Join us for a WEBINAR
May 20, 2020 – 1 PM EST
The Post COVID-19 "New Normal" Future of Retail

Speaker
Tony D'Onofrio
CEO, TD Insights

> Latest Retail Trends / Forecasts
> The Surreal "New Normal"
> Role of Physical Stores
> The Emerging Technologies
> Loss Prevention Impact

Top 10 Global
Retail Influencer

Register NOW

PRESENTED in
Partnership with **LPF** LOSS PREVENTION FOUNDATION

SPONSORED by **FACEFIRST**

WELCOME

THE Post COVID-19 FUTURE OF RETAIL

Tony D'Onofrio

Tony D'Onofrio

- Top 10 COVID-19 Global Thought Leader & Influencer by Thinker360
- Top 25 Retail Industry Website by Vend
- Top 10 Global Retail Influencer List by Thinkers360
- Board Member – Private Equity Tech and the Loss Prevention Research Council (LPRC)
- Global Social Media Influencer & Publisher in Retail, Emerging Tech & Security
- Mentor to Silicon Valley Startups

Speaker
Tony D'Onofrio
CEO, TD Insights

Top 10 Global
Retail Influencer

WHO IS FACEFIRST?

CUSTOMER EXPERIENCE

SECURE TRANSACTIONS

SAFER COMMUNITIES

HEADQUARTERS
Los Angeles, California

Enterprise Software Developer
AI-enabled computer vision software solutions for large, enterprise customers for safer, personalized and more engaging experiences for their customers and employees

Best-of-Class Facial Recognition & Identity
Solutions that are known for their performance and ease of use

Respected Channel Partner
Partnering with world-class hardware and software providers to deliver comprehensive solutions for our customers

Privacy and Security Experts
Creating the foundation for everything we do from design to deployment

THANK YOU

FACEFIRST

www.facefirst.com

Who is The Loss Prevention Foundation?

LPF
LOSS PREVENTION FOUNDATION

www.losspreventionfoundation.org
info@losspreventionfoundation.org
+1 (866) 433-5545

Mathew Schriner, LPC, Director of Operations
Mat.Schriner@LossPreventionFoundation.org

The Loss Prevention Foundation (LPF) is an international leader in educating and certifying retail loss prevention and asset protection professionals.

LPF's mission is to advance the retail loss prevention and asset protection profession by providing relevant, convenient and challenging educational resources.

Elevate the perception of our industry

Legitimize our profession and skillset

Builds a framework for education and professional development and personal growth

Provides an educational bridge to law enforcement and military personnel

THANK YOU

You are the **Leaders** to *Shape It.*

The **$30 Trillion** Retail Opportunity

The Retail **Apocalypse** and **Recovery**

Retail **New Normal**

COVID-19 Retail **Crime** Trends

The Post COVID-19 **Future of Retail**

For MORE Visit
www.tonydonofrio.com

6

It's a Global Pandemic of Challenges

Real GDP Growth Rate: 2019-2020

Country	2019	2020
China	6.1	0.5
World	3.1	-3.0
USA	2.3	-5.8
South Korea	2.0	-1.0
Spain	2.0	-8.0
United Kingdom	1.4	-6.7
France	1.3	-6.7
Brazil	1.1	-5.0
Russia	1.1	-6.2
Japan	0.7	-5.5
Germany	0.6	-6.3
Italy	0.3	-9.0

■ 2019 ■ 2020

Global Consumer Expenditure Growth by Category

Category	2020
Food & Non-Alcoholic Beverages	2
Housing	-1.3
Alcoholic Beverages & Tobacco	-2.8
Education	-2.5
Health Goods & Med Services	-3.5
Communications	-4.3
Clothing & Footwear	-4.7
Misc Goods & Services	-7.4
Hotels & Catering	-7.7
Household Goods & Services	-8.2
Leisure & Recreation	-9
Transport	-9.3

% annual real growth

■ 2019 ■ 2020
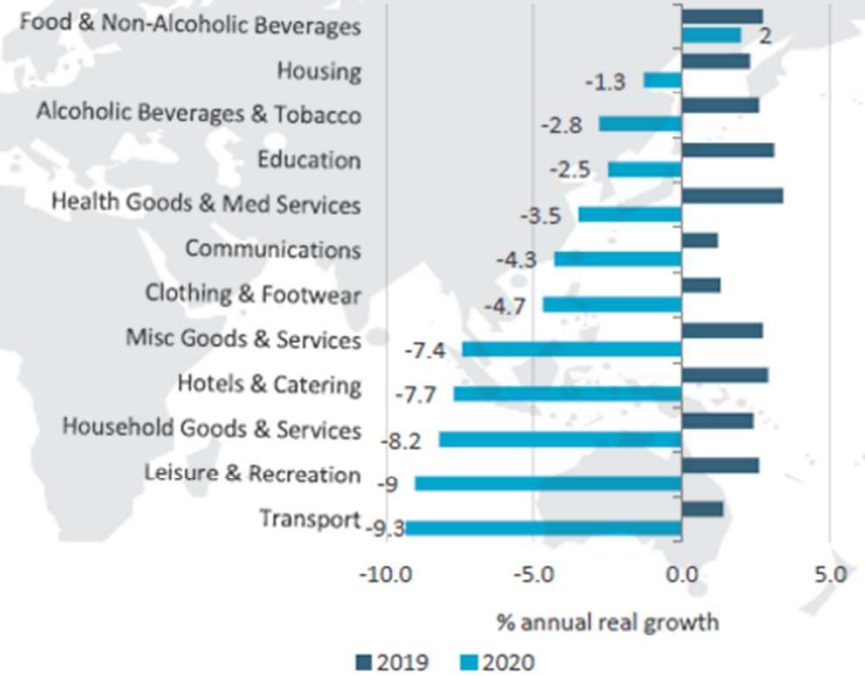
Source: Euromonitor, 2020

We are all Looking forward to **2021**

% change in real GDP by region

North America
- 2.8% (2018)
- 2.2% (2019)
- -3.3% (Optimistic 2020 estimate)
- 7.2% (Optimistic 2021 estimate)

South and Central America
- 0.6% (2018)
- 0.1% (2019)
- -4.3% (Optimistic 2020 estimate)
- 6.5% (Optimistic 2021 estimate)

Europe
- 2.1% (2018)
- 1.3% (2019)
- -3.5% (Optimistic 2020 estimate)
- 6.6% (Optimistic 2021 estimate)

Asia
- 4.2% (2018)
- 3.9% (2019)
- -0.7% (Optimistic 2020 estimate)
- 8.7% (Optimistic 2021 estimate)

Other regions
- 2.1% (2018)
- 1.7% (2019)
- -1.5% (Optimistic 2020 estimate)
- 6.0% (Optimistic 2021 estimate)

Legend: ■ 2018 ■ 2019 ■ Optimistic 2020 estimate ■ Optimistic 2021 estimate

Source: Forrester Data Provided by JLL 2020

INSIGHTS TD

8

Global Retail Forecasts
PRE-COVID-19

Total Retail Sales Worldwide, 2017-2023
Trillions and % change

Year	Retail Sales	% Change
2017	$22.974	6.2%
2018	$23.956	4.3%
2019	$25.038	4.5%
2020	$26.074	4.1%
2021	$27.243	4.5%
2022	$28.472	4.5%
2023	$29.763	4.5%
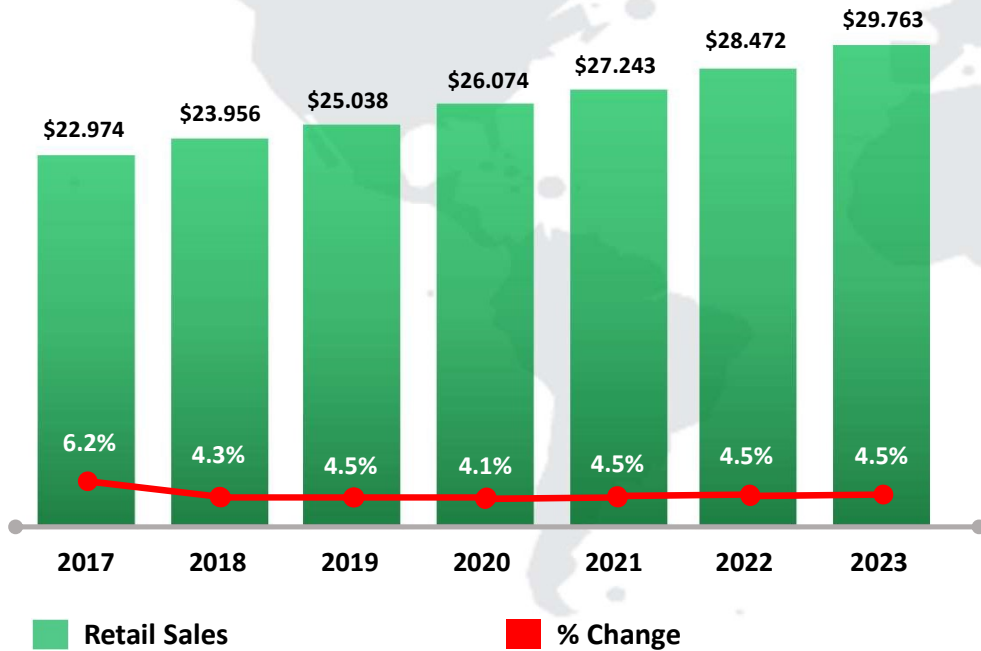
Retail sales growth, 2020-21 forecasts
(real % change per year)

Legend: 2020, 2021

Categories: Asia and Australasia, Middle East and Sub-Saharan Africa, Eastern Europe, North America, Latin America, Western Europe

The New Retail Sales **Normal**

Updated May 20, 2020

North America	2019 % of Total Retail	Revised 2020 % of Total Retail	$ impact from 2019 actuals
FDCM	49.0%	56.2%	$172.3b
GMS	23.7%	21.9%	-$167.9b
Hospitality	27.4%	21.9%	-$356.4b
Total			-$352.0b

EMEA	2019 % of Total Retail	Revised 2020 % of Total Retail	$ impact from 2019 actuals
FDCM	49.0%	55.3%	$127.7b
GMS	33.4%	29.6%	-$216.6b
Hospitality	17.6%	15.1%	-$130.9b
Total			-$219.8b

Asia/Pacific	2019 % of Total Retail	Revised 2020 % of Total Retail	$ impact from 2019 actuals
FDCM	53.6%	57.7%	$229.7b
GMS	34.7%	31.6%	-$275.7b
Hospitality	11.8%	10.7%	-$93.4b
Total			-$139.4b

Latin/South America	2019 % of Total Retail	Revised 2020 % of Total Retail	$ impact from 2019 actuals
FDCM	52.8%	57.7%	$35.8b
GMS	33.2%	29.9%	-$71.5b
Hospitality	14.0%	12.3%	-$34.1b
Total			-$69.8b

Source: IHL Group

North America "New Normal" – Revised Retail Forecasts

Updated May 20, 2020

	2019 Retail Sales ($ MM)	2020 Forecast Growth Original	2020 Forecast Growth 3/25	2020 Forecast Growth 4/15	2020 Forecast Growth 4/26	2020 Forecast Growth 5/7	2020 Forecast Growth 5/20
North America							
Food/Grocery	$ 846,205.0	3.3%	11.0%	13.0%	10.0%	10.5%	11.5%
Drug Stores	$ 378,191.0	2.9%	8.0%	12.0%	10.0%	10.0%	10.7%
Supercenter	$ 532,508.7	3.0%	12.0%	14.0%	12.0%	12.5%	12.5%
Department Store	$ 52,423.6	-10.0%	-20.0%	-25.0%	-29.0%	-29.0%	-29.0%
Specialty Hardgoods	$ 865,397.7	0.5%	0.0%	-2.5%	-4.5%	-10.8%	-10.8%
Specialty Softgoods	$ 296,016.3	-1.0%	-18.0%	-23.0%	-26.0%	-20.0%	-21.0%
Mass Merchandisers	$ 197,493.9	2.0%	10.0%	12.0%	12.0%	12.0%	6.6%
Convenience / Gas	$ 558,182.9	0.5%	-5.0%	-8.0%	-8.0%	-8.0%	-7.5%
Bar/Restaurant	$ 346,708.7	2.5%	-13.0%	-22.0%	-25.0%	-25.0%	-25.0%
Quick Service/Fast Food	$ 346,133.8	7.1%	-0.5%	-8.0%	-12.0%	-13.0%	-13.0%
Lodging	$ 268,719.2	2.0%	-14.0%	-26.0%	-26.0%	-26.0%	-26.0%
Ent - Casino Cruise	$ 181,137.3	1.7%	-18.7%	-30.0%	-35.0%	-35.0%	-35.0%
Ent - Theme Theater, etc	$ 261,400.0	1.8%	-18.5%	-30.0%	-35.0%	-35.0%	-35.0%
Total North America	**$ 5,130,518.2**	**2.0%**	**-1.0%**	**-3.9%**	**-6.2%**	**-6.9%**	**-6.9%**

***As of 5/20/2020 – not including pure play ecommerce in these figures which are estimated to be +80b for the year

COVID-19 IMPACT

Source: IHL Group, 2020
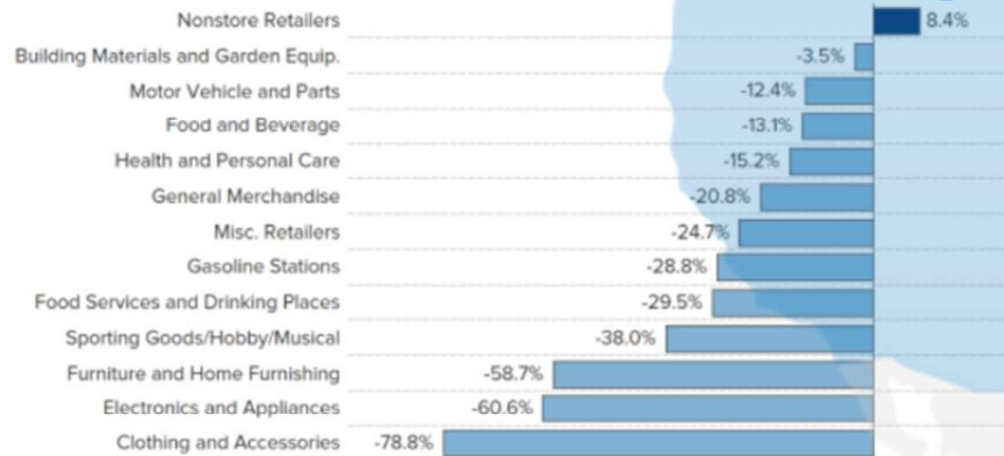
The Retail **Apocalypse** and **Recovery**

April 2020 USA Retail Sales

COVID-19 IMPACT

Retail store sales by category
Percent change from March to April 2020. Total retail sales dropped by 16.4 percent.

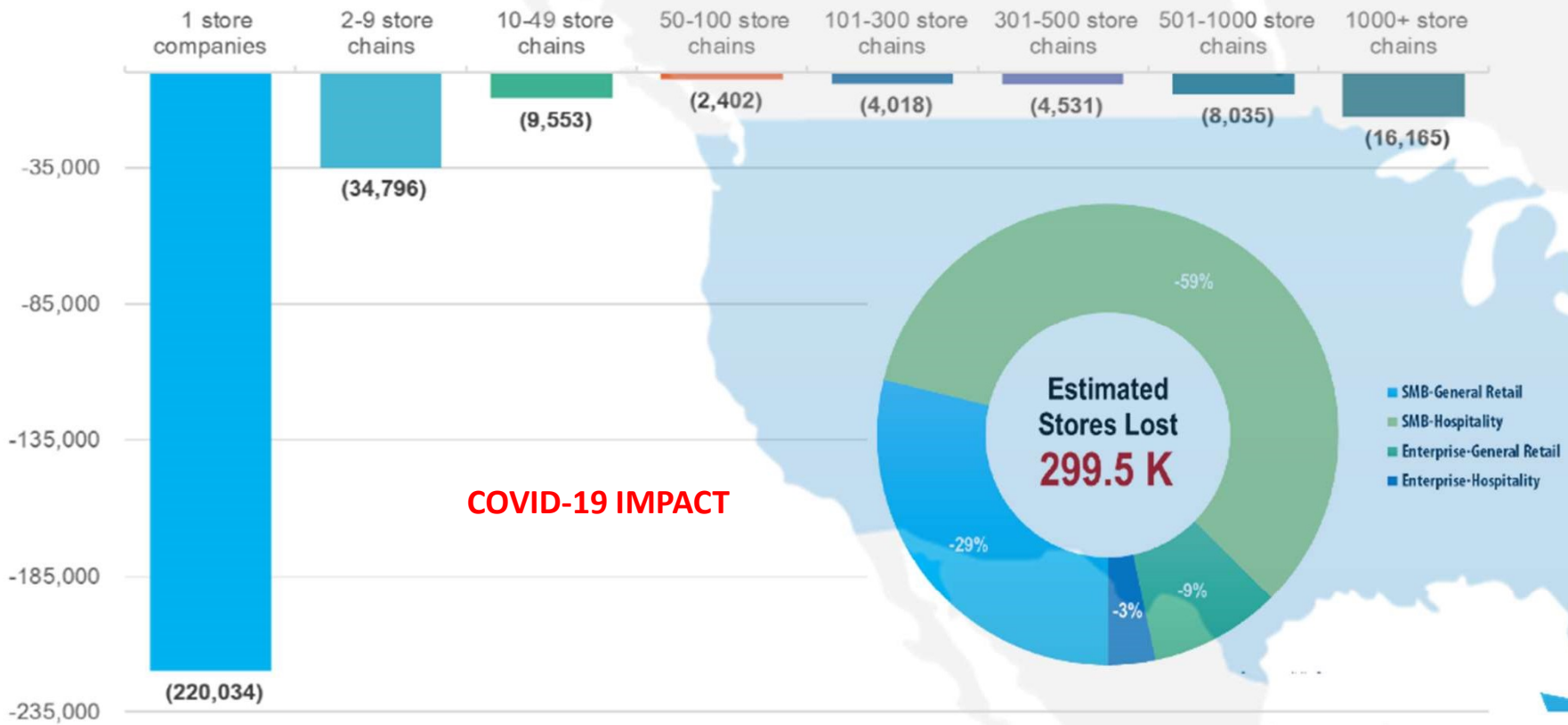| Category	Percent change
Nonstore Retailers	8.4%
Building Materials and Garden Equip.	-3.5%
Motor Vehicle and Parts	-12.4%
Food and Beverage	-13.1%
Health and Personal Care	-15.2%
General Merchandise	-20.8%
Misc. Retailers	-24.7%
Gasoline Stations	-28.8%
Food Services and Drinking Places	-29.5%
Sporting Goods/Hobby/Musical	-38.0%
Furniture and Home Furnishing	-58.7%
Electronics and Appliances	-60.6%
Clothing and Accessories	-78.8%

SOURCE: U.S. Census Bureau

- **April down -16.4%**
  - Economists projected -12.3%
- **March -8.3%**
- **68% of USA $21.5 trillion economy from personal consumption expenditures, which tumbled 7.6% in Q1**
- **Consumer sentiment**
  - 73.7 in May from 71.8 in April
- **A year of rebalancing** – Under Armour

Source: CNBC, May 15, 2020 / Wall Street Journal May 15, 2020

Est. 2020 USA Retail & Hospitality Store Closures By Chain Size

1 store companies	2-9 store chains	10-49 store chains	50-100 store chains	101-300 store chains	301-500 store chains	501-1000 store chains	1000+ store chains
		(9,553)	(2,402)	(4,018)	(4,531)	(8,035)	(16,165)
	(34,796)						

-35,000

-85,000

COVID-19 IMPACT

-135,000

-185,000

(220,034)

-235,000

Estimated Stores Lost
299.5 K

-59%

-29%

-3%

-9%

- SMB-General Retail
- SMB-Hospitality
- Enterprise-General Retail
- Enterprise-Hospitality

Source: IHL Group
UPDATED – May 7, 2020

Est. 2020 USA Retail & Hospitality Store Closures By Chain Size

% of Total Stores Lost

1 store companies	2-9 store chains	10-49 store chains	50-100 store chains	101-300 store chains	301-500 store chains	501-1000 store chains	1000+ store chains
-9.2%	-10.6%	-6.8%	-4.2%	-3.6%	-4.8%	-5.0%	-2.3%
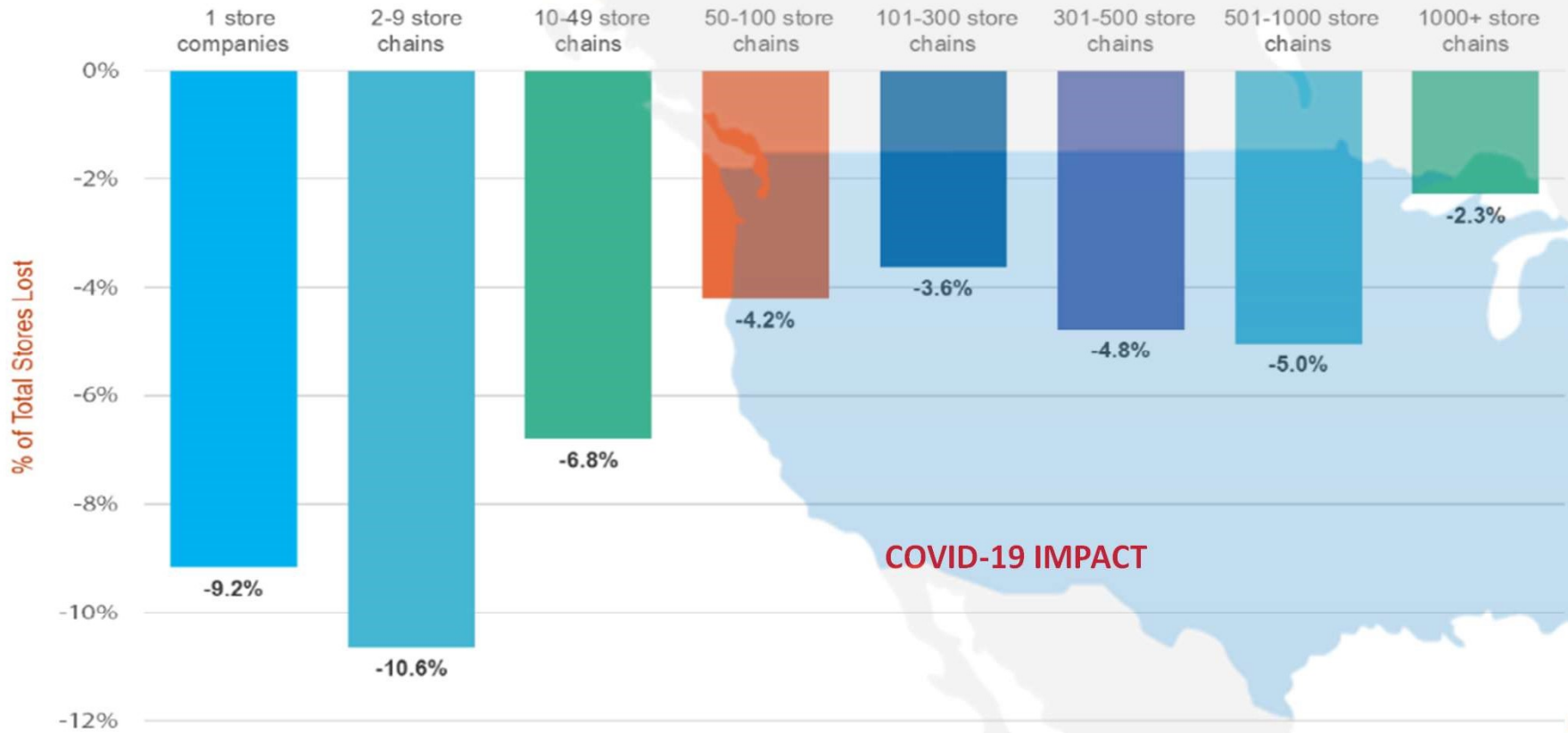
COVID-19 IMPACT

Source: IHL Group
UPDATED – May 7, 2020

15

COVID-19 Lockdown USA Transfer of Wealth

GMS Hospitality

North America - $125b

Worldwide - $285b

→ **Food/Drug/ Mass/Conv**

Small Companies

North America - $250b

→ **Large Companies**

IHL Projects over 254,000 retailers with fewer than 10 locations will go out of business as a result of COVID-19 lockdowns and policies that allowed Mass Retailers like Walmart, Sam's, Costco and Target to be open and sell non-essential categories while small companies were shuttered because they only sold categories that were deemed non-essential by state governments. So if a large company could sold food and cleaning materials and also clothing, sporting goods, home accessories, luggage they could sell all categories, but small clothing, sporting goods, home accessories, luggage and others were forced to shut down.

Sources: US Retail Census through April, 2020, IHL Group

UBS: 100,000 USA Stores to Close Next Five Years

Estimated stores remaining in 2025
Stores closures from 2019

	0%	25	50	75	100

Office Supplies

Consumer Electronics

Sporting Goods

Home Furnishings

Clothing & Accessories

General Merchandise

Home Improvement

Auto Parts
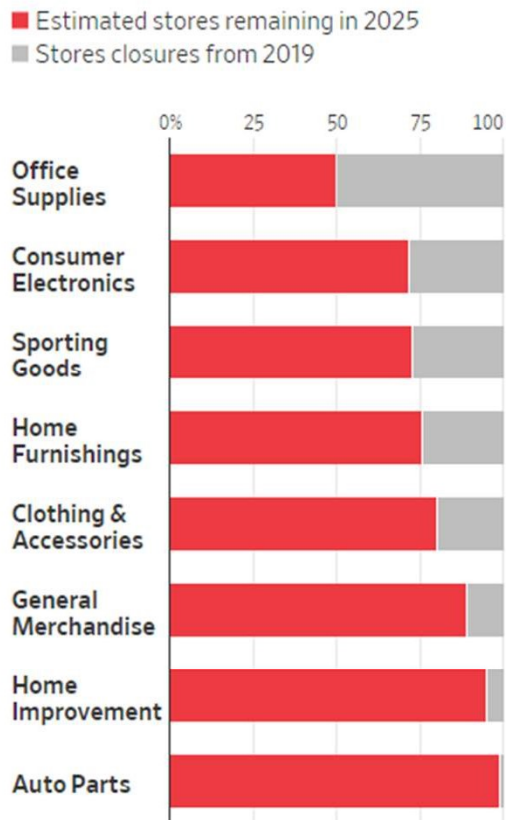
Source: UBS

- From 883,000 stores last year to 782,000 stores
  - 2% of stores to close every year into 2025
  - 28,455 stores closed during 2008 recession

- 50% chance 19 retailers tracked by S&P will default on their debt
  - Five retailers defaulted in 2008 recession

- Lines blurring between physical and digital retail
  - E-commerce to 25% of retail sales vs 15% in 2019

COVID-19 IMPACT

Source: Wall Street Journal, May 15, 2020

INSIGHTS TD

17

Over Stored at the USA Mall

2016 Total Retail Square Footage per Capita

Country	Value
US	23.5
Canada	16.4
UK	4.6
France	3.8
Spain	3.4
Italy	2.8
Germany	2.4

Malls built at 4x population growth rate since 1975

USA retail 10x more space per capita than Germany and est. 20x for apparel / dept. stores

Source: Cowen Research, IHL Group

E-Commerce will not Eat the Physical Retail World

eCommerce will skip a year or two

eCommerce as a % of retail in the US

- Original forecast
- Revised

Physical Stores Still & Will Matter in Online Sales
Pre-COVID-19

Consumer Spend (Trillions USD)

Year	2017	2018	2019	2020	2021	2022	2023
Total	$4.99	$5.25	$5.43	$5.70	$5.83	$5.98	$6.13
Ecommerce Rev. Fulfillment Center	$0.32	$0.36	$0.38	$0.41	$0.42	$0.44	$0.45
Ecommerce Rev. WH Fulfillment	$0.49	$0.54	$0.59	$0.67	$0.72	$0.78	$0.85
Ecommerce Rev. Store Fulfillment	$0.14	$0.19	$0.25	$0.31	$0.38	$0.44	$0.51
Store Revenue	$4.04	$4.17	$4.21	$4.31	$4.31	$4.32	$4.32

YEAR
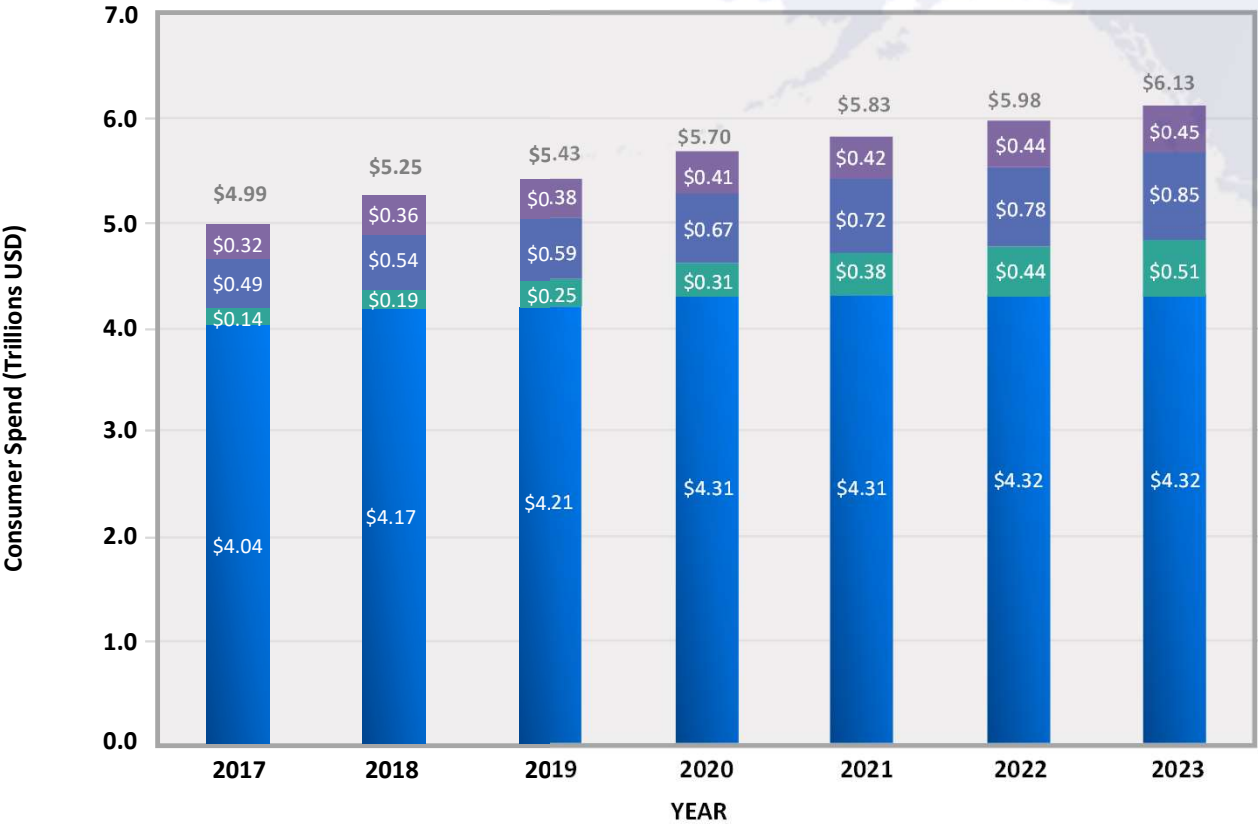
NA Retail & Hospitality Spend by Fulfilment Channel

■ Store Revenue
■ Ecommerce Rev. Store Fulfillment
■ Ecommerce Rev. WH Fulfillment
■ Ecommerce Rev. Fulfillment Center

Source: IHL Group

iNSIGHTS TD

The Retail *Recovery*
Is Already Underway

COVID-19 and Retail Sales

Historical Perspectives
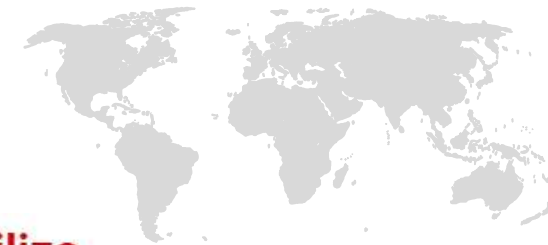
Retail markets typically dip during a crisis, but eventually stabilize

SARS outbreak
China 2003

Retail sales year-over-year growth
Outbreak spreads — Steady recovery — Market stabilizes as epidemic ends
March 2003 — May — August — January 2004

Fukushima disaster
Japan 2011

Earthquake and nuclear disaster create sudden panic — Market stabilizes
Market recovers as panic subsides
March 2011 — June — January 2012

MERS outbreak
South Korea 2015

Outbreak spreads — Rapid recovery — Market stabilizes as epidemic ends
Peak retail season during Mid-Autumn Festival
May 2015 — August — October — December

Sources: China National Bureau of Statistics; Japan Ministry of Economy, Trade and Industry; South Korea government statistics

Source:
Bain & Company, 2020

China Recovery Retail Trends

China Retail Sales
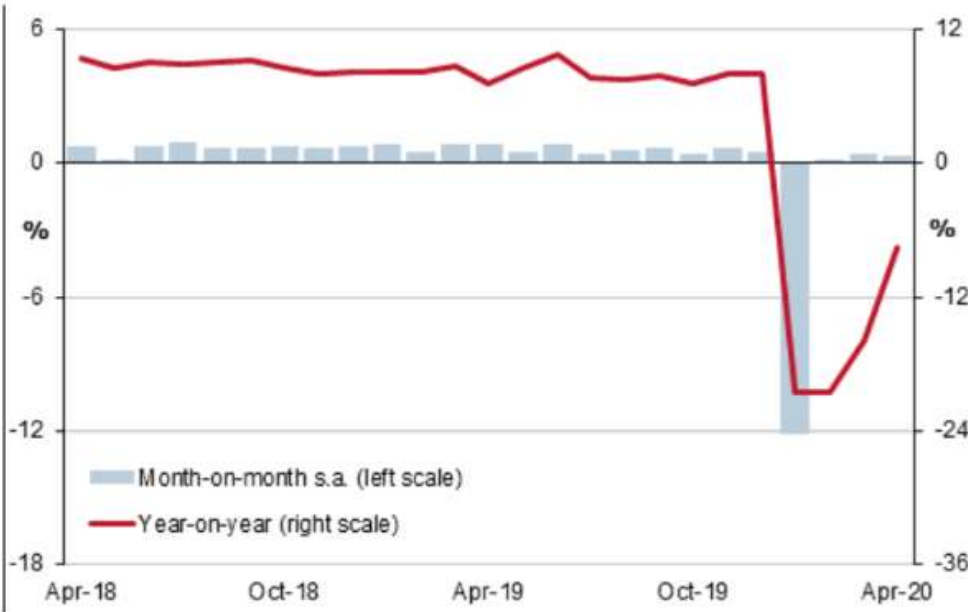
Shanghai

Chanel

Dining

USA Retail Recovery is Underway
Updated May 24, 2020

Current metrics
Last updated: May 24th @ 9.25am Arizona / 12.25pm Eastern

Retail sales growth and forecasts
Last updated: May 14th @ 7.20am Arizona / 10.20am Eastern

CLOSED

Stores closed
Current number of units and square feet

Store numbers:
104,545
(24.0% of total stores)

Floorspace (sq ft):
1,993
(21.5% of total space)

Stores open with severe restrictions
Current number of units and square feet

Store numbers:
90,170
(20.7% of total stores)

Floorspace (sq ft):
1,974m
(21.3% of total space)

Note: Restrictions means by appointment only or curbside/outdoor pickup only

Monthly retail sales growth forecast
Year-over-year, non-seasonally adjusted sales

3.5   7.3
-19.2
-38.1
-24.3

Jan   Feb   Mar   Apr   May
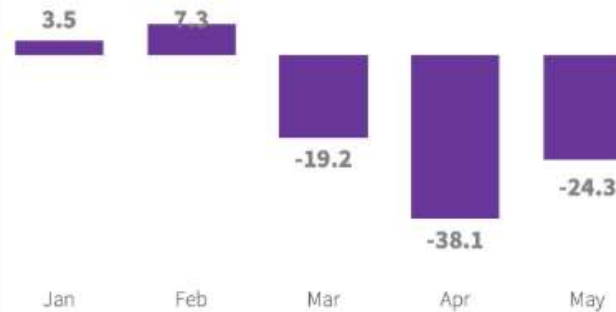
Note: January, February and March are actual data. April and May are forecasts. All data cover 'pure' retail only and so exclude gasoline, foodservice, and auto sales. Forecasts are based on GlobalData's latest model which takes inputs from our consumer panel, retailers and economic data.

Full year forecast for 2020
Year-over-year, non-seasonally adjusted sales

Overall	-5.6%
Apparel	-25.5%
Electronics	-7.1%
Food & grocery	+8.4%
Health & beauty	-3.2%
Home products	-11.5%

24% stores closed / 20.7% open with severe restrictions

INSIGHTS TD

24

USA Recovery by Segments
Versus 2019 Levels

COVID-19 IMPACT

- RETAIL & RESTAURANT COMBINED TOTAL
- FOOD, DRUG, CONVENIENCE, MASS MERCH SALES
- DEPT STORES, SPECIALTY HARD GOODS, SPECIALTY SOFT GOODS
- RESTAURANTS

GROWTH

70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
-60%

2020   2021   2022   2023

TIME

Source: IHL Group, 2020

25
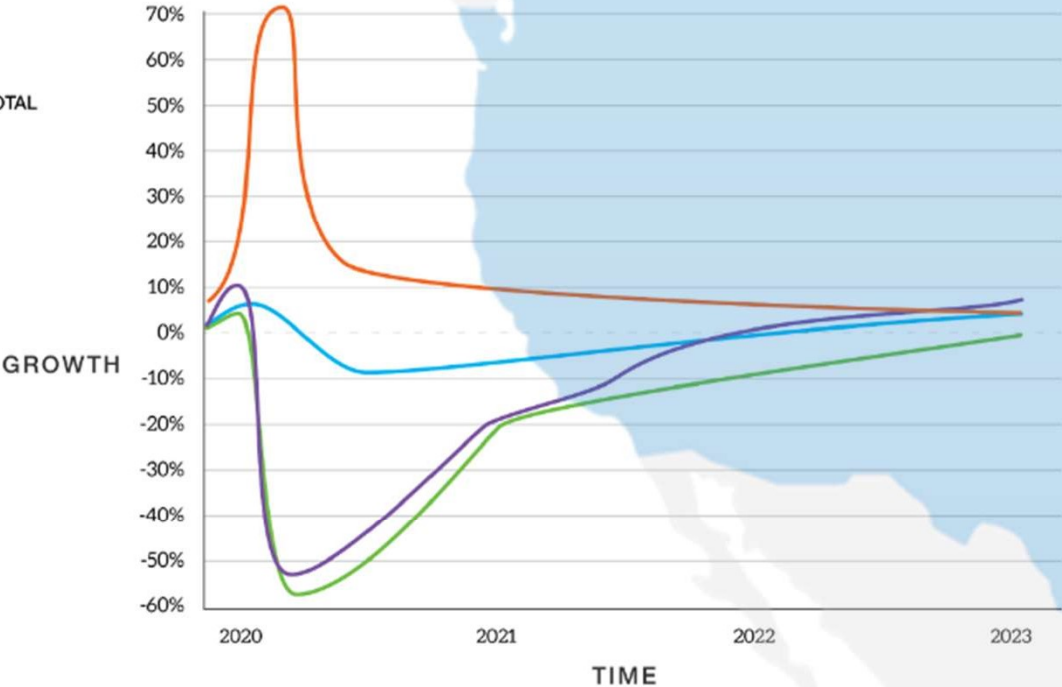
USA Retail Recovery

We model discretionary
retail sales in the US
in **three phases**:

(March–June)

2. Initial shopper
   caution with some
   pent-up demand
   (June–October)

3. Relative stability
   (October onward)
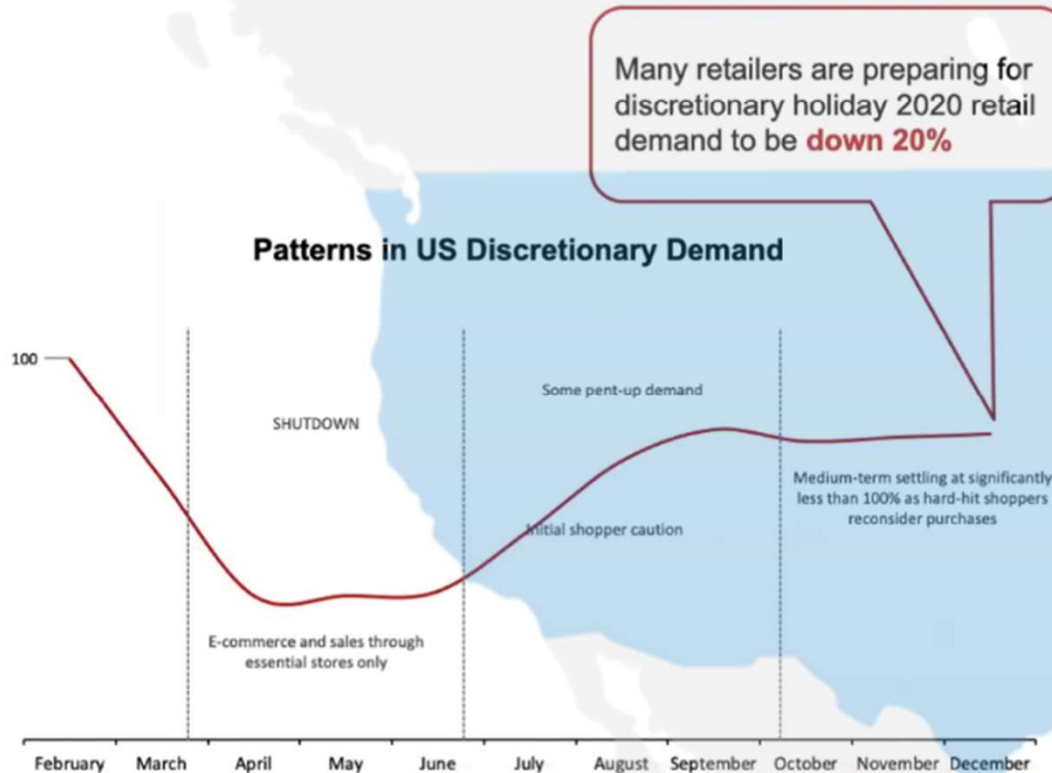
Many retailers are preparing for
discretionary holiday 2020 retail
demand to be **down 20%**

Patterns in US Discretionary Demand

100

SHUTDOWN

Some pent-up demand

Initial shopper caution

Medium-term settling at significantly
less than 100% as hard-hit shoppers
reconsider purchases

E-commerce and sales through
essential stores only

February   March   April   May   June   July   August   September   October   November   December

$2 Trillion
Estimated Loss
of Discretionary
Sales

USA Reasons Reasons for Optimism

Household Debt Service Ratio – Share of Disposable Income (%, SA)

Recessions are Getting Shorter

Wilshire 5000 Index ($Trillion)

Over $6 trillion of stockholder wealth regained

Government Stimulus

Source: Cushman & Wakefield
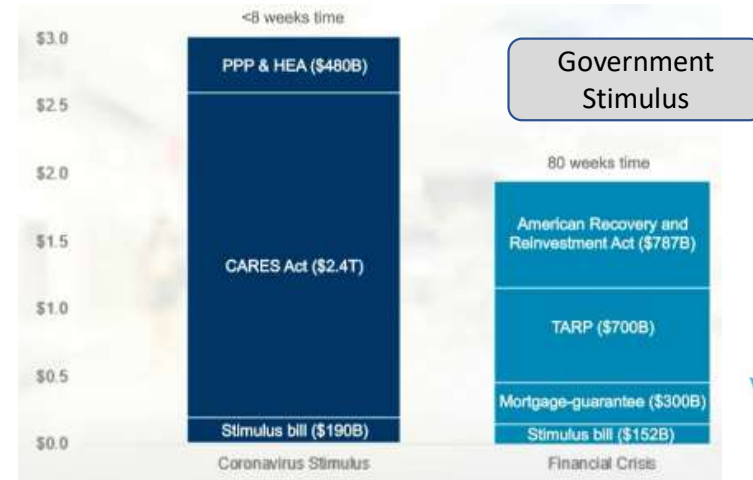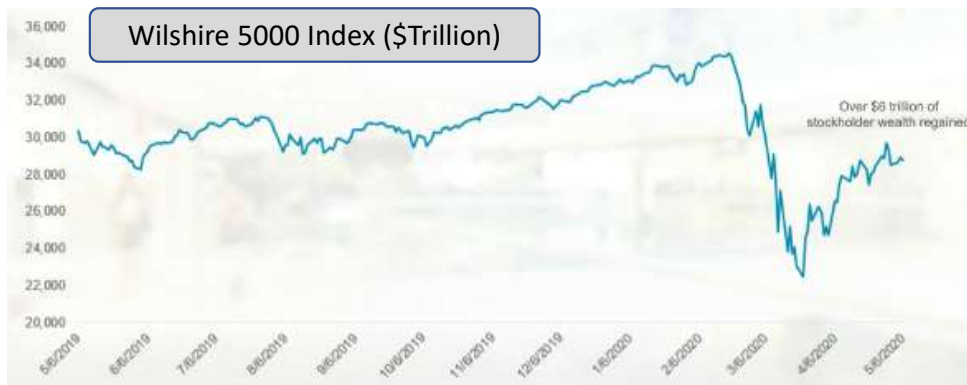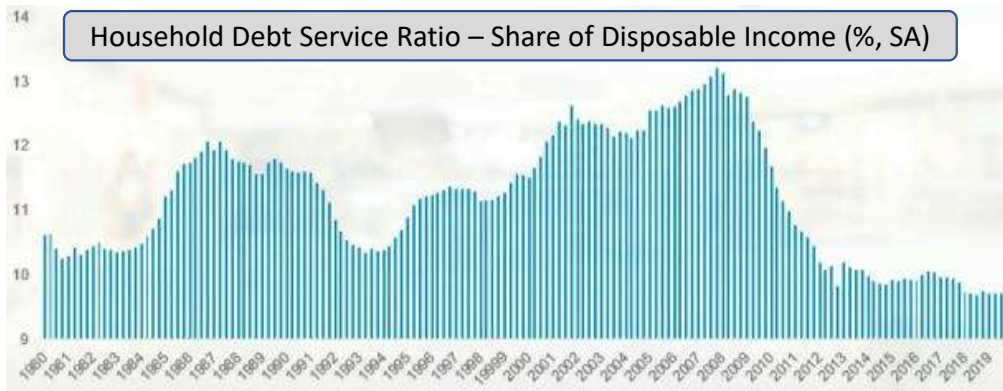
Retail's
New Normal

USA – Worsened some pre-COVID-19 Trends

Moderated others

Short-term COVID-19 impact	Declining growth	Moderate growth	High growth
Rapid acceleration	Retail electronics	Mass retail Pharmacy Grocery Paper products Personal care Packaged foods and beverages	Amazon Online grocery OTC health care Pet food and care Organic and fresh foods
Moderate impact	Tobacco	Home and DIY retail Hobby retail Alcohol	Health, fitness, and beauty
Rapid deceleration	Apparel and accessories Department stores	Restaurants Away-from-home entertainment	Travel Public transportation and rideshare

Long-term growth before outbreak

COVID-19 IMPACT

Source: BCG 2020

We are all Digital Natives Now

US consumers are accelerating adoption of digital channels, a trend seen across global regions.

Digital adoption, by industry, % of digital access

Regular users ▪ First-time users ▪

	Banking	Entertainment	Grocery	Apparel	Utilities	Telcom carriers	Travel	Insurance
Total	73	64	61	45	39	38	37	35
First-time users	21	24	31	13	9	11	6	8
Regular users	51	40	30	31	30	27	31	27
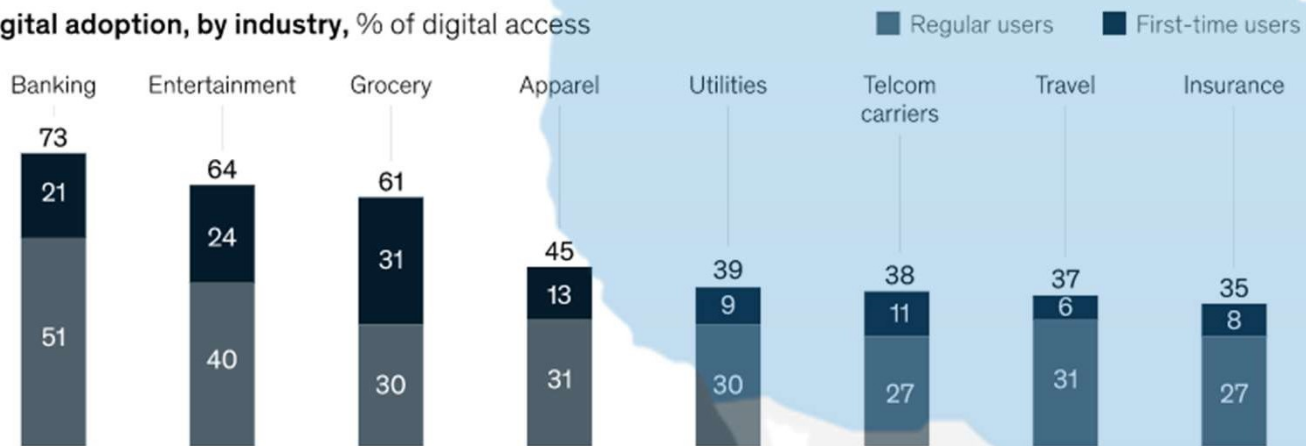
Note: Figures may not sum to listed totals, because of rounding.
Source: McKinsey COVID-19 US Digital Sentiment Survey, Apr 25–28, 2020

Source: McKinsey 2020

After The Pandemic

Activities US Adults Are Likely to Do Once the Coronavirus Pandemic Ends, April 2020

% of respondents

Save more and spend less

79%

Avoid nonessential travel

68%

Use car to travel long distance instead of air travel

59%

Order groceries online for delivery

43%

Continue home-schooling children

31%

Move out of densely populated areas and toward rural areas

29%

Note: those who answered very or somewhat likely
Source: The Harris Poll, "COVID-19 Wave 8," April 20, 2020

254926

www.**eMarketer**.com

How Often Do US Adults Think They Will Shop in Physical Stores After the Coronavirus Pandemic Is Resolved?

% of respondents, March 31, 2020

Less often 20.9%

More often 16.7%

About the same 62.5%
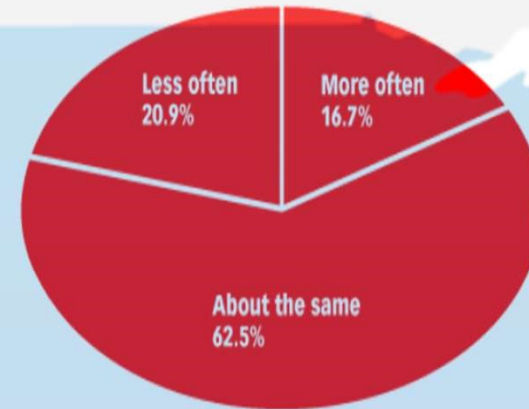
Note: ages 18+; compared with before the pandemic; numbers may not add up to 100% due to rounding
Source: Business Insider Intelligence, "Coronavirus Consumer Survey," April 6, 2020

254522

www.**eMarketer**.com

Source: E-Marketer 2020

How is COVID-19 Changing Consumer Behavior

47% of consumers have increased the amount of **online shopping** they do

39.3% have been **unable to find** everything they wanted online

25.5% have **not been receiving** orders on time

USA COVID-19 IMPACT

27.2% of consumers were not offered all of the fulfillment options they wanted • **60.5%** of respondents age 18-24 in that group **prefer BOPIS** to home delivery and **29.1%** of that group prefer curbside delivery and were not given those options.

73.5% care about **product country of origin**

36.4% for the **first time**

Source of goods is **most important** to the **18 to 24** age cohort.

Source: Retail Touch Points / IDC 2020

Safety, Safety, Safety, Safety

OVERALL SAFETY RANKING

Ranking	Percentage
1. GROCERY STORES	🏆 54% FEEL SAFE
2. DRUG STORE CHAINS	50%
3. BIG BOX RETAILERS	45%
4. LOCAL SMALL BUSINESSES	43%
4. WAREHOUSE CLUBS	43%
5. DEPARTMENT STORES	37%
6. SHOPPING MALLS	33%

Percentage of U.S. Consumers Who Feel "Safe" or "Very Safe"
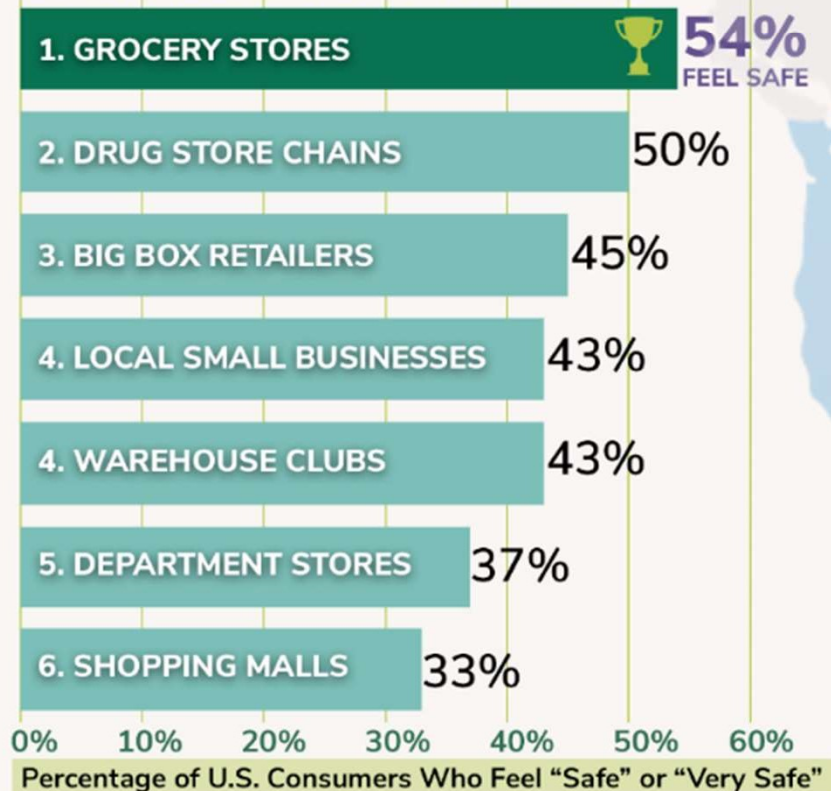
Women do NOT feel safe

- 65% trying clothes in a dressing room
- 78% testing beauty products
- 66% working with a sales associate

80% PREFER TO USE THEIR OWN

75% PREFER TO USE THEIR OWN

Source: First Insight 2020

33

Safety, Safety, Safety, Safety

Name	ShopSafely Score	Contactless Pickup	Mask Required for Associates	Mask Required for Customers	Traffic Limited
Walmart	B-	✔	✔	✘	✔
Kroger	B	✔	✔	✘	✔
Costco	B-	✘	✔	✔	✔
Walgreens	B-	✔	✔	✔	✘
Home Depot	B-	✔	✔	✘	✔
CVS	C	✘	✔	✘	✘
Target	A-	✔	✔	✘	✔

Source: Shopsafely.co 2020

The In-Store "New Normal"

NORDSTROM

- Limit number of customers in stores. Employees count customers and offer guidance.

- Close some fittings rooms and clean those that remain open after each use.

- Hold clothing that has been tried on or returned for a "period of time" before returning it to the sales floor.

- Increase cleaning and sanitizing, especially around high-traffic areas.

- Add plexiglass partitions to checkout areas.

- Shift to contactless payment options.

- Add drive-thru order pickup and dedicated parking spaces for returns.

- Suspend services like alterations; beauty makeovers; skin-care and specialized beauty services; and dining-in services at restaurants. ATMs and water fountains will also be closed.

- Shift from in-person styling appointments to virtual consultations.

COVID-19
Crime Trends

USA General Crime Trends

Covid-19 Impact on Top Offenses
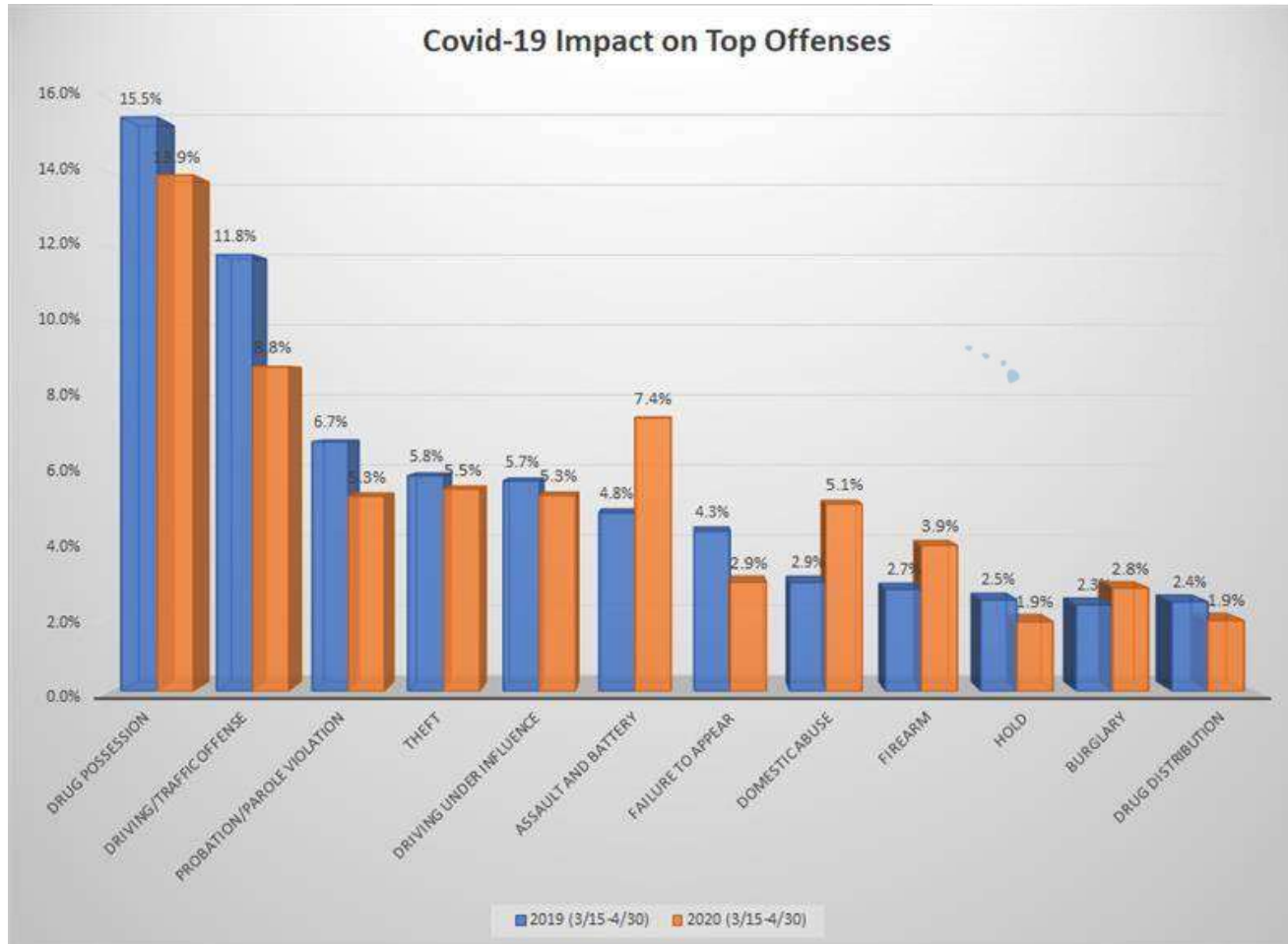
Less Focus by Law Enforcement on enforcing low-level offences

Source: Policeone.com 2020

USA Retail Crime Trends
Robberies & Burglaries

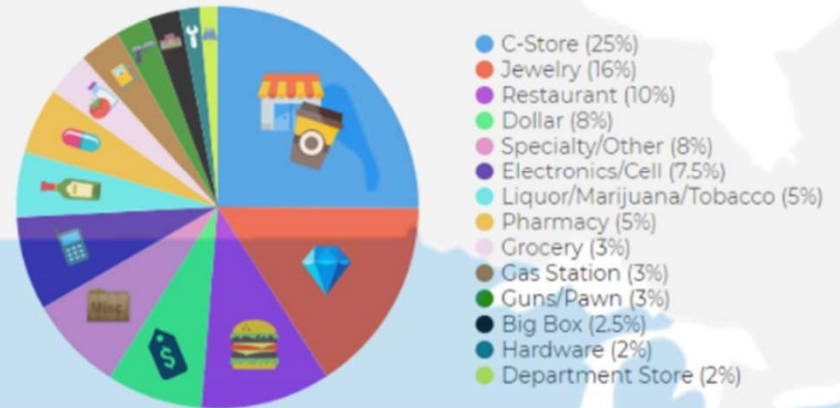### Q1 2020 Robberies & Burglaries by Store Type

- C-Store (25%)
- Jewelry (16%)
- Restaurant (10%)
- Dollar (8%)
- Specialty/Other (8%)
- Electronics/Cell (7.5%)
- Liquor/Marijuana/Tobacco (5%)
- Pharmacy (5%)
- Grocery (3%)
- Gas Station (3%)
- Guns/Pawn (3%)
- Big Box (2.5%)
- Hardware (2%)
- Department Store (2%)

Yearly & Quarterly Comparison 2016-2020

	Q1 2016	Q1 2017	Q1 2018	Q1 2019	Q1 2020
	1,151	1,459	1,431	1,382	1,573
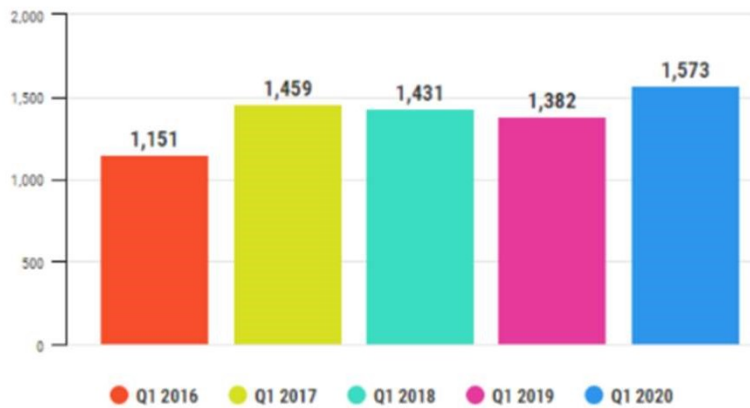
Q1 Robberies Up 37% From 2016 - 14% from Last Year

Q1 2020 Robberies by Weekday
Monday Highest & Friday Lowest All Years

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
%	(15%)	(18%)	(15%)	(13%)	(14%)	(11%)	(14%)
	232	276	237	216	218	167	226
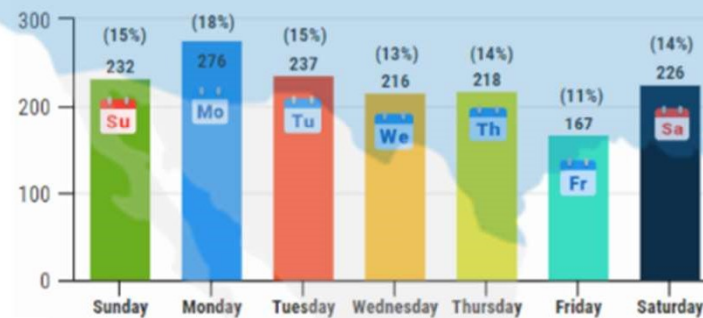
Not all incidents reported a weekday

Source: D&D Daily Q1 / 2020

USA Retail Crime Trends
Violent Fatalities

Q1 2020 Fatalities Location
64% In-Store, 27% Parking Lots, 9% Off Premises

1st Quarter Comparison
2016 - 2017 - 2018 - 2019 - 2020

Up 28%
Total Fatalities

Q1 2016: 100
Q1 2017: 112
Q1 2018: 125
Q1 2019: 122
Q1 2020: 128

Up 34%
Total Incidents

Q1 2016: 86
Q1 2017: 102
Q1 2018: 113
Q1 2019: 113
Q1 2020: 115

Parking Lots: 35
In Store/Mall: 82
Off Premises: 11

Q1 2020 Fatality Incidents by Store Type
C-Stores Top Store Type Five Straight Years

- C-Store (33%)
- Restaurant (20%)
- Liquor/Tobacco (9%)
- Other (9%)
- Big Box (7%)
- Mall (7%)
- Gas Station (3%)
- Grocery (3%)
- Pharmacy (3%)
- Jewelry (2%)
- Sporting Goods (2%)
- Clothing (2%)

- **128 Fatalities – Up 28% Over 2016**
- **115 Incidents – Up 34% Over 2016**
- **Most Q1 Fatalities & Incidents Ever Recorded**

Source: D&D Daily Q1 / 2020

INSIGHTS
TD

39
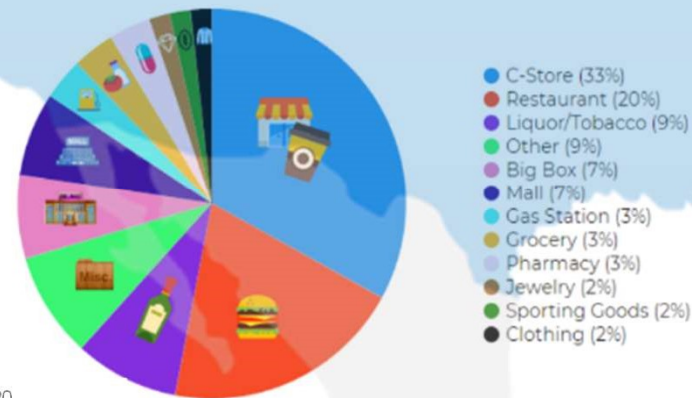
USA Retail Crime Trends
Organized Retail Crime (ORC)

Q1 ORC Case Comparison
Down 18% Since '19 - Up 44% Since '14

- Q1 2014: 245
- Q1 2015: 395
- Q1 2016: 368
- Q1 2017: 351
- Q1 2018: 380
- Q1 2019: 432
- Q1 2020: 353
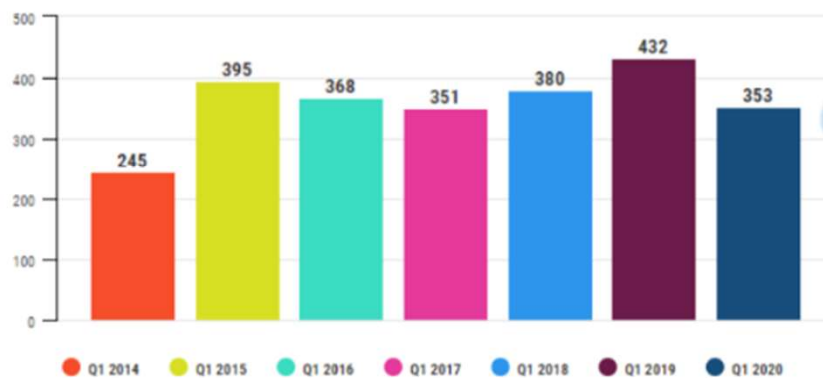
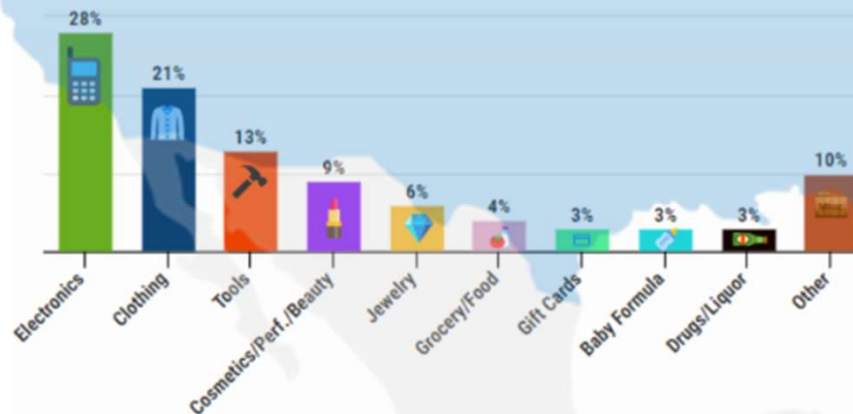**ORC Cases Drop 18% Since Q1 2019 - Up 44% Since '14**
Average Dollar Amount Up 86% Since Q1 2019

Q1 ORC Cases by Total & Average Dollar Amount

Q1	$ Amount Reported	$ Average Per Case
2014	$116,392,986	$152,624
2015	$380,464,168	$140,415
2016	$208,051,138	$21,878
2017	$32,912,889	$93,768
2018	$32,829,145	$86,392
2019	$23,655,937	$54,759
2020	**$36,027,712**	**$102,061**

Q1 ORC Cases by Merchandise Stolen
Electronics & Clothing Most Targeted Four Years Running

- Electronics: 28%
- Clothing: 21%
- Tools: 13%
- Cosmetics/Perf./Beauty: 9%
- Jewelry: 6%
- Grocery/Food: 4%
- Gift Cards: 3%
- Baby Formula: 3%
- Drugs/Liquor: 3%
- Other: 10%

Source: D&D Daily Q1 / 2020
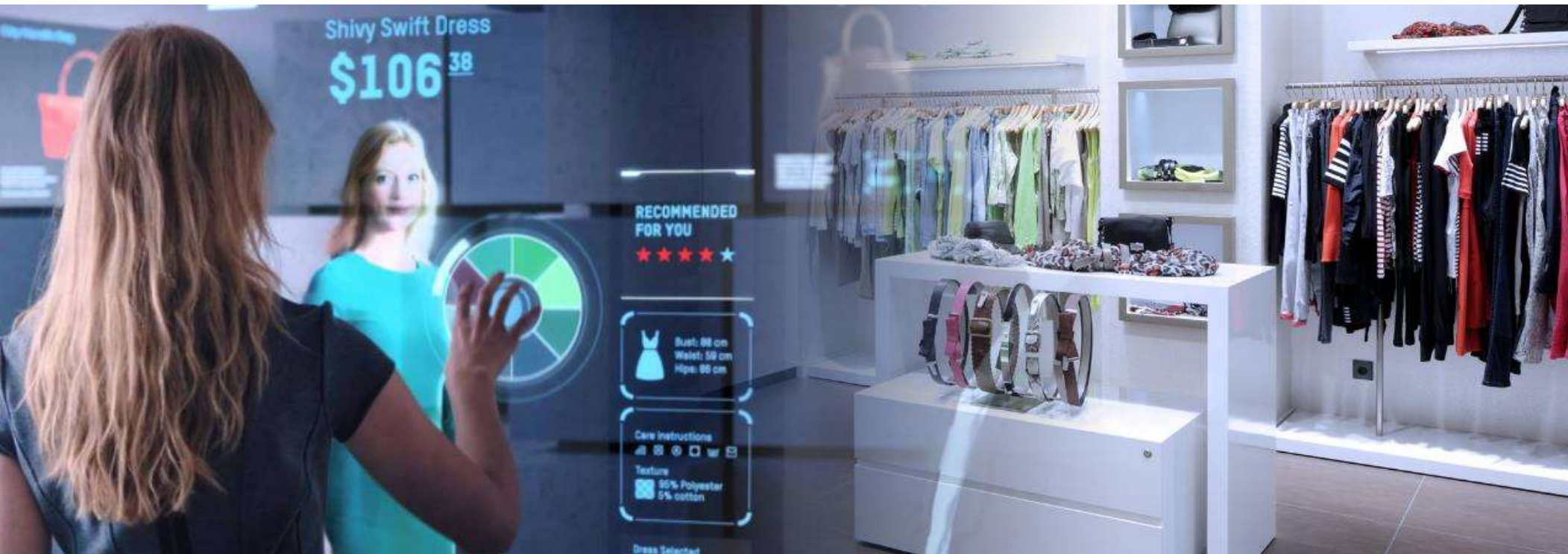
The Post COVID-19 *New Normal*
Future of Retail

Pre-COVID-19 Store Transformation Technologies

Within 24 Months

Technology	%	Change
Proximity / Location-Based Marketing	59%	**+136%**
Single Unified Commerce Platform	43%	**+330%**
Internet of Things	41%	**+310%**
RFID	36%	**+300%**
Computer Vision	33%	**+266%**
SD-WAN	31%	**+288%**
Conversational Commerce	33%	**+450%**
Edge Computing	28%	**+460%**
Microservices Architecture	34%	**+750%**
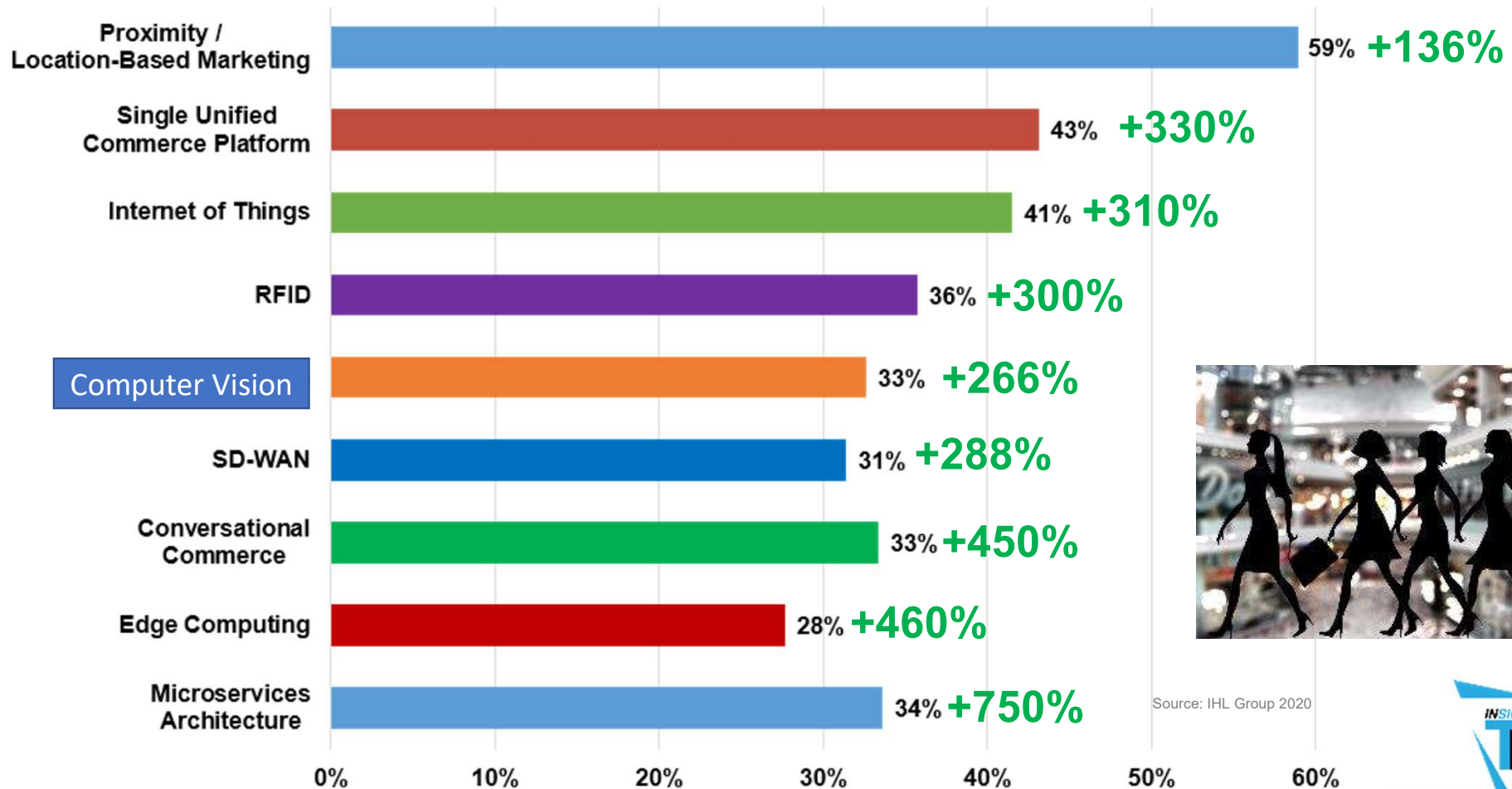
Source: IHL Group 2020

Post COVID-19 Investment Changes

Area of focus

- **Government relations**
- Content marketing
- **Alternative monetization**
- Artificial intelligence investments
- Microfulfillment
- Experimenting with DTC models
- Mobile payments
- Sustainability initiatives
- Experiential retail

- Social commerce
- Easier returns

- Order management systems and omnichannel efforts

- More fast free shipping
- **Cash preservation**
- Revised loyalty programs

Competitive landscape

Innovation

Marketing

Maturity

"New Normal" Technology Priorities
Next 12 to 18 months

RETAIL INDUSTRY LEADERS ASSOCIATION

- Social distancing simple solutions with alert capabilities.

- Max occupancy technologies with alerts

- Mass accurate / temperature taking technologies

- Efficient recording of health screen questionnaire responses

- Contact tracing for employees

- Returns process management

- Contactless POS including ability for retailers to accept credit card applications.

- Technology to attack crime, identify what's behind the mask, increase deterrence.

- Cash payment in general is a significant talking point.

Source RILA 2020

Welcome to Frictionless Commerce

Shopping Process

- RESEARCH PRODUCTS ONLINE
- INTERACTION WITH THE SPECIFIC RETAILER'S SITE OR PHYSICAL STORE
- INVENTORY VISIBILITY
- PRODUCT SELECTION
- ADDING TO CART EITHER PHYSICALLY OR DIGITALLY
- COMPLETING THE TRANSACTION

Computer Vision

AI/ML

Core Enabling Technologies for Frictionless Retail

RFID

Smart Shelves

Rates at Which Retailers Planning Frictionless Have Already Implemented Other Key Technologies

Edge Computing
273% HIGHER

SD-WAN
146% HIGHER

Video Analytics
140% HIGHER

Cost of Frictionless Per Sq. Ft.

$110

2018   2020   2022   2024
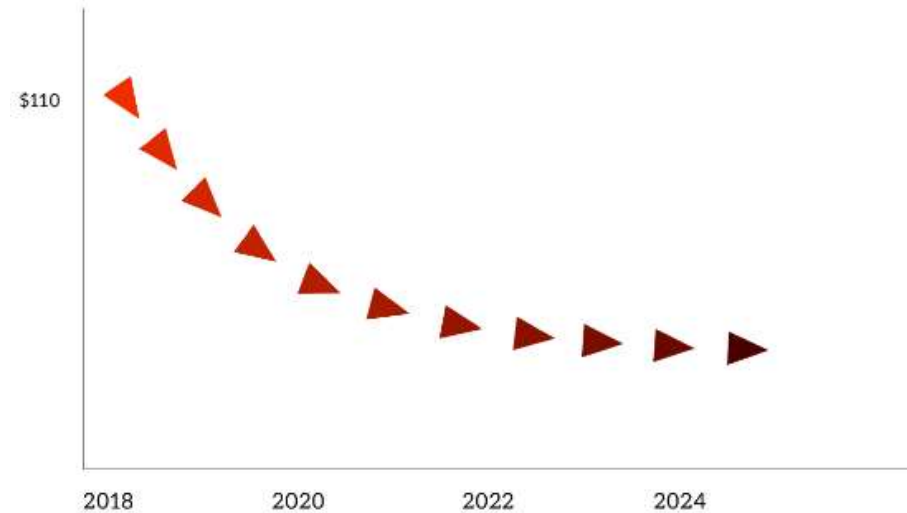
Removing loss prevention technologies can lead to losses of more than **3%** of annual sales.

45

Inventory Visibility

Autonomous Vehicles

Autonomous Stores

Paul / Male
26 Years Old

Happy Smile

Sentiment / Demographics
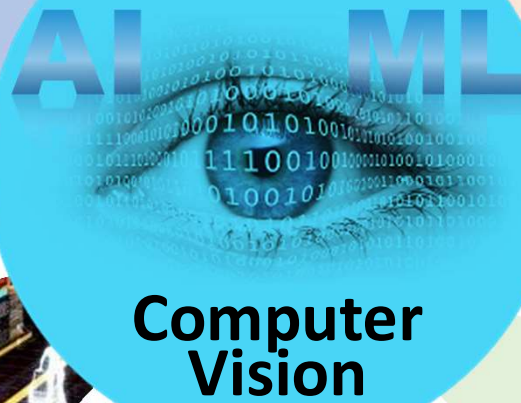
Contextual Product Information
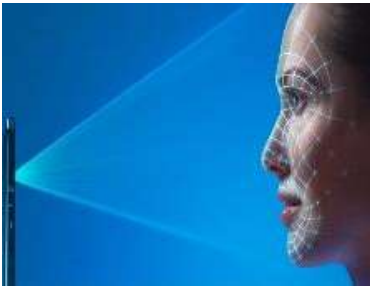
AI   ML

Computer Vision

Theft Prevention

Facial Recognition

Installed base of security cameras, in billions

China

U.S.

World

2018
2021*

*Projection
Source: HIS Markit
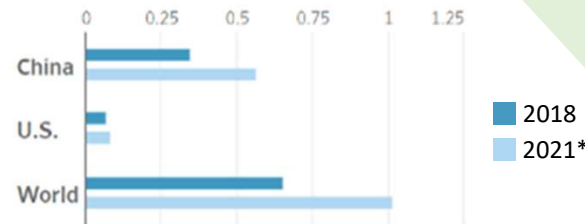
PERSONALIZATION/ACCESS/AUTHENTICATION

In the pockets of consumers **1 Billion+ Smart Phones**

Food & Beverage brands offering personalized contactless experience

Manufacturers leveraging it for security & safety

Travel companies for authentication & ease of boarding

Banks for authentication – couch to loan approval
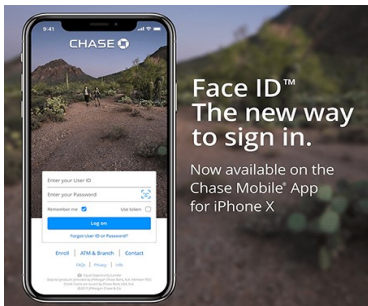
Hotels greet guests, speed of check in & personalization

Automotive manufacturers for car access

Beauty brands letting consumers try on makeup virtually

47

COMPUTER VISION FOR LOSS PREVENTION

Main Use Cases – Shrink reduction, combat ORC, reduce in store violence, investigation time savings

43% of retail evaluating or had deployed face recognition going into 2020

5 of the **Top 10 US** Retailers have deployed

INCREASED AWARENESS AND EDUCATION AMONG LP HOW TECHNOLOGY WORKS

ROI in Loss Prevention - White Papers very strong

COMPUTER VISION TOMORROW

CONTACLESS TRANSACTIONS

Replacement of credit / debit cards with touch-free solutions & more secure transactions

CONNECTED WORKFORCE

AI contactless check ins for employee time and attendance and security inventory devices

CURBSIDE/LOCKER PICK UP

Quicker, more secure authentication through computer vision at curbside

CRIMINAL ACTIVITY

Smart AI computer vision solutions to attack Organized Retail Crime (ORC)

AI BASED SHOPPING

Instore expanded sensors improving merchandise relevance, consumer personalization, & optimizing engagement at key buying decision points.

ACCESS CONTROL

Contactless smart entry replacing historic plastic badges

Retail Loss Prevention Disrupted

DIGITALLY EMPOWERED CONSUMER

Shrink

RETAIL THEFT OPPORTUNITIES

Cxx Focus

Brand Value Differentiation

Real-Time Consumer Loyalty

Immersive Unified Customer

Experiences

Smart Supply Chains

LP Cxx Moment

Brand Integrated Security / Video Analytics / Machine Learning

Data / Visual Zone Deterrence
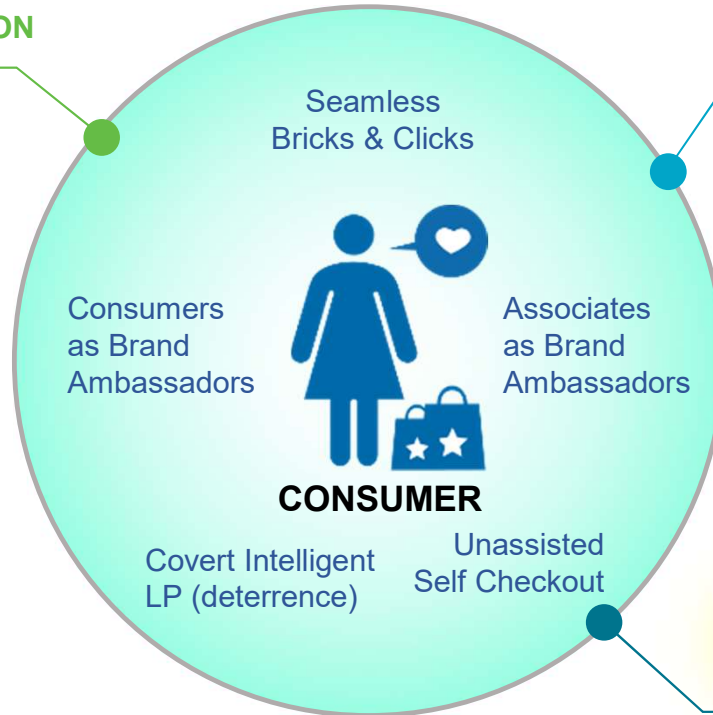
Prescriptive Data Analytics

51

The SMART Store of the Future

STORE DATA EXPLOSION

- POS
- Labor Scheduling
- Planograms
- Store Traffic
- Loyalty Programs
- Video
- RFID
- HVAC
- Internet of Things
- Beacons
- Wearables
- Robots
- GPS Tracking

Seamless
Bricks & Clicks

Consumers
as Brand
Ambassadors

CONSUMER

Associates
as Brand
Ambassadors

Covert Intelligent
LP (deterrence)

Unassisted
Self Checkout

INTELLIGENT FILTERS

- Computer Vision
- Artificial Intelligence
- Machine Learning
- Big Data
- Facial Recognition

IMMERSIVE EXPERIENCES

- Unified Commerce
- Smart Mirrors
- Smart Floors
- Smart Fitting Rooms
- Augmented Reality
- Virtual Reality
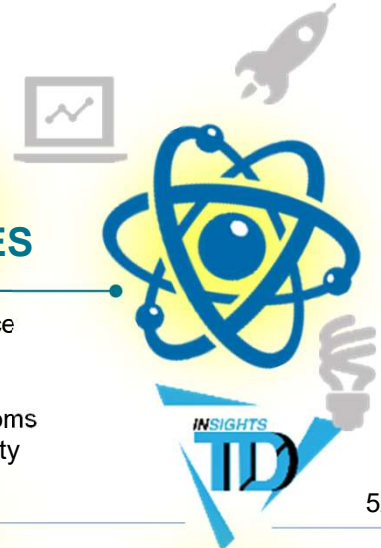
"COVID-19 has become a brutal accelerator of digital transformation trends that were already underway." – Tony D'Onofrio

52

THANK YOU

> **"Vision** without execution is **hallucination."**
> ~ Thomas Edison

You are the Leaders
to Shape It.

For MORE Visit
www.tonydonofrio.com

**Stay Safe
Stay Strong**