efficiencies and frees employees from repetitive processes to better serve consumers
5. Investment in upskilling to prevent attrition – training existing employees to drive culture, provide confidence and support and align corporate and workforce goals
6. Realigning employee KPIs for a multiplier effect – develop unified and consumer-centric culture, better incentivization, upskilling to provide a seamless experience for consumers

Case studies

1. Nordstrom focuses >30% of their capital budget on technology, and has opened an Innovation Lab in Seattle
2. Amazon is leading the way in predictive analytics
3. Sephora uses its Innovation Lab to spot emerging product trends that would map well to their customers

Profit &

Regional trends in global sourcing

Planet

What is Regional Comprehensive Economic Partnership about?

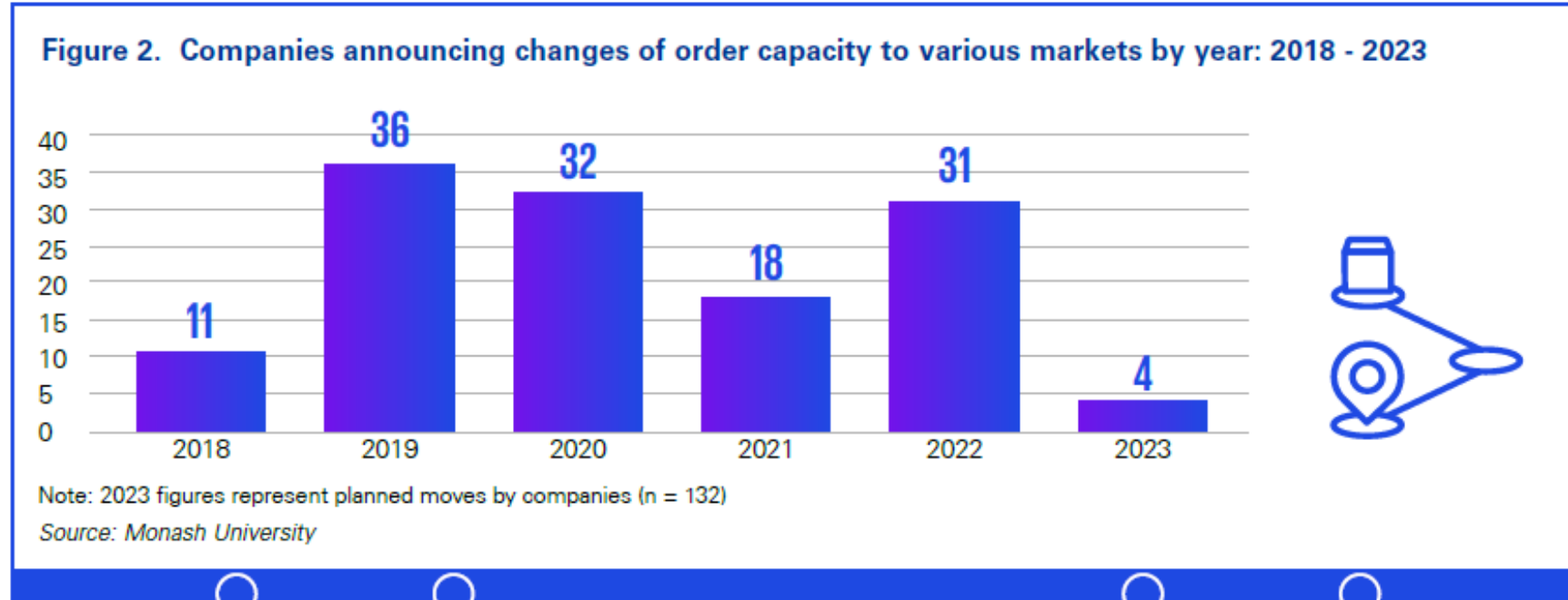


Creation of new free trade zone
 1/3 world population
 29% Global GDP but will rise to nearly 50% by 2030

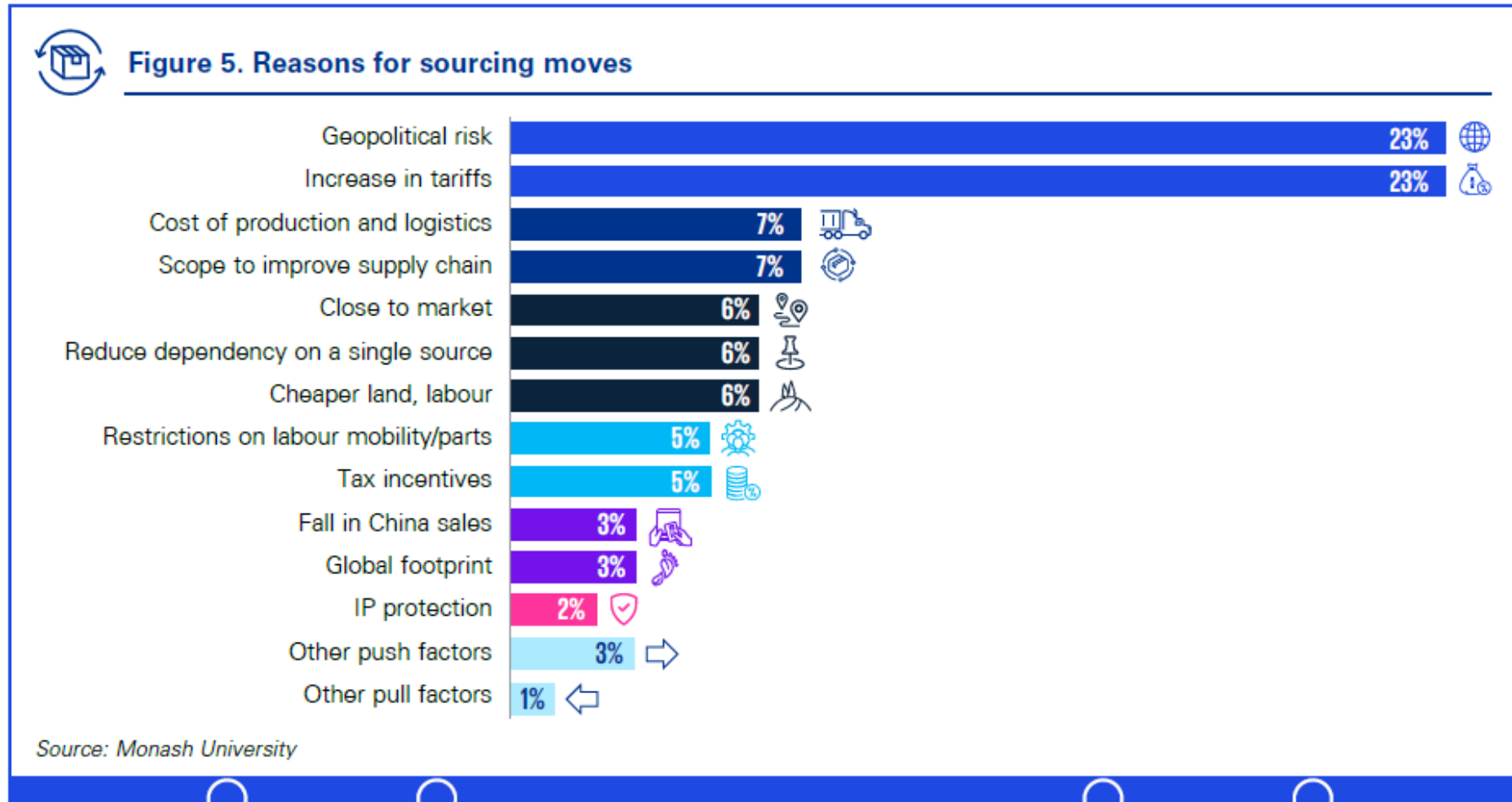
Businesses reconsider their supply chains with key benefits of harmonization given complexities of trade within Asia Pacific region

Expected to eliminate range of tariffs on imports over several years including Telecoms, FS, professional services, IP, ecommerce +movement of people

We analysed 132 companies shifting their supply chains



Companies are either moving their sourcing or reshoring operations entirely, mostly due to geopolitical risk and tariffs

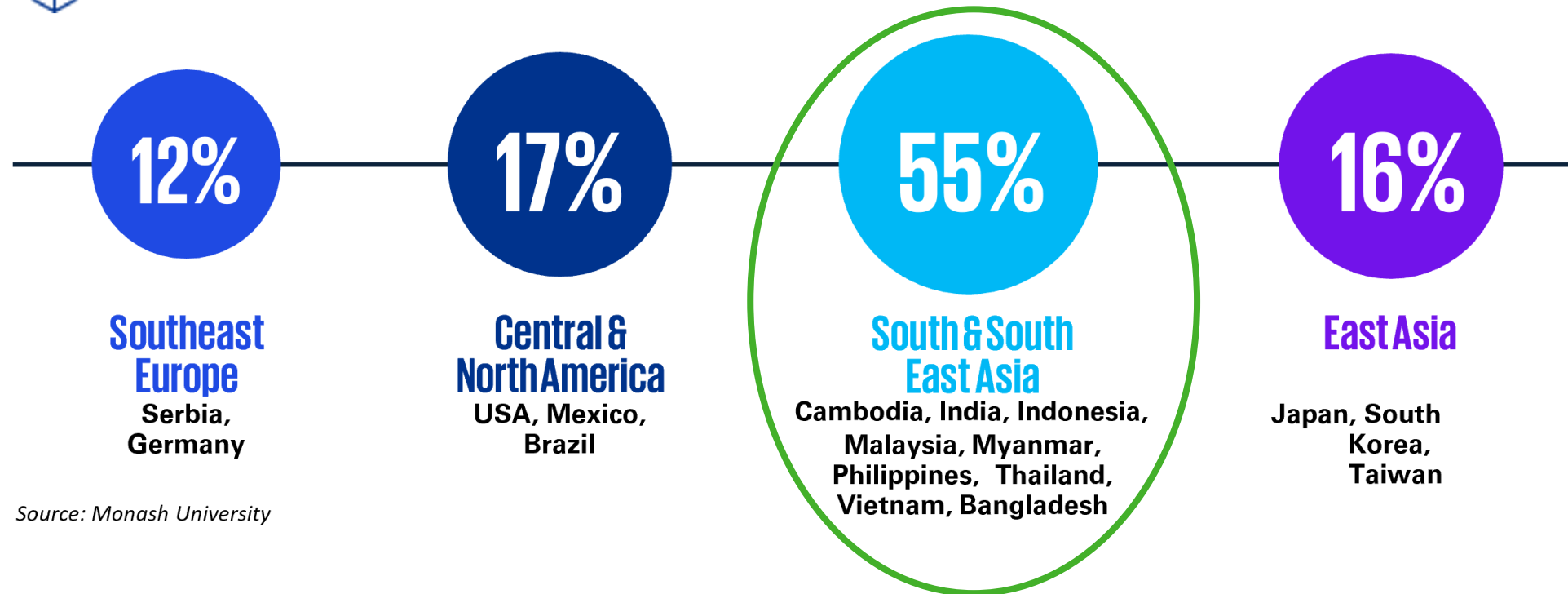


Supply chains are mostly staying in Asia, with a strong tendency for movement towards Southeast Asia

Most of the capacity movements we are seeing are in Asia, broken down as follows: 16% in North Asia, 55% in Southeast Asia, 12% in Europe, and 17% in the Americas. Southeast Asia still dominates the sourcing move away from China.












Company relocation distribution – 2018 - 2023



Source: Monash University

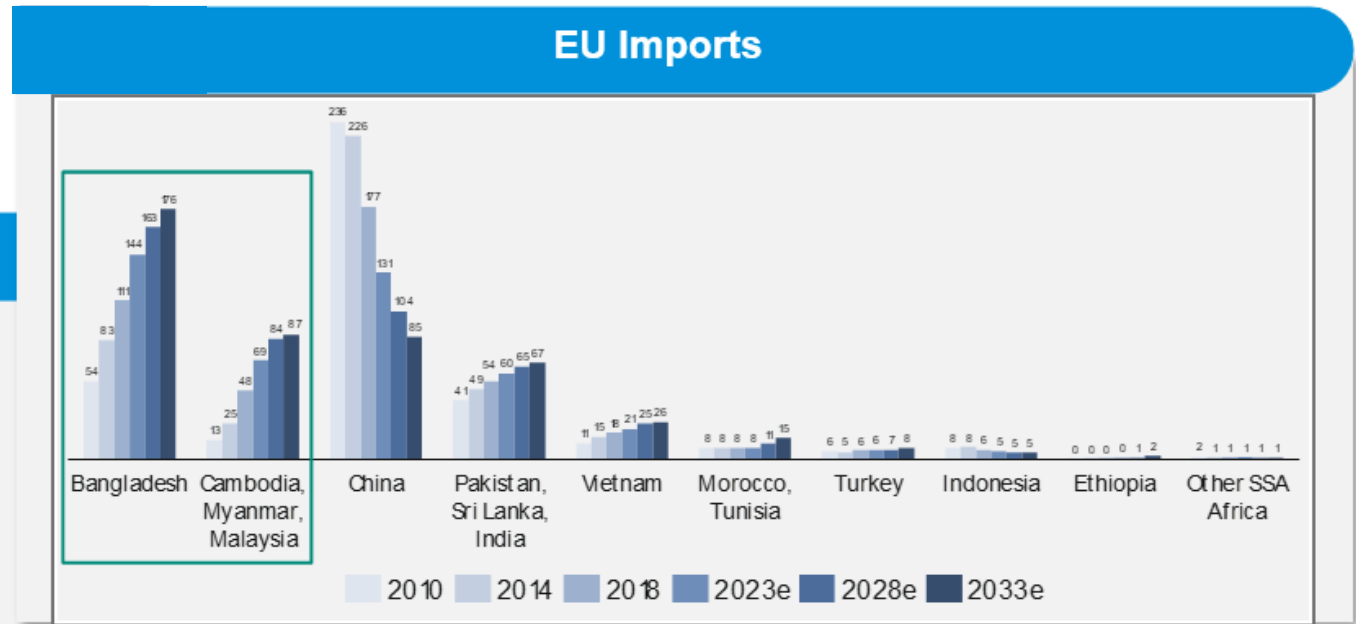
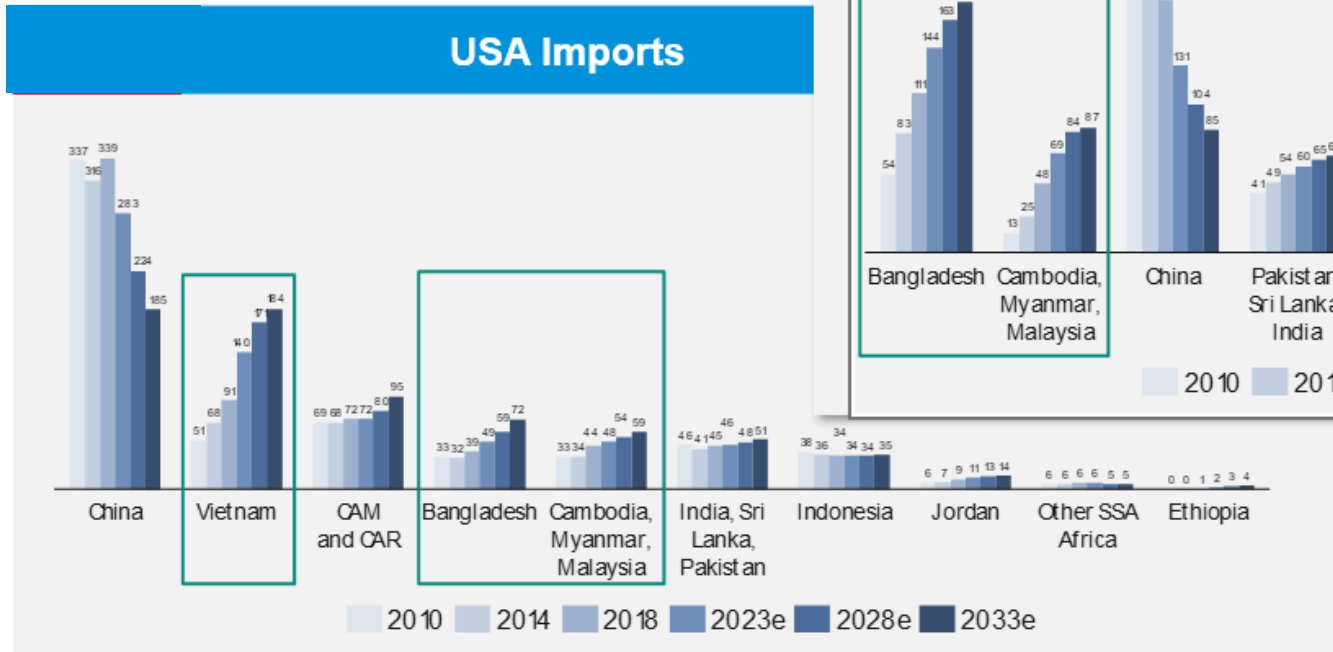
What is moving where?

Figure 11. Distribution of sourcing moves across markets and industry sectors

Region	Asia											Europe				Americas			Total	
	Vietnam	Taiwan	Thailand	India	Indonesia	Cambodia	Malaysia	Japan	Philippines	South Korea	Myanmar	Bangladesh	Germany	Hungary	Jordan	Serbia	USA	Mexico		Brazil
Electronics 	19	11	13	1	2		3	2	3								4	9	2	81
Household 	12	2	1	2	1	1	4			1							4	2		30
Industrial 	6	1	3	1	1		1	6	1			1					5	2		28
Auto 	5	1	2	2	3		1	1	1	2					1		2	3		24
Component 	7	4	1	2	1				1								1	2		19
Footwear 	8				2	3				2		1						1	1	16
Clothing 	8				2	1			1					1			2			15
Sports & Outdoor 	3	5				3								1						12
Accessories & Souvenirs 	2					2					2						1			7
Total	70	24	20	18	12	10	9	9	7	5	2	1	1	1	1	1	19	19	3	232

Source: Monash University

Our forecasts from 2020 regarding Vietnam and Bangladesh's explosive growth have proved right



Import volume of apparel from origin countries into the EU and US, '000 FFEs.
 Source 2010-2018 historical; Seabury database / 2023-2033 projections; Maersk and Duke Global Value Chains project

Vietnam has become a leader for sourcing in Asia



Companies relocating capacity to Vietnam (moves = 70)

South Vietnam

Number of sourcing shifts: 41

Overall Business Type: B2C
 Median Market Cap: USD 3.01 Billion
 Average Capacity Shifted: 50%~70% Average
 People Capacity Shifted: ~3.4K (pax)

Existing Factory - Capacity Shifts: 26 (64%)
 New Factory - Capacity Shifts: 15 (36%)



Source: Monash University

North Vietnam

Number of sourcing shifts: 29

Overall Business Type: B2C
 Median Market Cap: USD 6.63 Billion
 Average Capacity Shifted: 50%~70% Average
 People Capacity Shifted: 3.9K (pax)

Existing Factory - Capacity Shifts: 15 (53%)
 New Factory - Capacity Shifts: 14 (47%)

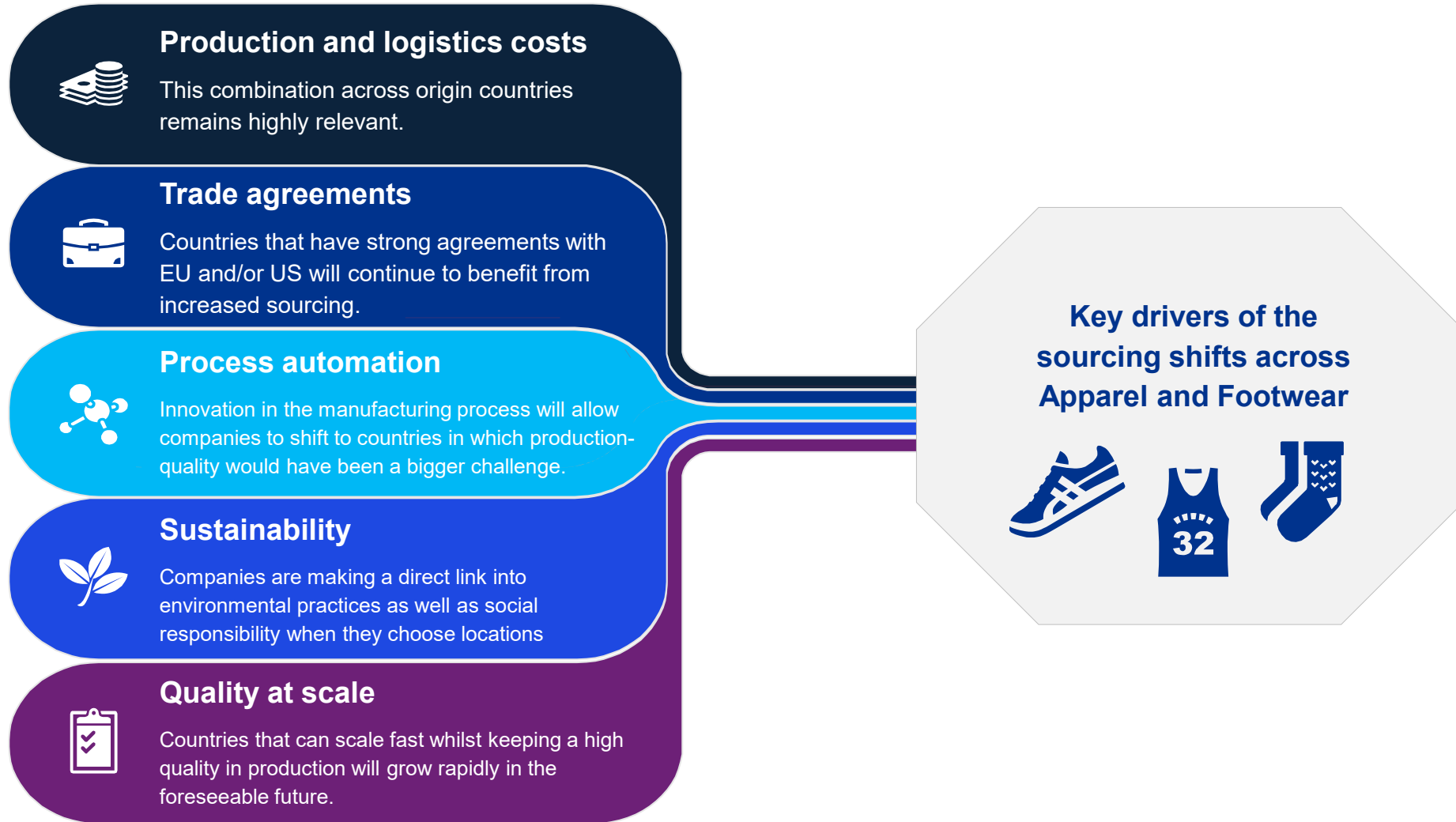


Vietnam today is comparable to Guangdong a decade ago

	Vietnam 2021	Guangdong 2011	Guangdong 2021
Population	97M	104.4M	126M
Average population age	32.5 years	30.6 years	38 years
Minimum monthly wage, adjusted to 2020 USD	\$169	\$213	\$307

Source: Monash University; ILO; national statistics; author calculations

What is Driving the Change?



Intelligent Forecasting

Uncertainty prevails in the business environment

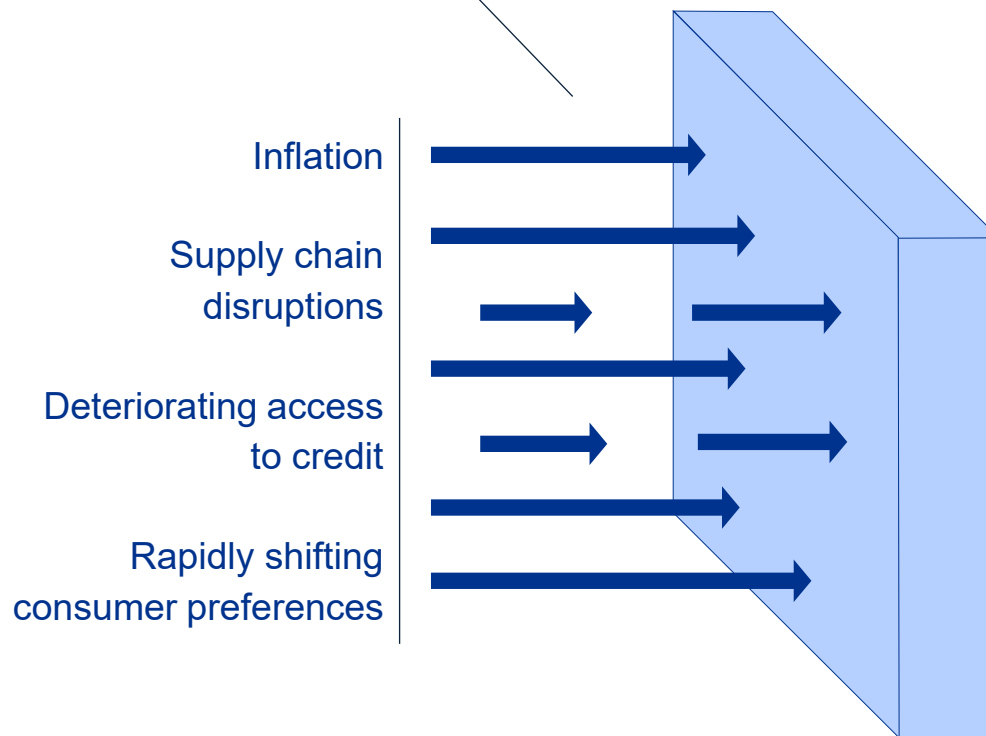
Unprecedented challenges in determining signal from noise when it comes to forecasting.



Data Inputs



Predictions



\$1 Trillion

Estimate of how much retailers lose per year in mismanaged inventory

30-60%

Of order require human intervention because of inaccurate forecasting

Accurate forecasts are crucial to retail success, yet increasingly difficult to attain



Source: IHL Group

Introducing intelligent forecasting

Intelligent forecasting is a customizable approach that is integrated into your existing process and systems to provide more automated and accurate forecasts for areas such as Demand, Sales, Revenue, Costs, or Cash.

Advanced predictive techniques

Various techniques are rapidly tested to help predict specific business unit(s) and P&L line(s) in scope.



Better data and signals

Incorporate external data and signals *from KPMG Signals Repository* along with internal financial or operational drivers to add context and predictive power.



Scenario Planning

Create specific forecasts by P&L line item, geographic region, brand, channel, etc. Levers can be adjusted to model impact of different scenarios at key dimensions.



Evolution & Integration

Integration of models across different business functions or different levels of the hierarchy with matching forecasts.



Regression

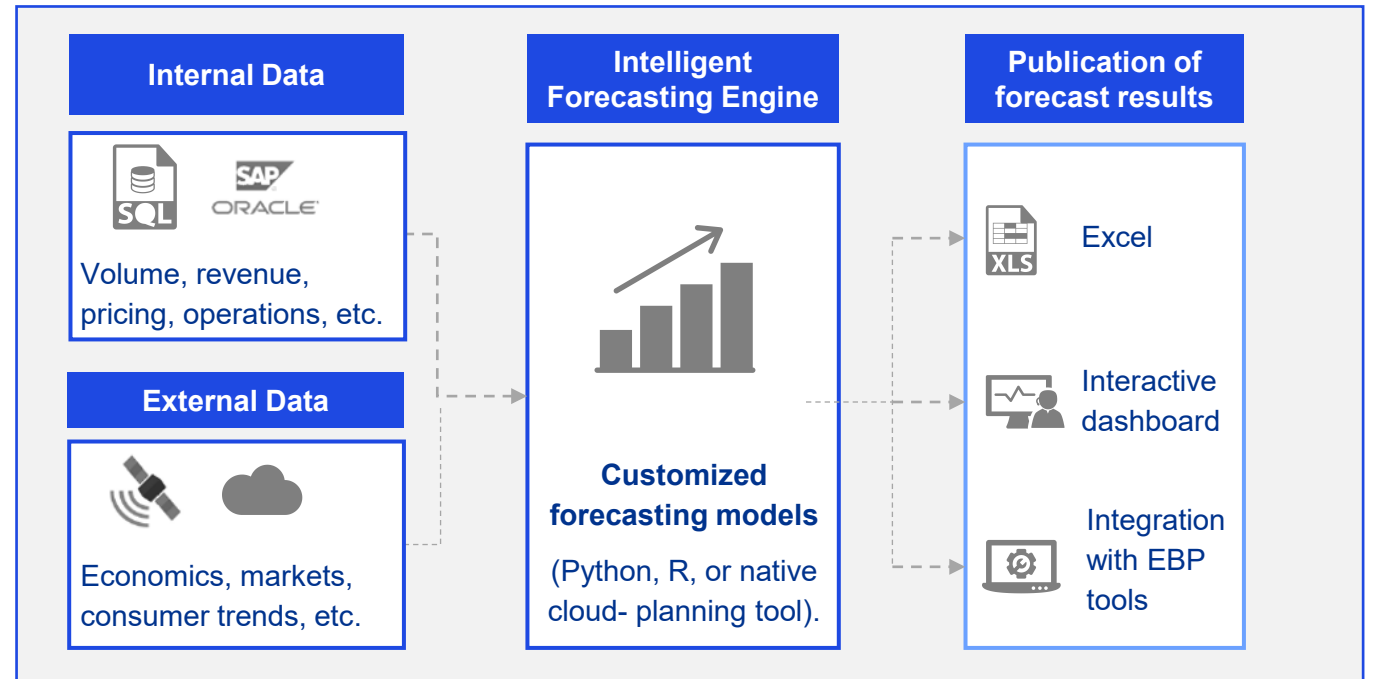
(Multiple Linear Regression, Lasso, Bayesian ridge, Vector Auto-regression, Elastic-Net)

Time series

(ARIMA, ARIMA-X, ARIMA w/ Regression, ETS, Holt, Holt-Winters, Facebook Prophet)

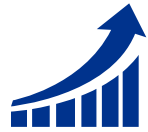
Machine Learning

(GPT, LightGBM, Long Short-Term Memory, XGBoost, Bayesian Structural Time Series)



Intelligent forecasting can drive real business value

Subtitle sentence



ACCURACY

Increase forecast accuracy and supplement current decision-making processes through a statistically-proven and data-driven approach

Ability to re-allocate revenue or cost savings to other growth initiatives, increased shareholder confidence



INSIGHTS

Gain additional understanding of internal/external drivers of business results; provide value beyond Finance

New signals supplement current decision making process through scenario modeling, and can serve as "early warning" through flash reports



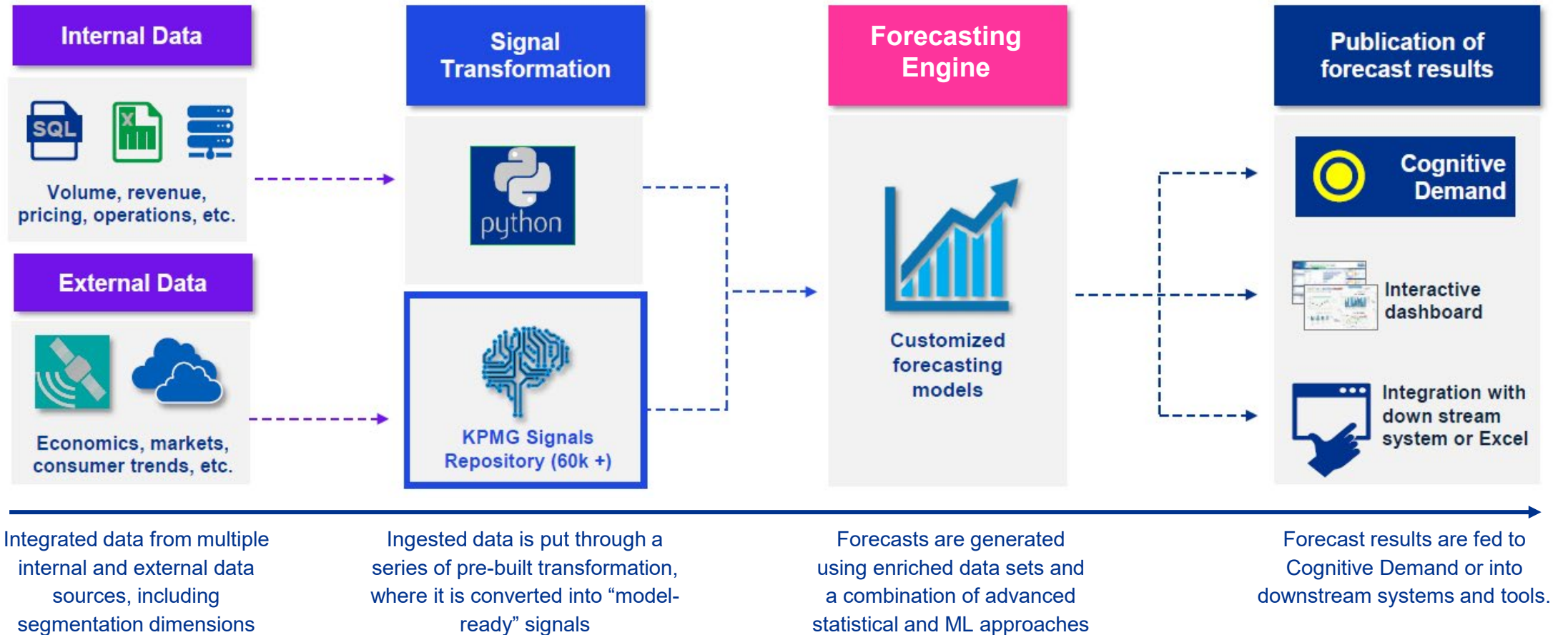
SPEED

Be fast and agile; accelerate cycle times for the monthly forecasting process

Less time and resources required for planning; free up business leader capacity to focus on additional strategic analysis or distribute to other functions

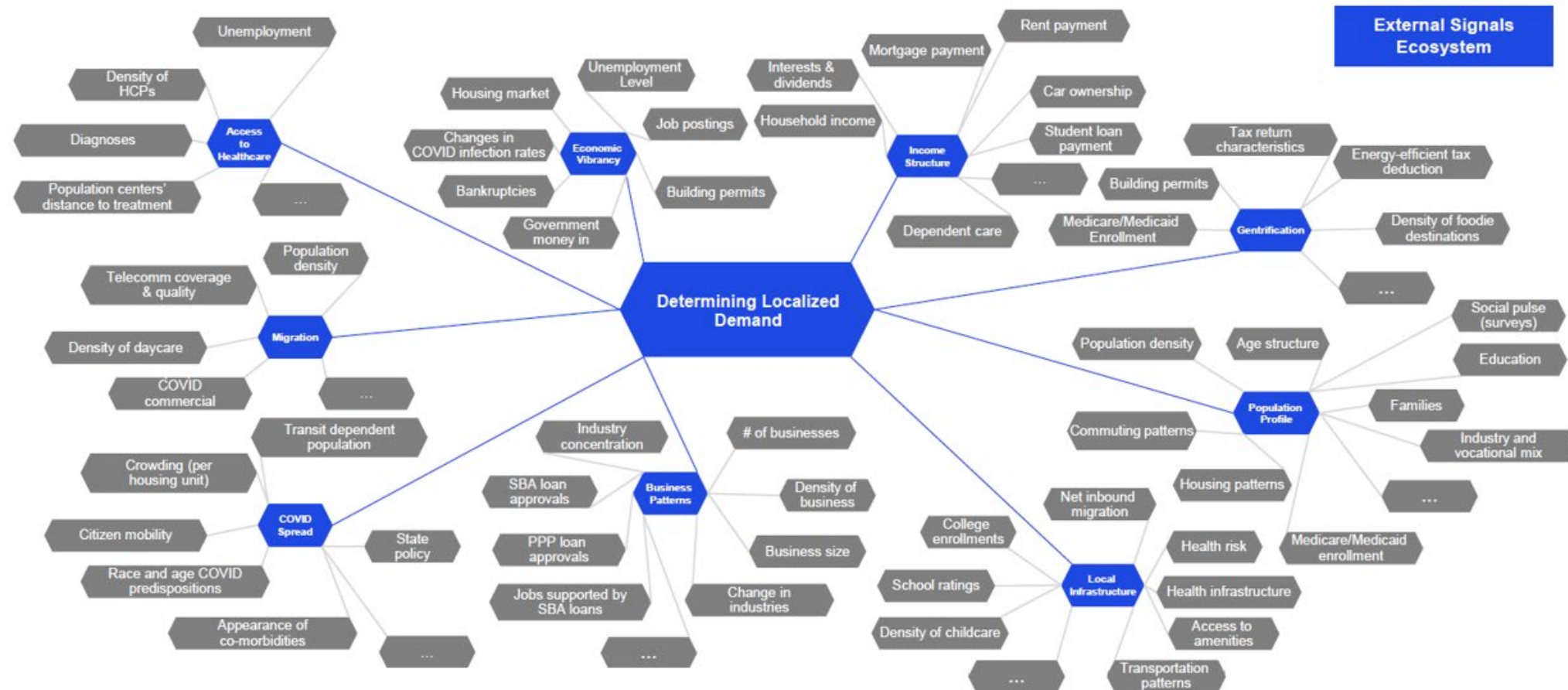
Cognitive forecasting detail: We leverage our signals repository

Forecasting leverages internal and external data sets, as well as a combination of advanced statistical techniques and machine learning approaches to improve forecast accuracy



A combination of Fast-and slow-moving external signals gives us a pulse on demand

Using machine learning, KPMG has refined a for-purpose curation from its signals repository that scores small areas along several dimensions including: population health needs, public health policy, commercial resurgence, and social behavior





Map controls RESET

2 5

LAYERS

SUPPLY CHAIN LAYERS

- Suppliers** Toggle to see on map
- Manufacturing plants** Toggle to see on map
- Distribution centres** Toggle to see on map

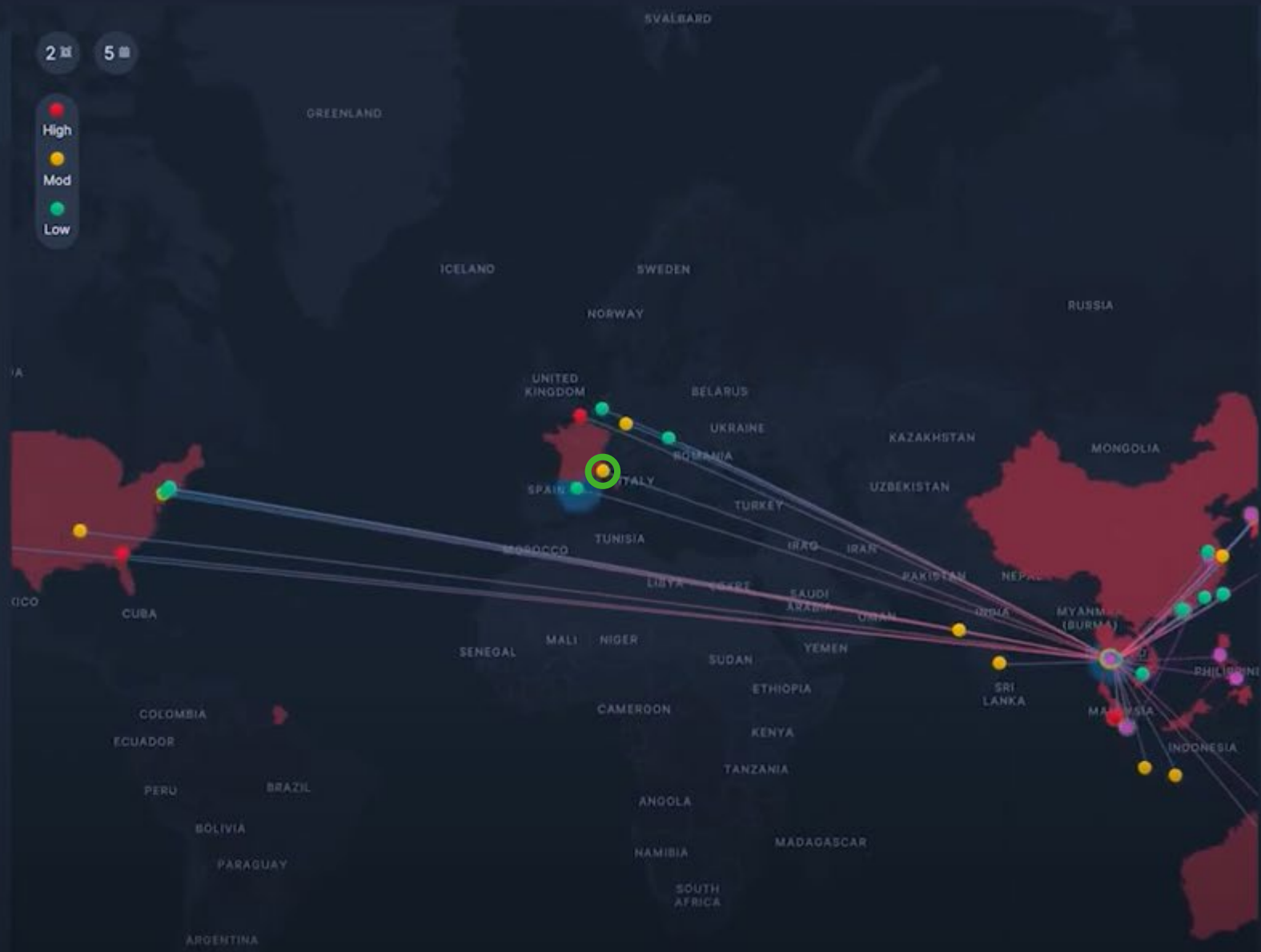
PRODUCT CATEGORY NETWORKS

- All Product Categories**
- Baby Powder
- Skin Care (Incl Baby Ctr)

RISK LAYERS

- Financial risk**
- Geopolitical risk

- High
- Mod
- Low



Current events ×

SUMMARY Live data

Current events	Events (YTD)
2	70
Events managed (YTD)	Total cost (YTD)
60	\$13m

- Virus Epidemic** (Epidemic)
 - Planning
 - \$ 13%
 - Thailand team
 - 60 days
- Heavy snow storm near Barcelona** (Storm)
 - Planning
 - \$ 1%
 - EU team
 - 30 days





Good afternoon, Arwin Admin

SUPPLY CHAIN HEALTH



CURRENT EVENTS



EVENTS MANAGED (YTD) 60 / 70

RESPON. LEAD TIME (DAYS) 20

TIME TO RECOVER (DAYS) 45

% OF SALES IMPACT 4%

COST OF REMEDIATION \$13M

IMPACT OF DELAY \$2M

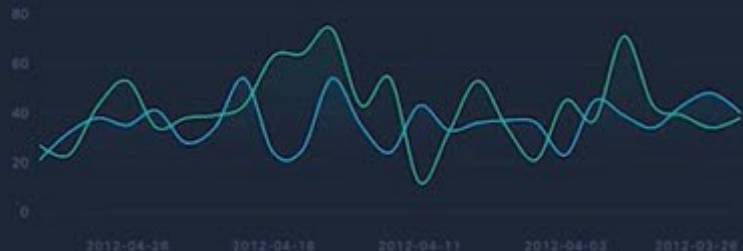
IMPACT ON MARKET SHARE 3%

GLOBAL ISSUES 1

SUPPLIERS AND RAW MATERIALS

Purchases and Sales (MTD)

● SALES ● PURCHASES



MANUFACTURING PLANTS AND PRODUCTS

Purchases and Sales (MTD)

● SALES ● PURCHASES



DISTRIBUTION CENTRES

SALES (MTD) \$66M -8

PERFECT ORDER RATE 26% -40

INVENTORY DAYS 86 -48

FILL RATE 88% +10

QUALITY ISSUES (MTD) 11 -1

NUMBER OF RAW MATERIALS 17 -6

PERFECT ORDERS 11% -11

NUMBER OF PRODUCTS 42 +4

PERFECT ORDERS 41% -11

ORDERS SUPPLIED LATE 7% +2

RAW MATERIALS WITH QUALITY ISSUES (MTD) 26 +18

ORDERS MANUFACTURED LATE 20% -4

PRODUCTS WITH QUALITY ISSUES (MTD) 84 +22

ORDERS SUPPLIED ON TIME 67% -13

STOCK LOSS (MTD) \$9M +6

ORDERS MANUFACTURED ON TIME 26% -8

STOCK LOSS (MTD) \$44M +24

REGULATORY AND LEGAL

PRODUCT SAFETY AND INTEGRITY ✓

SOCIAL RESPONSIBILITY STATUS ✓

TRADE REGULATION CHANGES ⚠️

Pause (k)

People &
Profit

Customer analytics



Successful brands that seek to create recurring engagement & revenue focus on driving clients through a virtuous cycle

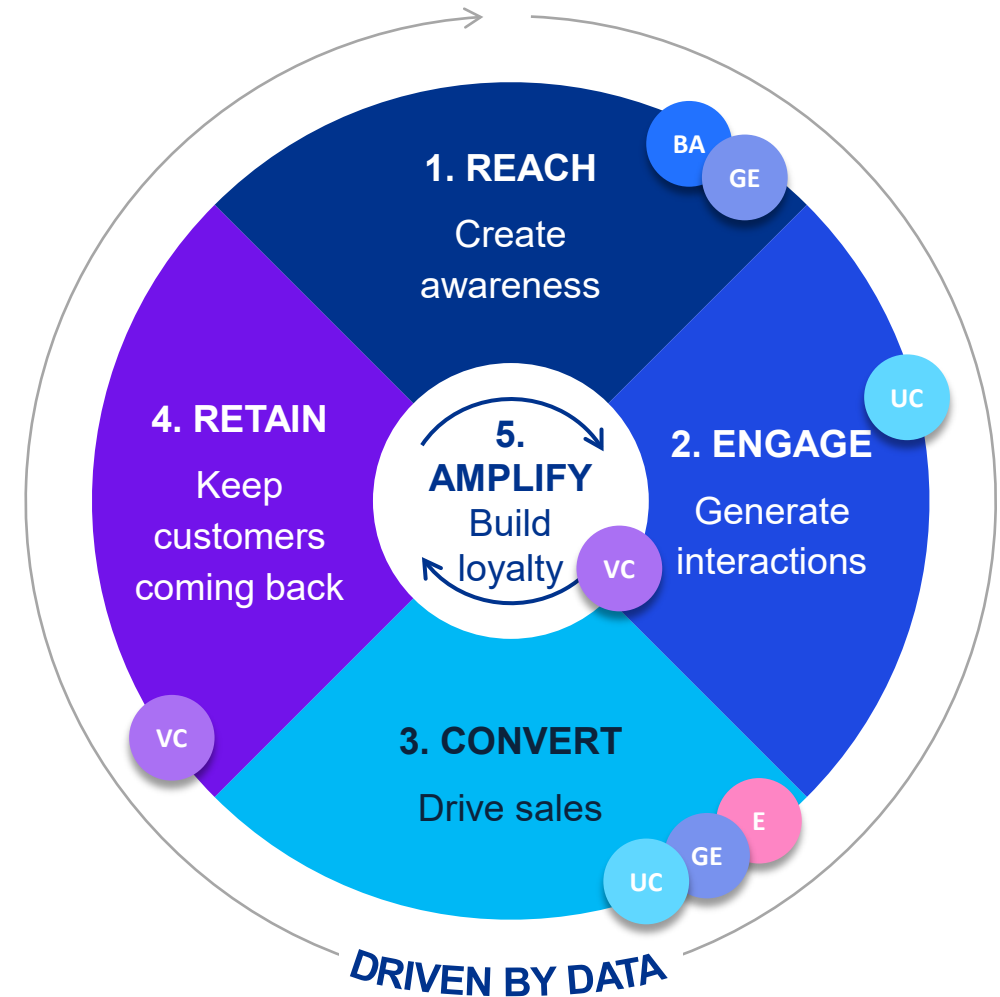
LEGEND

Growth Pillars

- GE** Geographic Expansion
- E** eCommerce Acceleration
- BA** Increased Brand Awareness

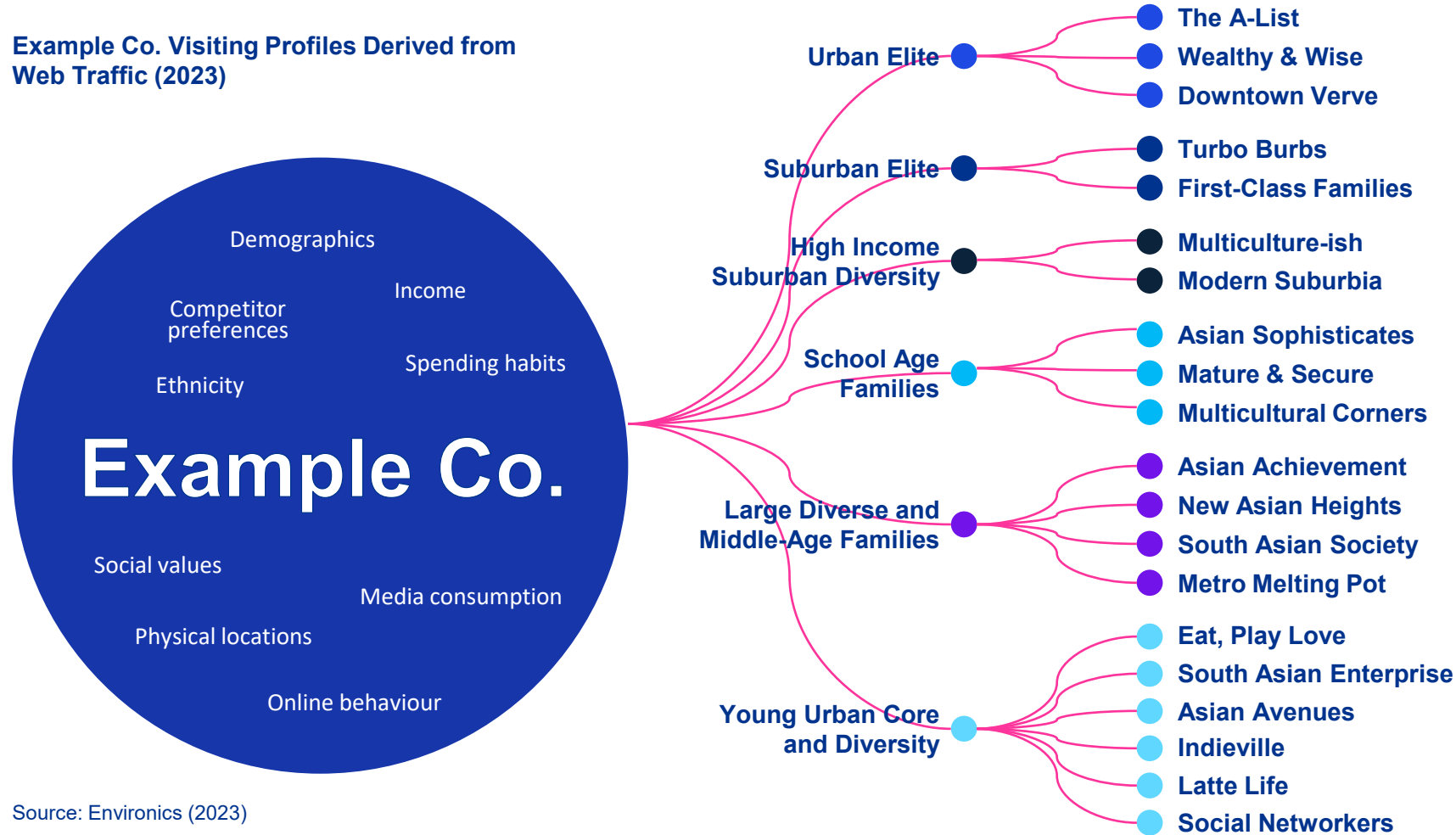
Opportunities

- VC** Voice of Customer
- UC** Unified Commerce



As you look toward growth, we can help you identify who your visitors are today

Example Co. Visiting Profiles Derived from Web Traffic (2023)



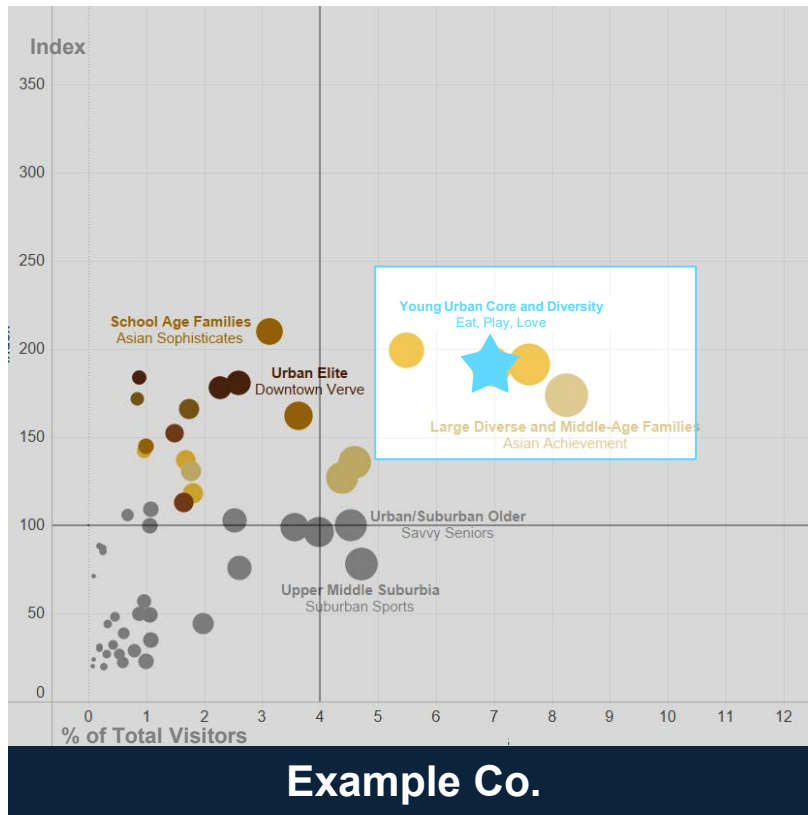
Source: Environics (2023)



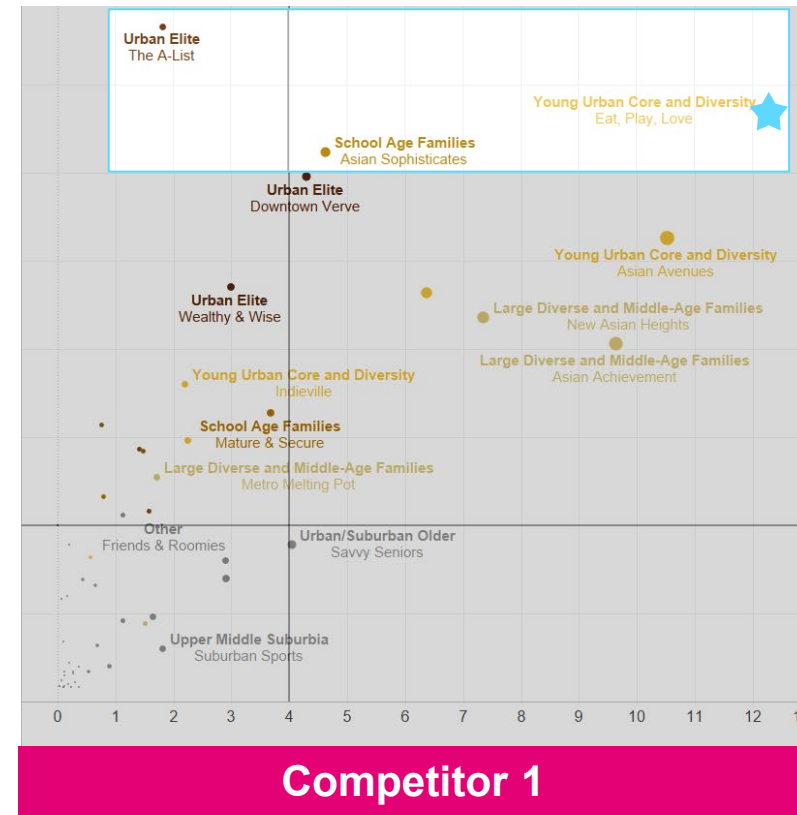
Data can help you identify where your competitors are outperforming you

Online Monthly Visits by Index (2023)

Size of bubble is proportional to profile population size



Example Co.



Competitor 1



Eat, Play Love
(670K pop.)

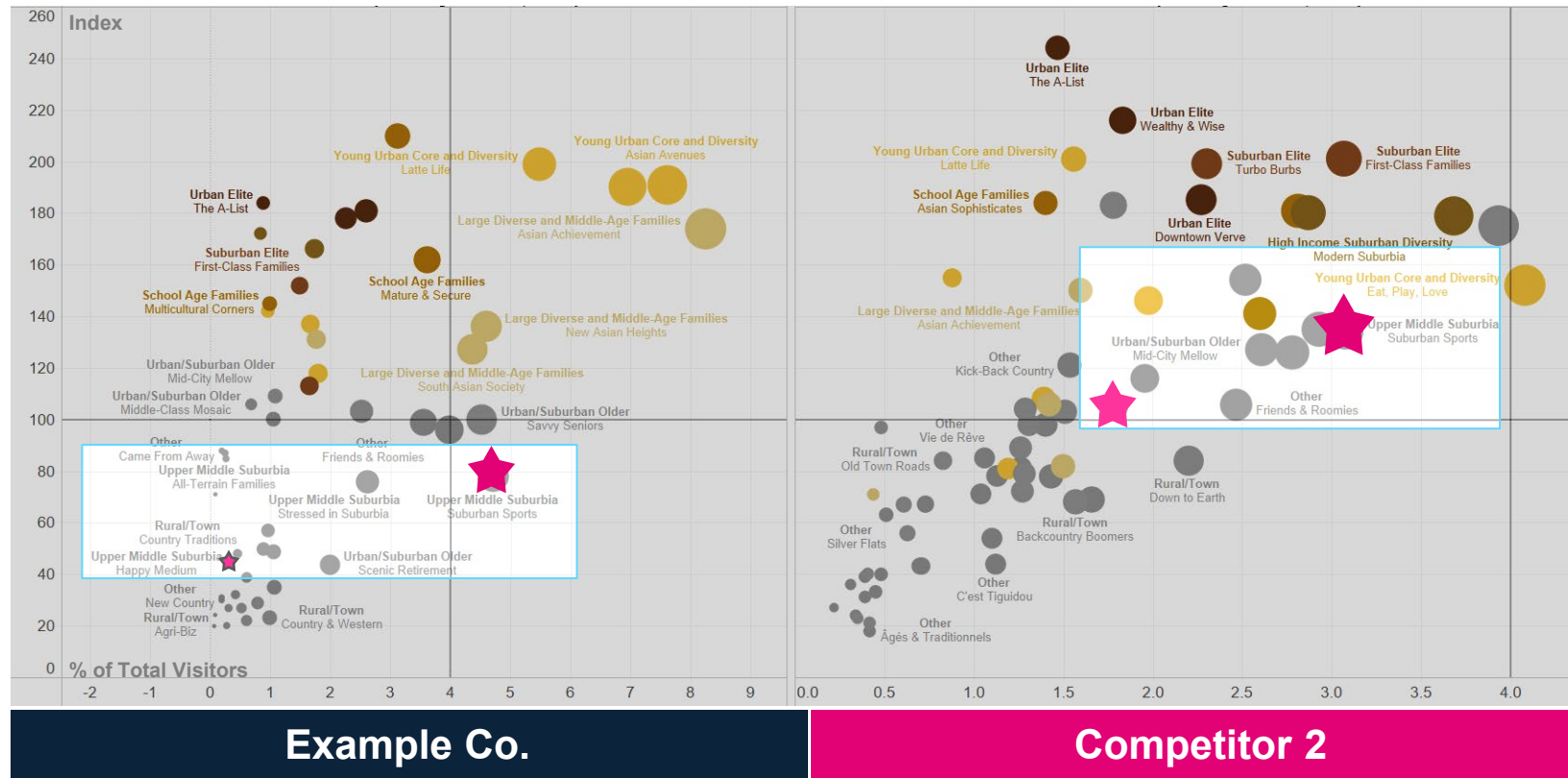
Competitor 1 is a competitor that Example Co. customers go to and they are **outperforming you in Young Urban Core and Diversity segments** like Eat, Play, Love.

Source: Environics (2023)



And identify which visitors to attract in order for your brand to compete effectively

On the Mental Visits by Index (Q2)
 Size of bubble is proportional to profile population size



★ Suburban Sports (970K pop.)

★ Happy Medium (475K pop.)

Competitor 2 has been successful at attracting Upper Middle Suburbia segments like Suburban Sports and Happy Medium.



Defend, Maintain, and Grow Strategies by Customer Profiles

To successfully defend current profiles and capture new profiles, Example Co. will have to offer key differentiators to existing profiles and develop innovative methods to strategically engage younger more diverse customer segments

Profile	Profile Category	Example Co.	Competitor 1	Competitor 2	Competitor 3	Competitor 4	Competitor 5	Competitor 6
Urban Elite	Maintain	☑				☑	☑	☑
Suburban Elite	Defend / At risk	☑		☑	☑	☑	☑	☑
High Income Suburban Diversity	Defend / At risk	☑	☑	☑	☑	☑	☑	☑
School-age Families	Defend / At risk	☑	☑			☑	☑	☑
Upper-Middle Suburbia	Maintain	☑		☑	☑		☑	
Upper Middle Rural	Maintain	☑		☑	☑			
Urban / Suburban Older	Maintain	☑		☑	☑			
Diversity	Opportunity		☑			☑	☑	☑
Young Urban	Opportunity				☑	☑	☑	☑
Lower Middle Rural	Opportunity				☑			

KEY TAKEAWAYS

Maintain Strategy

- Current Example Co. strengths are within the Suburban Elite, Upper Middle Suburbia, Upper Middle Rural, Urban/ Suburban Older
- These profiles know your brand very well - they are accessing the brand directly
- However, these profiles are shared with several competitors and would require actions that would differentiate Example Co. from the others to ensure success in these profiles

Defend and Grow Strategies

Successfully fulfilling these strategies would require answering several major questions:

- Lower Middle Rural is an opportunity few seem to be capturing, is it worth pursuing?
- How can you cater to the untapped market of Young Urban profiles?
- How do we capture other new/ defend existing younger profiles with elements of diversity?
- Finally, an area where several competitors seem to outperform is indirect search – pushing SEO. One-stop shop awareness should be a priority



So you can develop impactful strategies that amplify your brand among receptive segments

Understand your under-indexed customers...

... to grow brand awareness

I'm a spender, not a saver and I'll pay premium prices for environmentally friendly products

I'm active in social issues and political campaigns

I think of myself as an influencer – I'll often share links to products with my friends

I'm not bound by authority and rules – I make my own path

I consider myself to be sophisticated and dressing smartly is important to me

I act on store offers I receive via SMS

I'll compare products and prices while shopping

Over-indexed behaviours, values and attitudinal preferences of **Eat, Play, Love**
Source: Environics (2023)

REPUTATION IN THE MARKET

Leadership | Strategic Direction | Public Trust & Integrity | ESG & EDI | Products | Price | Difficulty of Substitution

RELATIONSHIPS WITH CLIENTS, EMPLOYEES AND PARTNERS

Customer Experience | Employee Experience | Store Experience | Supply Chain Relationships | Product Design and Quality

COMMERCE ENABLEMENT INFRASTRUCTURE

Geographic Reach | Physical Footprint | Unified Commerce | Platform Technology | Innovation Capability | VoC Insights



High Income Suburban Diversity

Upscale, younger and middle-aged, multi-ethnic suburban families

Sub Segments: Multiculture-ish | Modern Suburbia

Median age

47

86

Average household income

\$111,234

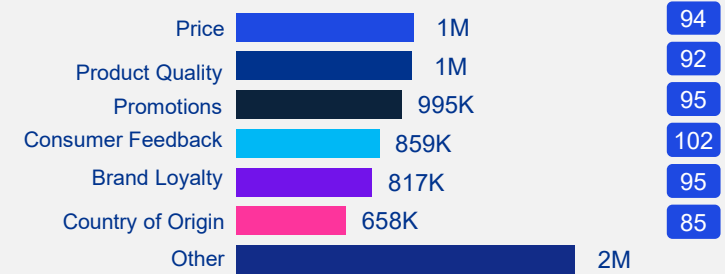
126

Average consumption

\$147,957

125

Purchase decision breakdown (top 5)



Strong values

Attraction for Crowds – Enjoyment being in large crowds as a means of deindividuation and connection-seeking. **132**

Penchant for Risk – Desire to take risks in order to get what one wants out of life. **129**

Pursuit of Originality – A need to demonstrate one’s individuality through original touches and expressions of personal uniqueness. **127**

Weak values

Fulfilment Through Work – A need to invest one’s professional life with meaning and deliver social value. **72**

Attraction to Nature – Desire to be close to nature, whether to recharge or enjoy simpler, healthier, or more authentic way of life **75**

Financial Concern Regarding the Future – Feeling of insecurity about one’s financial future, particularly in old age. **75**

RECEIVING INFO ON PRODUCTS / PROMOTIONS BASED ON PAST PURCHASES



ATTITUDINAL PREFERENCES

“I am likely to share product deals/ information via social media”

Total resp. **300K** % of pop. **22** **142**

“I feel that I influence consumption choices of the people around me”

Total resp. **634K** % of pop. **45** **116**

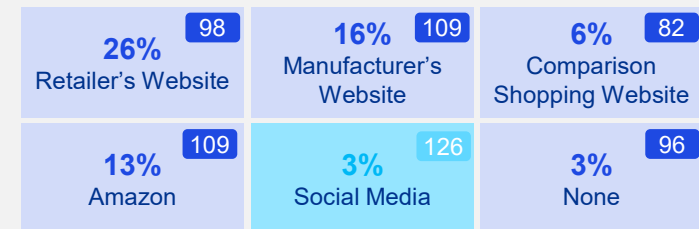
“If a product is widely advertised, it will be a good product”

Total resp. **427K** % of pop. **30** **138**

“I am very comfortable sharing my personal data with retail companies”

Total resp. **348K** % of pop. **22** **132**

Research sources for clothing and fashion



Index Legend

- >110
ABOVE British Columbia benchmark
- 81-109
AT British Columbia benchmark
- <80
BELOW British Columbia benchmark



Data can help you identify who your American prospective customers will be

Example Co.'s Visitor Profiles Derived from Web Traffic (2023)



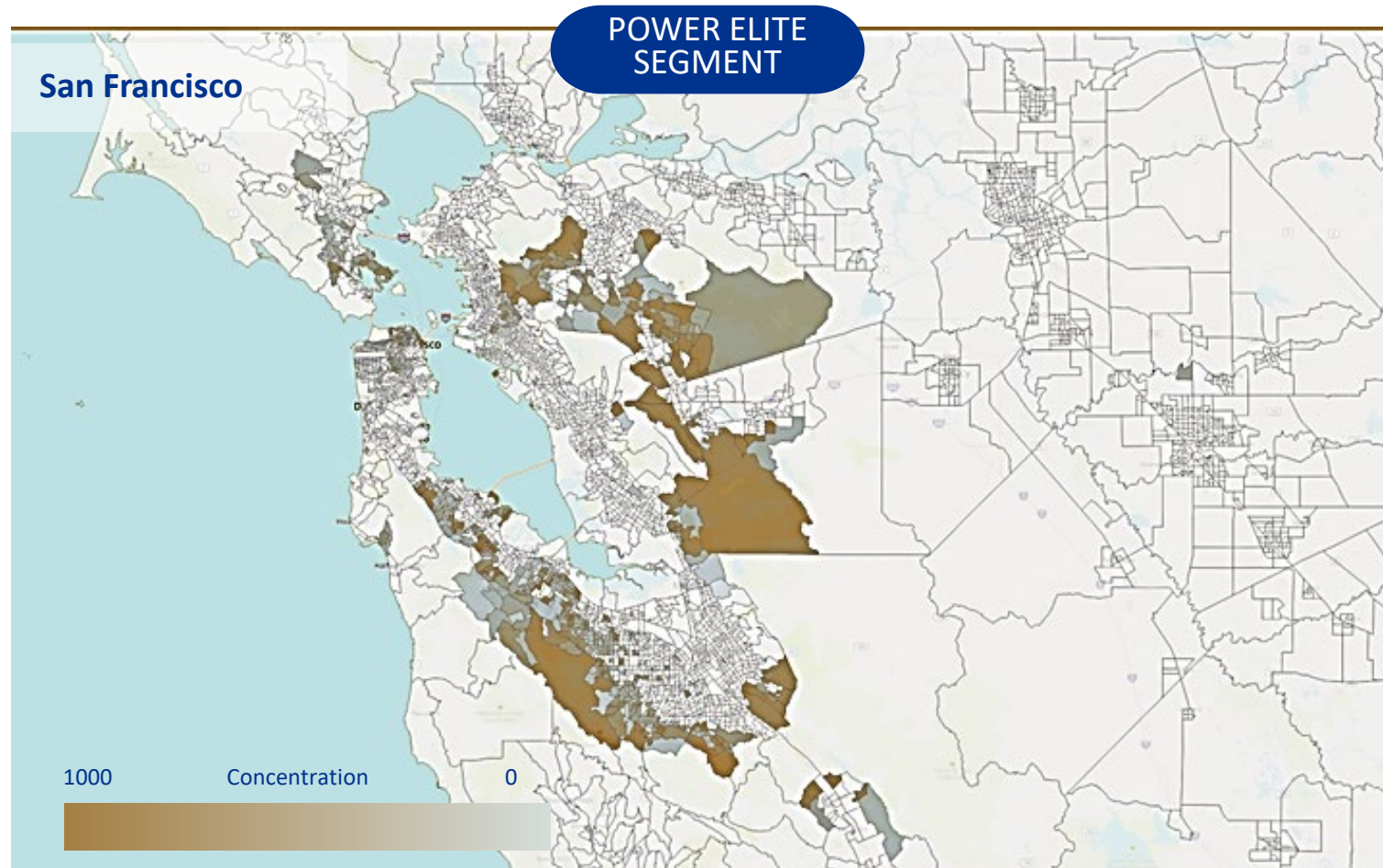
U.S. Prospective Profiles (2023)

A	Power Elite	A01	American Royalty
		A02	Platinum Prosperity
		A03	Kids And Cabernet
		A04	Picture Perfect Families
		A05	Couples With Clout
		A06	Jet Set Urbanities
B	Flourishing Families	B07	Across The Ages
		B08	Babies And Bliss
		B09	Family Fun-tastic
		B10	Cosmopolitan Achievers
C	Booming With Confidence	C11	Sophisticated City Dwellers
		C12	Golf Carts And Gourmets
		C13	Philanthropic Sophisticates
		C14	Boomers And Boomerangs
		C15	Sport Utility Families
D	Suburban Style	D16	Settled In Suburbia
		D17	Cul De Sac Diversity
		D18	Suburban Nightlife
		E19	Consummate Consumers
E	Thriving Boomers	E20	No Place Like Home
		E21	Unspoiled Splendor
F	Promising Families	F22	Fast Track Couples
		F23	Families Matter Most
G	Young City Solos	G24	Ambitious Singles
		G25	Urban Edge
		H26	Progressive Assortment
H	Bourgeois Melting Pot	H27	Life Of Leisure
		H28	Everyday Moderates
		H29	Destination Recreation
		I30	Potlucks And The Great Outdoors
I	Family Union	I31	Hardworking Values
		I32	Steadfast Conventionalists
		I33	Balance And Harmony
		J34	Suburban Sophisticates
J	Autumn Years	J35	Rural Escape
		J36	Settled And Sensible

K	Significant Singles	K37	Wired For Success
		K38	Modern Blend
		K39	Metro Fusion
		K40	Bohemian Groove
L	Blue Sky Boomers	L41	Booming And Consuming
		L42	Rooted Flower Power
		L43	Homemade Happiness
M	Families in Motion	M44	Creative Comfort
		M45	Growing And Expanding
		N46	True Grit Americans
N	Pastoral Pride	N47	Countrified Pragmatics
		N48	Rural Southern Bliss
		N49	Touch Of Tradition
		O50	Full Steam Ahead
O	Singles and Starters	O51	Digital Savvy
		O52	Urban Ambition
		O53	Colleges And Cafes
		O54	Influenced By Influencers
		O55	Family Troopers
P	Cultural Connections	P56	Mid-scale Medley
		P57	Modest Metro Means
		P58	Heritage Heights
		P59	Expanding Horizons
		P60	Striving Forward
		P61	Simple Beginnings
Q	Golden Year Guardians	Q62	Enjoying Retirement
		Q63	Footloose And Family Free
		Q64	Established In Society
		Q65	Mature And Wise
R	Aspirational Fusion	R66	Ambitious Dreamers
		R67	Passionate Parents
S	Thrifty Habits	S68	Small Town Sophisticates
		S69	Urban Legacies
		S70	Thrifty Singles
		S71	Modest Retirees

So you can move into the U.S. markets that matter

Canadian and U.S.-based data can be used to identify priority areas for new store locations that maximize ROI and minimize risks



Locate existing customers living in the U.S.

Identify areas with high concentration of **key segments** to meet current prospects where they are

Identify prospective customers with the highest potential to convert

Use demographic and characteristic data of current segments to find **unaddressed gaps** in similar US markets

Takeaways

Data unlocks value

Sourcing moves accelerating due to geopolitical changes

Intelligent forecasting unlocks profit

Customer analytics to drive sales and new market entry



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