



HARVARD
BUSINESS SCHOOL

The Future of Food Retailing

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Outline of the Presentation

- The Amazon Effect – Why is it hard to compete ?
- Consumer Expectations Shaping Retailing
- How can Supermarkets/Grocers Compete Effectively
- Technology can Change the Consumer Experience

Good News: Bricks and Clicks Doing Well

- Most Retailers are reaping the benefits of these changes:
 - Williams-Sonoma – Direct sales account for more than 52% of \$5.3 billion in total sales in 2017
 - Dick's Sporting Goods Internet sales of \$940 mil. grew by 26% in 2016
 - Staples Internet sales are 45% out of \$18 billion in revenues in 2017
 - Macy's Internet Sales are estimated to be \$5.4 billion of \$24 billion in 2017
 - Nordstrom online sales 26% of total in 2017- could be 50%

Bad news: News in the World of Retailing

- **Macy's** closing 15% of locations – 100 out of 730 stores
- **Sears** and **Kmart** – Closing 150 out of 1500 stores
- **JC Penny** – Closing 140 out of 1000 stores
- **Staples** – Closed 125 stores in 2015/2016
- **Walmart** – 150 + all express stores
- **Limited Brands** – All stores

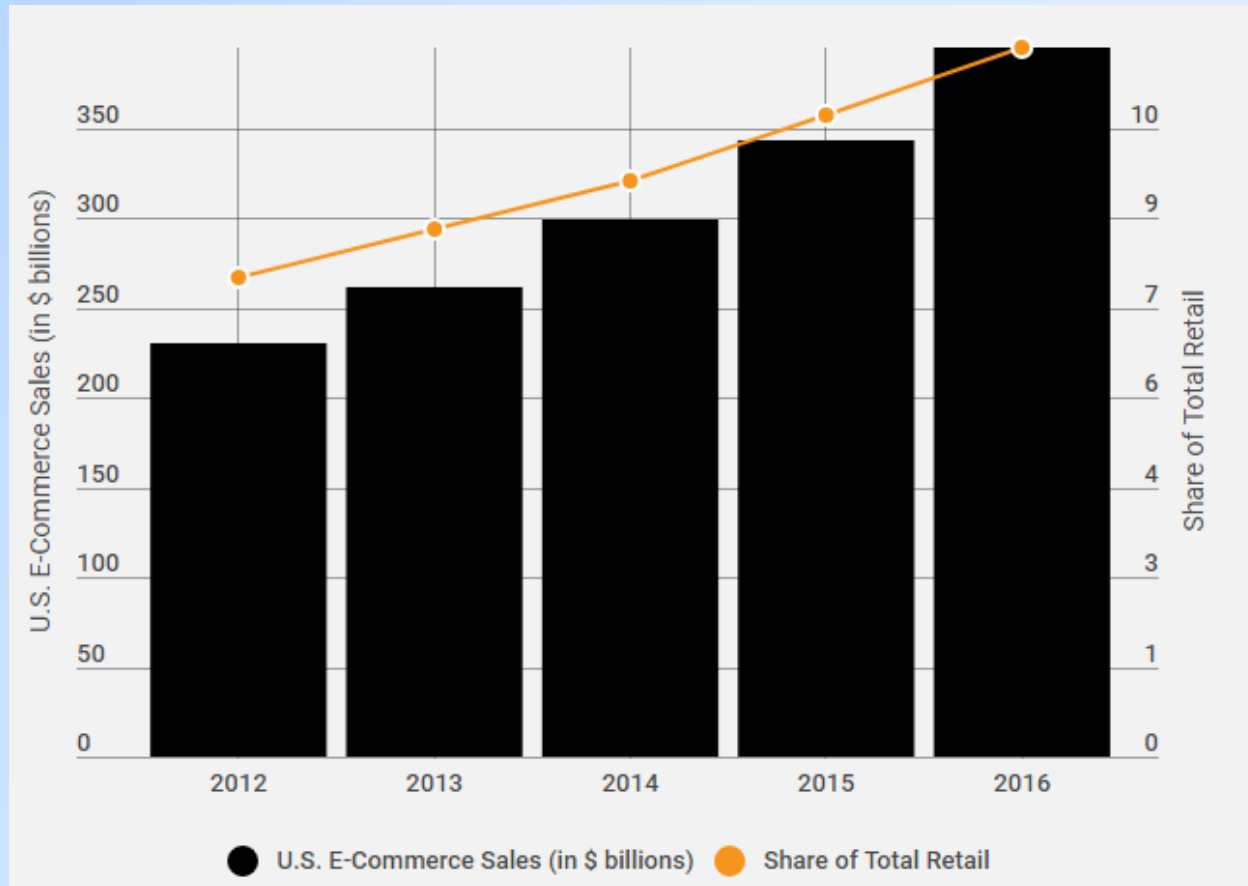
The Amazon Effect

- Consensus: Amazon is Killing Bricks & Mortar Retail

Consensus: The Amazon Effect

- Amazon takes \$4 of every \$10 spent on line
- 80% of online growth comes from Amazon
- 100 million Prime Members – 60% of US households
 - major benefit: free 2 day shipping

U.S. E-Commerce Sales & The Web's Share of Total Retail 2012-2016



Source: Internet Retailer analysis of U.S. Commerce Department figures that factors out the sales of goods not normally purchased online; cited in Zaroban, Stefany, "U.S. e-commerce sales grow 15.6% in 2016," *Digital Commerce 360*.

How Big is the Amazon Effect?

- Internet Sales in 2017 were \$453 billion;
- Amazon Retail Sales in US \$106 billion
- 2017 Retail Sales in US (excl auto) were \$4.6 trillion
- Amazon is 2.5% of Total Retail Sales and 22% of Internet Sales in 2017

Amazon Sales

- Amazon typically sells less volume in every category than the corresponding leading Brick-and-Mortar Retailer

Amazon Sales	Best Buy Sales
\$8.5 billion	\$42 billion

Amazon Effect?

- If Amazon is 2.5% of all Retail and 22 % of Internet Sales

And

- Category Killers like Best Buy have scale advantage
- Why is it hard to compete with Amazon?

The Threat from Amazon

Amazon

- No longer just an Internet Retailer, but...
- A platform that facilitates eCommerce transactions by providing both demand generation and fulfillment services to millions of suppliers
- Retailers are now competing with millions of suppliers

Amazon's Value Proposition as eCommerce Destination

PROMISE (What)	HOW
Low Prices	Efficient Retail Model
Fast Delivery	Investment in DCs
Wide Assortment	Marketplace
Ease of Shopping	Technology
Better Customer Service	Economies of Scale & Scope

Why Hard to Compete with Amazon?

1. Amazon is often “First Point of Consideration of Online Search”

- Invested in:
 - Search
 - Personalization
 - Recommendation
 - Ease of Ordering
 - Product Information

Why Hard to Compete with Amazon?

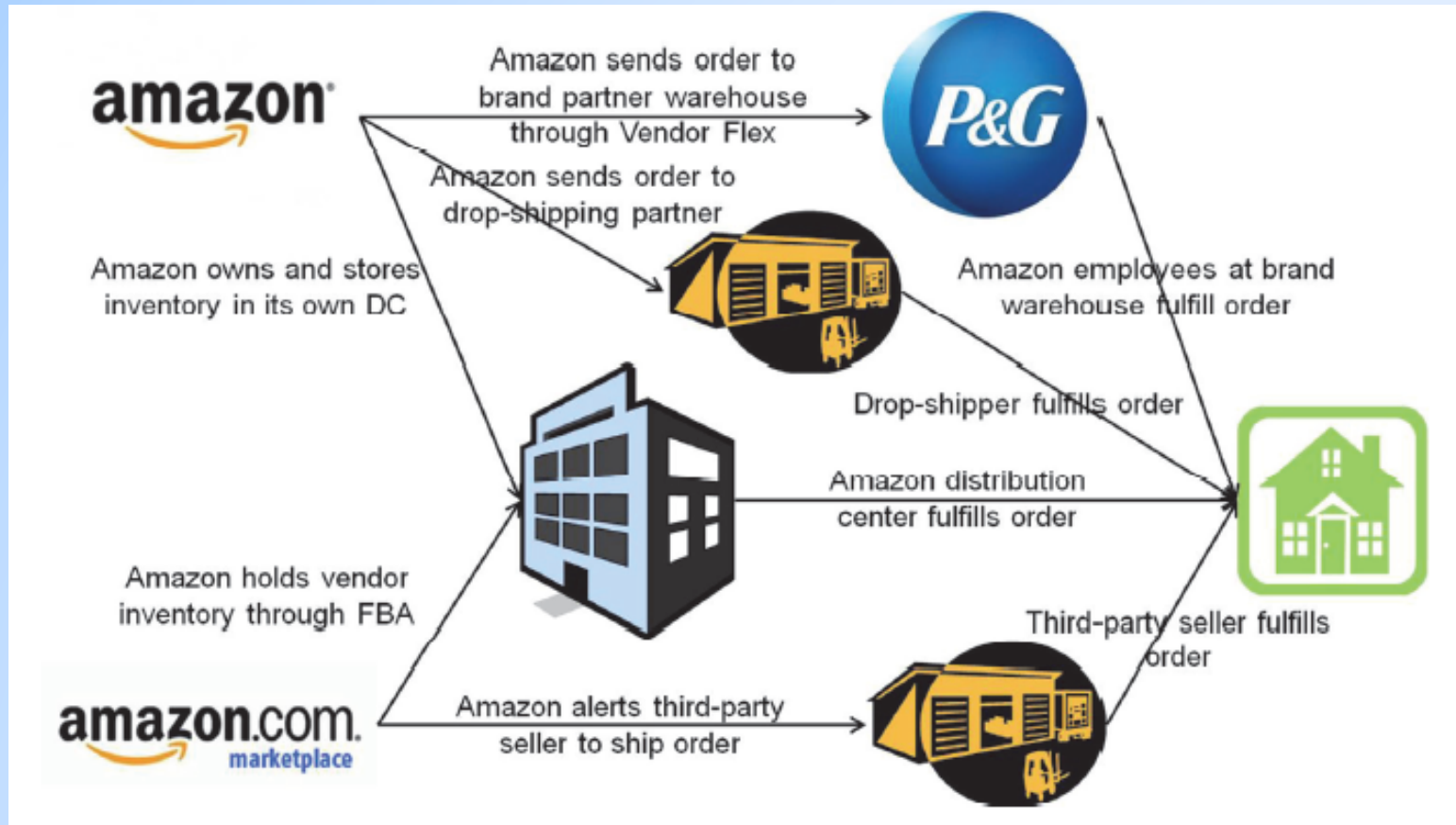
2. Amazon Marketplace

- 238 million items available
- Lowest price due to competition between third-party providers
- > 3 million third-party providers are responsible for 50% of unit sales
- Revenue from Services to Third Party - \$23 billion
 - Fulfillment by Amazon
 - Vendor Flex Program with companies like Proctor & Gamble
(fulfillment located inside Proctor & Gamble warehouses)
- Brands that don't want to sell directly to Amazon often find their products sold on Amazon through third-parties

Why Hard to Compete with Amazon?

3. Amazon's > 80 fulfillment centers drive down:
- Shipping costs
 - Delivery times
 - Most Brick-and-Mortar Retailers have only one, two, or a handful of distribution centers (DCs)
 - Walmart has 130 DCs across U.S. but only 10 dedicated to eCommerce
 - Amazon Supply Centers – also very flexible

Why Hard to Compete with Amazon?

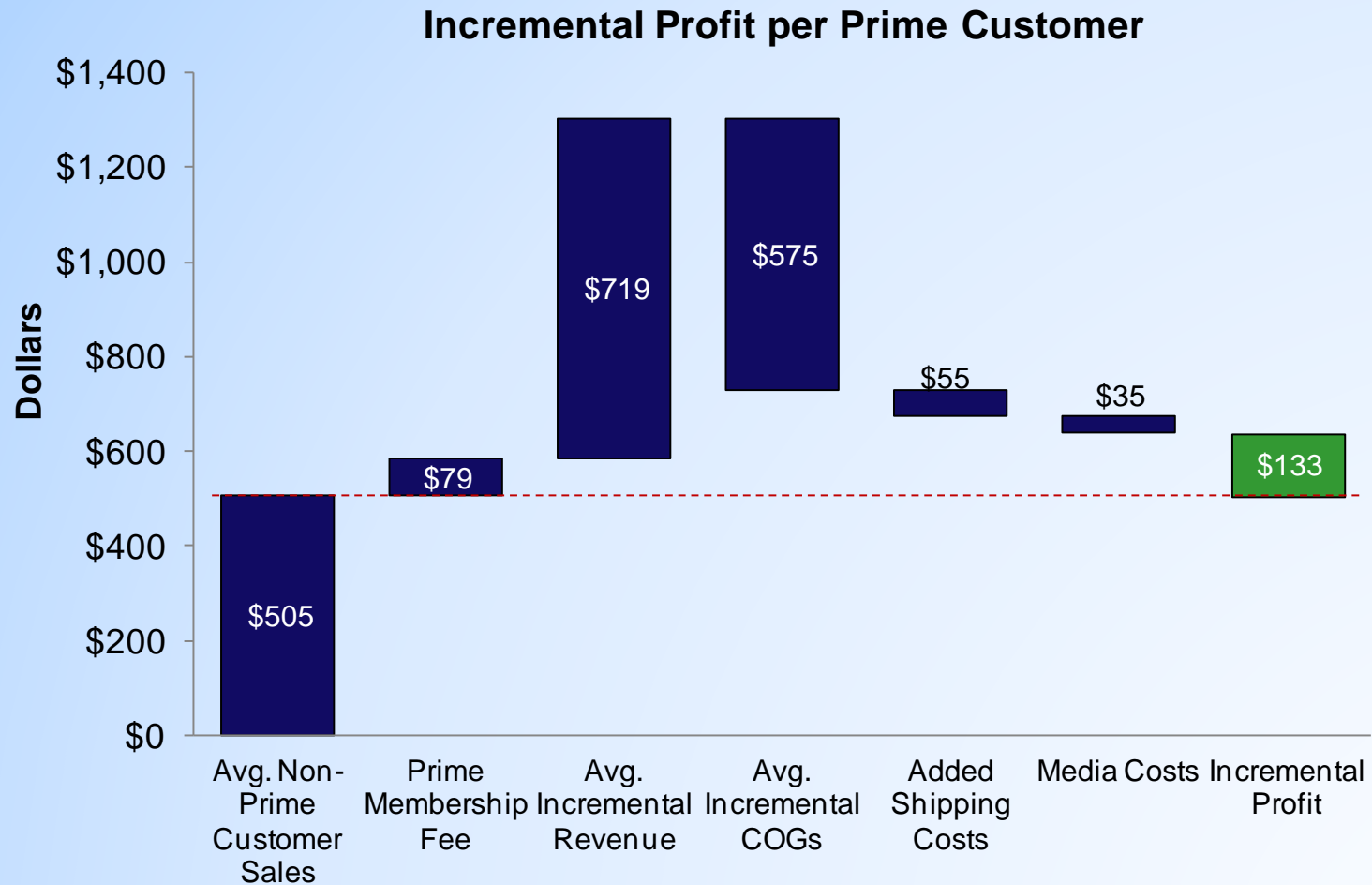


Why Hard to Compete with Amazon?

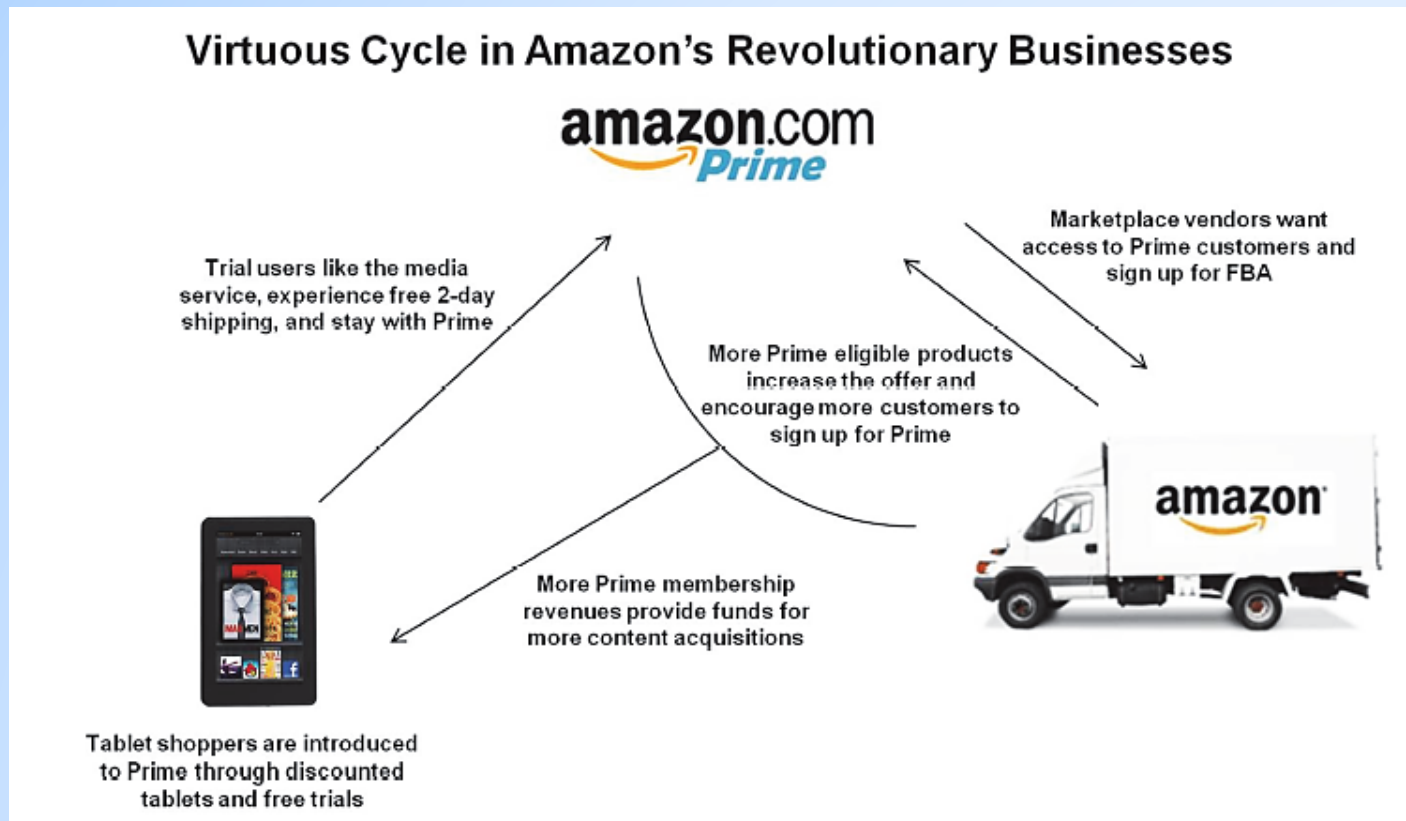
4. Amazon Prime

- Cost = \$119
- Two-day free shipping
- Netflix style service for movies and TV shows
- Free book rentals from the Kindle Store
- From 4 million in 2011 to 100 million 2017

Prime Customers very Profitable



Why Hard to Compete with Amazon?



Is Amazon Profitable?

	2013	2014	2015	2016	2017
Net Sales	\$74,452	\$88,988	\$107,006	\$135,987	\$177,866
Operating income	\$745	\$178	\$2,233	\$4,186	\$4,106
Net income (loss)	\$274	\$(241)	\$596	\$2,371	\$3,033
Net cash provided by (used in) operating activities	\$5,475	\$6,842	\$11,920	\$16,443	\$18,434
Total assets	\$40,159	\$54,505	\$64,747	\$83,402	\$131,310
Total long-term obligations	\$7,433	\$15,675	\$17,476	\$20,301	\$45,718

Note: (\$ in millions)

Why Hard to Compete with Amazon?

5. Has a history of innovation and experimentation

- Never stops innovating and experimenting
- Amazon Go
- Amazon Drone Delivery
- Whole Foods

The Threat of eCommerce: Serious

- Retail Profitability= Gross Margins \times Basket Size \times Shopping Frequency
 - Gross margins decreasing because of price competition
 - Basket Size and Shopping Frequency also decreasing because of convenience of home delivery and targeted shopping

The Threat of eCommerce: Serious

- Analyzed the P&L of many retailers including JCPenny, Toys R Us, Staples, Barnes and Nobles, Wal-Mart, Best Buy, Costco, Home Depot, Bed Bath and Beyond etc.
- Find that many retailers will be unable to meet a hurdle rate of 10% ROIC if gross margins decline by 1%-3% or sales decline by 5-10%

Conclusion: Amazon Effect

- The Internet only formats are doing to the Category Killers what Category Killers did to the mass-merchants
- Just like the Category killers- highly focused retailers killed mass-merchandisers due to their wide and deep assortment, large stores, extensive network, deep expertise and sharp pricing, Internet only retailers are competing on the same attributes and doing an even better job than Category Killers

Much Debate about The Threat

- The Scale of the threat
- Which Retailers are at greatest Risk and Why?
- What are the best Responses available to Bricks and Mortar Retailers

Supermarkets

- Grocery is a \$700 billion business in US
- On line sales are between 2-3%
- Yet, Supermarkets are hardly thriving

Why?

Supermarkets: Today's Picture

5Y Stock Price, Kroger



5Y Stock Price, SuperValu



Supermarkets: Major Consumer Trends

- Income
 - Average Declining – Wages Stagnant
 - Middle Class Shrinking
 - Income of Bottom 60% of U.S. Pop. Has Not Recovered to Level of 2007
- Emphasis On Health & Nutrition
 - Obesity Epidemic in U.S.
 - % of Obese Persons by 2020
 - % of Obese Children by 2020
- Technology/Information
 - In Store
 - Communication (Mobile)
 - Apps
 - Supply Chain

Supermarkets: Consumption Patterns

- 48% replace meals with snacks at least 3.4 times/week
- 90% consumers snack multiple times throughout the day
- 49% dinners are decided in about an hour or less before mealtime
- Acquisition of dinner items is planned ahead, desire and consumption decisions are made in the moment – what do we want to eat for dinner?
- Customers often struggle for ideas for mealtime
- Millennials eat home cooked dinners 4.3 times/week vs. 5.4 times/week for Gen X

Supermarkets: Consumption Patterns

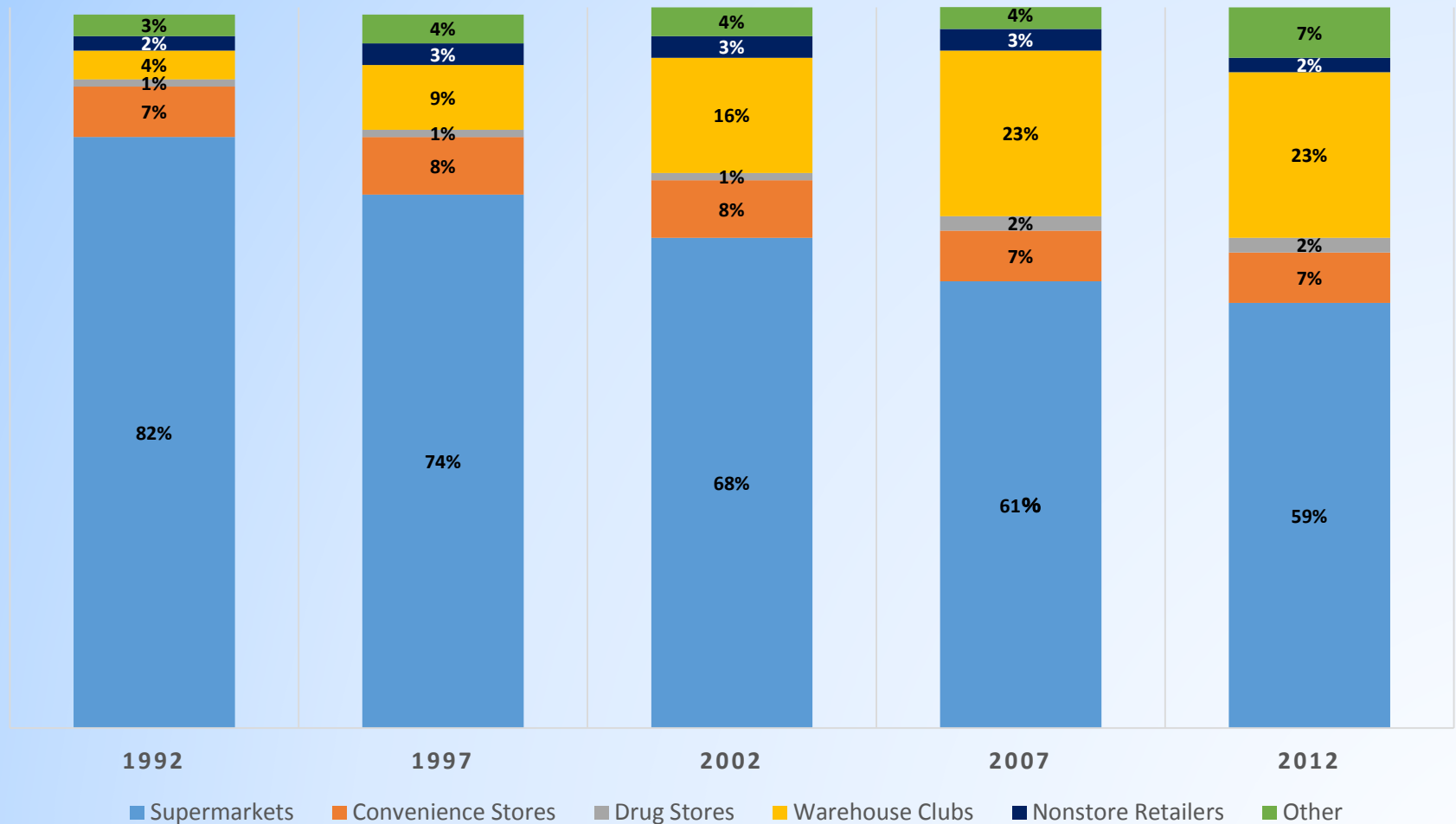
- Time, energy, and cooking knowledge are increasingly in short supply
- In 2015, Americans spent more money on food away from home
- Millennials outnumber Baby Boomers
- Healthy, convenient meal solutions are growing

Supermarkets: More Consumer Trends

- Ease of Preparation
- Convenience in Getting Food
 - Rising Expectation Because of Tech.
 - Big Stores Not Convenient
- Emphasis on Value
- The Weekly Shopping Trip
 - Fill in to Supermarket?
 - For Some Consumers – Unbundling of the Shopping Basket
- Supermarkets Becoming More of Convenient Locations Rather Than Destination

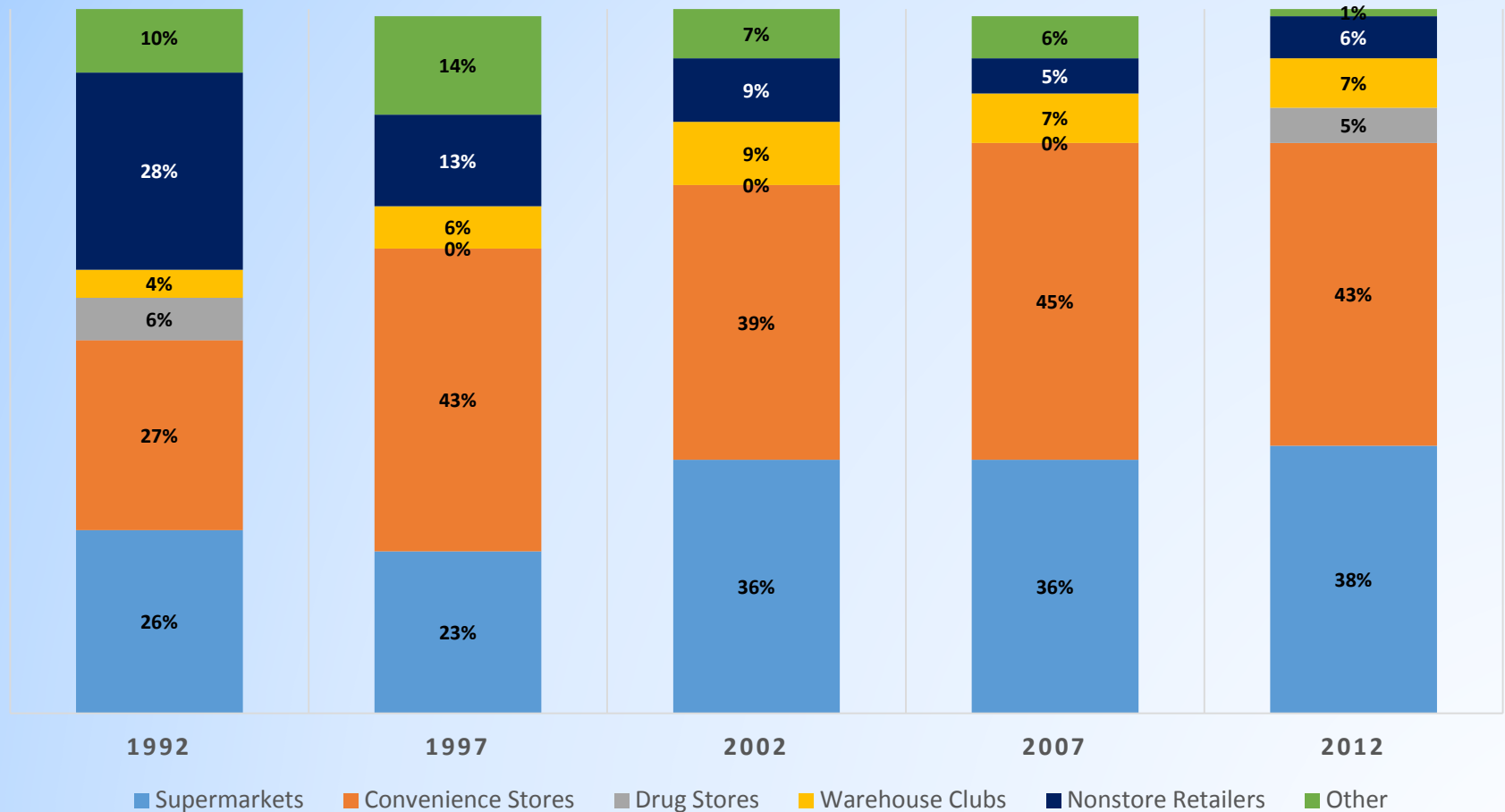
Supermarkets

Grocery (Produce, Meats, Cereals, etc.) - Sales by Store Category



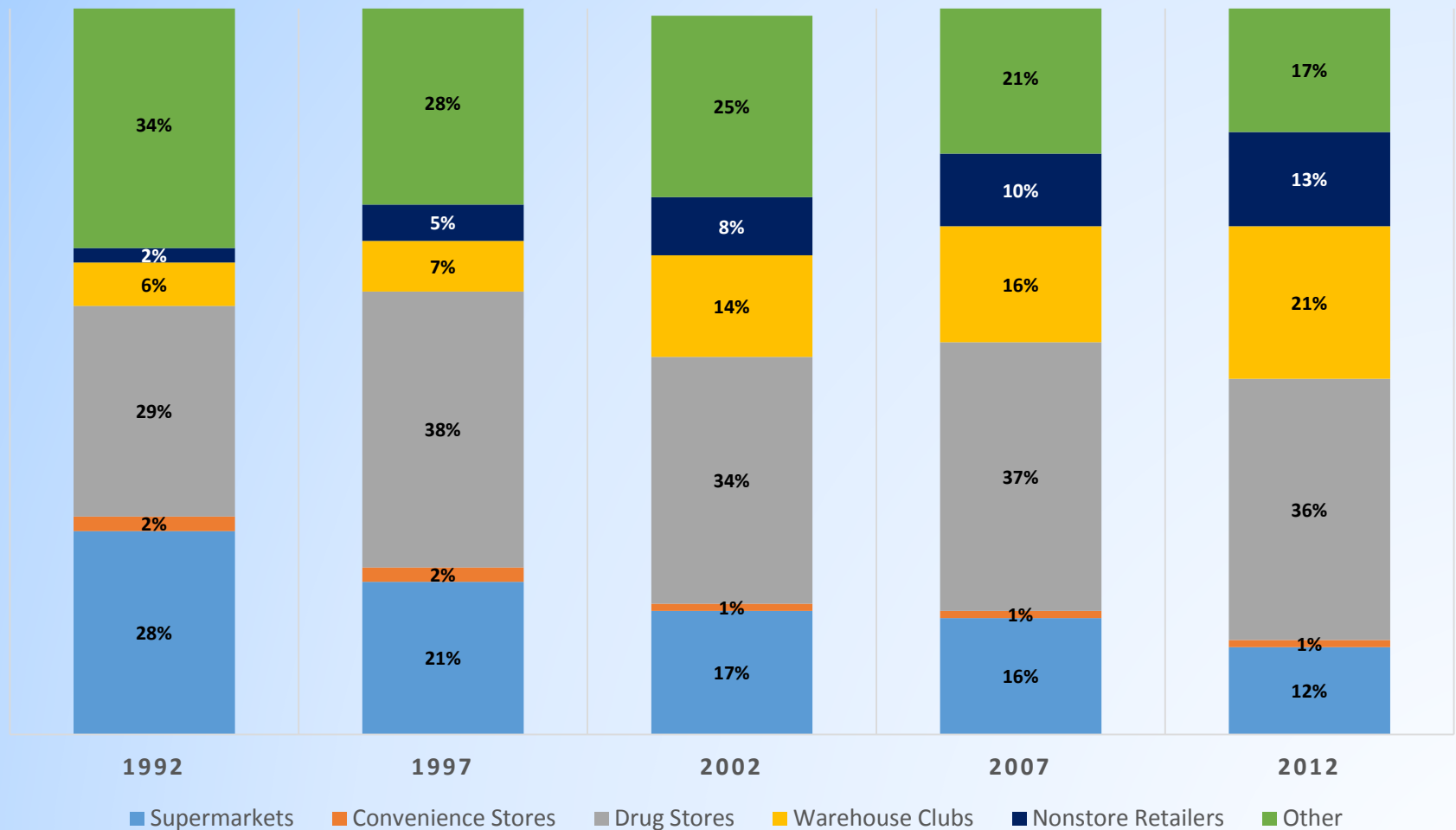
Supermarkets

Meals (Meals, Snacks, Sandwiches, and Non-alcs for Immediate Consumption, No Frozen Meals) - Sales by Store Category



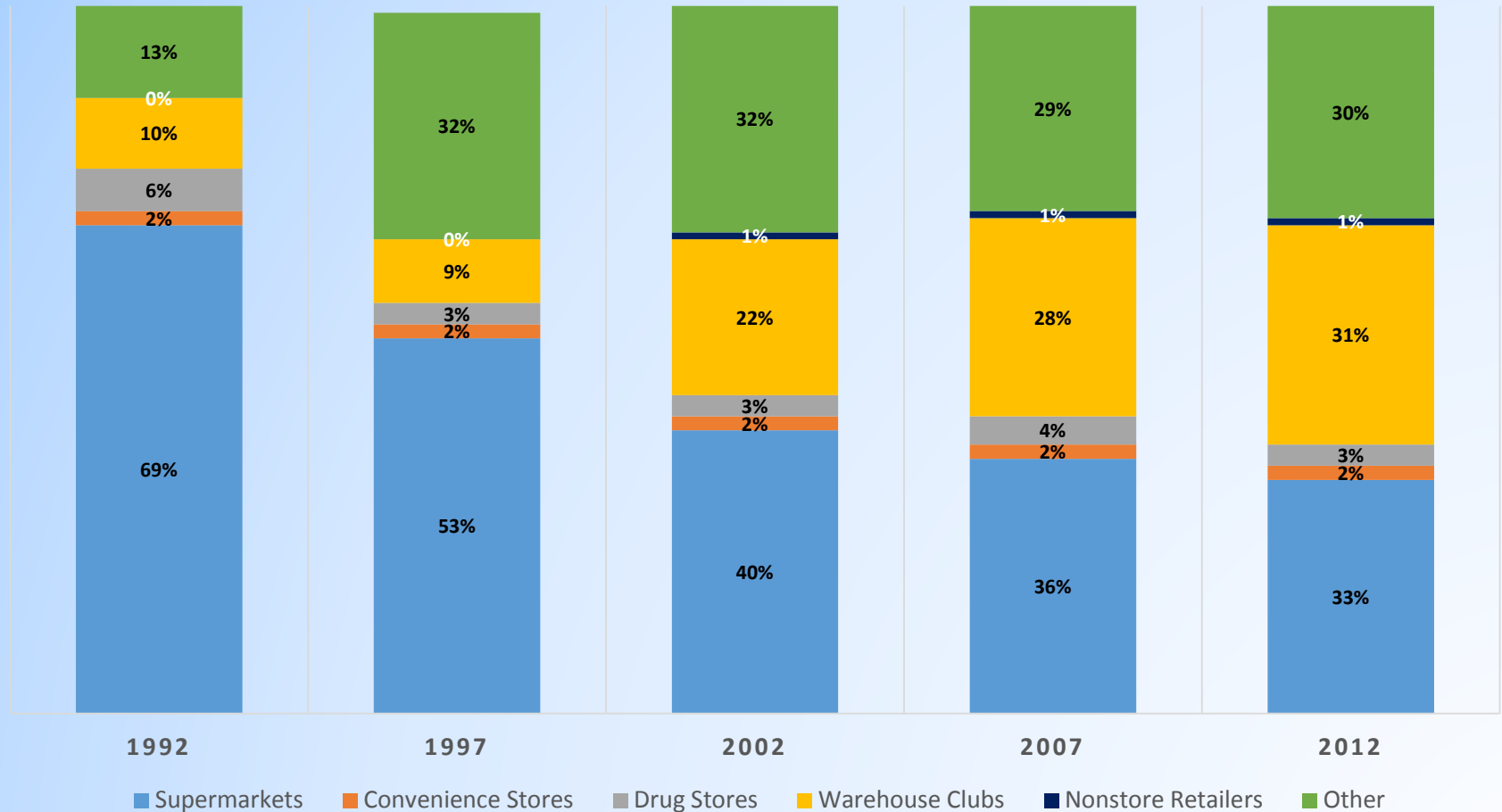
Supermarkets

Health and Beauty Care - Sales by Store Category



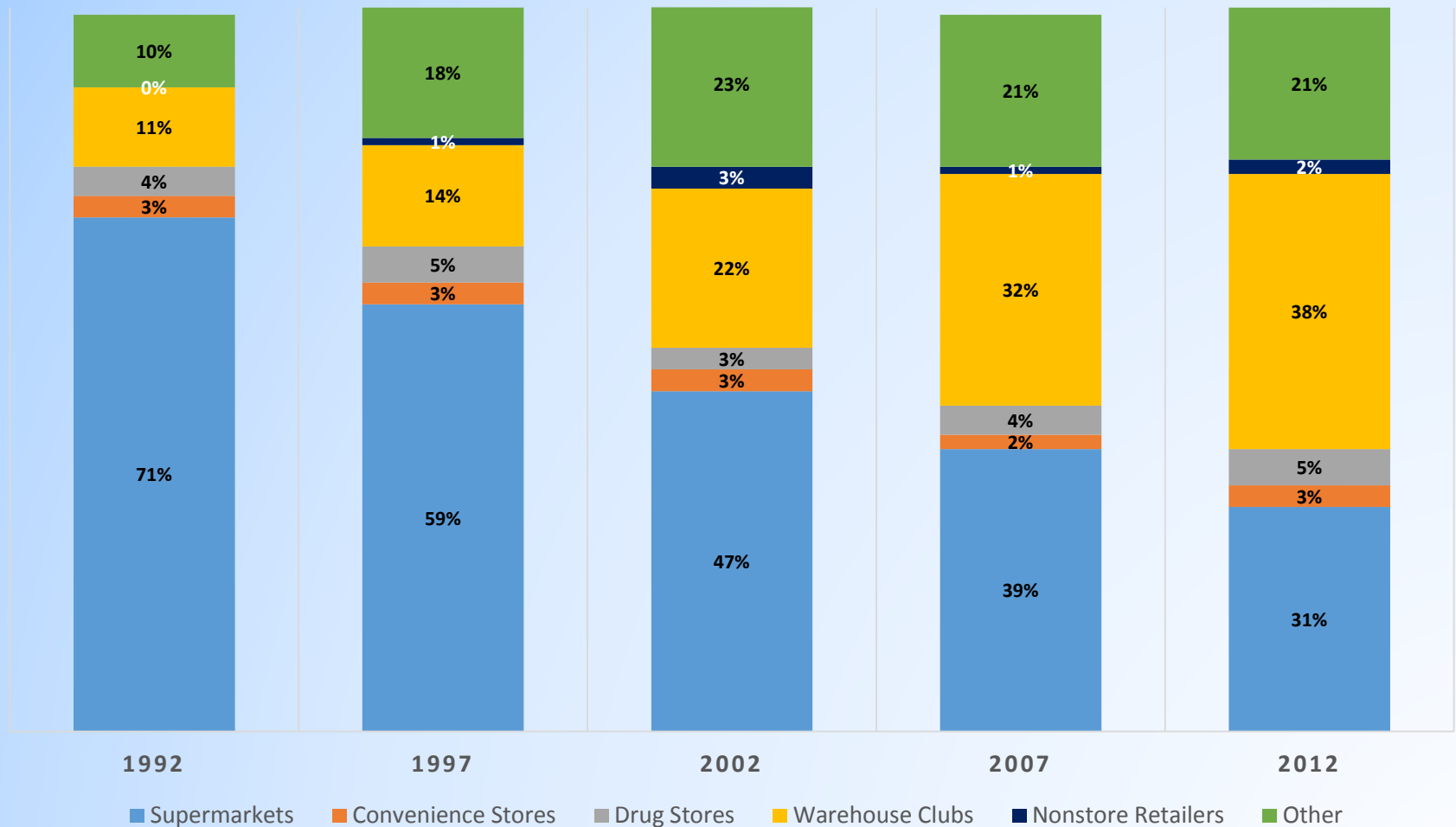
Supermarkets

Cleaners (Soaps, Detergents, and Household Cleaners) - Sales by Store Category



Supermarkets

Paper Products - Sales by Store Category

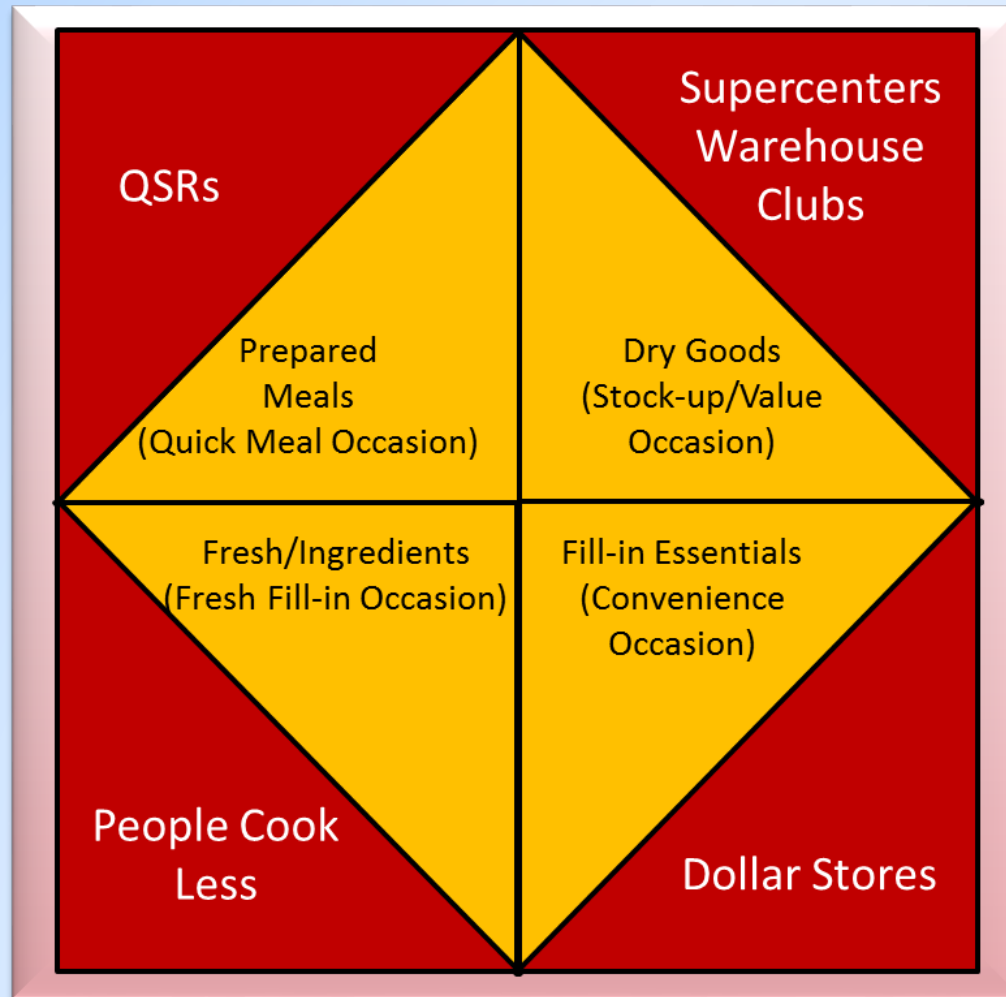


Supermarkets & Competitors



Supermarket Business Declining

The Supermarket and Its Competitors



Future of Supermarkets

America's Retailers Have a New Target Consumer: The New 26-year old Millennial

This age bracket, bigger than any other, is pushing companies to revamp marketing and products, including a lot of remedial education – WSJ, Oct 9, 2017

The Millennials: A Different Breed

- Digital natives/Tech savvy- mobile as preferred platform
- Use technology for showrooming, downloading coupons, search for product information and need a compelling reason to leave their homes
- Use word of mouth and social networks as influencers
- Well off will pay for speed but otherwise price sensitive
- More interested in sharing economy, have lower incomes, lack of desire for possessions and delayed life events

The Millennials: A Different Breed

Looking for Shopping Experience that is..

Easy

Convenient

Speedy

Hassle Free

Helpful (expertise)

Seamless

Future of Supermarkets

- Future: Things are likely to get more challenging for supermarkets and grocers
- June 16, 2017: Amazon buys Whole Foods
- Impact on shares of grocery retailers on June 16:
 - Kroger: -14.5%
 - Supervalu: -17.0%
 - Costco: -7.0%
 - Target: -10.0%
 - Walmart: -7.0%
- Why?

Future of Supermarkets

- Amazon launched Amazon Fresh in 2007
 - In 2017, only in seven U.S. cities
 - Fresh and last mile home delivery – Not easy
- With Whole Foods, Amazon solves both problems
 - Whole Foods stores can be remodeled for shopping, pickup, and home delivery
 - 470 stores serving 30 million well-off shoppers

Future of Supermarkets

- In addition, Amazon has acquired Ring, a maker of video doorbells, expanding its reach into home security
 - Amazon has shown interest in developing its logistics/delivery capabilities
- With the introduction of driverless cars, the economics of home delivery will change dramatically
 - Imagine: Amazon driverless vans delivering groceries to your garage before 7:00am
 - Impact: Ocado in U.K. already has 10% share in London

Future of Supermarkets

**Online Grocery Sales To Reach \$100 Billion In 2025;
Amazon Is Current And Future Leader**



Supermarkets: Today's Picture

- Given The Latest Trends - We Believe That
Supermarkets Have Reached The End of Adjustments
And Need Reinvention

Options for Supermarkets

- REINVENT
- OUTRUN/OUTCOMPETE OTHER SUPERMARKETS

New Supermarket Model

- Shrink the store to 10,000-15,000 sq.ft
- Retain the periphery of the current store, where you can create an experience
- Fresh, deli, bakery, seafood, prepared meals, etc.
- Take out dry groceries and put in the parking lot or Deliver
- Consumers order online, enjoy the shopping and pick up dry groceries on their way out

New Supermarket Model

- Outcompete Other Supermarkets:
 - Soft discount format
 - Focus on lowering costs to compete with the internet operators
 - If cannot get out of leases:
 - lease to other businesses that will generate foot falls

What Can Supermarkets Do?

- You can be like H-E-B: The best grocery store in America
 - Emphasis on fresh produce, fish, and quality meats
 - Great private label selection including low price & organic options
 - Fresh bakery
 - Products aligned with local tastes
 - Great service
 - Options for health issues: allergies, diabetes, obesity, etc.
 - Prices: 2% lower than Walmart
 - Revenues up ~ 30-40% in last 5 years

What Can Walmart Do?

- For long Walmart did not have a significant e-commerce business
- Buying online was not perceived to be popular with Walmart clientele of middle income consumers
- Changed all that over the last 18-24 months with the success of Walmart.com and purchase of Jet.com

What Can Walmart Do?

- Online sales have grown significantly to about \$12 billion
- Walmart now wishes to provide seamless experience to its customers when they shop in-store, online, mobile via store pickup
- Walmart is deploying an intelligent website that helps reduce shipping costs by encouraging customers to build bigger baskets
- The result of these initiatives have been positive but much remains to be done

What Can Walmart Do?

	2013	2014	2015	2016	2017
Total revenues	\$468,651	\$476,294	\$485,651	\$482,130	\$485,873
Increase (decrease) in calendar comp sales in the U.S.	2.4%	(0.5%)	0.5%	0.3%	1.4%
Gross profit margin	24.3%	24.3%	24.3%	24.6%	24.9%
Operating, selling, general and admin expenses, as % of net sales	19.0%	19.3%	19.4%	20.3%	21.2%
Income from continuing operations attributable to Walmart	16,963	15,918	16,182	14,694	13,643
Walmart unit counts (U.S. segment)	4,005	4,203	4,516	4,574	4,672

What Can Walmart Do?

- Walmart stock over the last 6 months



What Can Supermarkets Do?

- Walmart needs to:
 - a. Leverage its extensive store network to make home delivery successful
 - b. Rural households are increasingly shopping online, affecting sales in local Walmart stores
 - c. Respond to the changing income distribution in the U.S.
 - More households are moving into the lower income categories and therefore Walmart faces competition from Dollar Stores

What should Food Retailers Do?

- Supermarkets today are a solution to the problem of 1990s
 - A place to buy ingredients to cook at home
- Need to solve today's problem: A convenient healthy meal that can be prepared in 30-45 mins
- Success of Meal Kits

Innovations That Could Disrupt Groceries

1. Smart Fridge – Samsung Family Hub

- Equipped with monitoring sensors, cameras, and a large LCD display
- Takes pictures of the inside and customers can view the pictures while in the grocery store through an app to see if they are running low on food items
- Future: Automatically order groceries

Innovations That Could Disrupt Groceries

2. Alexa: Order toilet paper, please

- With a simple voice command, Alexa can order items for delivery to your home

3. Amazon DASH button

- Allows you to order products with a push of a button

Innovations That Could Disrupt Groceries

4. Drones for home delivery



Innovations That Could Disrupt Groceries

5. Amazon Go



Innovations That Could Disrupt Groceries

6. Augmented Reality & Virtual Reality



Innovations That Could Disrupt Groceries

6. Augmented Reality & Virtual Reality



Let us now turn to what is possible in
retailing

What is possible in Retailing

- Retailing is on the cusp of Renaissance
- And technology will lead the way

With Technology: Potential to Change the Equation

- Big Question:
 - Technology allows us to ask the question: Shopping for what in a different way?

Supermarkets

- Many Situations: In and out
- Other Occasions: What would you like to eat tonight?
- Many Types of Answers
 - Food Categories (meat, fish, poultry)
 - Dishes (variety of choices in fish)
 - Types of Cuisines (French, Italian, Iranian)
 - Recreate Experiences (restaurants/trips)
 - Flavors and Tastes

Supermarkets

- I believe that with AR/VR and a Digital Assistant, we can explore these questions
- As we become comfortable with making seemingly risky choices
 - Learn and discover ourselves
- ENTERTAINING, ENGAGING, and ENJOYABLE

What is possible in Retailing

- Live more in the moment
- Experience our senses more intensely
- Shopping can be more Social

ESSENCE: Live more imaginative lives

Thank you!