

Growing Competition in Food and Fresh Produce Markets

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Agenda

- Fresh produce basics
- Comments on branding in fresh produce
- Changing food markets and consumers: Choice and substitution abounds!
- Blueberries
- Conclusions

Fresh Produce Basics

Fresh Produce Marketing Basics

- About 20 retailers estimated to account for over 70% of US total retail food sales.
- Buyer consolidation has led to shipper consolidation - fewer, bigger firms. But most suppliers are still relatively small compared with retailers.
- Retail and foodservice buyers demand yr-round supply.
- Shippers have big investments in facilities, technology, seed trials, research to improve efficiency, sustainability, precision farming.

Fresh Produce Marketing Basics

- Imports increasingly handled by U.S. grower-shippers that import during the off-season.
- Same requirements for foreign and domestic growers.
- Role of forward contracts increasing but challenging to manage across growers in different locations and seasons.
- Foodservice leads in forward contracting.
- As forward contracting grows for retailers as well, the marketing system becomes less focused on transactions (daily spot market) and more on building marketing “programs” designed to increase sales.

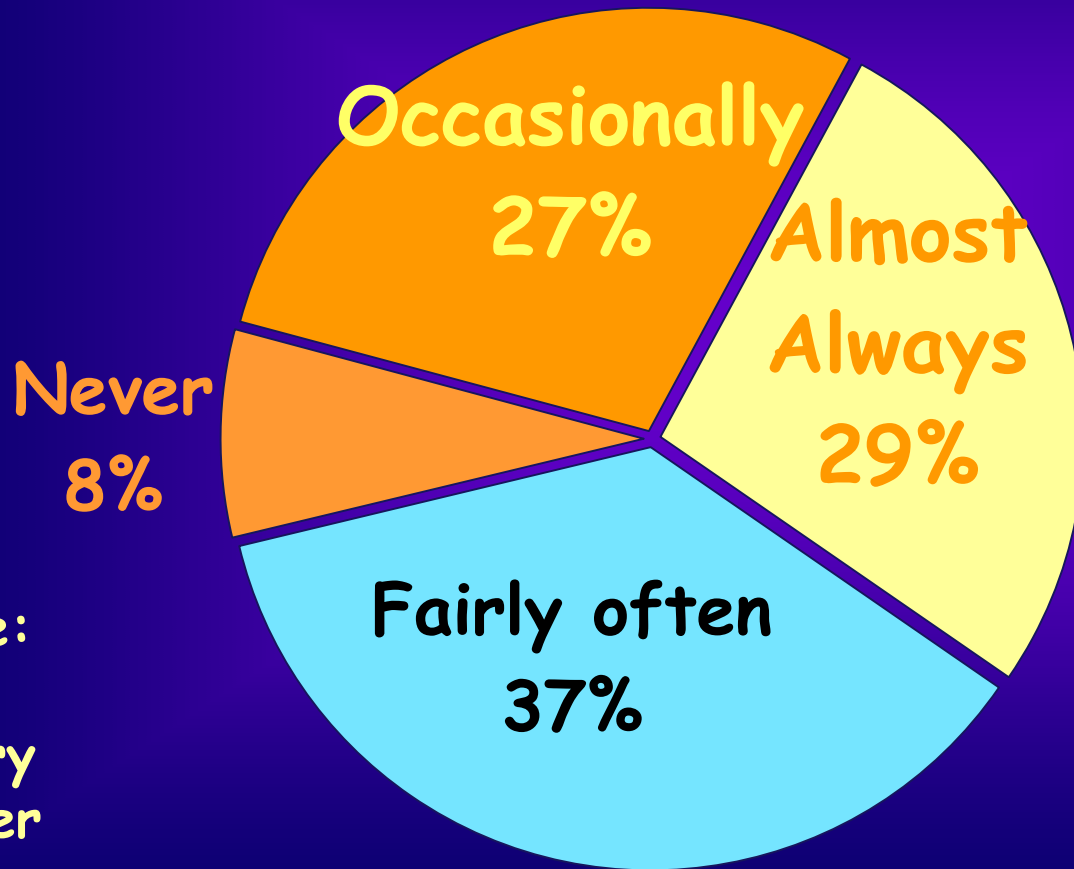
Fresh Produce Marketing Trends

- Major food safety requirements, higher cost structure. Table stakes.
- Sustainability and social responsibility practices factoring into buyer-seller negotiations but don't trump price, consistent availability and volumes.
- Buyers expect suppliers to be much more data-driven in their selling/marketing approaches, requires IT investments.
- Fewer, larger buyers have enabled shippers to reduce their customer lists and to focus more on understanding the needs of key accounts - becoming account-driven and strategic.

Fresh Produce Marketing Basics

- Firms attempting to differentiate their products to get out of the “commodity trap,” but perishability will always make that challenging.
- Product differentiators: quality, color, shape, flavor, texture, culinary factors, proprietary seeds.
- Service differentiators: marketing, transportation, shopper insights, etc.
- Shippers focusing more on understanding and communicating with consumers, attempting to stimulate consumer demand; social media facilitates.
- Branding and private label are both growing. Deep discount retailers (e.g. Aldi) emphasize private label.

Frequency of Purchasing Private Label Fresh Produce, 2016



Source:
U.S.
Grocery
Shopper
Trends
2016, FMI.

Historical role of branding and consumer marketing in fresh produce

- Food marketing dominated by brand-based consumer packaged goods (CPGs). Produce is an exception. Beyond the banana players and Sunkist cooperative, brands were not prevalent.
- Commodity (undifferentiated) marketing the norm.
- Where brands existed, achieving consumer brand loyalty was difficult due to: inconsistent quality and distribution (shelf-presence); seasonality; lack of differentiation.
- Produce often costs more when quality is the worst (weather related). Why should a consumer be loyal?

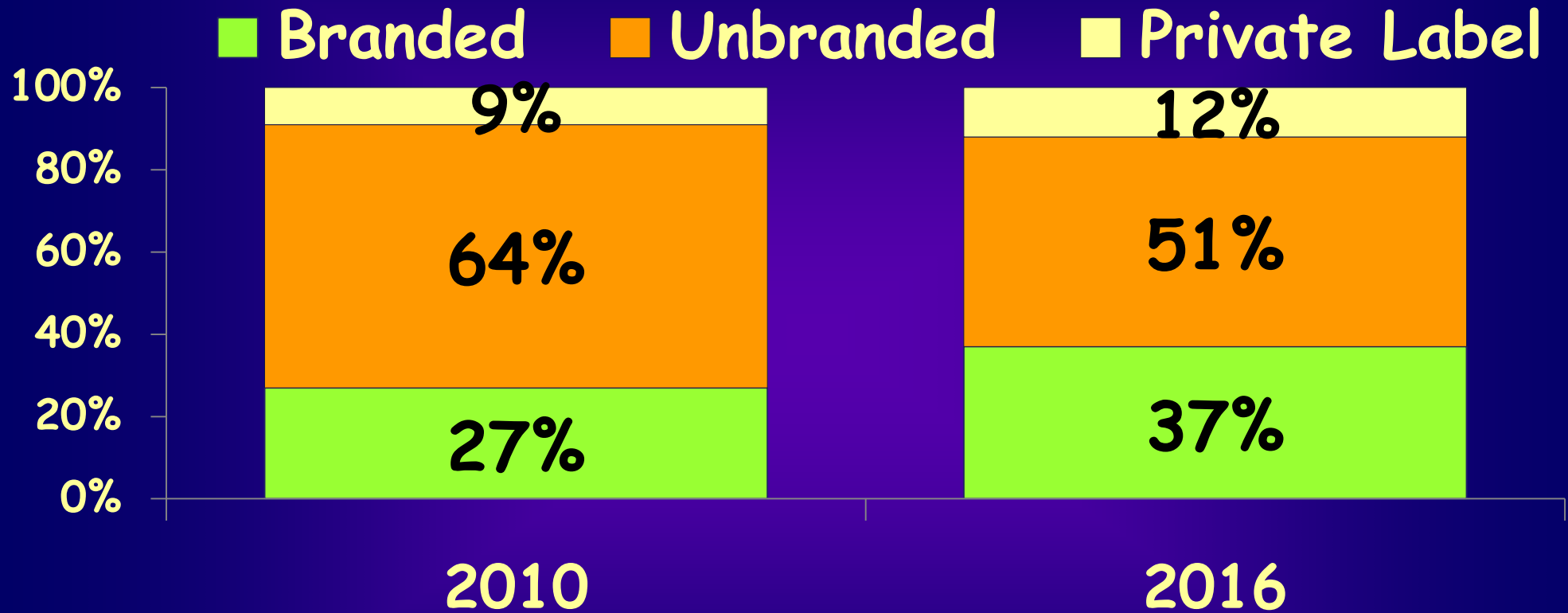
Role of branding in fresh produce marketing

- Hard to get ROI on investments in branding.
- Under-investment in consumer marketing in produce.
- Growth in social media making it less costly to reach target consumers with marketing messages.
- For larger grower-shippers consumer marketing may make sense. Cutie's, Halo's, Driscoll's berries.
- Incentives are becoming more aligned to improve quality and flavor and educate consumers about how to use and prepare fresh produce. Traceability, GTIN's.
- Role of generic marketing/advertising programs.

Historical role of branding and consumer marketing in fresh produce

- Value-added produce (VAP) is marketed like CPGs – consistent weekly volumes, shelf-space, pricing and quality.
- Salads brought more emphasis on branding, marketing & promo support. Dedicated shelf-space.
- ROI on investments in consumer marketing for commodity produce is more challenging due to supply side fragmentation, inconsistent weekly distribution.
- Under-investment in consumer marketing; promotion typically trade-oriented (commercial buyers).

Share of Branded vs Unbranded Fresh Produce \$ Sales in US Retailers, 2010 vs. 2016 and CAGRs



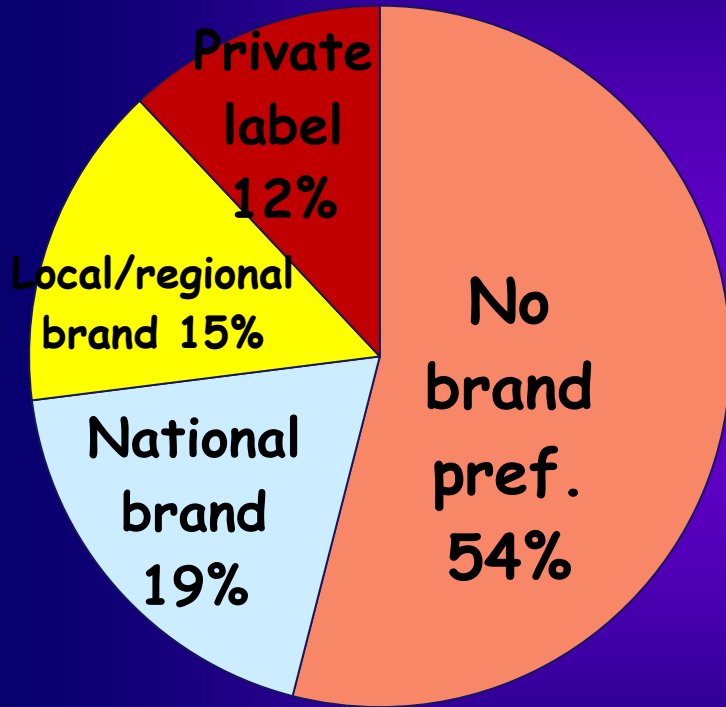
12%

2011-16 Year CAGRs:

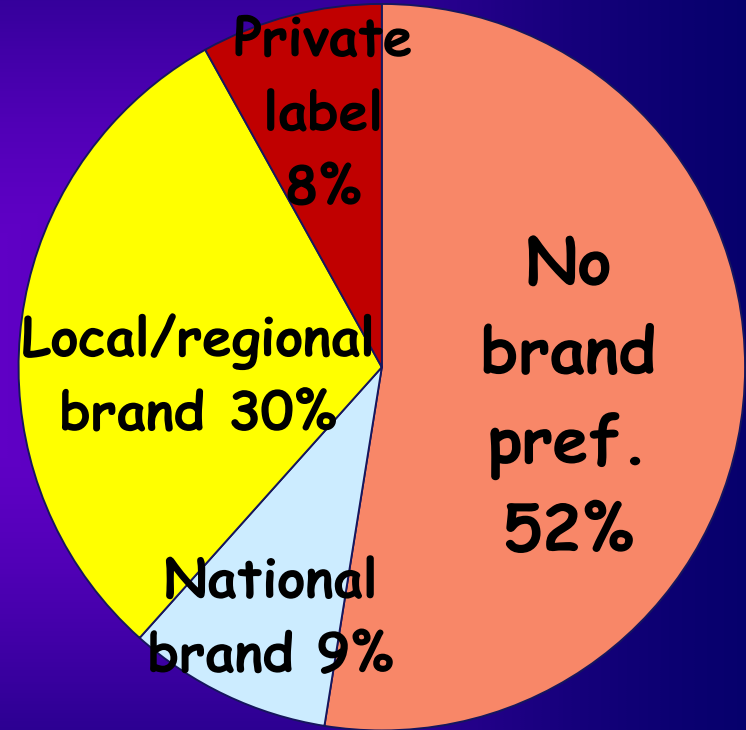
8%

Sources: Fresh Facts on Retail Q3 2015, United Fresh and Nielsen; and FMI Power of Produce 2017.

US Consumer Preferences for Fresh Produce Branding, VAP and Bulk, 2017



Value-added Produce

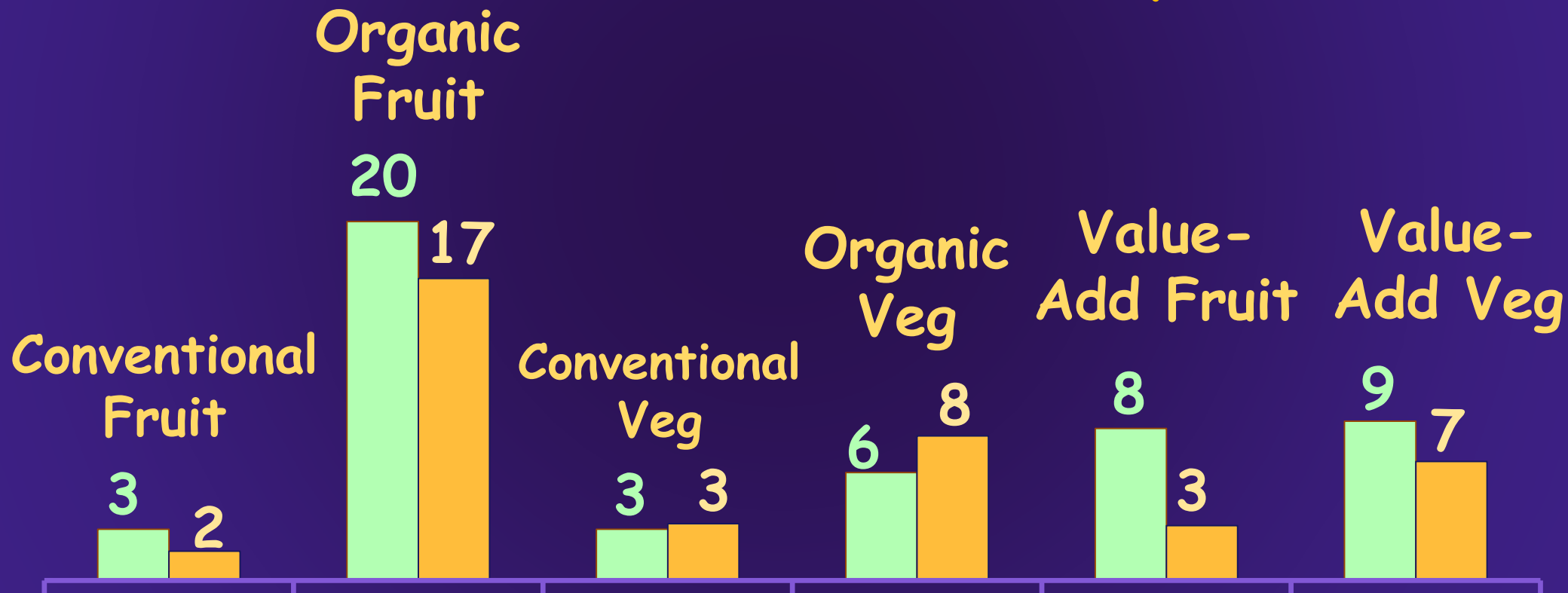


Bulk Produce

Conventional, Organic and Value-Added Fresh Fruit/Veg Sales in Key US Food Retailers, % Change 2017* vs 2016

■ \$ sales

■ Quantity (lbs) sold



Changing Food Markets and Consumers: Choice and Substitution Abounds!

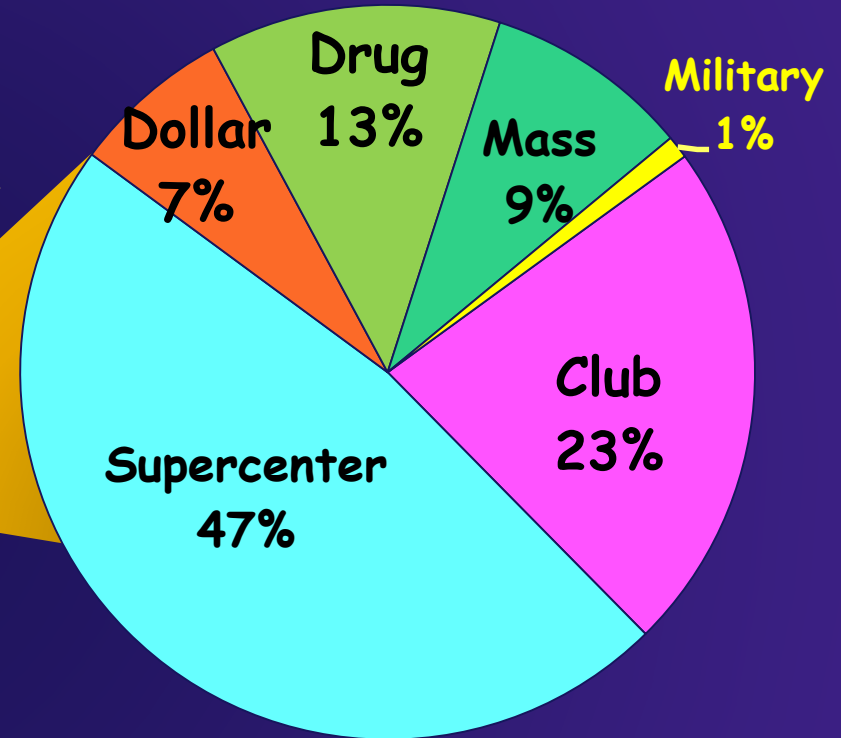
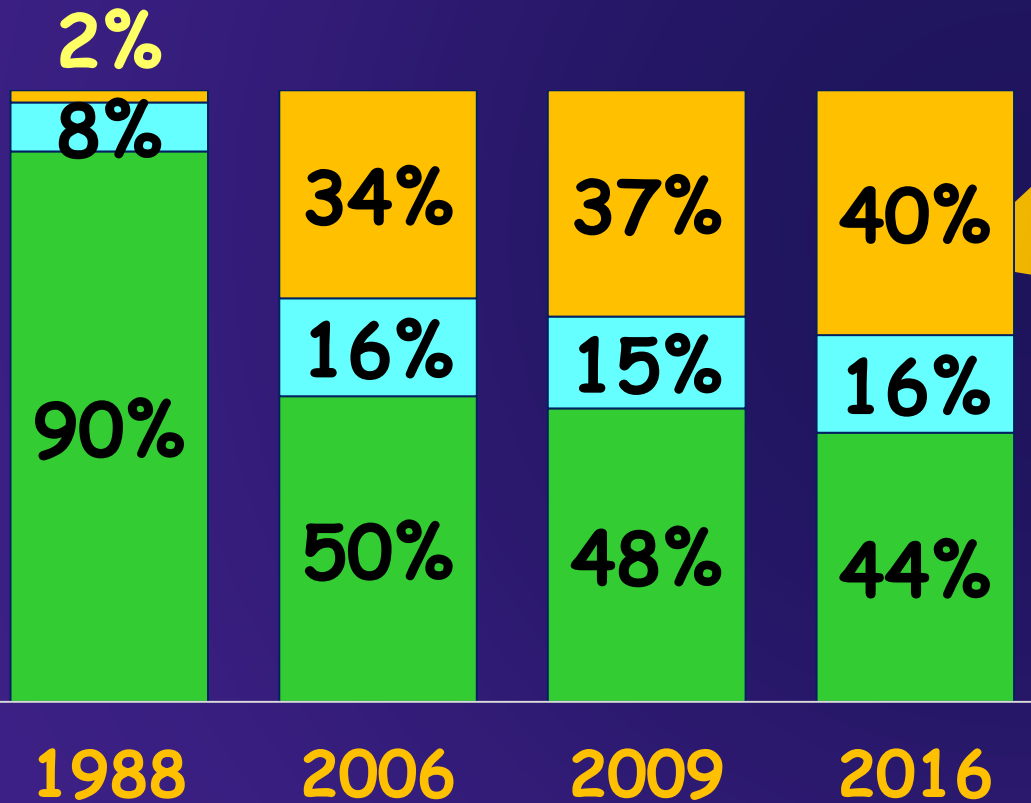
Accelerated pace of change in the food marketing system

- New entrants. Channel blurring - retail, foodservice, online - more competition!
- Firms must have clear value propositions.
- Shift to "shopper-centrism."
- Price deflation - price wars at retail a threat.
- Margin pressure at all levels of the food system!
- Growing food safety, traceability, sustainability, social welfare expectations all increase costs.
- Need for major investments in IT systems.
- Mergers and consolidation continue, scale is key.

Shifting Grocery Formats: Growth in nontraditional channels has transformed the US grocery industry

Dollar Share by Channel

■ Traditional ■ Convenience ■ Nontrad.

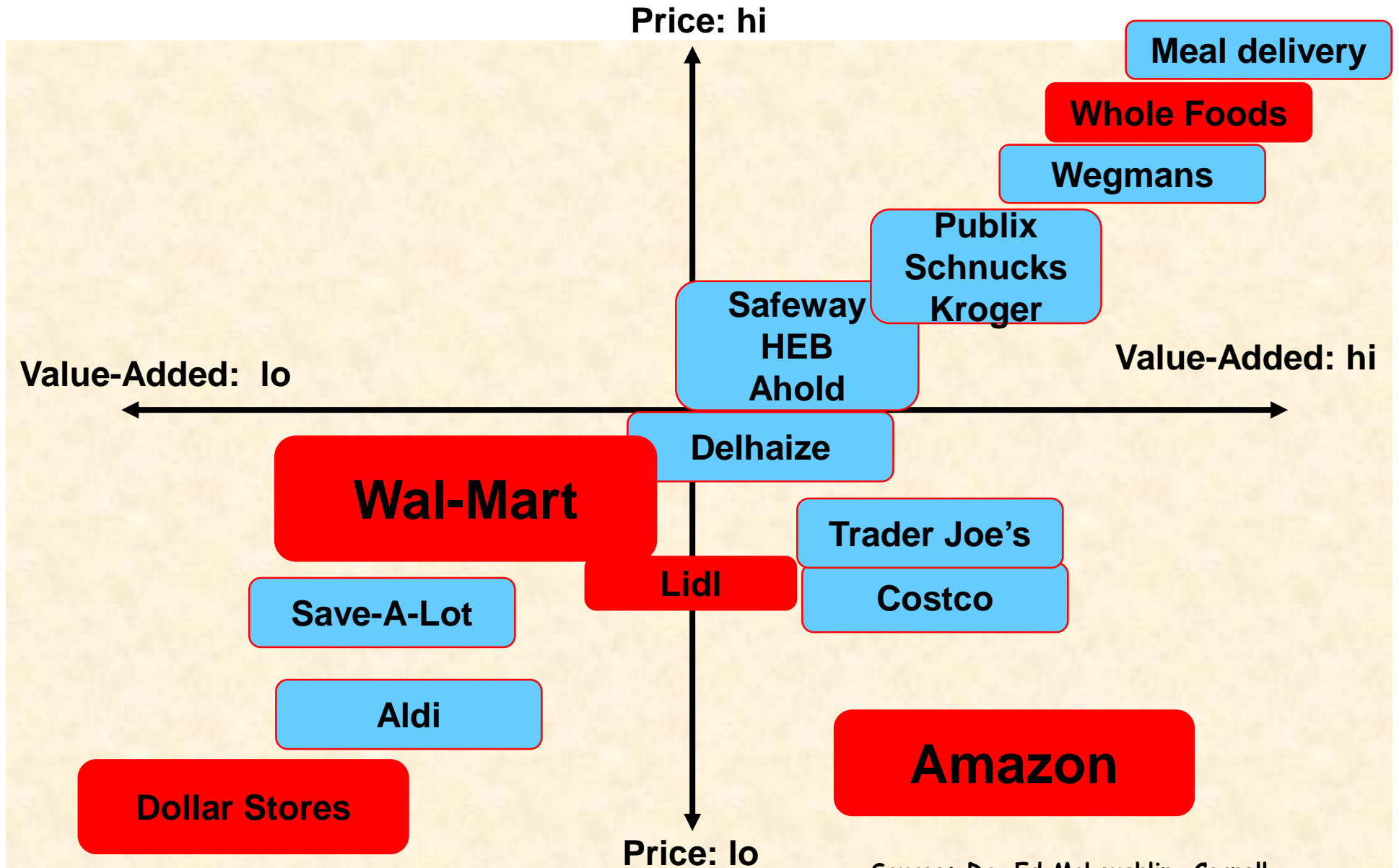


Dollar Share of Food Sales in Nontraditional Formats

Traditional=conventional supermarket, fresh format, ltd assortment, super warehouse, other

Sources: Willard Bishop, various The Future of Food Retailing reports; and for 2016, Inmar Webinar May 17, 2017 for the Food Institute.

New Retailing Positioning Dilemma: USA



Source: Dr. Ed McLaughlin, Cornell

Total US Grocery Sales,* Store Numbers, and Market Share by Channel, 2016

| | Sales \$Million | No. of Stores | % of Sales |
|--------------------|--------------------|------------------|---------------|
| Traditional | \$542,725 | 40,498 | 44.6 |
| Nontraditional | \$480,228 | 62,634 | 39.5 |
| Total C-Stores** | \$194,046 | 161,052 | 15.9 |
| GRAND TOTAL | \$1,216,999 | 264,184 | 100.0 |

*Grocery sales only (food and nonfood); excludes electronics, prescription drugs, toys, jewelry, sporting goods, gas, clothing, footwear, knickknacks, and hardlines. **Sales exclude gas.

Source: The Future of Food Retailing, Inmar Willard Bishop Analytics, June 2017

Wawa C-store Chain Offers Convenient Healthful Produce



US Grocery Sales, Store Numbers and Market Share of Total Grocery Sales, by Store Format, 2016, and Projected Share, 2021
Traditional Grocery Channel

| | 2016 Sales \$Million | 2016 No. of Stores | 2016 % of Sales | 2021 % of Sales |
|----------------------------|----------------------------|--------------------------|-----------------------|-----------------------|
| Total Traditional | \$542,725 | 40,498 | 44.6% | 43.6% |
| Conven. Supermkt | \$440,136 | 25,380 | 36.2% | 32.7% |
| Fresh Format | \$27,882 | 1,547 | 2.3% | 2.8% |
| Ltd Assortment | \$37,273 | 4,093 | 3.1% | 4.5% |
| Super Warehouse | \$23,617 | 730 | 1.9% | 2.3% |
| Other (small groc.) | \$13,817 | 8,748 | 1.1% | 1.2% |

Source: The Future of Food Retailing, Inmar Willard Bishop Analytics, June 2017

US Grocery Sales,* Store Numbers & Market Share of Total Grocery Sales, by Store Format, 2016, & Projected Share, 2021

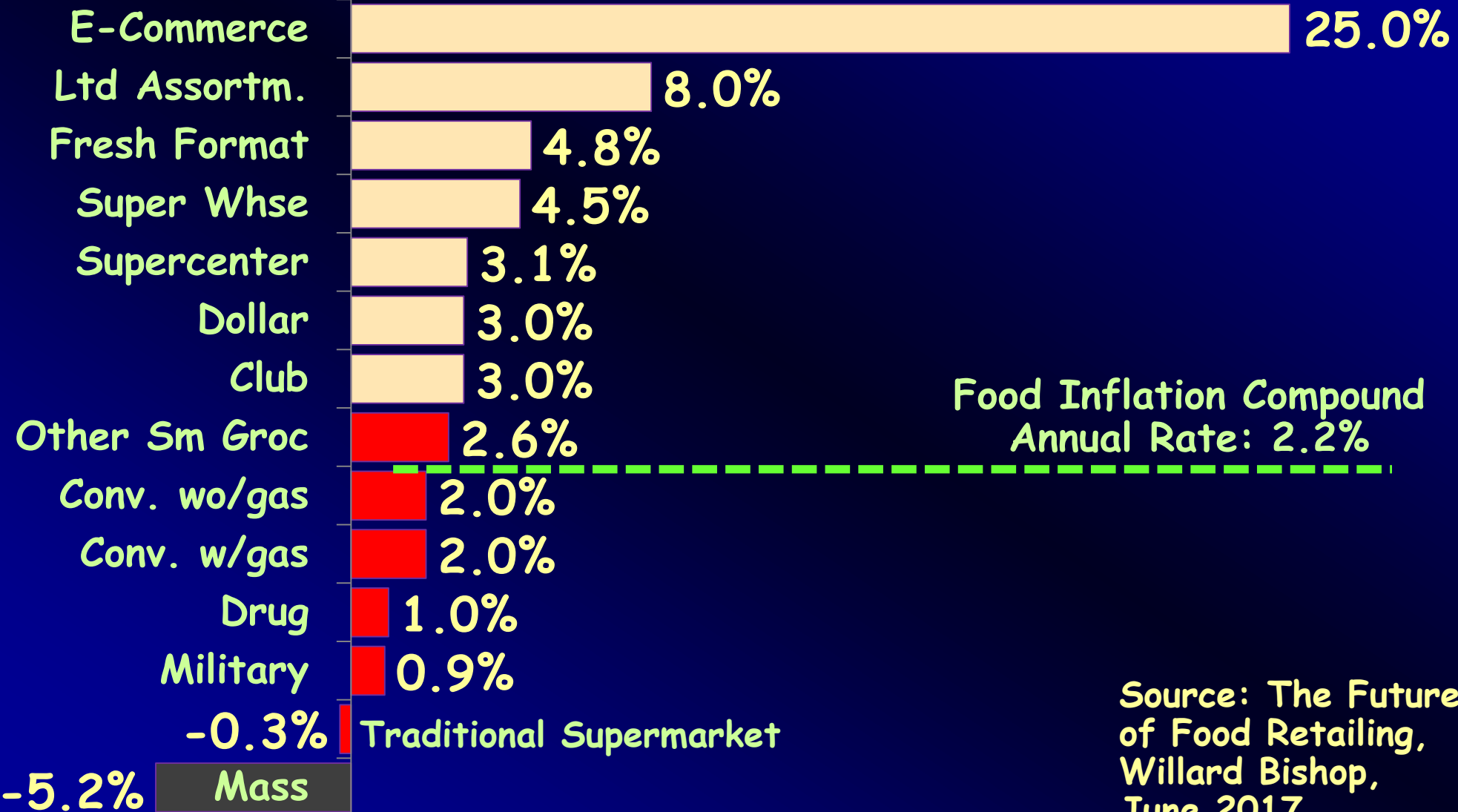
Nontraditional Grocery Channel

| | 2016 Sales \$Million | 2016 No. of Stores | 2016 % of Sales | 2021 % of Sales |
|------------------------|----------------------------|--------------------------|-----------------------|-----------------------|
| Total Nontrad'l | \$480,228 | 62,634 | 39.5% | 39.6 |
| Wholesale Club | \$109,183 | 1,472 | 9.0% | 9.7 |
| Supercenter | \$228,331 | 4,106 | 18.8% | 19.7 |
| Dollar Store | \$33,757 | 30,496 | 2.8% | 2.8 |
| Drug | \$61,998 | 23,607 | 5.1% | 4.6 |
| Mass | \$42,627 | 2,775 | 3.5% | 2.5 |
| Military | \$4,332 | 178 | 0.4% | 0.4 |

*Grocery sales only (includes food and non-food); excludes electronics, prescription drugs, toys, jewelry, sporting goods, gas, clothing, footwear, knickknacks, and hardlines.

Source: The Future of Food Retailing, Inmar Willard Bishop Analytics, June 2017

Forecast of Compound Annual Sales Growth Rate vs. Inflation for US Grocery Formats, 2016-2021



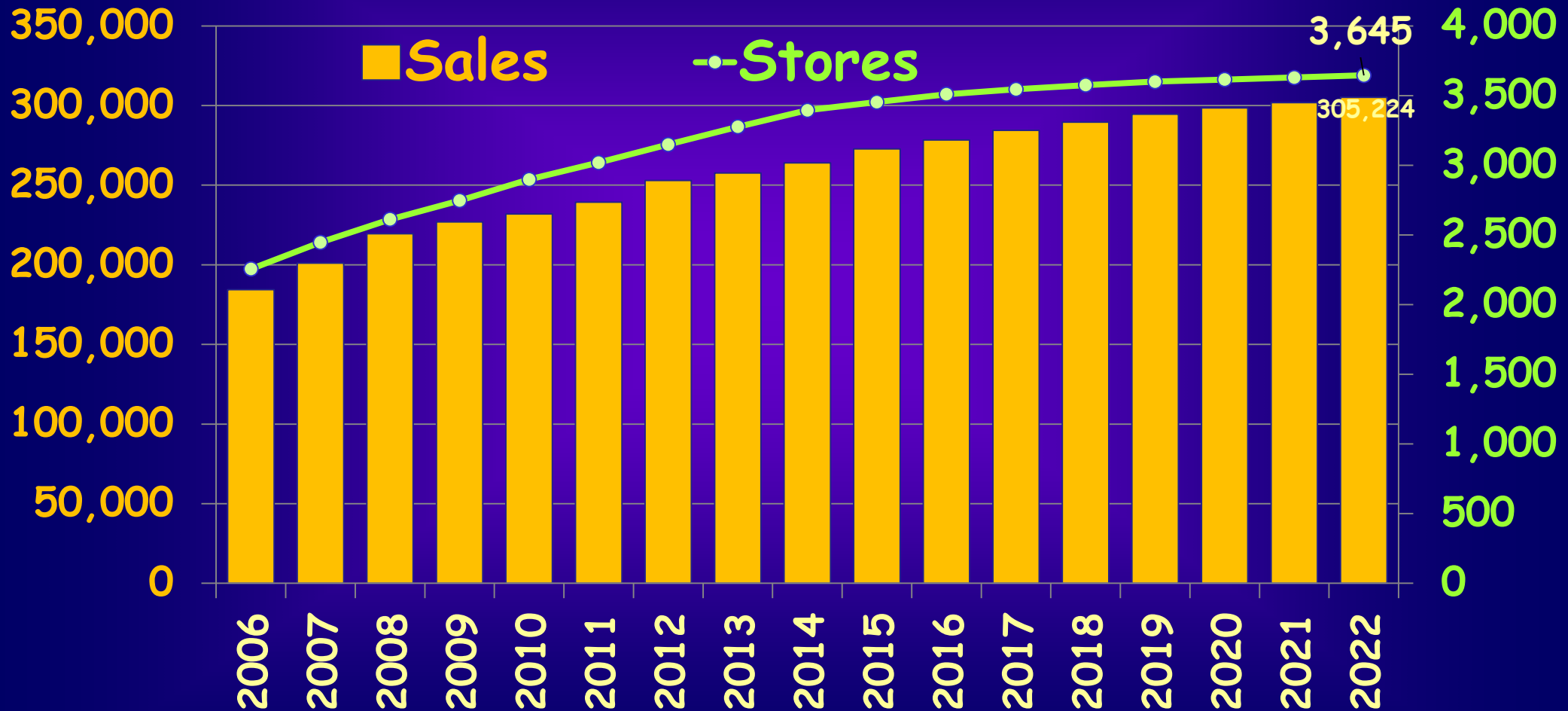
Source: The Future of Food Retailing, Willard Bishop, June 2017

Changing Marketing Channels, 2016

- Consumers took ~3% more trips to deep discounters.
- Lidl entering market with up to 100 stores in a yr. (Reuters). Stumbling blocks.
- Aldi controls 1.5% of market, growing 15%/yr vs Walmart has 22% market share and 2% sales growth expected 2017 (Reuters May 11, 2017).
- Only about 40% of shoppers shop at deep discounters.
- Significant opportunities for growth ahead.
- Deep discount and online channels were top beneficiaries of consumer spend leak from mass merchandisers.

Walmart Supercenter Sales and Store Numbers, USA, 2006-2022^F, excludes other Walmart formats

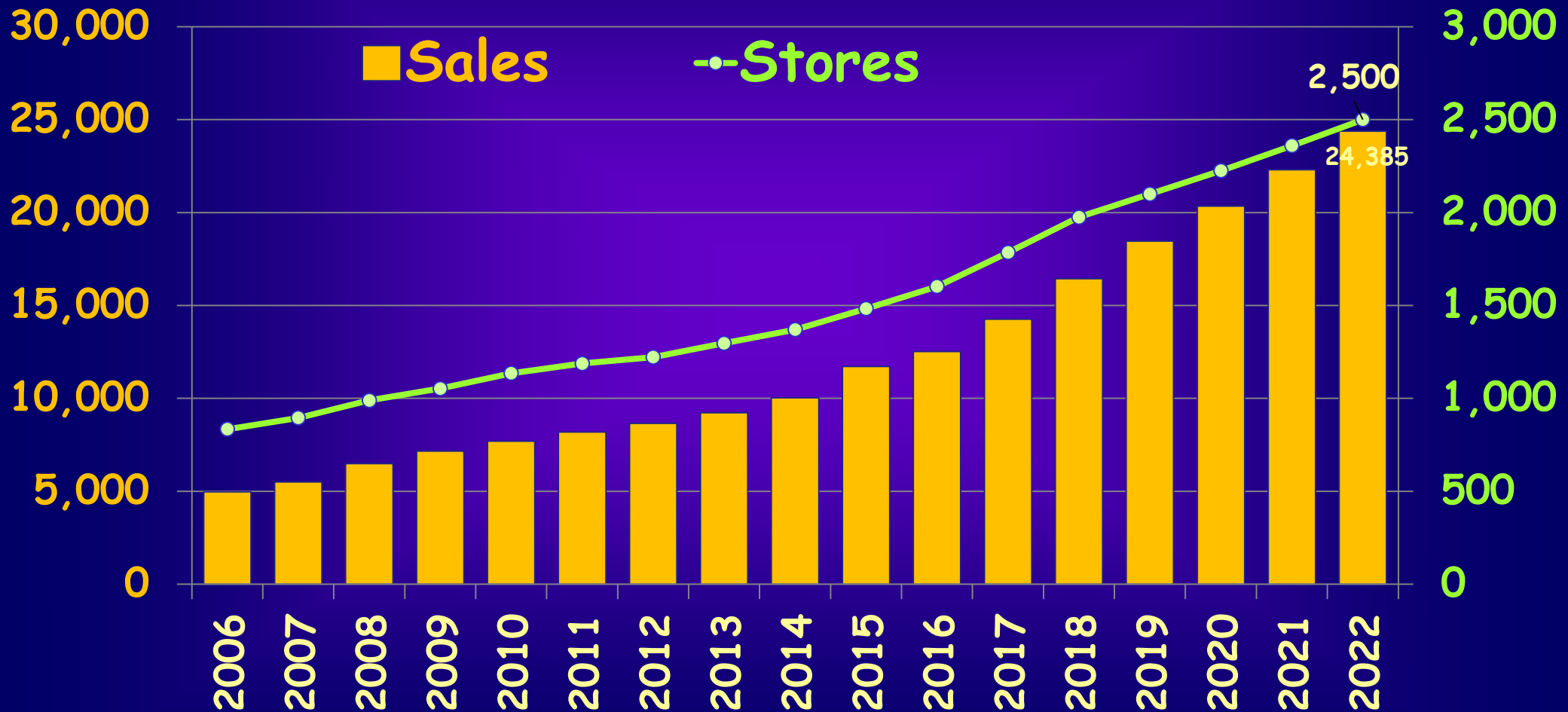
Million\$



Source: Planet Retail online query January 18, 2018.

Aldi USA Net Sales and Store Numbers, 2006-2022^F, Excludes Trader Joe's

Million\$



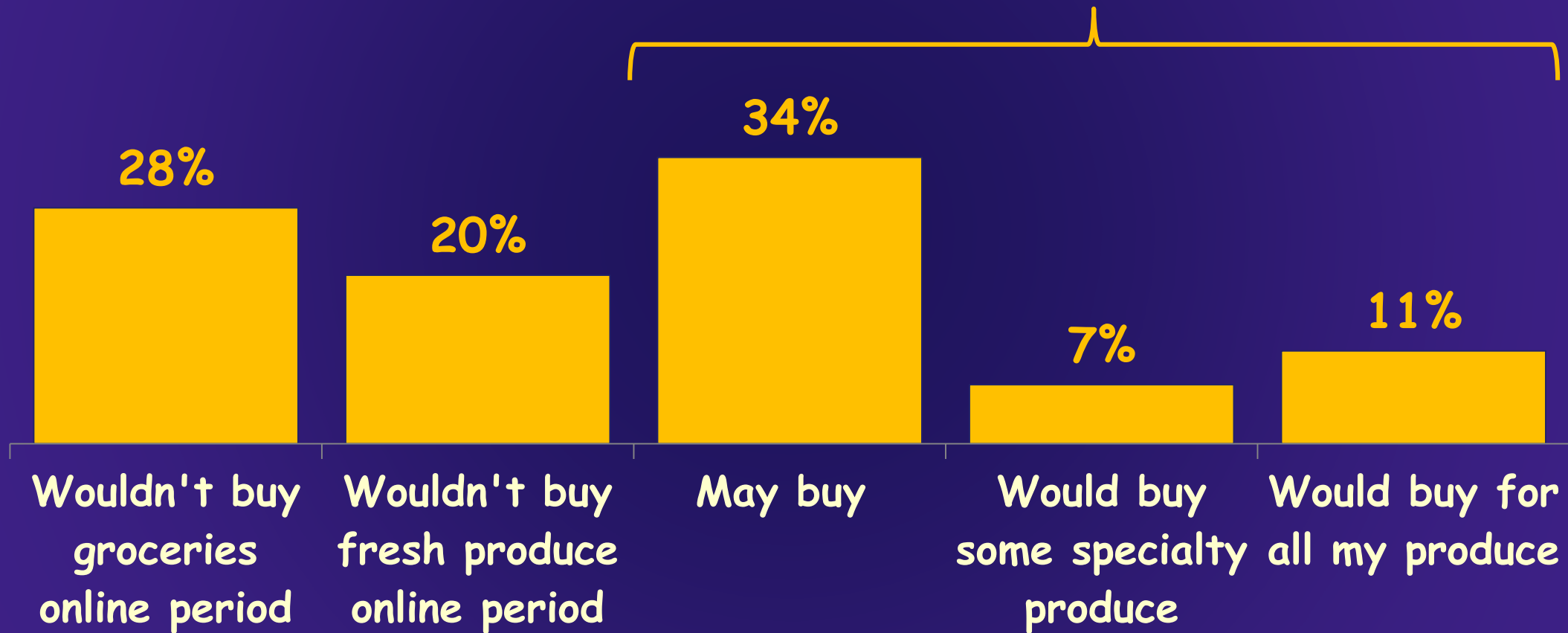
Source: Planet Retail online query January 18, 2018.

Changing Marketing Channels, Online Sales, 2017

- Amazon acquisition of Whole Foods.
- Many grocery retailers engaged in online sales.
- 31% of consumers likely to shop online for groceries.
- 23% of consumers already buy groceries online.
- Among those shoppers ordering groceries online in the last 12 months, 47% did so 5 or more times.
- Personalization of offers growing.
- 2016 food/bev. e-com. sales \$33B (4% of total).
- Online food shopping may reach \$100 billion by 2025 (8% of total food/bev forecast sales).

Likelihood of Buying Produce Online if Capability Were Available with Your Current Primary Produce Store

52% may buy produce online



Source: Acosta, Inc., The Why behind the Dine 2016.

Rate of Growth in Online Sales by MyWebGrocer

| | Growth vs. YAGO | % of orders with x in cart |
|--------------------------|--------------------|-------------------------------|
| Citrus fruits | 126% | 15% |
| Peppers and chilis | 124% | 18% |
| Lettuce | 43% | 14% |
| Broccoli and cauliflower | 39% | 7% |
| Beans | 36% | 4% |
| Melons | 33% | 8% |
| Squash and zucchini | 24% | 8% |

Source: Food Marketing Institute, Power of Produce, 2016.

Basket Data for Online Sales by MyWebGrocer

| | % of orders with x in cart |
|---------------------------------|-------------------------------|
| Bananas | 43% |
| Onions/garlic; cukes and celery | 22% each |
| Tomatoes | 21% |
| Apples | 19% |
| Grapes | 16% |
| Tropical fruits | 15% |
| <u>Organic vegetables</u> | 14% |

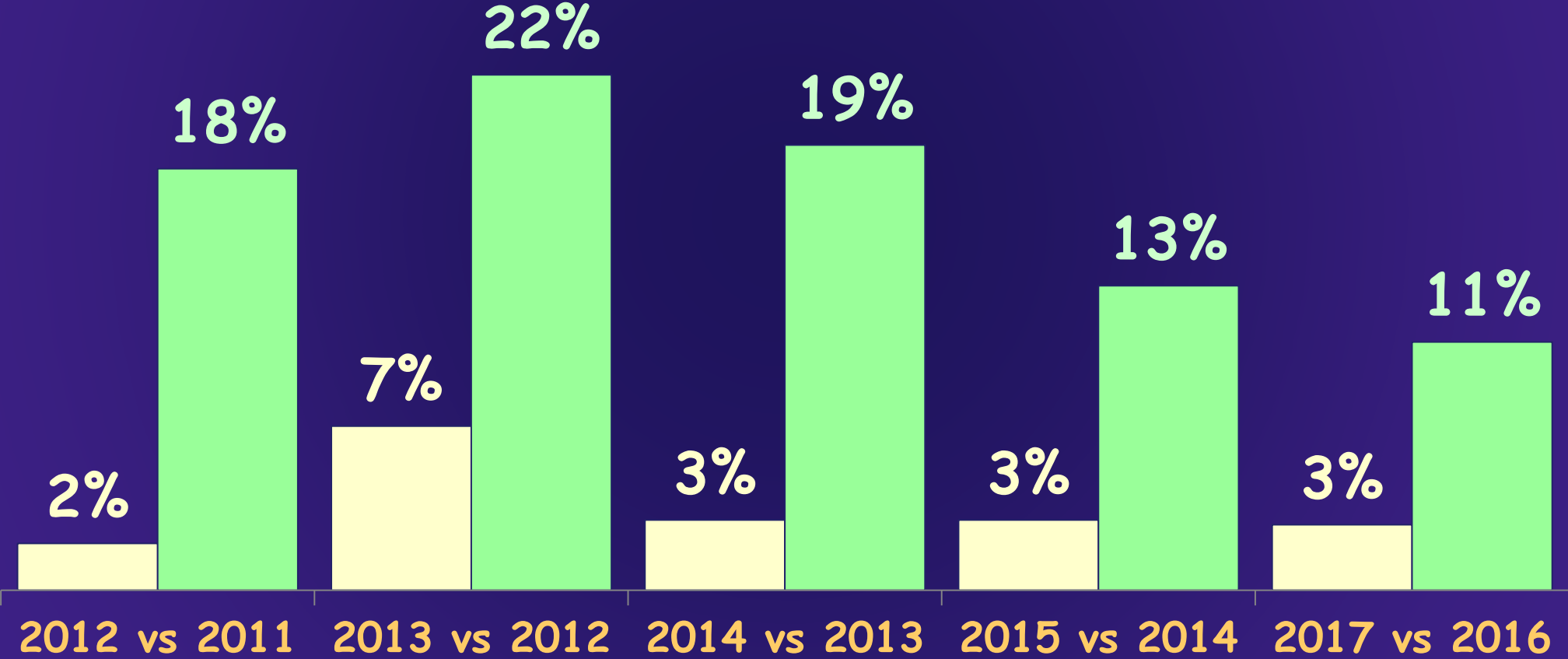
Source: Food Marketing Institute, Power of Produce, 2016.

Factors affecting demand for fresh produce

- Commodity price, consumer income, ethnicity, age, pop. growth, price and convenience of substitutes and complements, culture/lifestyle/values, credence attributes
- Quality: appearance, flavor, texture, color, shape, size, unique varieties
- Info on produce selection, ripening, recipes
- Convenience in prep, usage; packaging role
- Consistent availability, year-round supply
- Distribution - # stores and shelf-space
- Promotion and advertising: trade v. consumer, generic v. brand; free riders; private label

Annual Growth Rates in \$ Sales of Conventional and Organic Produce in Key US Retailers, 2012-2017*

■ Conventional Produce ■ Organic Produce



Sources: Food Marketing Institute, The Power of Produce, 2016, and 2017. *52 weeks ending 3/19/17.

US Household Penetration Rates for Organically-Grown Fresh Produce, 2017

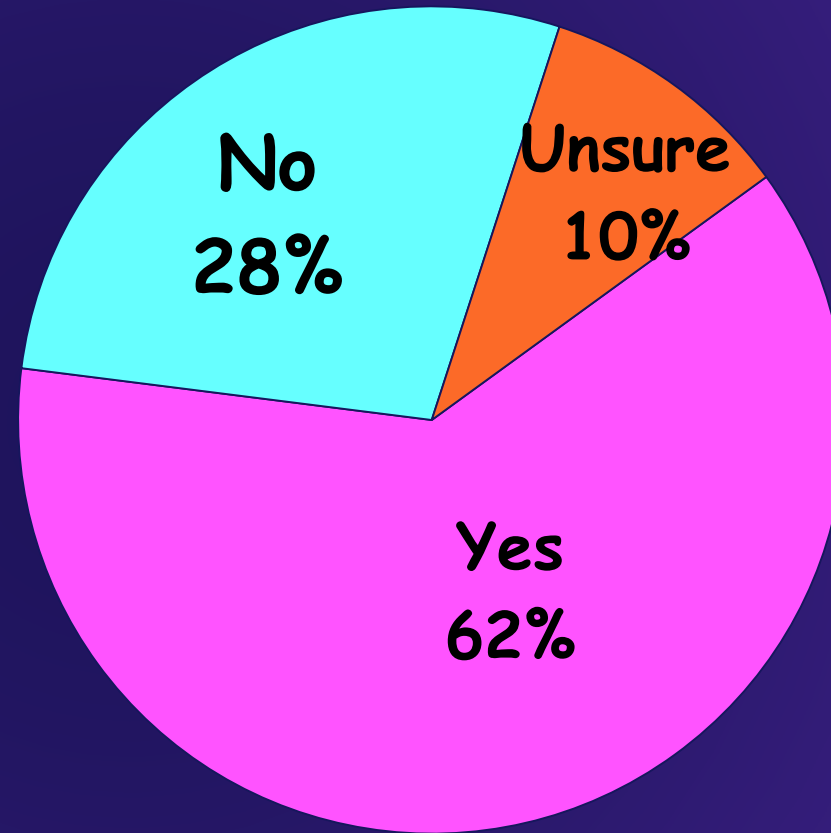
More likely to purchase:

Club shoppers 77%

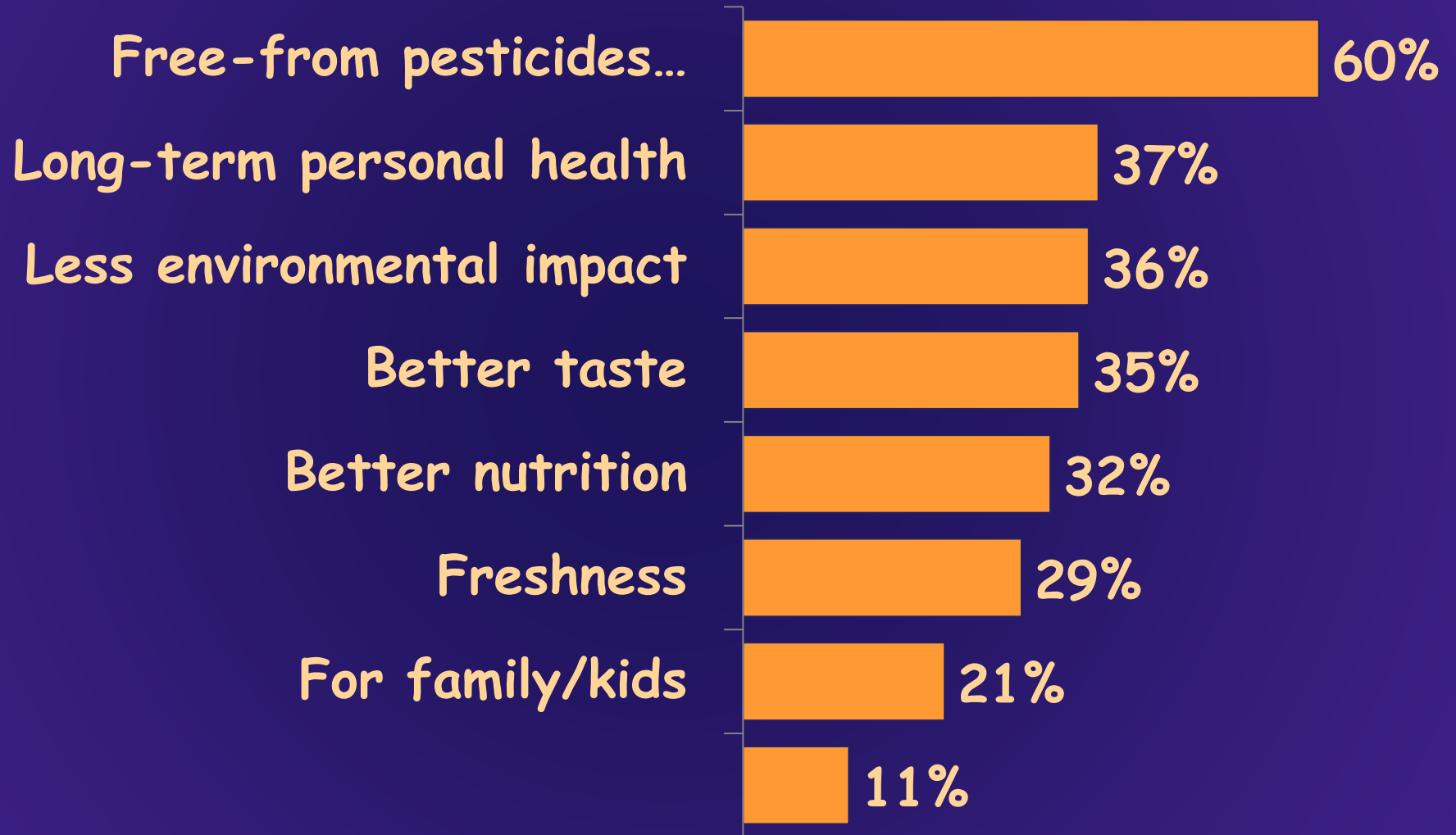
Annual Income >\$100K
71%

Living in the west 69%

24% of organic buyers
are core=15% of all
produce buyers



Reasons for Buying Organically Grown Fresh Produce at Retail, 2017



Source: FMI The Power of Produce, 2017.

New VAV Items Addressing Demand for Convenience, Health and Customization



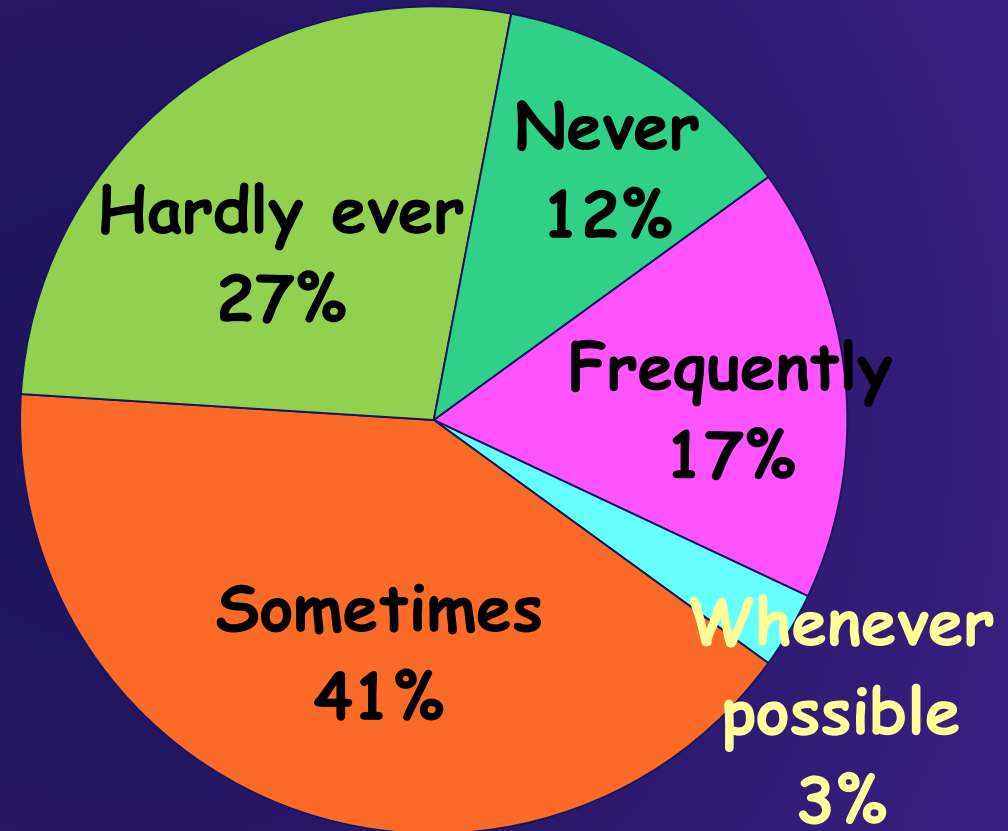
US Household Penetration Rates and Buying Frequency for Value-added Produce, 2017

Penetration rates:

Bag salads 76%

Value-added fruit 82%

Value-added veg 48%



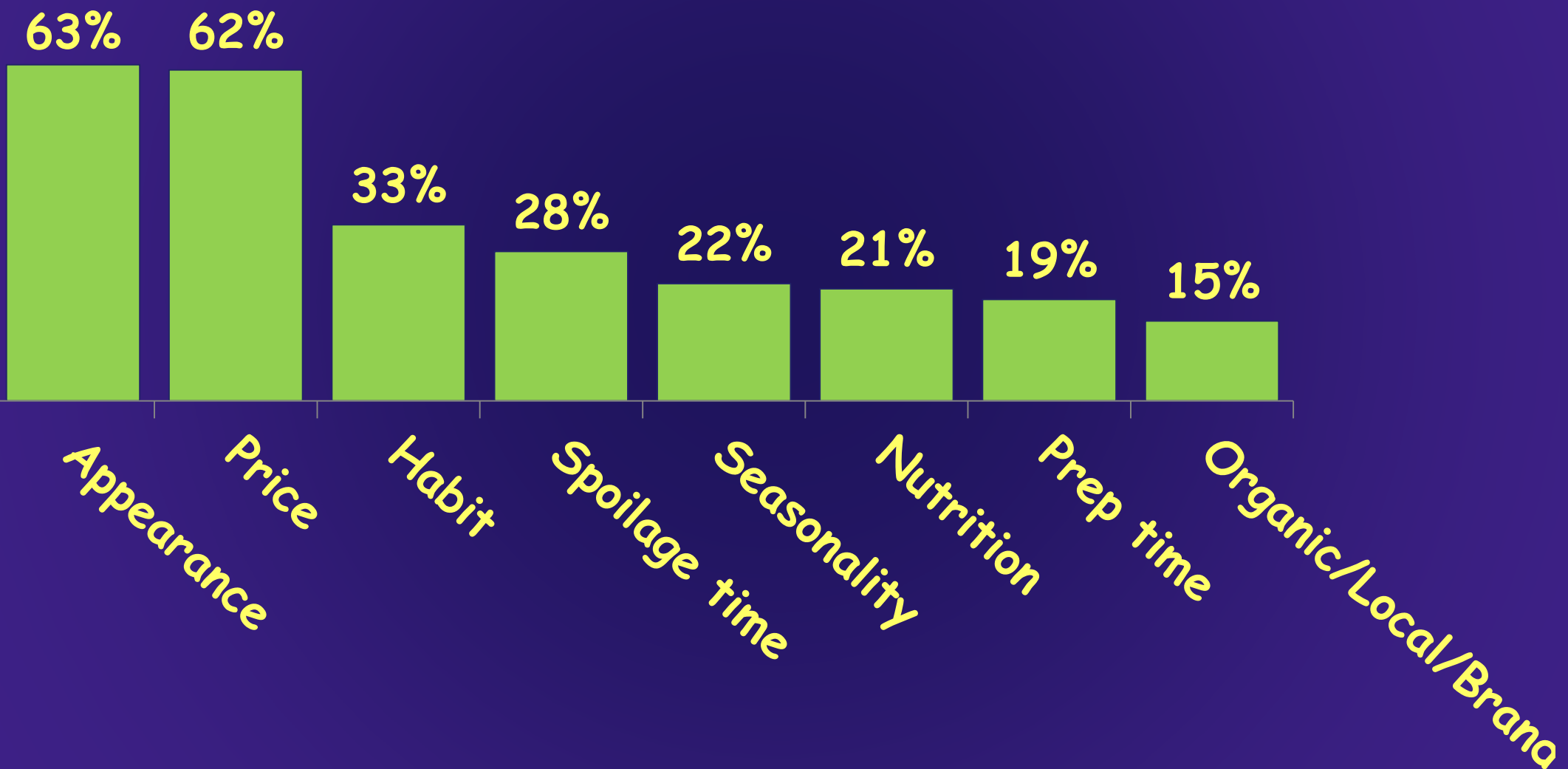
Convenience and Organic

- Value-added produce contributed 17% of produce dept sales; lesser share of quantity. (FMI Power of Produce 2016.)
- Both tend to be consumed proportionally more by consumers with higher incomes and educational levels, also millennials.
- Organic share of VAP growing.
- Economic and wage/income growth rates have a major positive influence on produce demand – consumption is positively correlated with income.

Growing demand for organic fresh produce, 2016

- Organic produce sales: \$4.46 billion.
- Accounted for 9% of produce dept. sales, yet contributed 30% of all produce growth in sales.
- Organic shoppers make 8 more trips to the grocery store than non-organic shoppers.
- Penetration rates are <20% for most items.
- >30% of cooking green & carrot \$ are organic, these have the most developed organic sales.
- Organic bag salad share of \$ bag sales=20%.
- Organic berries represent 11% of organic sales.

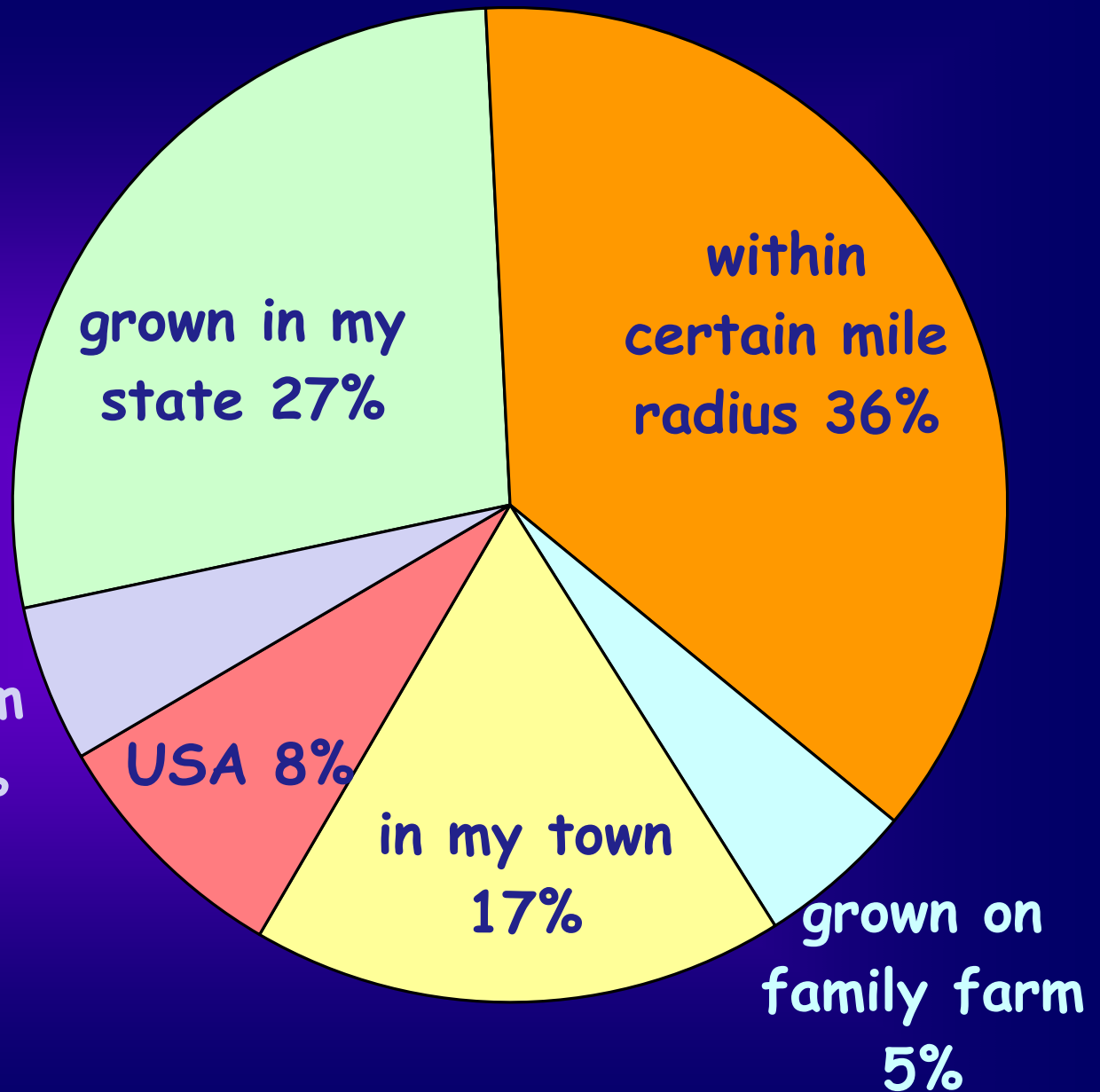
Top 3 Factors That Influence US Consumers' Selection and Purchase of Fresh Vegetables, 2016



Source: Food Marketing Institute, The Power of Produce 2016.

Definition of "Locally Grown" Products according to Shoppers, 2017

Direct from farmer 5%



Source: FMI, Power of Produce 2017.

Reasons for Buying Locally Grown Fresh Produce at Retail, 2017



Source: FMI The Power of Produce, 2017.

Emerging marketing channels for produce

- 2015/16 fast casual sales: \$48B (15-20% of QSR sales).¹ Focused on fresh/creative ingredients, sustainability.
- 2016 foodservice revenues in supermarkets should reach \$30B. (Inmar Willard Bishop Analytics.)
- Major initiative to increase fresh produce on foodservice menus despite the barriers.
- Stealth health.
- Growing international trade gives more supply redundancy which may help large foodservice users to add produce items to the menu.

¹Source: Technomic unpublished data.

Obstacles to Fresh Produce in Foodservice

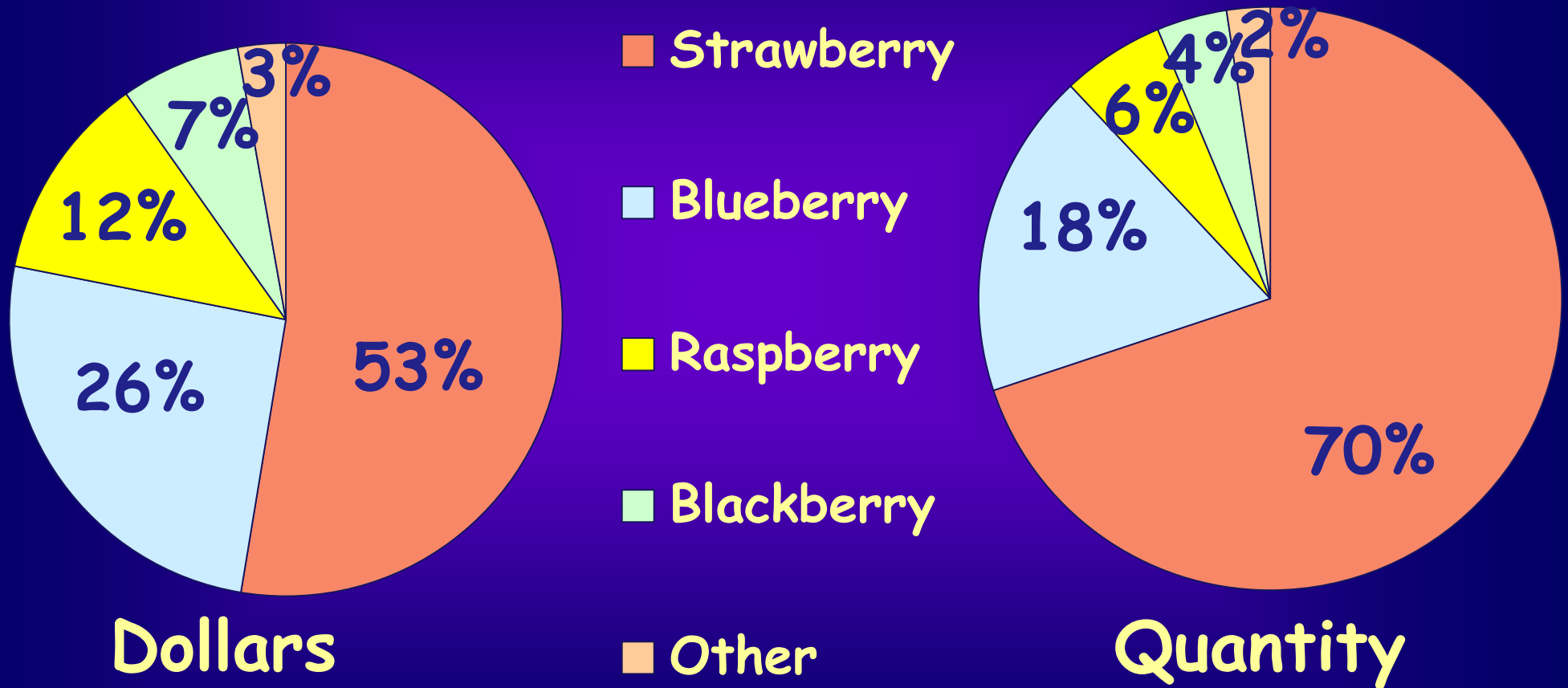
- Cost
- Seasonality
- Perishability
- Price volatility
- Seasonal shoulders especially risky
- Labor for prep; VAP helps but costs more
- Even the largest fresh produce suppliers are small relative to food manufacturers
- Sourcing often not as direct as for retail
- Variations in quality, flavor

The Produce Industry Challenge

- Getting the right product to the right consumer at the right place and price, with reasonable remaining days of shelf-life.
- Requires collaboration between suppliers and retailers, including sharing loyalty card data, and promotional efficiency analysis.
- Most shippers not assisting with individual store shelf-set recommendations, great opportunity.
- We can increase efficiency and reduce shrink through better coordination of supply and demand. This will make produce more affordable to more consumers, expand demand.

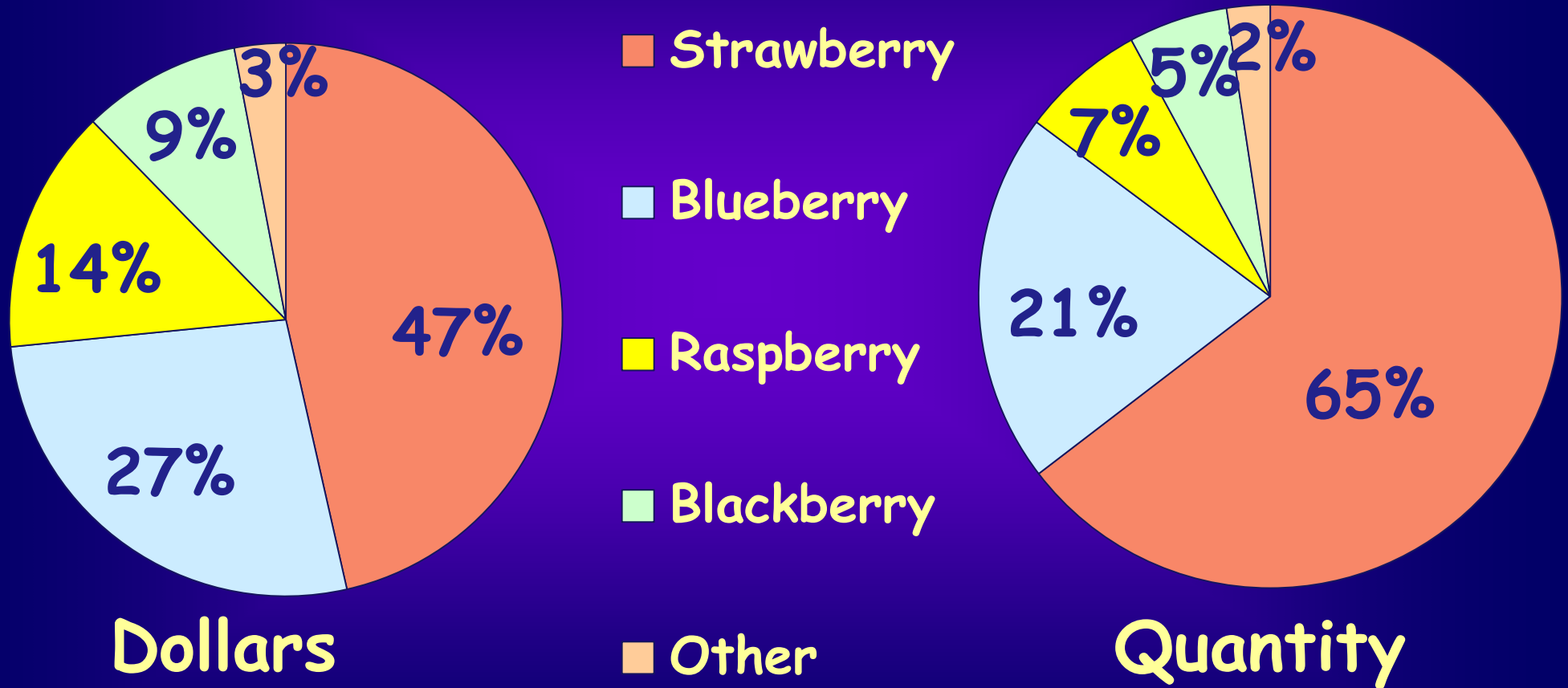
Blueberries

US Retail Fresh Berry Sales, by Type, Share of Dollar Sales and Quantity, 2011*



Source: Retail Category Trends: Total US, California Strawberry Commission. *IRI/Freshlook data ending October 10, 2011.

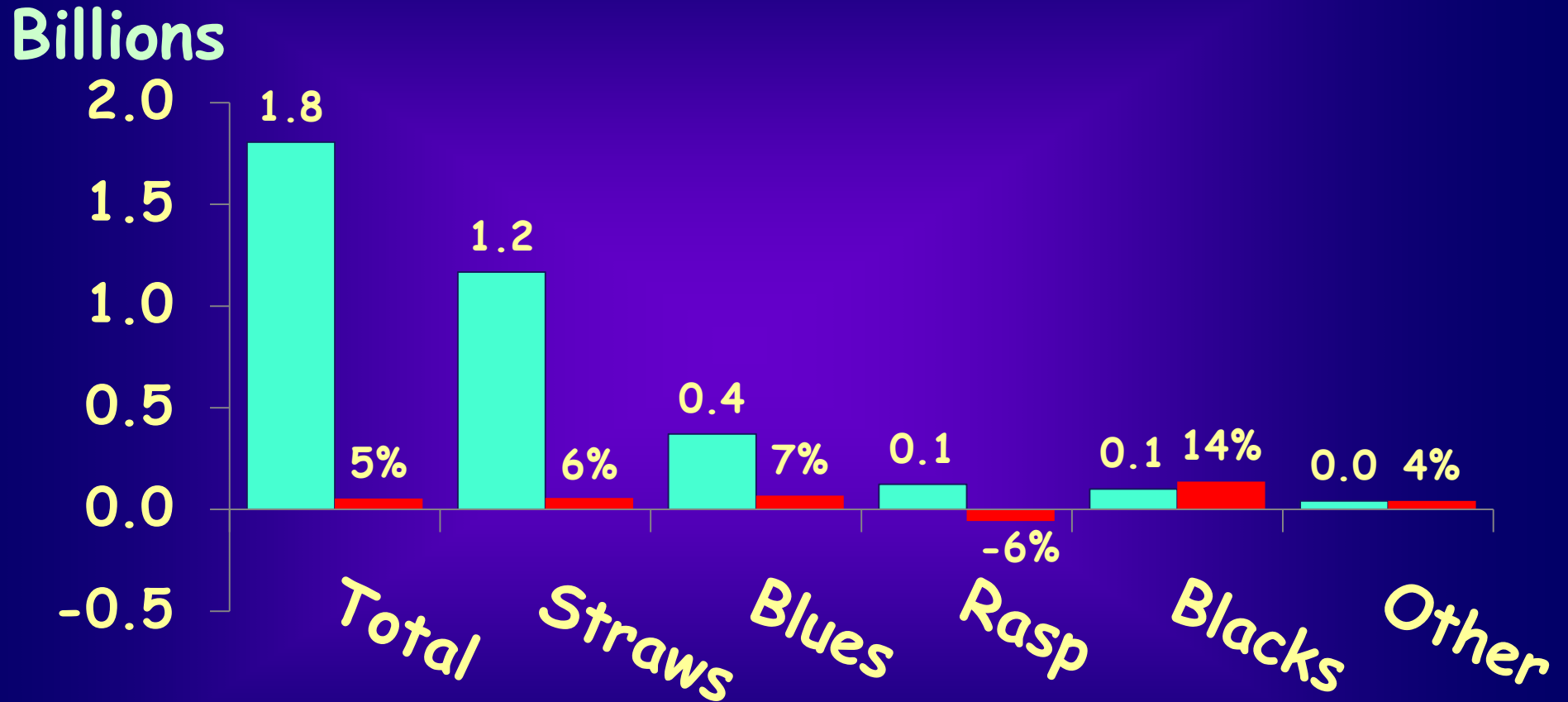
US Retail Fresh Berry Sales, by Type, Share of Dollar Sales and Quantity, 2017* (\$6.4 billion total sales and 1.8 billion pounds)



Note: Berries represent 19.7% of total fresh fruit sales, and rank #1 in total produce dept \$ sales; berries are 7.8% of total fresh fruit quantity, and rank #6 in total produce sales, in pounds.

Source: Retail Category Trends: Total US, California Strawberry Commission. *IRI/Freshlook data ending October 8, 2017. Data projected to national US retail sales.

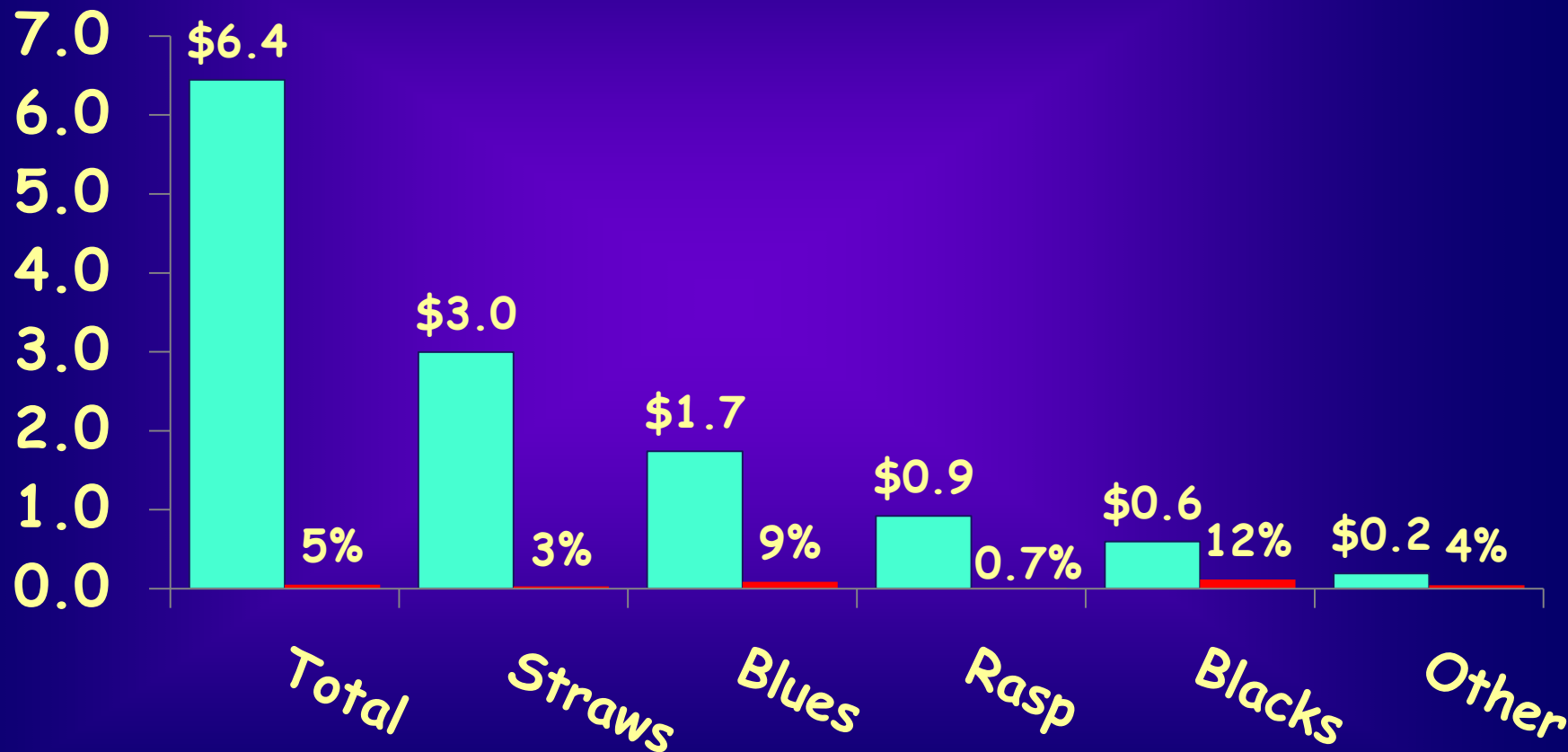
US Berry Sales, by Type: Quantity Sold and Annual Growth Rates in Key Food Retailers, Lbs, 2017



Source: Retail Category Trends: Total US, California Strawberry Commission. *IRI/Freshlook data ending October 8, 2017.

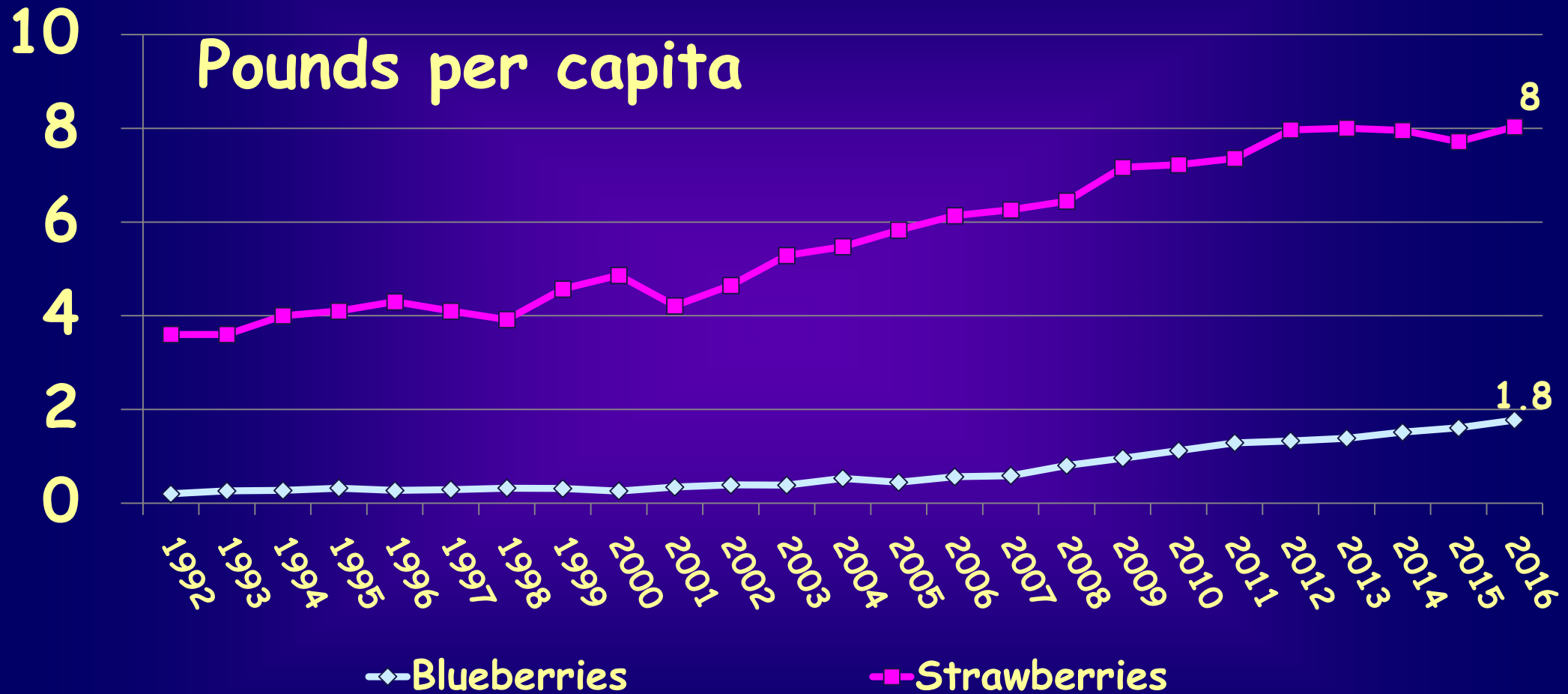
US Berry Sales: \$ Sales and Annual Growth Rates in Key US Food Retailers, 2017

\$Billions



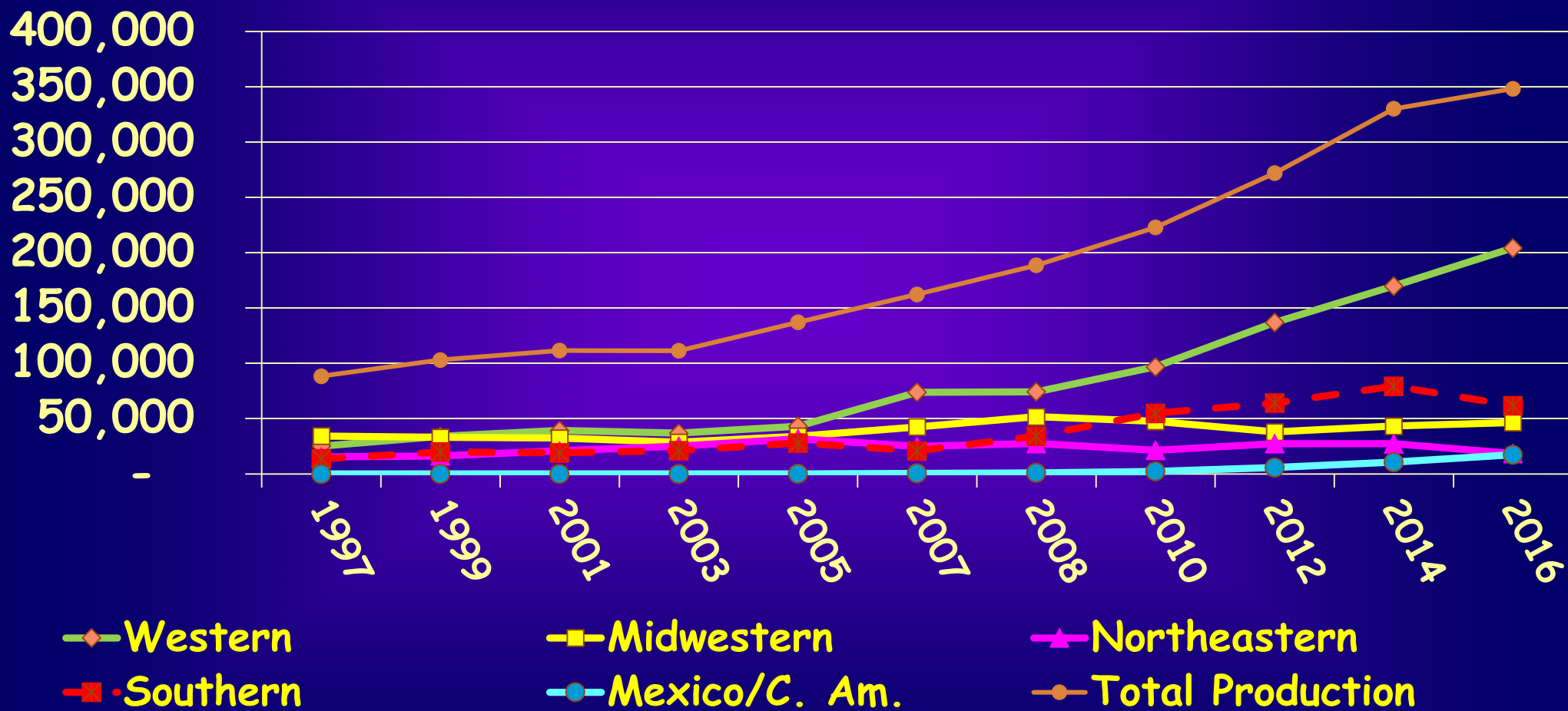
Source: Retail Category Trends: Total US, California Strawberry Commission. *IRI/Freshlook data ending October 8, 2017.

US Per Capita Consumption/Disappearance of Fresh Blueberries and Strawberries, 1992-2016



Source: 2017 Fruit and Tree Nuts Yearbook, ERS/USDA, October 31, 2017.
Includes retail and foodservice.

N. American Highbush Blueberry Production, by Region, 1997-2016 (fresh and processed), Metric Tons, (in 2016 174,225 fresh + 173,998 process = 348,223 total MT)



Source: Global Blueberry Statistics and Intelligence Report, International Blueberry Organization (IBO), April 2017.

US Fresh Blueberry Production, Utilization, Imports, and Exports, 1990-2016, MT (260,129 MT in 2016)

Metric tons

300,000

250,000

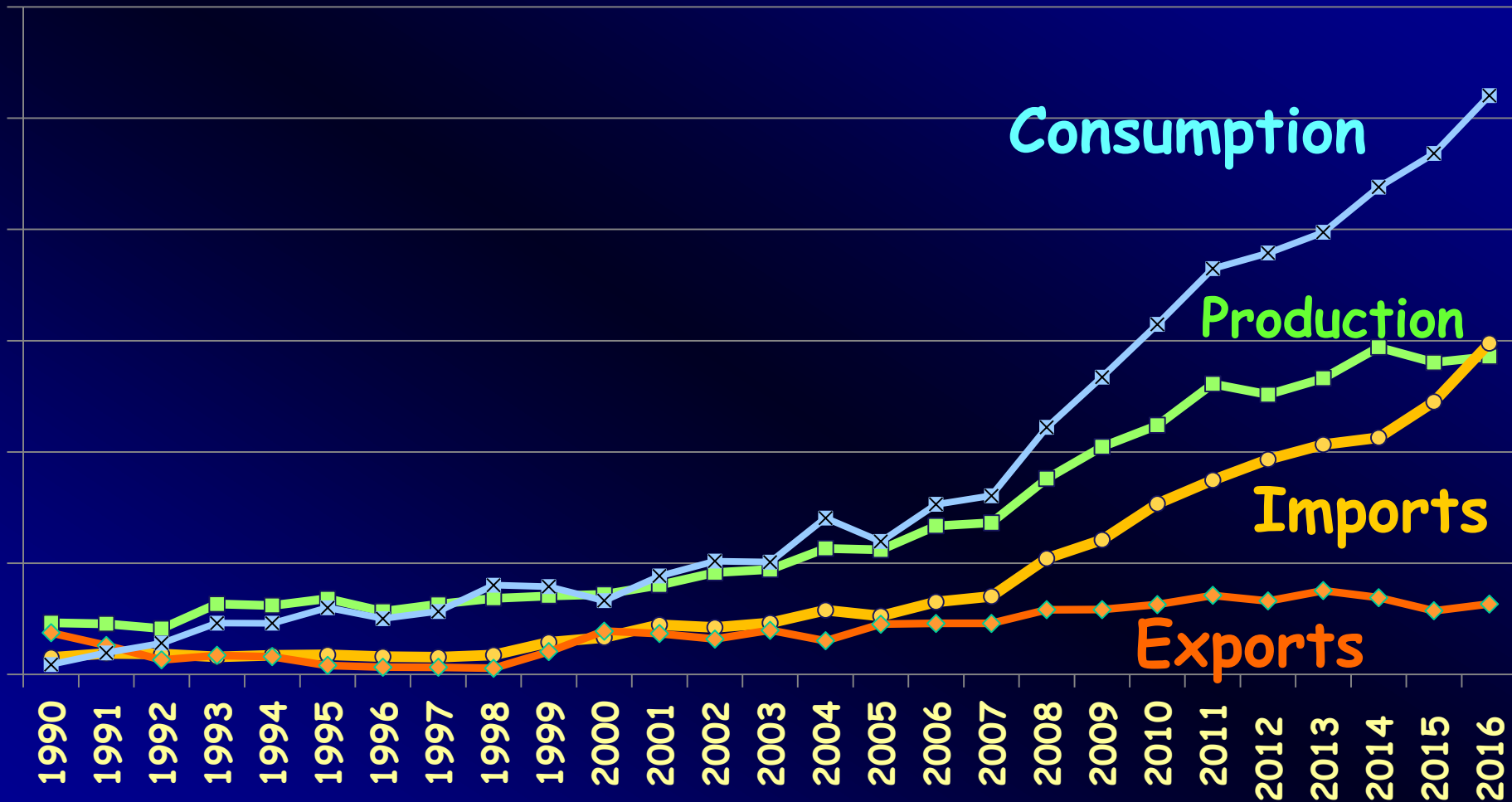
200,000

150,000

100,000

50,000

0



Source: 2017 Fruit and Tree Nuts Yearbook, ERS/USDA, October 31, 2017. Includes retail and foodservice.

USA Fresh Blueberry Imports by Key Country of Origin, 1990-2016, (148,911 MT in 2016)

Metric Tons

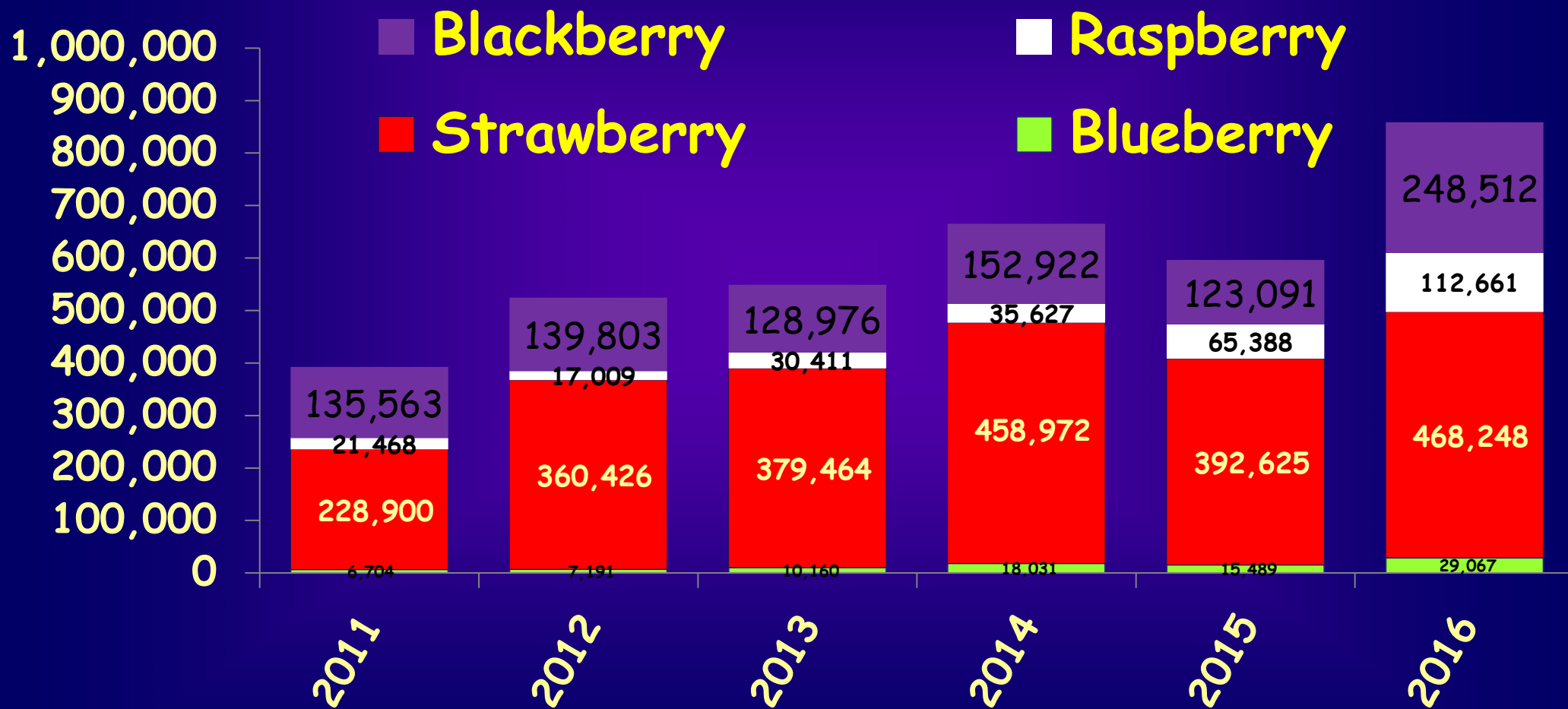
- ▲ Chile
- ◆ Canada
- Argentina
- Mexico
- Other

Note: In 2016, 14,626 MT of Other is Peru vs 5,234 in 2015.



Source:
GATS/FAS
/USDA
online data
queries.

Mexican Berry Production, 2011-16, Metric Tons, (total berry production: 858,488 MT in 2016!)



Source: Elaborated by Aneberries with data from SIAP 2011-15, Sagarpa 2016.

Note: Figures include processed and Mexico has a straw freezer industry. 2/3 of strawberry production is for the domestic market or processing, while most of the other berries are fresh export-oriented. 2016 production of all the berries may be overestimated.





Tabletop production of strawberries in Mexico

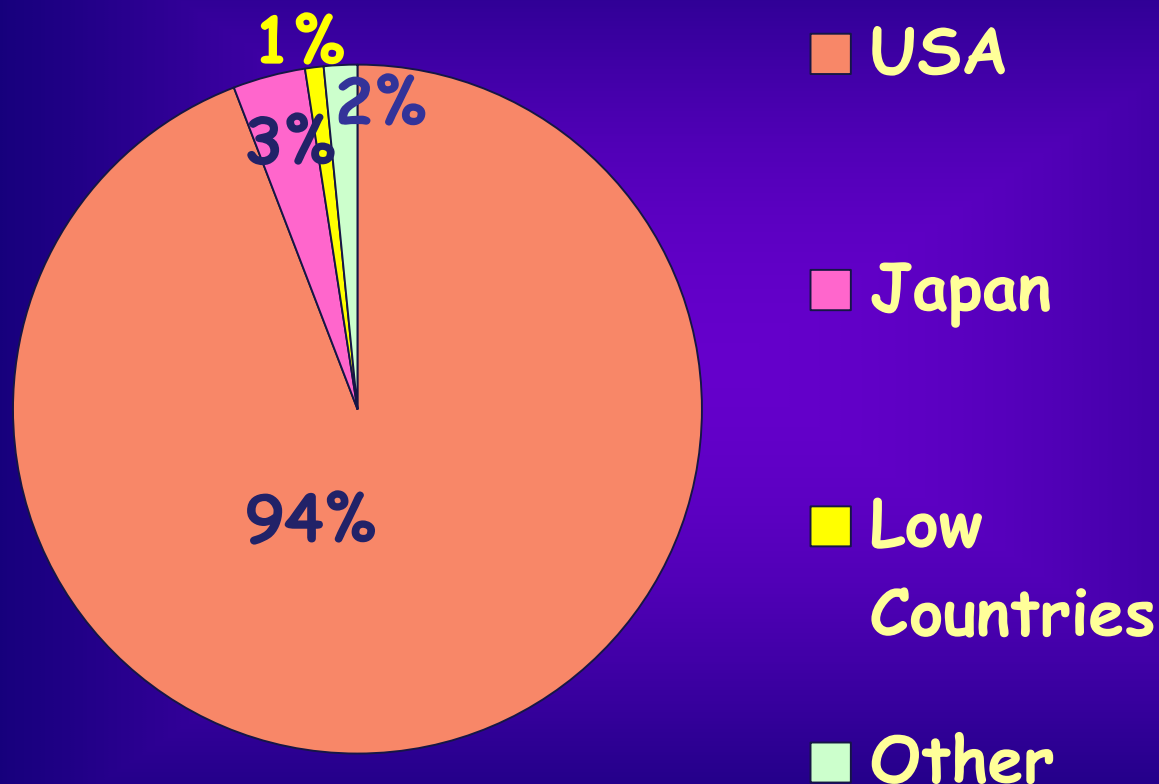
Changing Role of Mexico

- Mexico one of few countries to offer the full berry line for fresh market, and has a long-standing straw freezer industry.
- It has a large domestic market for fresh straws and emerging domestic markets for the other berries.
- Michoacán and Jalisco most important berry states:
 - Jalisco most important for blues;
 - Michoacán for straws & blacks;
 - Jalisco for rasps;
 - Baja California plays a role in straws & rasps.

Mexico



Mexican Fresh Highbush Blueberry Exports, by Key Destination Market, 2016, (17,107 MT total exports)



US\$187
million total
value

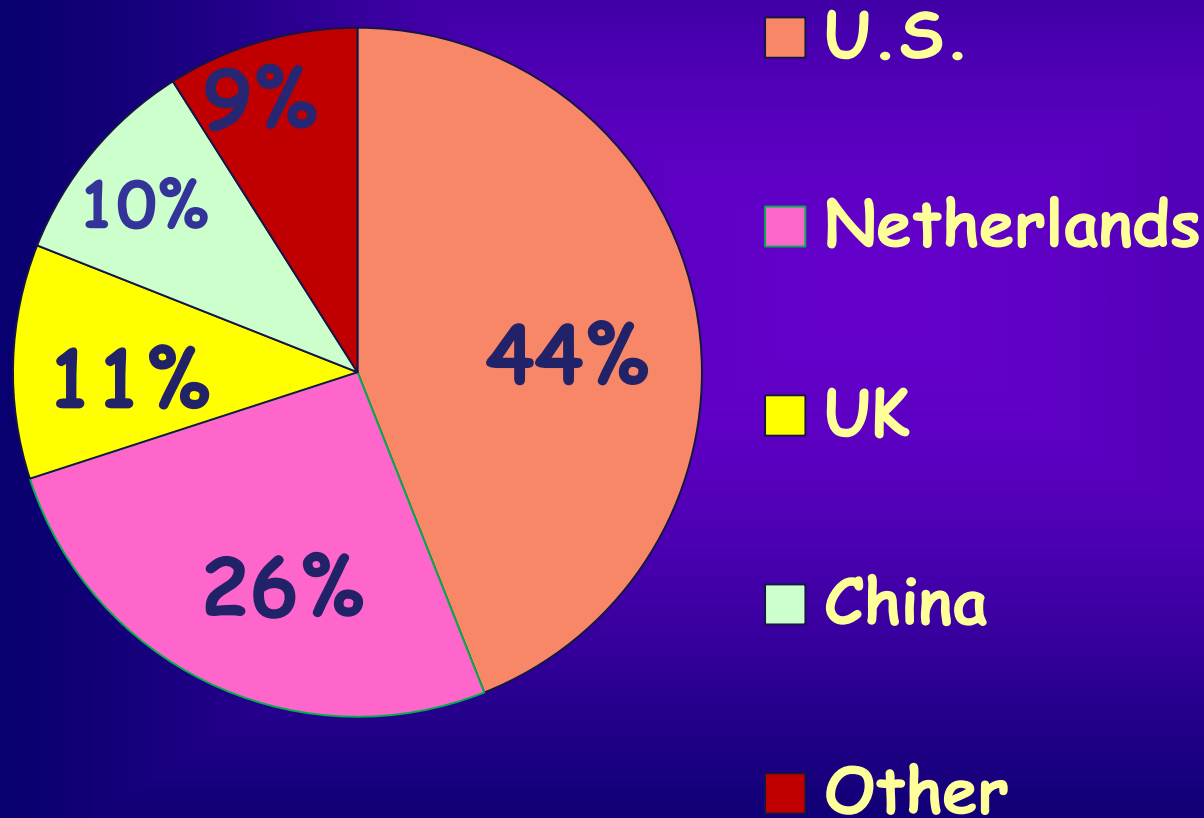
Changing Role of Mexico

- In 2014, Mexico got market access to China for blackberries and raspberries; in 2017 for blues.
- Several flights/week from Guadalajara to Hong Kong.
- Export volumes to China may reach around 5% of export value but the market is very challenging.
- Chile and Peru have duty-free access for blues while Mexico faces 12-16% duties for blues and ~20% for other berries.

Peruvian Blueberry Industry

- In 2017, Peru's blue exports surpassed Argentina: Peru= 18% of S. American exports vs 12% Argentina.
- Targeting fall window, before Chile, for now. Can ship August-April if economically attractive.
- In next 5 yrs some experts expect Peru to surpass Chile in fresh exports.
- Most production in north, led by La Libertad.
- Peru is going through a rapid learning curve on locations, varieties, cultural practices, postharvest handling, etc.

Peruvian Fresh Highbush Blueberry Exports, by Key Destination Market, CY2017, (41,329 MT total exports)



Peruvian Blueberry Industry

- Plants come into production quickly; fast paybacks.
- Plants can be pruned to produce almost any time of yr. Large growers can afford to pull out & plant new varieties. With current pruning practices the same plants won't stay in prod'n for many yrs, so expansion in total production must come from new plantings.
- Most new plantings are open varieties. Biloxi and Ventura are common.
- Land and water are abundant. However, labor is becoming a challenge. Housing is being built.

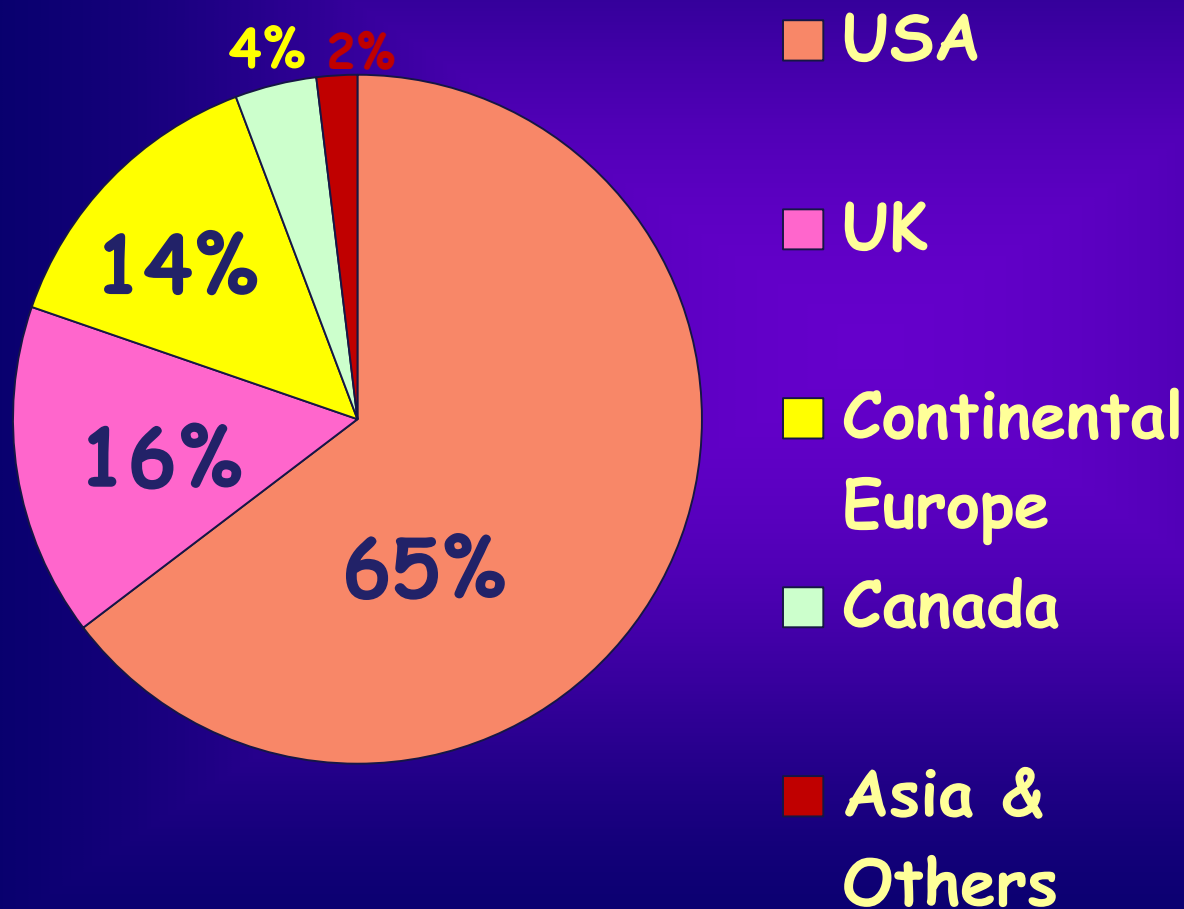
Peruvian Blueberry Industry

- Production has been dominated by few firms. Foreign investment growing.
- Camposol recently announced a special consumer slogan, "The berry that cares," showing it's growing focus on consumers. As of Sept 2017 in Camposol's Q3 2017 report, blue area planted was 1628 HA.
- Only 68% of Camposol planted area has reached peak yields.
- In October 2017, Chilean blueberry grower-exporter Hortifrut and Talsa merged, now with 2200 hectares total.

Peruvian Blueberry Industry

- Peru can ship by boat to the USA using a cold treatment and avoid fumigation. It can land product in the US with prices below the Argentine cost of production (and still make money).
- Peru will challenge Argentina in the USA and European markets in the fall. Will face competition from S. Africa in Europe.
- Peru got access to China in 2016.
- Chile is ahead in servicing Asian markets but both Peru and Chile have duty free access in China, an advantage relative to Mexico.

Argentine Fresh Highbush Blueberry Exports, by Key Destination Market, MY2015/2016, (14,921 MT total exports)



Source: Global Blueberry Statistics and Intelligence Report, International Blueberry Organization (IBO), April 2017.

Argentine Blueberry Industry

- Federico Baya, new president of the ABC: “the international market has changed and Argentina is preparing for a new global scenario.”
- Changes include more maritime shipments to improve cost competitiveness. ABC forecast for 2017 indicates air shipments may decline to 80% vs almost all in 2015.
- Improvements in varieties, growing practices, logistics, postharvest handling, statistics, internal market, market promotion and buyer communications are underway.
- Int'l campaign “Taste the difference;” & local, “Mejor con arandanos.”
- Gaining new market access, including China and Japan.

Sources: Argentine Blueberry Committee (ABC), including <https://www.argblueberry.com/home/en/arandanos-argentinos-record-de-exportacion-por-via-maritima/>

Conclusions

- Competitive pressure on retailers and foodservice operators means on-going margin pressure for suppliers as well.
- Firms at all levels of the fresh produce supply chain must take management practices to a higher level to improve efficiency and survive on lower margins.
- Information technology will play a growing role.
- Shopper-centrism and targeted marketing to specific segments will grow; social media will help.
- Strategic alignment between suppliers and commercial buyers will grow.
- Fresh produce demand improving along with the economy.