BAIN & COMPANY

Future of Retail

SIX PROVOCATIONS THAT WILL LEAD THE RETAIL RENAISSANCE

Disruption in retail is not new – the industry has faced significant disruption with increasing frequency

1860s — **Modern department store**
Growth of big cities and rise of railroad networks

1910s — **Shopping malls with specialty retailers**
Mass-produced automobiles and suburban developments

…

1960s — **Discount chains and big-box retailers**
Rise of 'category killers' like Walmart, Amazon

1980s — **Advent of the internet**
Creating new pathways of interaction between consumer and brand

~1995 — **Rise of ecommerce**
Created more direct channels for purchasing goods

~2010 — **Digital technology through devices**
Consumers can "be anywhere, know anything, share with anyone, at anytime" through smart, connected devices

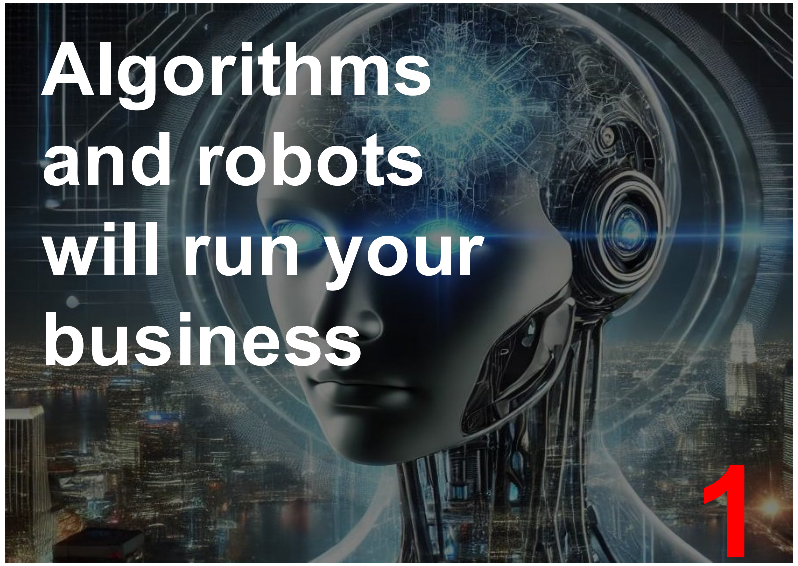
2020s — **Covid Inflation**
Geopolitical & trade disruptions AI…

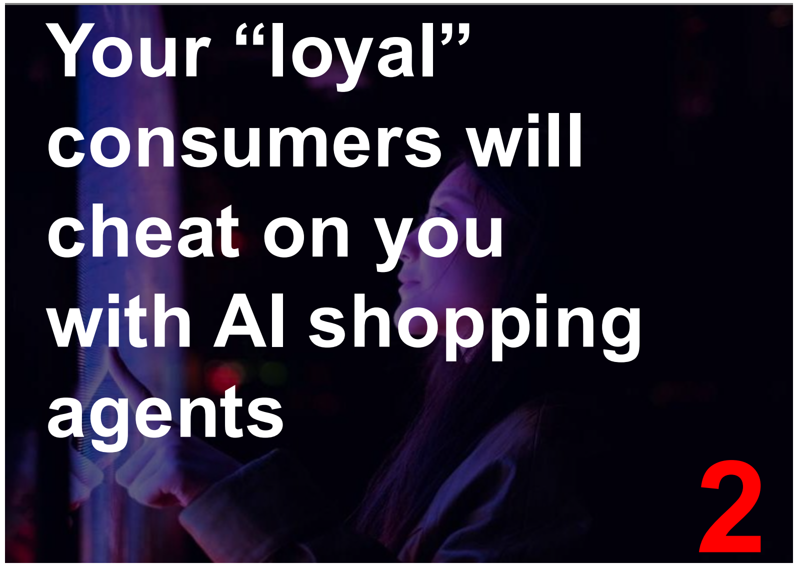
Source: "The Future of Shopping", HBR (Dec 2011)

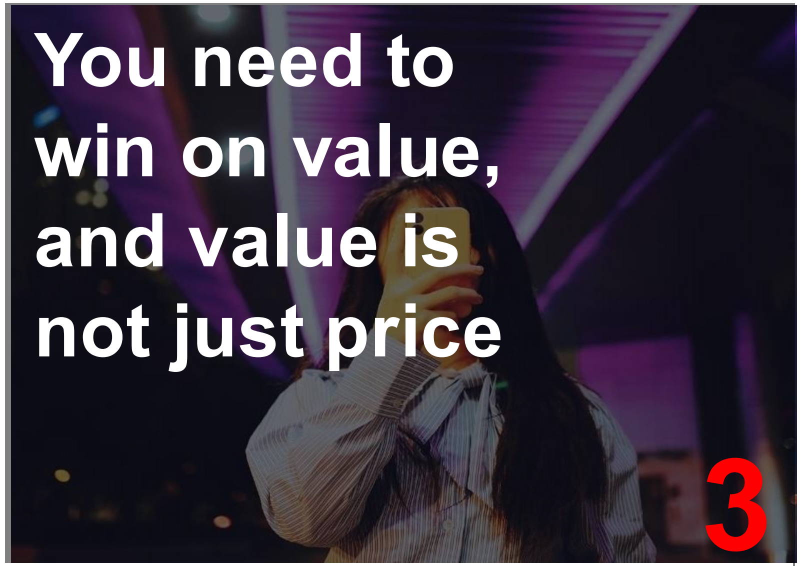
Profit pools continue to be under immense pressure as “uncertainty becomes the only certainty”

Macro headwinds & Supply insecurity	**Proliferating consumer expectations**	**Changing competitive dynamics**	**Acceleration of Tech & Innovation**	**Cost pressures & underutilized assets**	**Limited organic growth in the core**

Six Provocations on the Future of Retail







1

Algorithms and robots will run your business

Imagine when...

Automated AI has taken over 80% of today's core retail processes across the value chain (Merch, CatMan, Pricing & Promo, Store Ops, Supply Chain, etc)

Core Retail operates 2X faster, with significantly better outcomes and 50**% less FTE resources** above the store

The **"Science of Retail" is fully commoditized,** meaning anyone (including new entrants) can **buy and deploy "Retail in a Box"**

1 AI driven transformation

Net bottom line savings potential (p.p. of EBIT) ■ Already achieved ■ Future potential

Early movers

Walmart	target	JUMBO supermarkten
Automated supplier negotiations	*AI co-pilots for store workers*	*Self-steering warehouse*

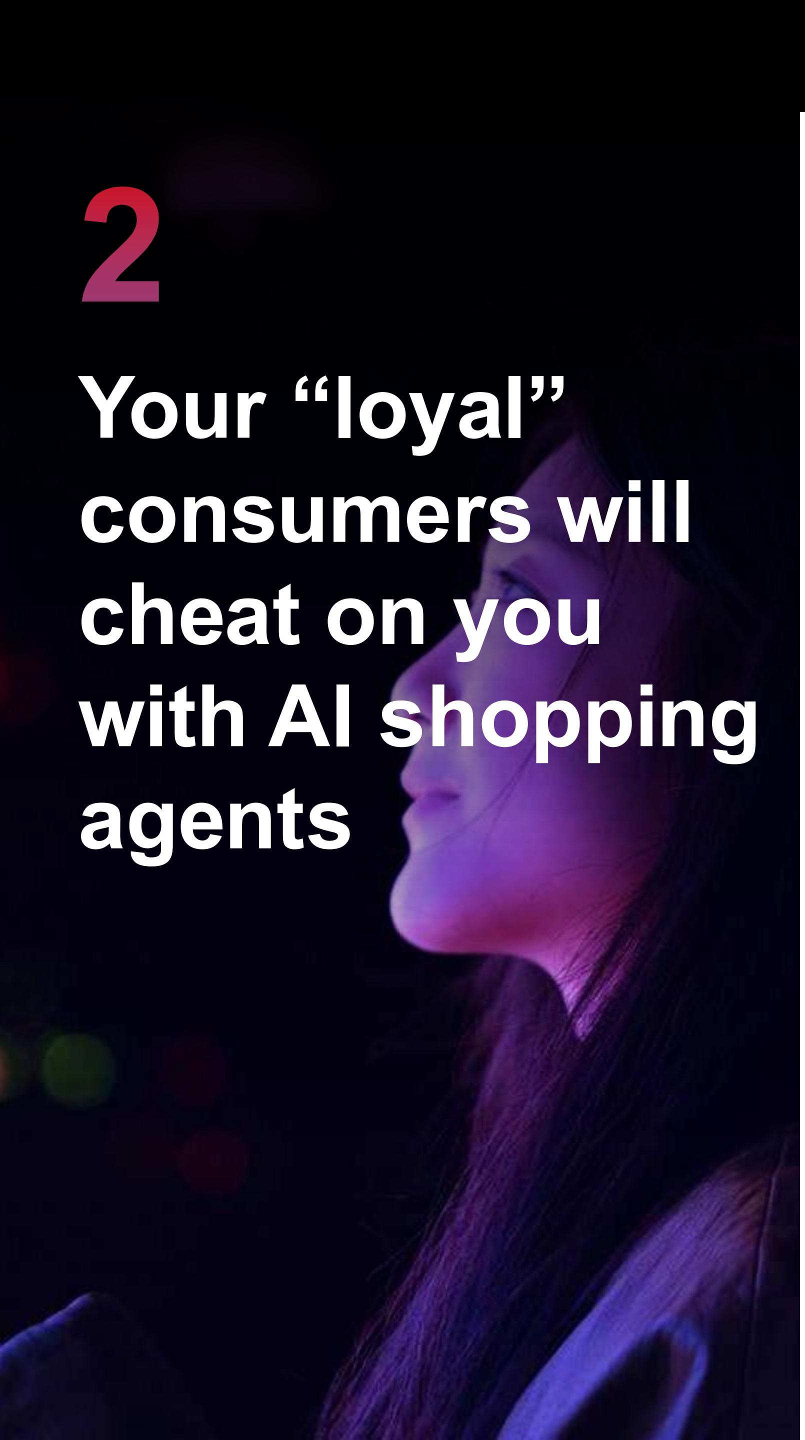
\+

~30% of US retail labor time is **estimated to be automated in the future**

~5-15% revenue uplift from **AI-led personalization**

~15% productivity gains **already unlocked** through AI in support functions

Retailers who are not adopting new automated & "commoditized" ways will be left behind & miss several points of profitability



2

Your “loyal” consumers will cheat on you with AI shopping agents

Imagine when...

Shopping is AI agent-led, curated, automated and **brand-agnostic** for many consumers, **reducing retailer control of the customer relationship**

Loyalty and growth is captured by those who **develop the winning AI agents** and/or those who become the **retailer of choice**

The new retail game is about **who can best optimize assets for AI discovery**

2 What will shopping with an AI agent be like?

Visual and voice search

As voice & visual search grow smarter, they're redefining commerce—turning inspiration into instant, seamless shopping experience

Conversational interface

Can you build a list for my shopping shop?

Sure! Based on past purchases, here is a list...

We are hosting a kid's birthday party this weekend, could you recommend some party items?

Here is a list of party accessories and a short list of pre-made cakes

Conversational chatbots will turn everyday needs into customized shopping lists through natural, real-time dialogues

Personalization

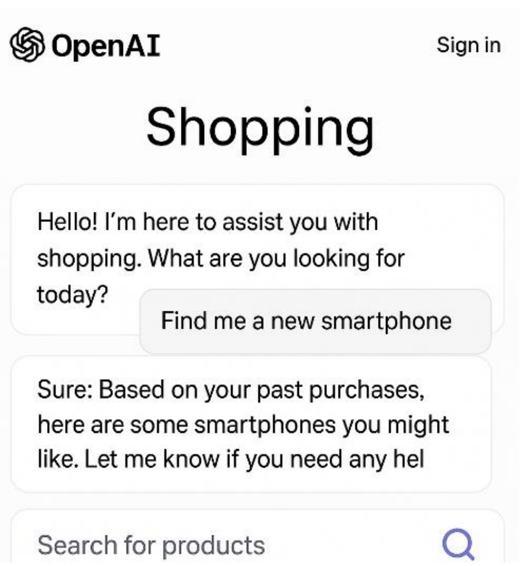
Input-driven suggestions

Health synced recommendations

Preference-aware picks

AI-led personalization will soon expand—blending data with health, constraints & preferences to deliver more intelligent, context-aware suggestions

Aggregation

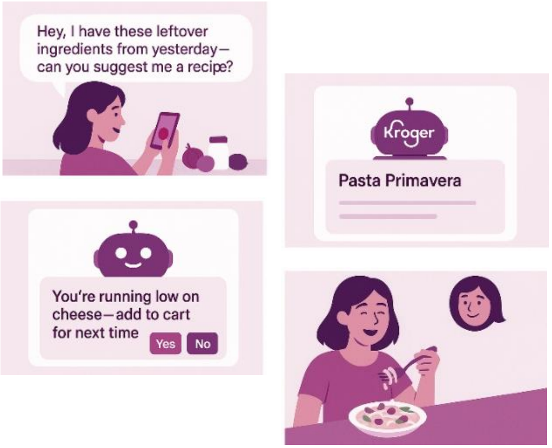


AI will enable new third-party aggregators—reshaping retail by disintermediating retailers and creating direct, smarter paths between consumers and products

2 Already happening today...

Visual and voice search

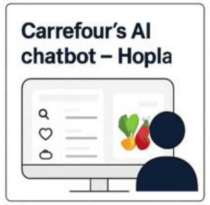
Kroger



Kroger's Chefbot shows how visual search is evolving—transforming simple photos into recipe ideas & shopping cues

Conversational interface

Carrefour

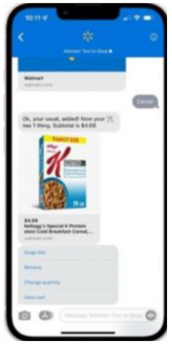


Results from Hopla:

4x higher conversion

5x lower bounce rates

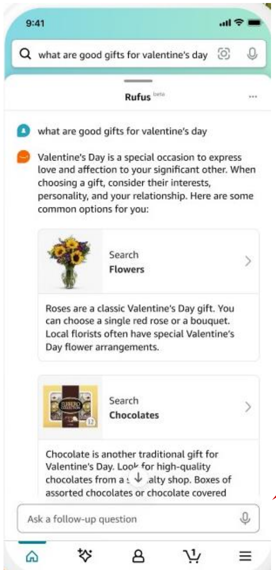
Ran out of protein powder while making morning smoothie? **Text Walmart** to add it to your **cart!**



Conversational chatbots turn everyday needs into customized shopping lists through natural, real-time dialogues

Personalization

amazon



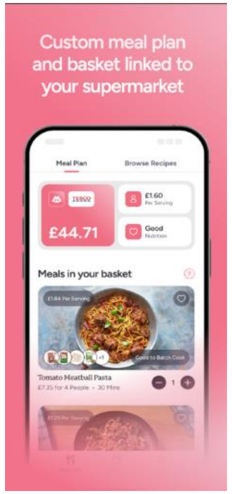
Rufus acts as a **buying guide-** answering **'why this?'** and **'what's the difference?'** with **AI in natural language**

AI-driven personalization aligns, user preferences, and context to deliver smarter, more adaptive recommendations

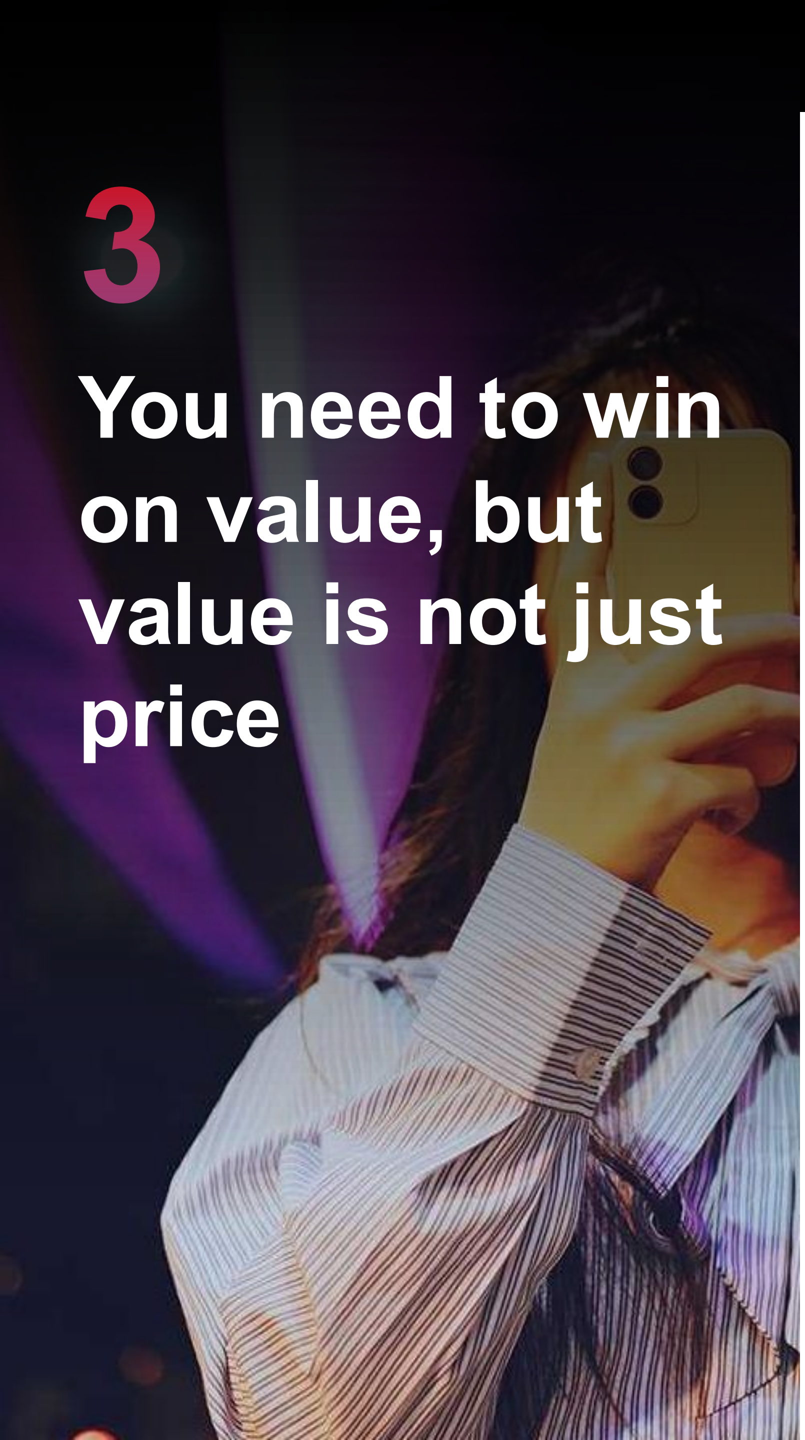
Aggregation

TESCO

Mealia is a **third-party app** which **connects with Tesco** to offer AI-generated **meal plans and shopping lists** tailored to user preferences and budgets



Smart retail platforms powered by AI unify brands, predict needs, and deliver hyper-personal shopping experiences



3

You need to win on value, but value is not just price

Imagine when...

Technology **radically reshapes the retail economics,** enabling **deeper** investments in price and the customer value proposition; retailers who **don’t adopt the new ways will be left behind** as unable to compete with new standards

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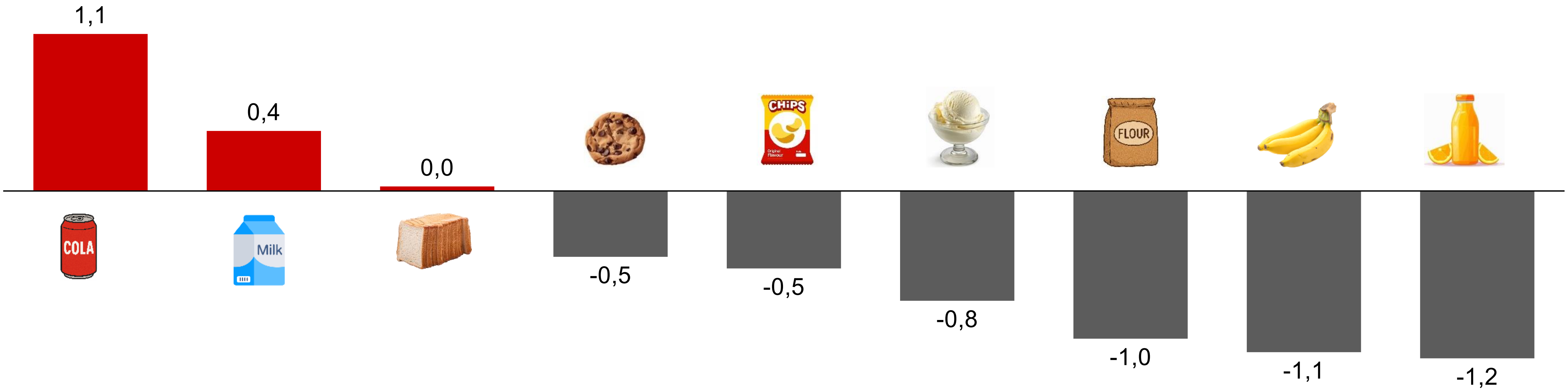
Value is **no longer just a race to the bottom on prices**

Winners will master the “personal value game” with their core consumers across the 2-3 KPCs that are most relevant to them in each shopping mission

3 Real pressure on real prices

Over the last few decades, real grocery prices have generally decreased

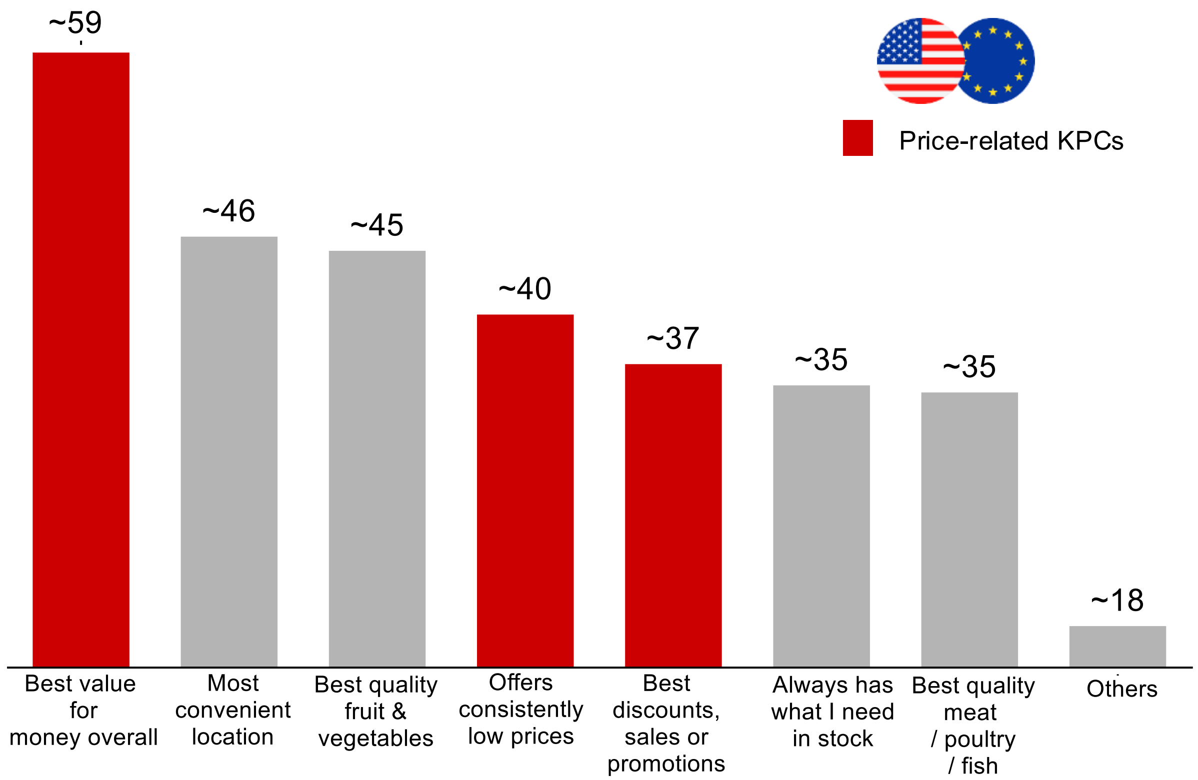
Real price change over time (40+ years, % p.a.)



3 Redefining Retail Value

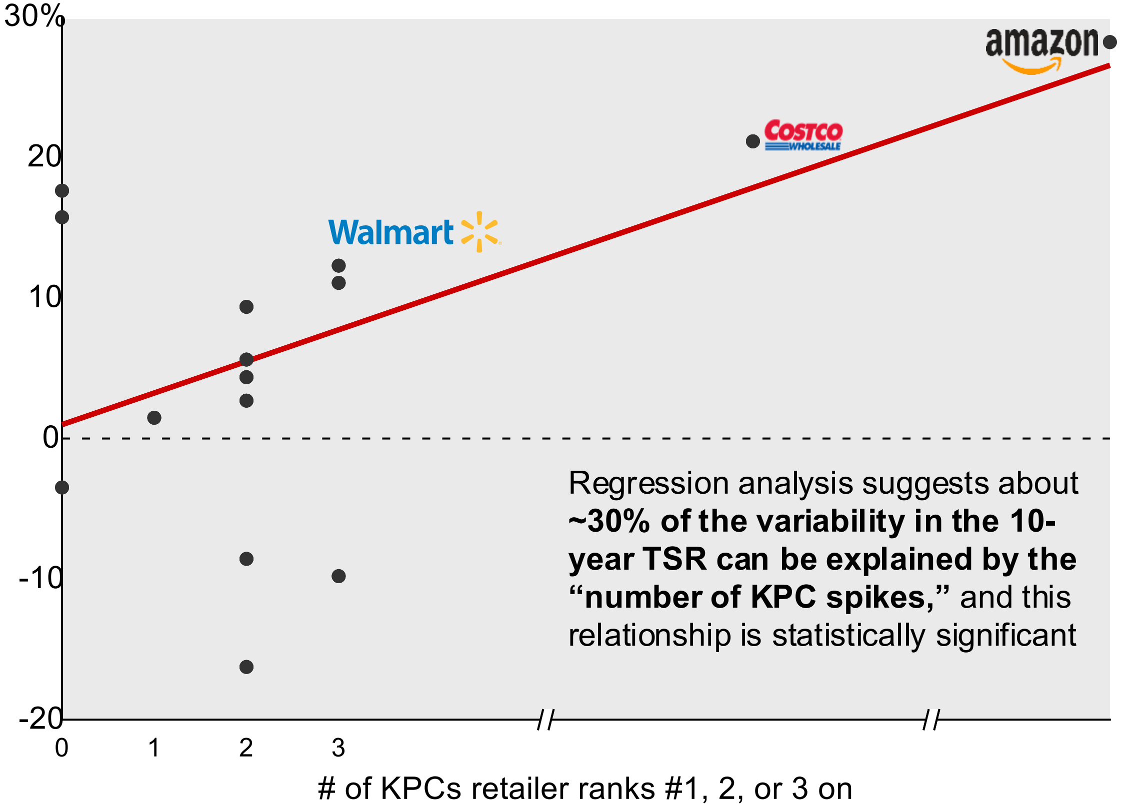
However, consumer value consistently extends beyond price

KPCs For Grocery Shopping
% respondents in USA & EU, March '25



Retailers who invest in price and win on multiple value drivers see consistent growth

10-year TSR (annualized)



Regression analysis suggests about **~30% of the variability in the 10-year TSR can be explained by the "number of KPC spikes,"** and this relationship is statistically significant

4

Grocers become FMCGs & B2B businesses

Imagine when...

An important differentiation in the future of grocery will be **exclusive assortments and surety of supply**

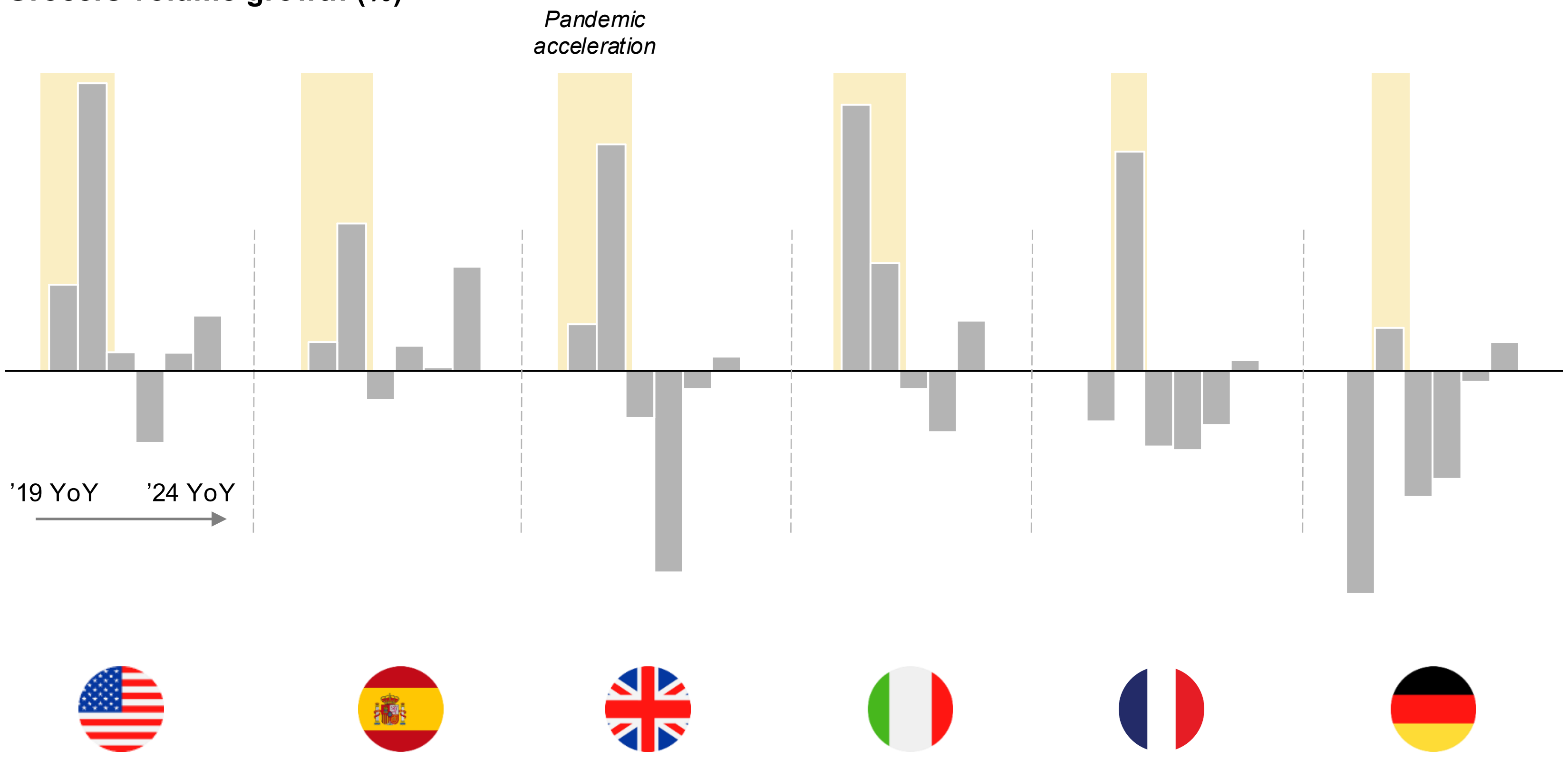
Core growth in grocery stalls, and the business definition of ‘retail’ dramatically shifts, with **all incremental profit growth coming from new adjacent** *“Beyond Trade”* **businesses**

Data & Traffic are the new “Candy and Soda” of retail

4 Stagnating core growth

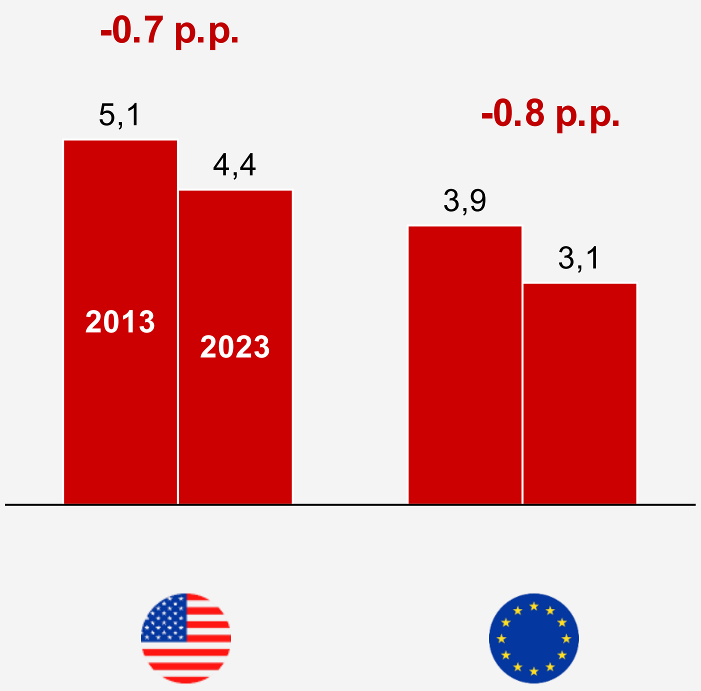
Over the years, grocers have seen declining volumes…

Grocers volume growth (%)



…and profits

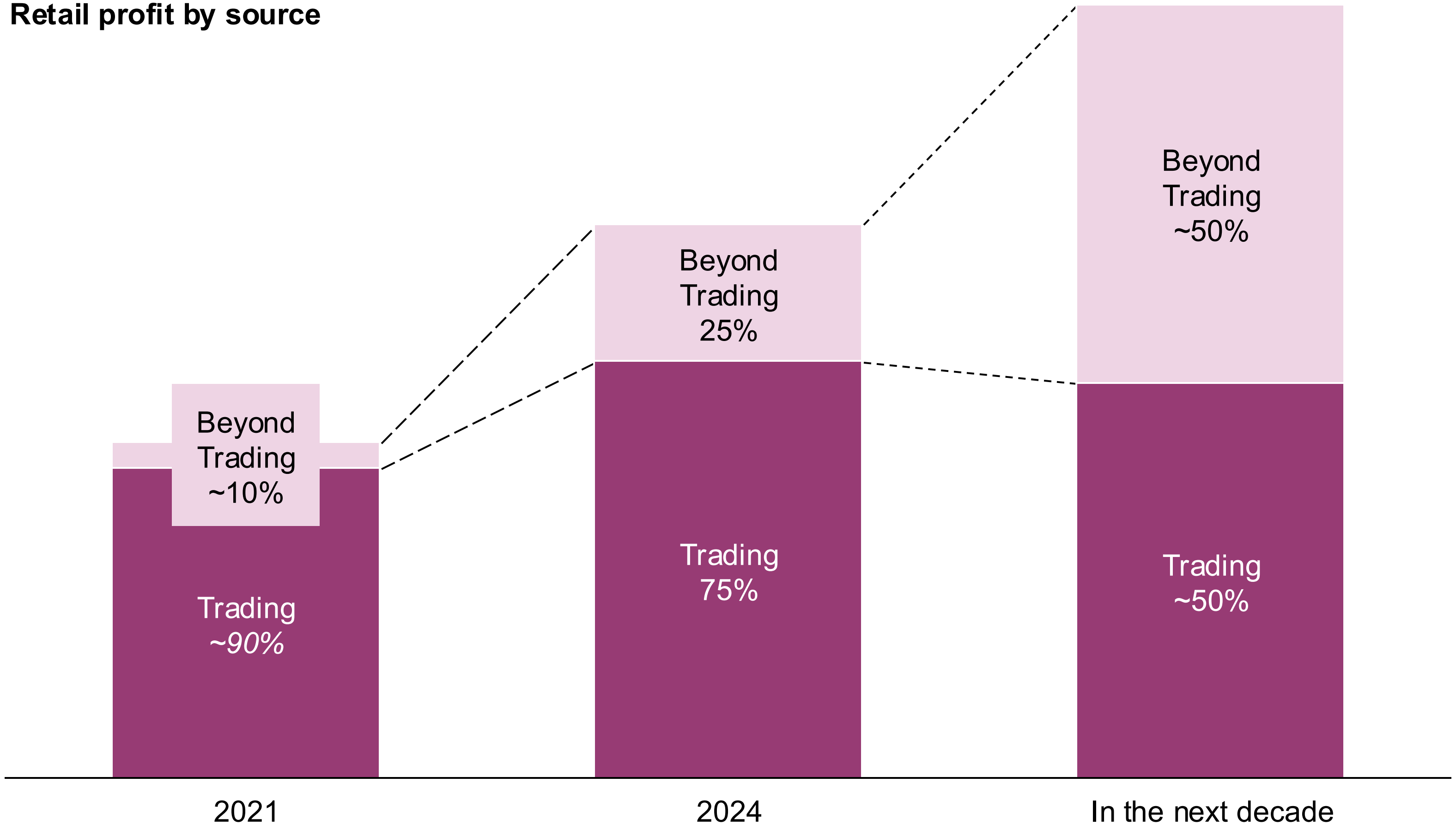
Public grocers EBIT margin (%)



4 Growth in Beyond Trade

Beyond Trade will be critical for retailers to achieve resilience and generate profit

Retail profit by source

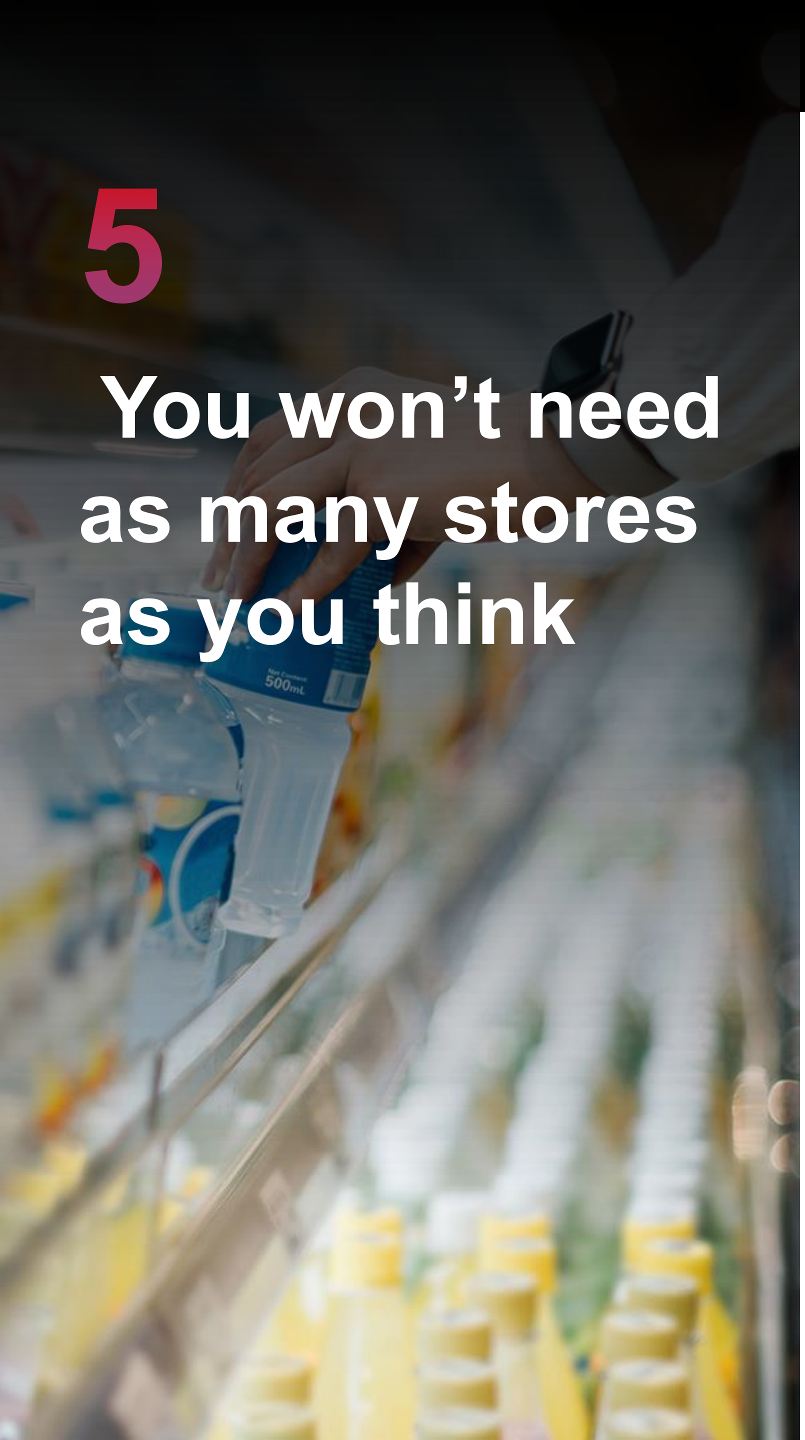


Leading players have already established offerings

Walmart Connect
RMN revenue
~$4.4B *('24)*

ROUNDEL
RMN revenue
~$649M *('24)*

Kroger Precision Marketing 84.51°
RMN profit
~$1.4B *('24)*



Imagine when...

5

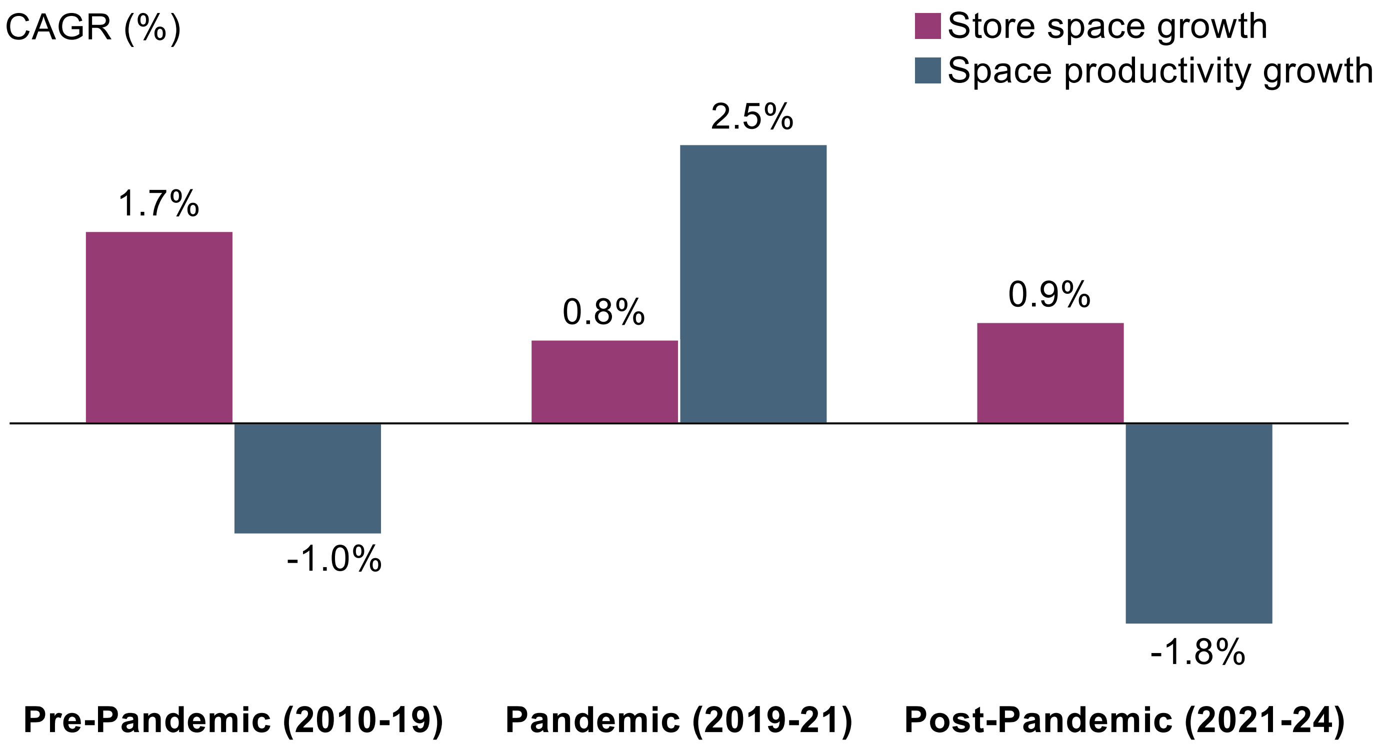
You won't need as many stores as you think

The overall **value, shape & CAPEX of store networks** are challenged given declining store productivity

Store overcapacity reaches a correction point, where oversaturation is no longer an option, forcing store closures

The **role of remaining stores evolves** into fully digitized media and retail-tainment destinations and/or fulfillment hubs

Productivity declines will make future expansion harder to justify...



Since the pandemic, US store space has grown 0.9% annually—even as productivity has fallen by 1.8%—revealing a structural imbalance that challenges the long-term viability of current expansion strategies

5 | Store space tipping point

If productivity was to return to previous levels, we would need

-10% less US grocery store square footage

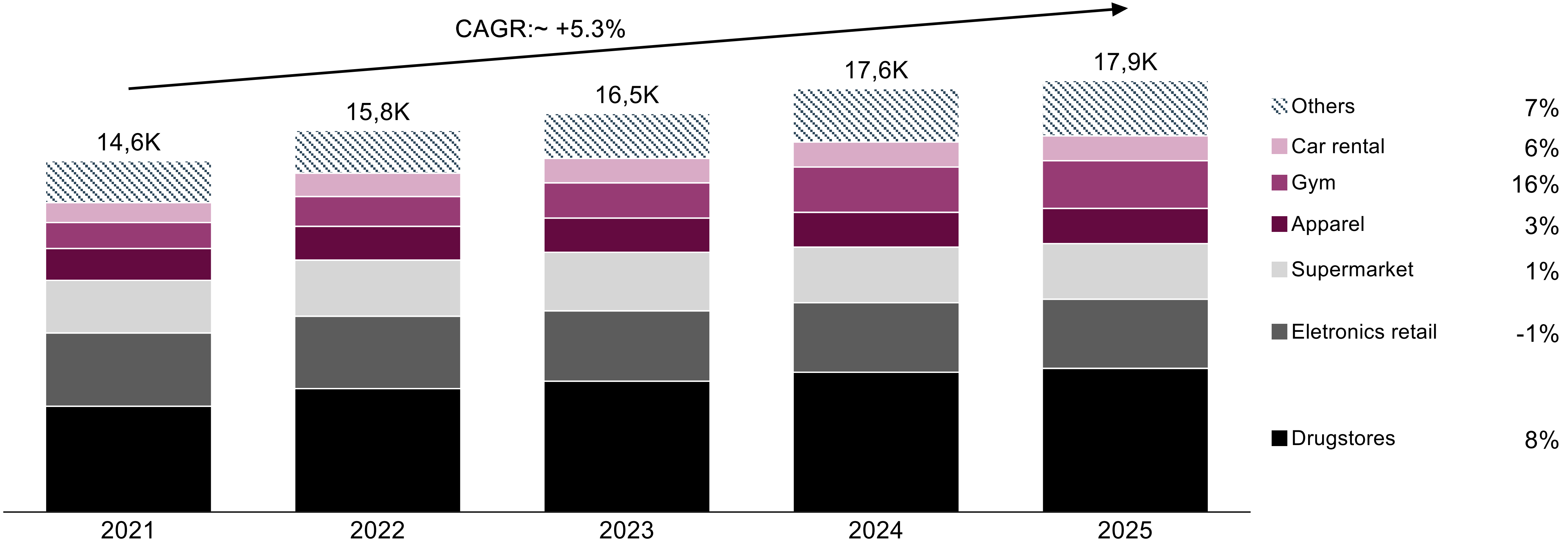
-15% fewer US grocery stores

based on 2010 peak productivity levels

5 In Brazil, number of stores operated by leading retailers has increased since the pandemic, driven primarily by drugstores

Quantity of stores per year

(#k of stores, 2021-2025)



Note: 1- Enterprises considered ((i) Drugstores: Raia Drogasil/RD Saude; d1000; Pague Menos; Panvel (ii) Eletronics retail: Magazine Luiza; Lojas Quero – Quero; G. Casas Bahia (iii) Supermarket: Carrefour; GPA Alimentar; Assai; Grupo Mateus (iv) Clothing: Lojas Renner; C&A; Guararapes (v) Gym: Smartfit (vi) Car rental: Localiza; Movida (vii) Others: Vivara; CVC; Petz) 2- For Carrefour, the same number of stores was considered in 2021 as in 2022

Source: Companies' investor relations

6

Local scale is no longer the only scale you need

Imagine when...

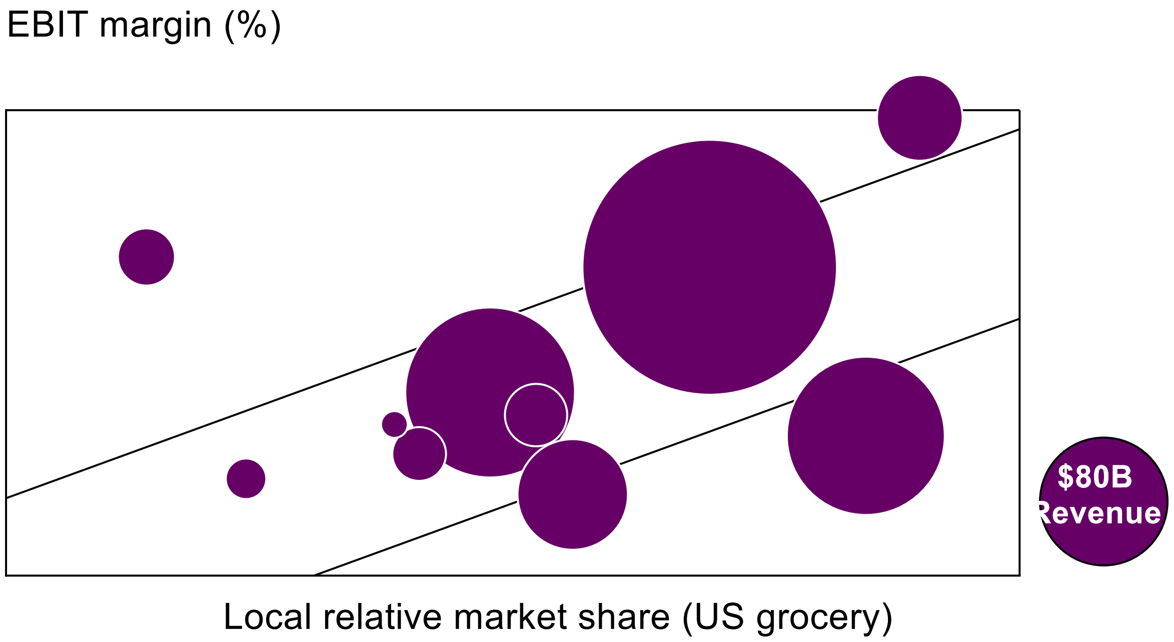
Winning day-to-day still occurs with local RMS, but **Global/ regional scale reaches an inflection point** becoming the main driver of growth, cost leverage, and the ability to re-invest to win locally

International growth and regional/cross-border M&A become the norm

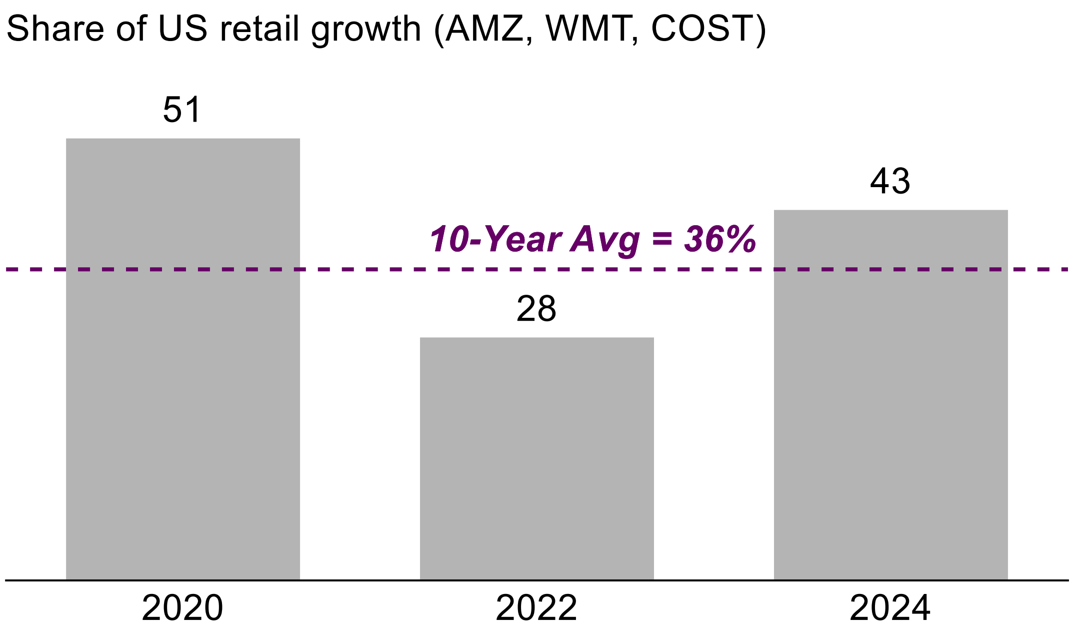
Scale players can afford to leapfrog on new tech and capabilities with scope deals

6 Absolute scale for the win

Local relative market share (RMS) still drives margin advantage..



...but global players have begun to capture outsized growth



6 M&A as a critical capability

M&A will be critical for retailers to scale quickly, and leap-frog on capabilities

Cross-border deals are enabling reach and access to new markets		…while capabilities-led M&A powers growth in emerging, high-value business areas	
Walmart / Flipkart	ALDI / LEADER PRICE	H-E-B / FAVOR	Albertsons / Plated.
2018 Aiming to enter one of the biggest and fast-growing retail market	**2020** Added ~500 stores in France	**2018** Grow eComm offerings	**2017** Expand private label offerings
Raley's / Bashas'	*Ongoing as of June'25* Couche-Tard / 7-ELEVEN	Ahold Delhaize / MOTIFY	Walmart / VIZIO
2021 Added ~125 stores in Arizona	**2024** Aiming for combined ~100K stores globally	**2023** Expand retail media capabilities	**2024** Enhance advertisement capabilities

Going into 2025, ~30% of Retail M&A practitioners said they were focused on scale M&A, while ~40% said they were more focused on scope deals, with the remaining ~30% focused on both

In Brazil, these provocations on the Future of Retail are reflected in two ways

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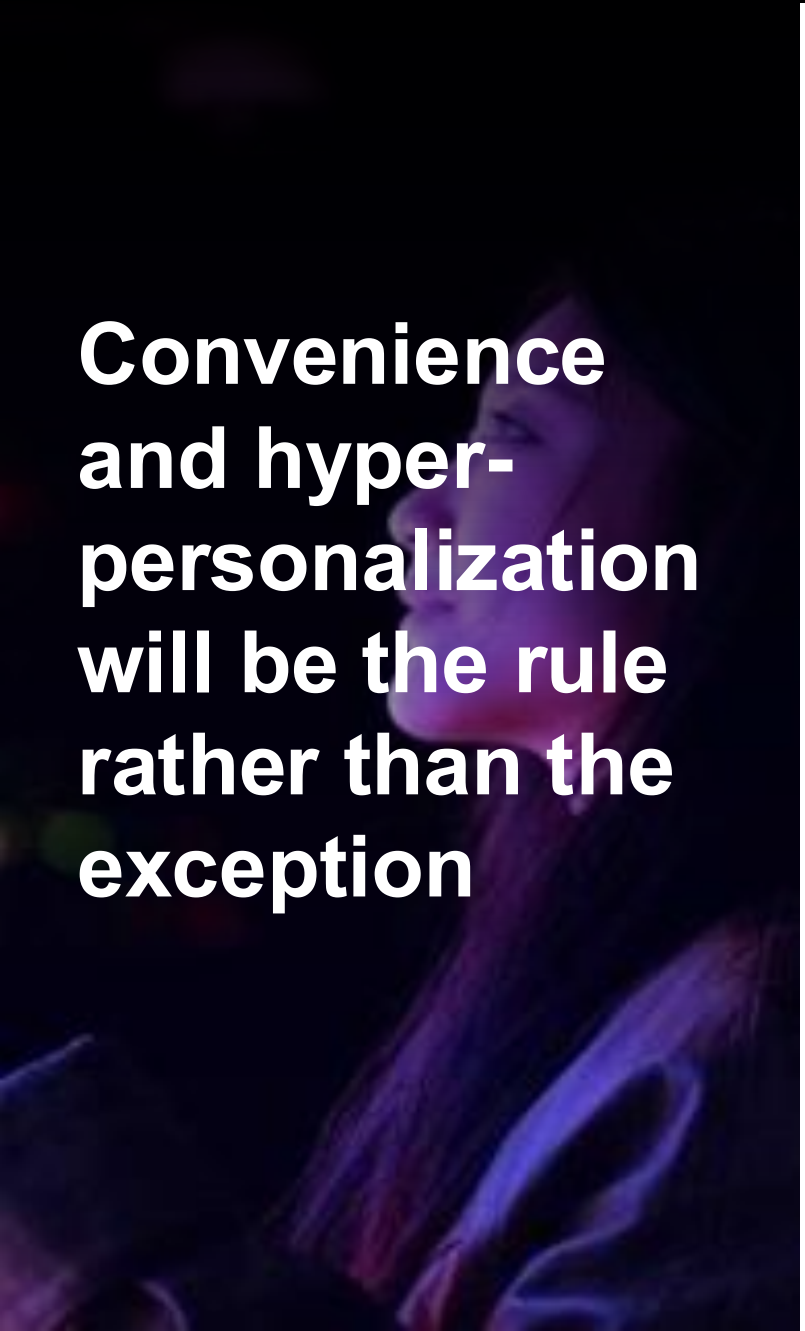

Convenience and hyper-personalization will be the rule rather than the exception

Each buying journey is completely shaped by intelligence engines, with real-time data and preferences: from the product to the channel; recommendations, language; Tests and offers

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Interfaces with virtual assistants and predictive applications, which anticipate the customer's desire even before they verbalize it

---

Personalization reaches such a degree that the consumer does not realize that he is being influenced, but feels that everything has been done for him, when he needs it

Brazilians are hyperconnected

55%

Brazilians own smartphones

3,6

Devices per person

70%

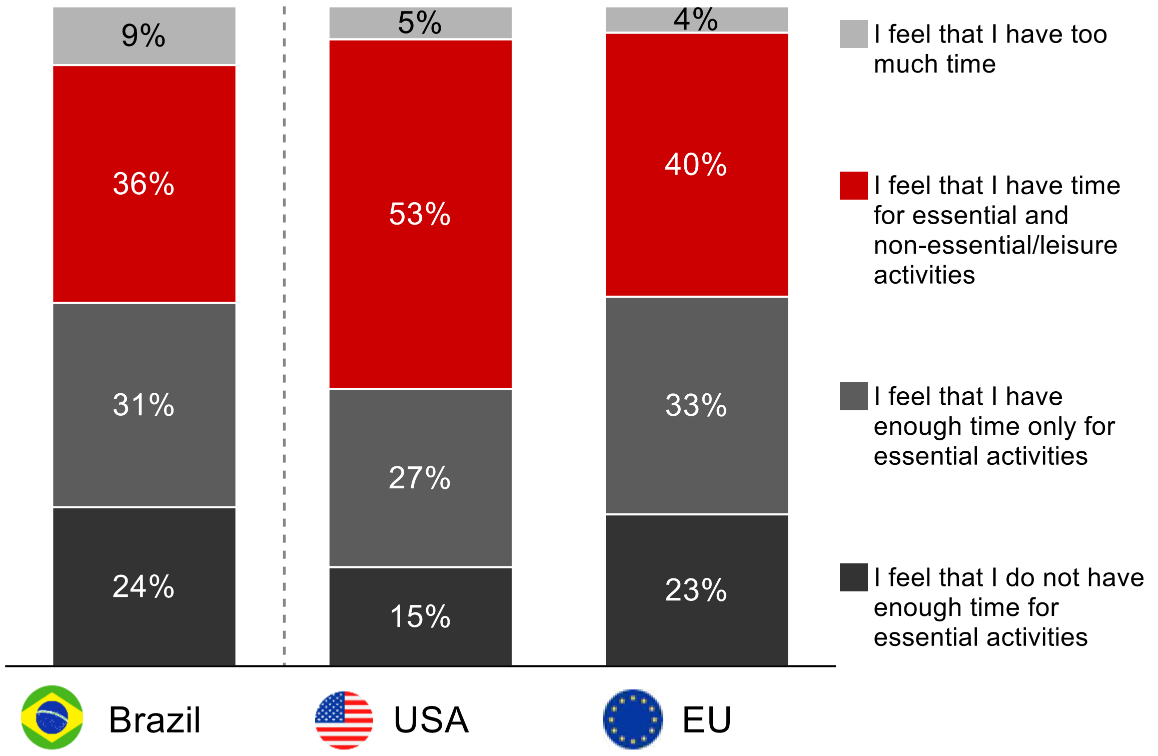
Of the population uses social media

9h

Average screen time per day of Brazilians

Brazilians declare they don't have time for their favorite leisure activities

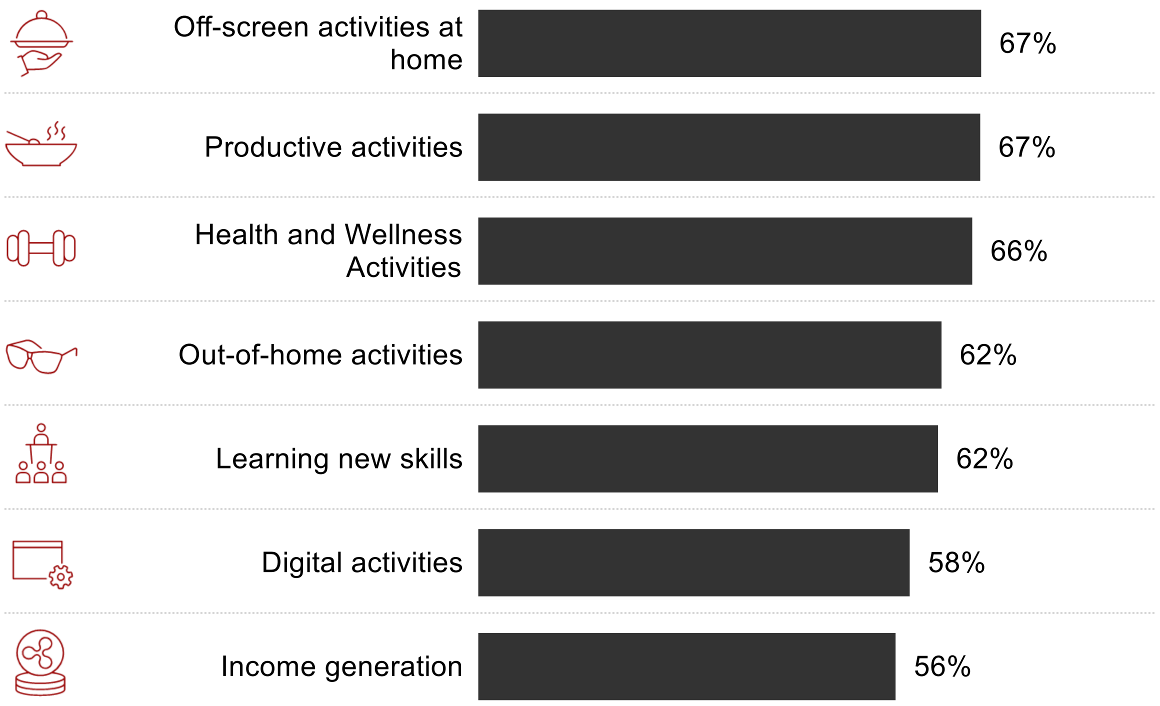
Consumer sentiment about their time
% respondents, Nov '23, EU, Sep '23; US, Sep '23



Q: During a typical week of the year, select which of the following statements best describes how you feel about your time

They declare to don't have time for off-screen, productive activities and health and well-being

Relative importance of activities enjoyed by consumers in their leisure time



Q: Considering the options below, what do you like to do the most in your spare time?

Convenience and Personalization have become a key point in consumer purchases

When asked about the top reasons to shop with a women's fashion retailer
% respondents

21% of respondents say they "have the most convenient location(s)"

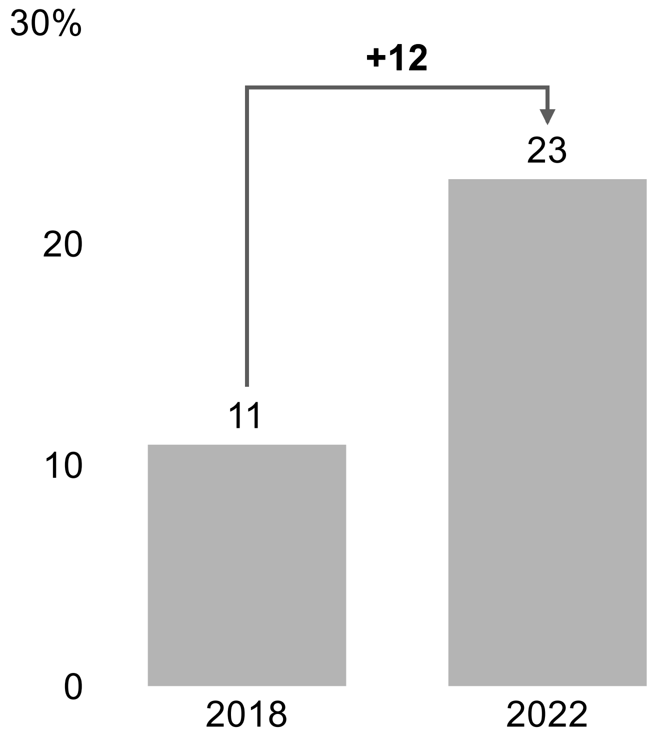
18% of respondents say "it is the easiest store to shop in"

17% of respondents say "it's a unique app"

16% of respondents say “they have a website/app that makes it easy to buy products"

12% of respondents say "It allows customers to shop quickly and leave with ease"

“Best Exchange Policy" as KPC
% Interviewed



Increased demand for convenience and personalization have implications for the physical store

Frictionless and personalized journey

Personalization and curation of the product journey and discovery, with the convenience **of the hybrid sales model**

- Store as a **critical touchpoint in the customer journey**
- Maximizing stock availability / **minimizing friction**

TESCO

Checkout-free GetGo in a hybrid format (store operates both with and without checkout), shortening the shopping trip;

In addition, the chain has started personalizing prices through Clubcard ("Your Clubcard Prices")

Carrefour Flash 10/10 ("10 seconds to shop and 10 seconds to pay") features a shopping journey that does not involve having to scan any products and payment that is almost instantaneous"

Freshippo's - Food is prepared and kept warm in lockers, costumer can scan the QR code in the app and pick up and go

Evolving spaces

As consumer habits continue to evolve, retailers are adapting their **operations and strategies to meet new demands**

Supermarket pick-up at subway and commuter train stations (TTC/GO Transit) with dedicated lockers or kiosks

Endless virtual aisles allow customers to browse, research, and purchase products online and offline

Without leaving home

Virtual grocery stores are delivering **fast and high-quality solutions** to customers' needs

iFood offers a quick market shopping option in certain regions, with delivery occurring within 15 to 60 minutes

Pão de Açúcar integrated e-commerce channel offering express delivery (within up to 2 hours same-day), scheduled delivery, or click-and-collect - entirely via WhatsApp

Pão de Açúcar

Convenience and hyper-personalization will be the rule rather than the exception

? QUESTIONS RETAILERS SHOULD ASK THEMSELVES NOW

Are we able to identify our customers and know their preferences in the different channels?

Do we have the right infrastructure and data to power personalization algorithms at scale?

Does our technology enable real-time responses?

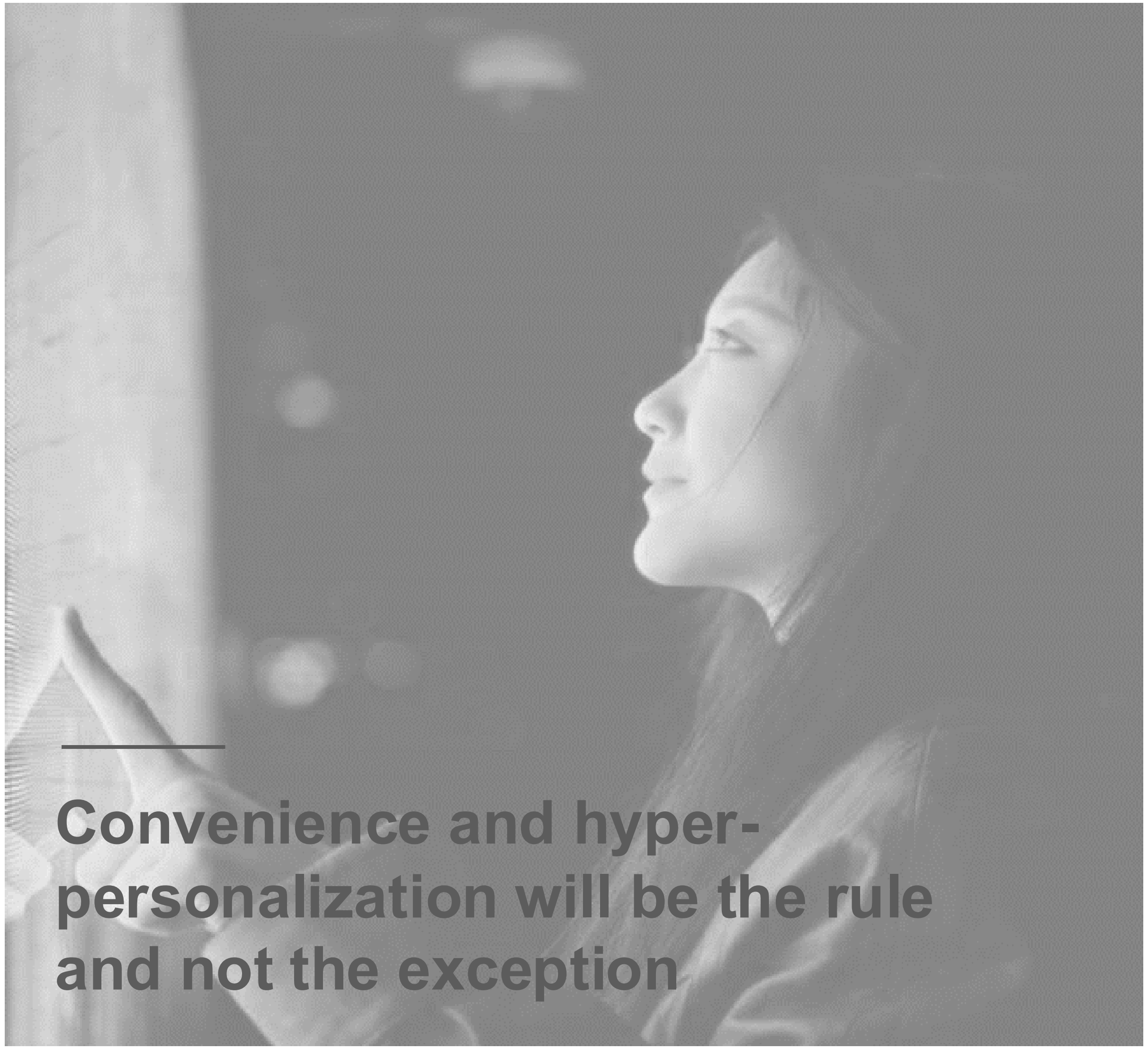
Or do we still operate with a delay in data activation?

Can we use our data as a prediction?

Is personalization ROI measurement standardized?

Are we really improving conversion and loyalty?

In Brazil, these provocations on the Future of Retail are reflected in two ways



New generations of consumers will impact the way brands communicate

Imagine when...

Generation Z and Alpha are +50% of the market, **demanding more transparent, inclusive brands with a tangible** social purpose

User- and influencer-generated content completely replace traditional campaigns, with a high focus on content transmission through social networks

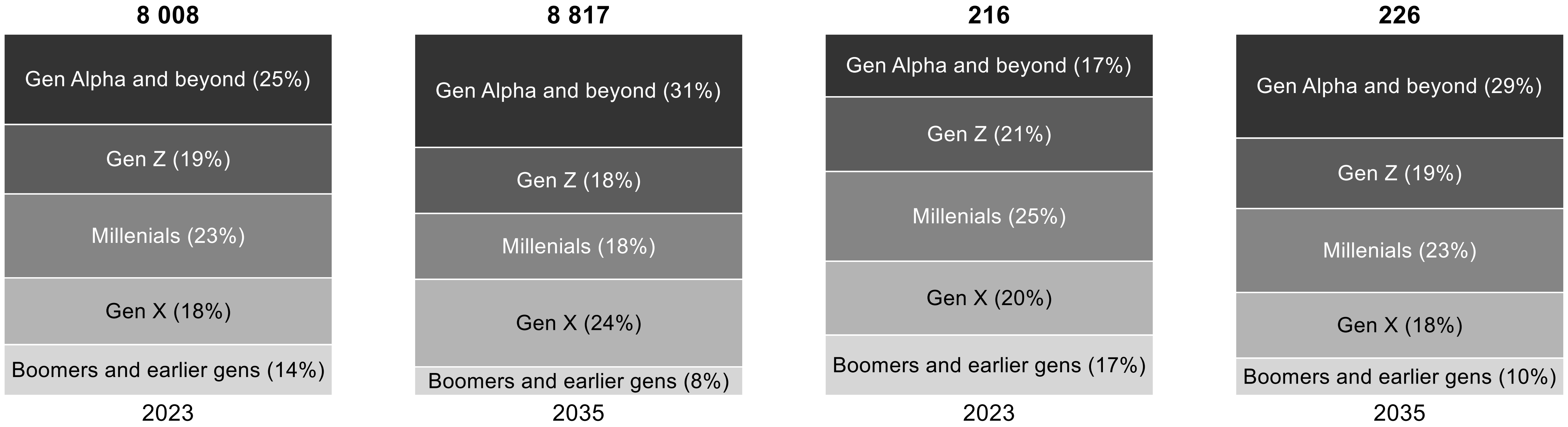
The **language and aesthetics of brands need to be constantly** updated to reflect cultural trends

Brands act **as platforms and** communities, not just product providers

Population will follow the global trend of aging; Gen Z and Gen Alpha will account for ~50% consumption in 2035

Global | **Brazil**

Generation (Millions of people)

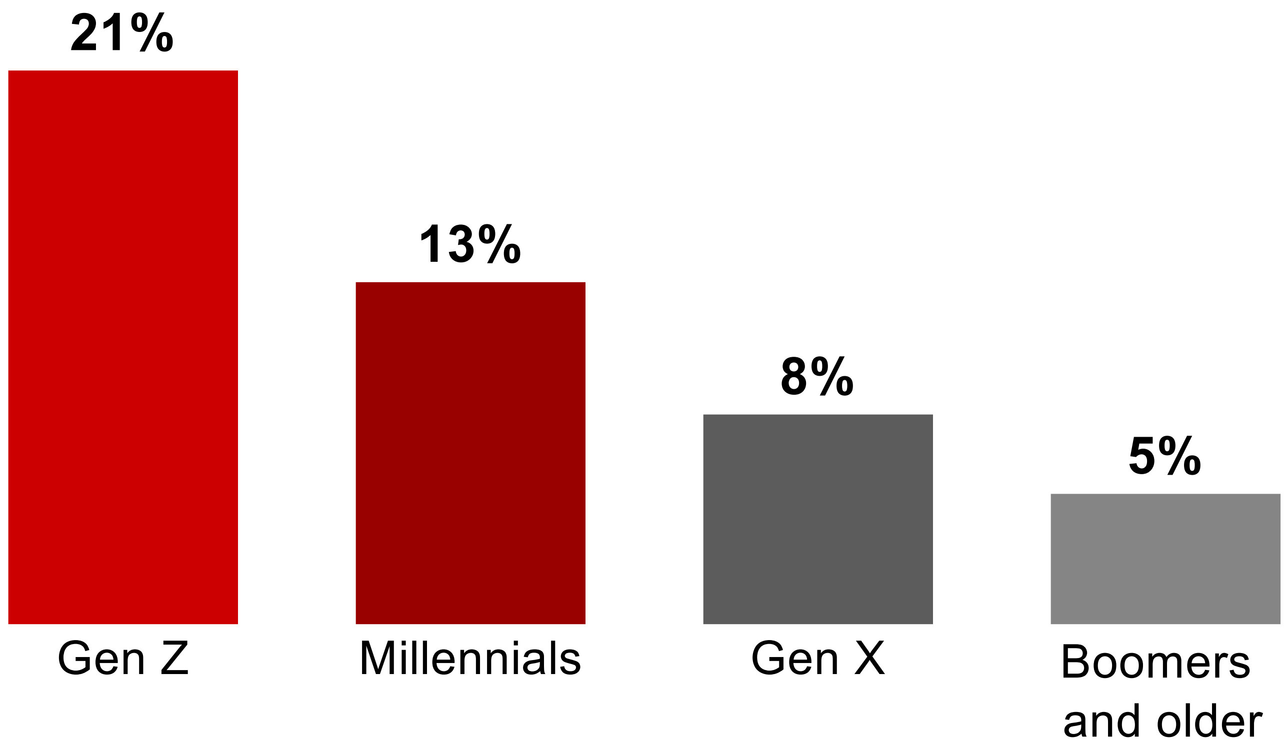


Macroeconomic trends fuel increased consumption and consumer profile will change drastically

Source: Banco Central (Brazil), IBGE (Instituto Brasileiro de Geografia e Estatística, Bain Data, World Bank Group

Younger generations are more likely to watch videos online and on social media to discover products

% of respondents who watched online videos about their purchases



Personalization of consumption

~500k

Brazilian influencers on Instagram with more than 10k followers

Decentralization of content production meets individual mix demand per consumer

Retailers must establish a presence in social media and live shopping, because these are becoming key shopping channels.

Social media shopping		Live Shopping
36%	of consumers have already made purchases through this channel	22%
38%	of consumers who have not tried this channel say they are likely to do so in the next 2 years	50%

Consumers are already shopping via social media and online streaming today

Market and users come together according to new formats of Media emerge

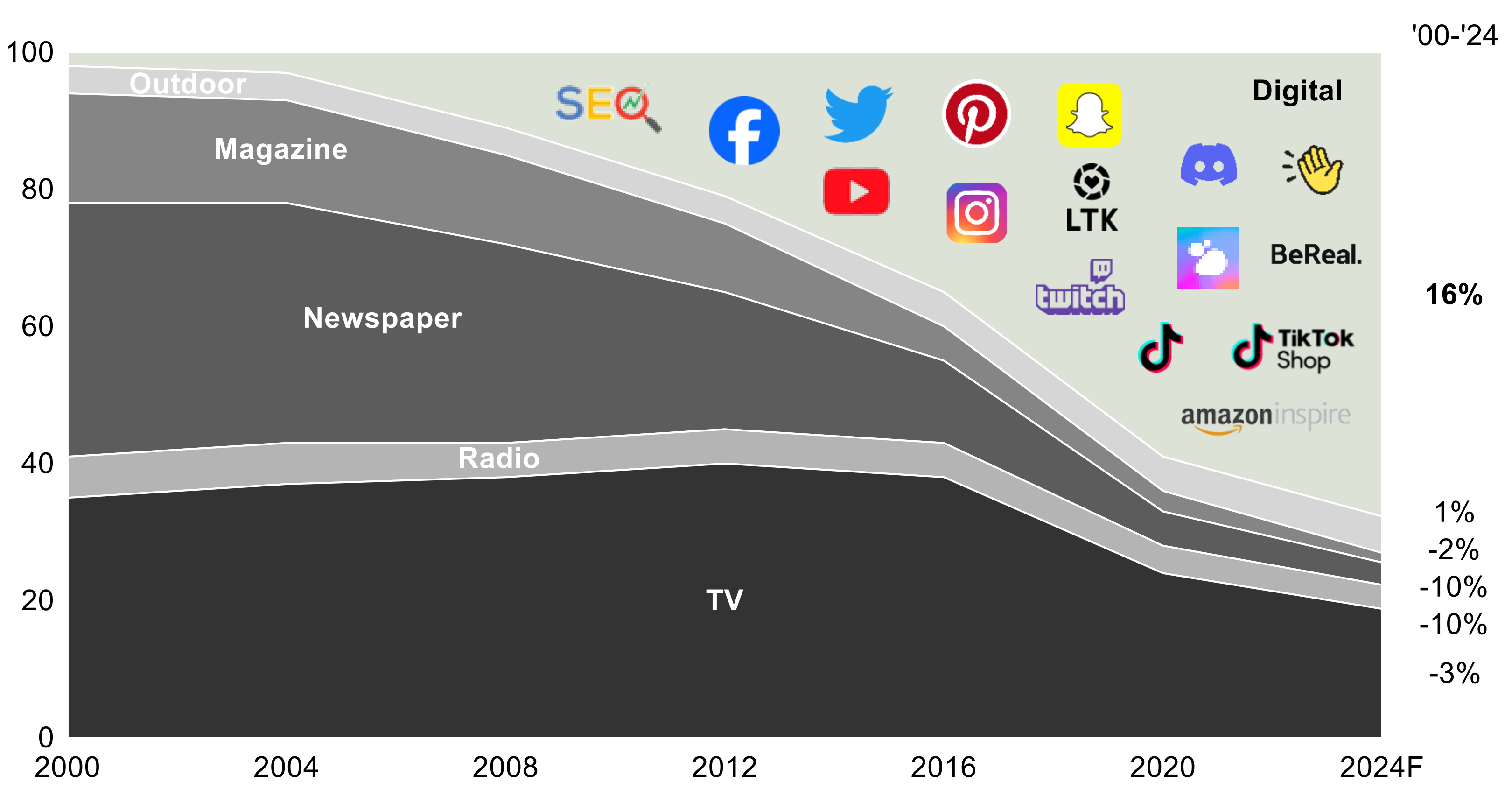
R$35 bi

Digital Advertising Investment (2023)

82 million **and 113 million Brazilian** users on Instagram and TikTok (2023)

Brazilians spend, on average, 3h37 a day on social networks

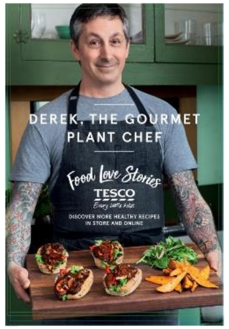
Global media spending share by network/media (%)



Different movements seek to bring brands closer to the "new consumer"

Partnerships with creators

Collabs **allow creators to participate** in creative decision-making

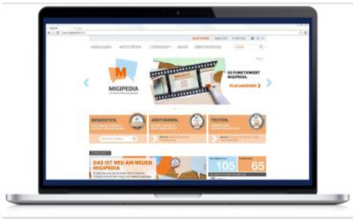


TESCO

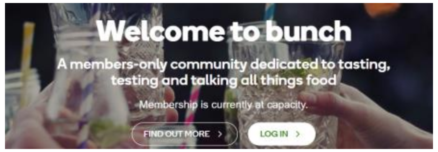
Tesco × Derek Sarno (Wicked Kitchen) - Chef-creator Derek Sarno served as Tesco’s Director of Plant-Based Innovation **and co-created the Wicked Kitchen and Plant Chef product lines** (flavors, recipes, and packaging), **launched as exclusive offerings of the retailer**

Community Creation

Building a sense of community around the brand with collaboration by consumers



Migros - Community platform where **customers suggest ideas, test, and vote** to decide the flavors/limited editions that reach the shelves



Woolworths - **Product tasting & testing community focused on food**; enrollment in waves

Promote experiences

Experiences that allow **consumers to identify with the brand** and feel part of a community

Woolworths - **Shoppers collect seedling kits** to grow herbs/veggies at home

Eataly - **Cooking schools and guided market tours inside the store**

EATALY

Design for everyone

Products and assortments that recognize the **diversity of consumers**

Walmart

Walmart - **Dedicated Halal and Kosher assortments** alongside a Supplier Inclusion program to expand access for small and diverse suppliers

REWE - REWE frei von private-label line for gluten-free and lactose-free shoppers, **making allergen-aware choices easy**

This next era of Retail Excellence demands bold strategic choices

Act now to embrace AI across your value chain and radically change your economics

Invest to personalize & protect your consumer relationships, and defend against disintermediation

Stay competitive on price and deepen your customer value moats

Scale exclusive assortments and accelerate Beyond Trade

Reset and reimagine store and supply networks overtime

Build global scale to accelerate resilience

Thank you!