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Consumer Behavior and Coronavirus: How the Pandemic Transformed the American Shopper

by

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An Honors Thesis in partial fulfillment of the requirements for the degree Bachelor of Science in Business Administration in Supply Chain Management.

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Abstract

This study examines the changes in consumer shopping behavior resulting from the coronavirus pandemic in the United States as well as the effects on in-store and e-commerce sales and market share within the CPG industry. Most Americans faced some level of disruption throughout developments in the coronavirus outbreak. The study of their ongoing behavior changes in shopping preferences and purchasing decisions is revealed through CPG sales and offers insight into how it has affected the industry long-term. This paper analyzes the consumer behavior shifts in chronological order as new developments in the pandemic affected shopping decisions from January 2020 to present day March 2021. The six behavior thresholds Americans underwent were proactive health-minded buying before the virus reached the U.S., reactive health management as the first American case was confirmed, pantry preparation and quarantined living preparation as consumers panic-purchased essentials, restricted living amid lockdown orders, and living a new normal with increased caution and social distancing. The pandemic exposed the effects supply chain disruptions had on retailers and CPG companies, and how they enabled smaller businesses to take shelf space during stockout periods. Severe stockouts at brick-and-mortar retailers drove record levels of consumers to utilize e-commerce platforms to purchase grocery essentials, which is a trend that has lasted well beyond the peak of the pandemic. This study dives into a further understanding of consumer behavior changes and how they affected retailers and CPG companies as the coronavirus outbreak evolved. The ongoing transformation of the American shopper in 2020 has led to permanent changes in the ecommerce landscape and continues to develop as the U.S. reaches a new ending phase with vaccine distribution.

Consumer Behavior and Coronavirus: How the Pandemic Transformed the American Shopper

In response to the coronavirus (COVID-19) pandemic in 2020, the consumer packaged goods (CPG) industry saw high sales growth in specific categories due to various shifts in consumer behavior trends. Six consumer behavior thresholds were identified to interpret these changes in shopping decisions as the COVID-19 pandemic has evolved since the beginning of 2020. These thresholds are presented in chronological order as consumer behavior changed with new developments in the spread of the coronavirus (Nielsen, 2021a):

- 1. Proactive health-minded buying
- 2. Reactive health management
- 3. Pantry preparation
- 4. Quarantined living preparation
- 5. Restricted living
- 6. Living a new normal

Consumer behavior shifts began in January 2020 as news reports of COVID-19 slowly increased. This initiated the proactive health-minded buying threshold as interest for health-safety products increased. Following the first U.S. COVID-19 case on January 21, American shoppers quickly purchased surgical masks and hand sanitizers, primarily in California, Colorado, Texas and Washington where cases arose (Lucas, 2020). This was the first wave of consumer panic-buying that was emotionally driven and fear based since little was known about COVID-19. In the week ended March 1, 2020, hand sanitizer sales nationwide increased 619% compared to a year ago (Lucas, 2020). This form of panic-buying expanded to include shelf-stable foods and other health-safety products during the pantry preparation threshold as the virus quickly spread across the country.

Consumers drastically altered their shopping behaviors to meet the needs of increased health concerns and restricted living conditions throughout March 2020 in the quarantine living preparation phase. During the two weeks ended March 21, 2020, the total U.S. CPG sales increased \$8.5 billion both in-store and online, which is fifteen times the average rate of change for a two week period (Nielsen, 2021b). CPG sales of essential food categories, toilet paper, and disinfectants reached record levels as statewide stay-at-home orders started issuing across the United States. Meanwhile, supply chain disruptions resulting from increased demand for essential products continued to rise. During this stage, the rush to prepare for more possible city lockdowns left toilet paper and disinfectant wipes out-of-stock in 92% of popular retail stores in the U.S. (Sabanoglu, 2020).

As Americans entered April, most reported staying at home as much as possible to avoid the risk of infection as the new behavioral threshold of restricted living emerged. With a majority of the country (95% of the U.S. population) under stay-at-home orders by April 28, different consumer groups began demonstrating various category preferences in CPG sales (Columbus, 2021). Younger generations saw the highest growth in premixed cocktails, baking and comfort items, while boomers and seniors focused on cooking ingredients and cleaning products instead (IRI, 2021b). As consumers adapted to staying at home long-term, rising changes in category preferences, demand for product variety and name-brand stockouts led to new buyers for smaller CPG businesses. With empty shelves of in-demand, large CPG brands occurring weekly,

consumers began to purchase new, smaller brands that were available to meet their need. From April – August 2020, market share for large firms dropped 1.6% while smaller startups jumped 0.7% (Doering, 2020).

As these thresholds developed throughout the pandemic, the CPG industry navigated uncharted territory as shoppers shifted their purchases to e-commerce channels. Increased CPG sales highlight the change in shopper behavior both in-store and online. Online sales grew at a rate of +91%, compared to in-store at +45% for total U.S. CPG sales by the two weeks ending March 14, 2020 (Nielsen, 2021b). Retail e-commerce platforms saw large growth numbers in online purchases in early March and have experienced online sales growth leading into the new normal phase. Consumers adopted online shopping methods quicker than most CPG supply chains were prepared for, since consumers realized it was a safer and more efficient way to purchase quarantine essentials. This trend has left permanent changes to how e-commerce supply chains operate as companies transform their operations to meet this lasting behavior shift (Nielson, 2021a).

The CPG industry has battled to meet the changing consumer demands for various product categories throughout the coronavirus pandemic. This study examines how the developing consumer behavior thresholds impacted the CPG and retailer market landscape. CPG leaders, like Bimbo Bakeries, that have made quick changes to keep up with unreliable demand, get product on retail shelves and retain their new customers gained throughout the pandemic, have benefitted more than top CPG competitors.

Despite CPG companies still struggling to understand and react to coronavirus-based consumer trends, a new threshold is slowly arising. The increasing distribution of the COVID-19 vaccine continues across the U.S. and consumers are anticipating a return to normal. While the upcoming horizon is still uncertain regarding when consumer behavior will change again, this study analyzes potential permanent behavioral changes and projected future consumer behavior in the post-pandemic world to come.

Consumer Behavior Thresholds Drive Record CPG Sales

To understand how the CPG industry was affected by the coronavirus pandemic, this study analyzes how consumer behavior changes led to shifts in purchasing decisions that drove record sales growth. Nielsen's six key consumer behavior thresholds identify the root causes of consumer decision making as the virus evolved in the United States (Nielsen, 2021a). These thresholds can be analyzed chronologically throughout the pandemic as specific developments in the coronavirus and consumer preferences serve as catalysts that directly influenced shopper behavior. This six stage model was identified based on CPG sales data and public reaction to news reports, press conferences, and public health announcements regarding COVID-19:



Threshold 1: Proactive-Health-Minded Buying (Early January 2020)

The world started to see concerns rise for the spread of COVID-19 as the World Health Organization (WHO) announced a cluster of pneumonia-like cases related to coronavirus in Wuhan, China on January 4, 2020 via Twitter (WHO, 2020). This initial public announcement stirred interest in news stations and social media worldwide, providing Americans updates as the number of Chinese coronavirus cases and deaths increased. Americans followed news reports of

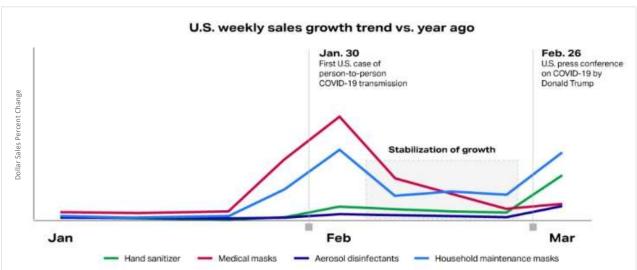
increasing infections and deaths traveling to other Asian countries, including Thailand, South Korea and Japan (Kantis et al., 2021). With the Center for Disease Control (CDC) beginning health screenings at JFK International, San Francisco International, and Los Angeles International airports on flights from Wuhan on January 20, 2020, Americans began taking notice of the heightened travel concerns (AJMC, 2021). This sparked the proactive-health-minded buying threshold as the earliest change in consumer behavior. This stage drove only minor changes in U.S. sales patterns as consumers did not express immediate concern for purchasing grocery and health essentials. Americans mainly exhibited increased interest for products that support maintenance of health and wellness, primarily surgical masks, while they stayed in touch with news reports (Nielsen, 2021a).

Threshold 2: Reactive Health Management (Late January - February 2020)

With the public's attention to news reports, the major catalyst that drove consumer behavior change was the arrival of the virus to the United States. The CDC confirmed the first U.S. coronavirus case in Washington state on January 21, 2020 following a man's travel from Wuhan, China prior to travel restrictions (WHO, 2020). The arrival of the virus in the U.S. and the uncertainty of how it was transmitted triggered the reactive health management phase. Just days following the initial news report of the first U.S. infection, American shoppers began panic buying protective face masks to defend themselves against the virus. Figure 1 shows U.S. sales trends for key health and safety products, including sanitizers, masks, and aerosol disinfectants, where there is an abrupt sales increase for masks beginning late January.

Figure 1

U.S. Sales Growth Trends of Health and Safety Products



From "Tracking the unprecedented impact of COVID-19 on U.S. CPG shopping behavior," by Nielsen, 2021, March 30, *NielsenIQ* (https://nielseniq.com/global/en/insights/analysis/2020/tracking-the-unprecedented-impact-of-covid-19-on-u-s-cpg-shopping-behavior/)

With evidence the virus may be spread via human-to-human transmission, major retailers like Walgreens, CVS, Walmart and Amazon suffered shortages of basic surgical masks as more Americans became infected (Andrew, 2020). Public health experts and the CDC began advising

the general public to not hoard masks in attempts to calm the panic, claiming it was only necessary for health professionals (Andrew, 2020). Despite expert recommendation, consumers continued to clear store shelves of face coverings as the first U.S. human-to-human transmission was reported in the media on January 30 (Kantis et al., 2021).

The reactive health management phase of consumer behavior included American shoppers progressively prioritizing essential health-safety products to protect their family from the virus throughout February 2020. Consumers purchased virus-defending products in addition to masks, including hand sanitizers and household cleaners. Obsession to obtain these products continued to intensify as the Trump administration announced the outbreak as a public health emergency on February 3 (AJMC, 2021). Following this announcement, sales growth for face masks had reached an all-time high. American shoppers continued to match their purchasing decisions to rising case numbers, despite President Trump's reassurance that the "risk to the American people remains very low" during a U.S press conference on February 26, 2020 (Shear et al., 2020, p.1).

Threshold 3: Pantry Preparation (Early March 2020)

Following President Donald Trump's U.S. press conference on February 26, 2020, the American public entered March with increased panic as the spread of the virus worsened and the country reported its first death on February 29, 2020. The press conference and media report of the first American death was the "clear driver that shifted public concern from the reactive health management level to the pantry preparation threshold" (Nielsen, 2021a, p. 2). As news reports detailed case numbers and deaths rising, Americans began household preparation to avoid the risk of outside infection. Consumers quickly stocked their pantries with basic shelf-stable foods. Table 1 reveals the top food categories that exhibited sales growth directly following the report of the first U.S. COVID-19 case and President Trump's press conference. Sales growth for nonperishable foods drastically spiked following the press conference, where President Trump offered the public direction and guidance to stock up on essential foods.

Table 1

U.S. Sales Growth of Shelf-Stable Foods following COVID-19 Developments

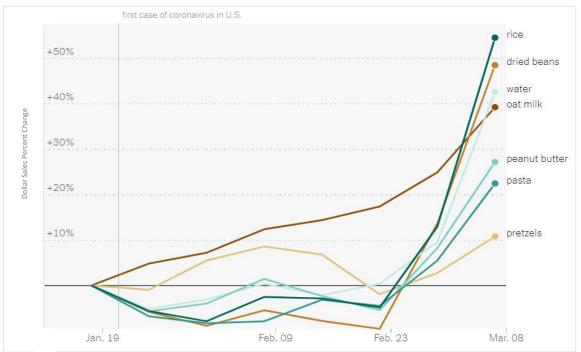
Category	Before COVID-19 outbreak (week ended Dec. 28, 2019)	After first confirmed U.S. COVID-19 cases (week ended Feb. 1, 2020)	After suspected local transmission and Trump's U.S. press conference (week ended Feb. 29, 2020)		
Powdered milk products	+11.8%	-3.3%	+84.4%		
Dried beans	-2.9%	-0.4%	+36.9%		
Canned meat	+15.8%	-0.7%	+31.8%		
Chickpeas / Garbanzo beans	+9.7%	+2.8%	+25.6%		
Rice	+8.1%	-1.0%	+25.3%		

From "Key consumer behavior thresholds identified as the coronavirus outbreak evolves," by Nielsen, 2021, March 20, *NielsenIQ* (https://nielseniq.com/global/en/insights/analysis/2020/key-consumer-behavior-thresholds-identified-as-the-coronavirus-outbreak-evolves-2/)

Demand levels continued to rise through early March 2020, when Americans entered the peak of pantry stockpiling. This new consumer behavior threshold set off a massive spike in supermarket visits as concern for the outbreak peaked. Figure 2 represents the high sales growth of top food categories that occurred early March, when compared to sales growth in prior weeks.

Figure 2

U.S. Pantry Items Sales Percent Change, from January 18 to March 8 vs. YA



From "There is plenty of food in the country," by M. Corkery, D. Yaffe-Bellany, A. Nierenberg, & Q. Bui, 2020, March 15, *New York Times. Published 2020.* (https://www.nytimes.com/2020/03/15/business/coronavirus-food-shortages.html)

Irrational shopping behavior continued to increase beyond consumable categories. Record sales growth for non-consumable, health and safety products occurred as Americans were "emotionally driven and nervous" to protect themselves as the outbreak worsened (Telford & Bhattarai, 2020, p. 2). By week ending March 7, hand sanitizer sales had jumped 470% nationwide. However at the same time, nationwide panic-purchasing expanded to a broader assortment of health and wellness products beyond hand sanitizer and masks. In the first week of March alone, sales of aerosol disinfectant sprays increased 385.3%, rubbing alcohol increased 253.8%, thermometers increased 172.3%, and toilet paper increased 60% compared to the same time last year (Domonoske & Schneider, 2021).

As health concerns for the outbreak grew nationwide, the pantry preparation threshold included the cycle of consumers seeing empty shelves which caused further panic-buying. This cycle drove stock-outs of popular items as soon as they appeared on shelves, including namebrands like Wet Ones, Clorox and Lysol disinfectants. However, early pantry preparation of essentials occurred at different levels across the U.S. where local transmission of the virus was concentrated. Figure 3 shows higher levels of panic buying in Washington state, Texas, Colorado

and California, where consumers stockpiled essential health and safety products and shelf-stable foods the most. These specific states entered the pantry preparation threshold slightly earlier than other states who saw less immediate concern for the COVID-19 spread. As of March 4, Washington state was the only state reporting coronavirus deaths and saw the biggest spike in sales of essential grocery and supplies. Hand sanitizer sales grew an enormous 836% and sales of dried beans, grains and rice rose 84% just in Washington state alone (Lucas, 2020).

Figure 3

Top States Reporting Growth of Health & Pantry Products, Week Ending March 1, 2020



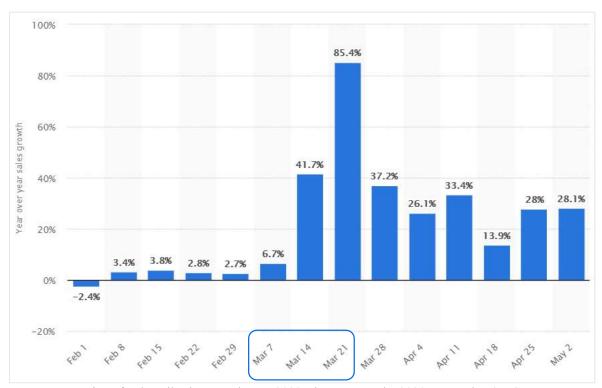
From "Grocery stockpiling is most severe near coronavirus clusters — then there's Colorado," by A. Lucas, 2020, March 4, *CNBC*. (https://www.cnbc.com/2020/03/04/coronavirus-where-shoppers-are-stockpiling-the-most.html)

Consumers increased their store visits and basket sizes as news stations reported depleted inventories of essential products and empty store shelves. Consumer demand increased further as the Department for Homeland security recommended that the public gather a two-week supply of food, water and OTC medicine to stay home if the outbreak reached pandemic status (FEMA, 2021). Due to the substantial increase in demand levels for food staples, health and cleaning products, in-stock rates rapidly declined early March. Many consumers became more price insensitive and took to e-commerce platforms to panic order items they couldn't find on store shelves, like disinfectant wipes, toilet paper and hand sanitizers. E-commerce giant Amazon had vendors selling a two-pack of Equate hand sanitizer at a premium price of \$78.95, which is nineteen times Walmart's original price of \$3.29 (Telford & Bhattarai, 2020). This threshold started the major shift to online shopping in the U.S.

As in-stock rates declined, American shoppers reached peak health concerns when President Trump declared a state of National Emergency on March 13, 2020, following the WHO declaring the coronavirus a global pandemic (Kantis et al., 2021). This announcement triggered consumers' fear of future shortages of food and health essentials, which caused even more out-of-stocks (LA Times, 2020). American shoppers also anticipated possible quarantines in the near future which further drove high demand of shelf-stable foods. Figure 4 highlights the progression of food sales growth throughout the pantry preparation threshold with the highest growth rate at +85.4% the week following the public health announcements, compared to 2019 (Coppola, 2020).

Figure 4

Total U.S. Retail Food Sales Growth, from February to May 2020 vs. YA



From "Coronavirus: food retail sales growth U.S. 2020," by D. Coppola, 2020, November 27, *Statista* (https://www.statista.com/statistics/1120030/food-retail-sales-growth-coronavirus-us/)

The run on grocery store inventories of essential consumable and non-consumable products continued into mid-to-late March as consumers stocked their households for the unknown situation to come. California, a state reporting the highest COVID-19 case numbers in early March, experienced stock-outs of hand sanitizer, toilet paper, rice, and beans at most major stores across the state (LA Times, 2020). A Chicago store reported that shoppers bought 40 cases of pasta in fifteen minutes, as retail stores struggled to keep up with consumers preparing for the coronavirus (Zumbach, 2021). With most American households increasing their store visits and basket sizes to build their at-home stock, the consequences of supply shortages and disruptions began to increase quickly and significantly.

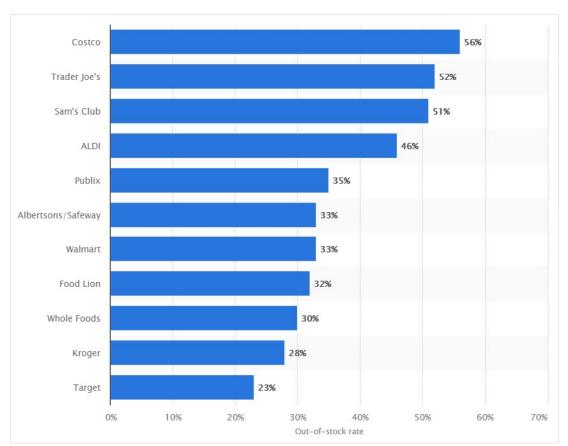
Threshold 4: Quarantined Living Preparation (Late March 2020)

The dramatic shift in the demand curve that occurred early March for categories like toilet paper, household cleaners, OTC healthcare, sanitizers and shelf-stable foods left CPG manufacturers scrambling to produce and meet the demand. Occurring in late March, the quarantined living preparation threshold encompasses severe stockouts of nearly all high-demand categories as Americans prepared for possible quarantines. CPG and retail supply chains were strained due to the increased shift to online shopping causing further supply shortages. Figure 5 portrays the stockout rates at select major retailers nationwide, where out-of-stocks are calculated by dividing the number of out-of-stock shelves by the total number of shelves for the following products: hand soap, disinfectant wipes, toilet paper, bottled water, canned soup, unseasoned rice,

saltine crackers, and frozen pizza. Even Walmart reported a 33% out-of-stock rate for these products as of March 19, 2020 (Statista, 2020).

Figure 5

Out-of-stock Rates of In-Demand Products at Major U.S. Retailers, from March 18-19, 2020



From "Coronavirus: out of stock rate at selected retailers U.S. 2020," by Statista, 2020, April 3, *Statista* (https://www.statista.com/statistics/1109017/coronavirus-out-of-stock-rate-at-selected-retailers-us/)

The rush to prepare for possible lockdowns left both toilet paper and disinfectant wipes out-of-stock in 92% of the major retail stores in the U.S. as of March 19, 2020 (Sabanoglu, 2020). Fear of quarantines and panic-shopping continued as states across the U.S. began announcing school closures in areas with high case numbers, including New York, Washington, Louisiana, Alabama, and New Mexico (AJMC, 2021). An increasing number of Americans were staying indoors nationwide, causing surges in e-commerce sales and a decline in visits to brick-and-mortar retailers (Nielsen, 2021a). With such high demand for essential products increasing online, retailers' supply chains were strained further as more of manufacturers' inventory went to fulfill online orders. Large retailers like Kroger had gone from keeping months of inventory to only 4 weeks of supply in-store (Gasparro et al., 2021). Toilet paper manufacturer Procter & Gamble, who usually forecasts years ahead for production levels, was forced to make real time decisions to get product on shelves and keep up with online orders from both in-store and online retailers (George-Parkin, 2020).

Large CPG companies like Clorox and General Mills, and small CPGs like Kodiak Cakes LLC, saw their supply chains reach capacity limits. CPGs could no longer rely on sophisticated algorithms to know how much to produce due to unreliable consumer demand. The pandemic's demand surge exposed any flaw in a CPG's supply chain and forced consumers to take whatever product was available, regardless of brand. California was the first state to issue a statewide stay-at-home order for its 40 million residents on March 19, 2020 (AJMC, 2021). This was the beginning of future statewide lockdowns throughout the U.S. as consumers faced another major change that altered shopper behavior.

Threshold 5: Restricted Living (April – June 2020)

Entering into a new consumer behavior threshold, almost 91% of Americans reported staying at home as much as possible to avoid the risk of infection, and 9 out of 10 Americans said they stopped going out to restaurants and bars (Balz & Guskin, 2020). Consumers had already been stocking up for the restricted living threshold in March 2020, and many Americans personally chose to restrict their own public outings outside of their normal routine. Following California's statewide stay-at-home order, a majority of other U.S. states enacted shelter-in-place rules in addition to closing nonessential businesses and dine-in restaurants (Wu et al., 2021). State lockdowns included school and business closures causing more students to learn at home and adults to work from home. As communities were ordered into lockdown, consumer fear remained high as news of the U.S. death toll surpassed 10,000 Americans (AJMC, 2021). Now that Americans were forced to spend more time at home and severely restrict their shopping trips, consumers had to adapt to the restricted living phase.

Americans adjusted to restricted living lifestyles in different ways based on their city's COVID-19 regulations. Western states, like California, were the top growing geographies for CPG sales growth at brick-and-mortar retailers, seeing an overall 12% dollar sales percentage change vs. 2019 (IRI, 2021b). California's metropolitan markets such as Sacramento, CA, Los Angeles, CA, and San Diego, CA saw 12-13% growth in in-store CPG sales in each of their cities alone. Other COVID-19 hotpots, like New York City and Chicago, were below market growth averages in brick-and-mortar CPG sales in 2020 as these cities utilized more e-commerce options due to greater COVID-19 mobility restrictions in these areas (IRI, 2021b, p. 25).

The restricted living threshold started the beginning of a months-long phase of consumers being confined to their homes. This phase drove sales in categories that were not as prioritized in the first four phases that occurred from January to March 2020, as consumers focused their purchases on different "restricted living needs". While every generation of American shoppers continued buying health care products, the top growing consumable categories varied by age group since consumers adjusted to the reality of staying home differently.

Some age groups began to see food and alcohol as a form of comfort rather than only panic-purchasing necessary shelf-stable foods. Younger generations (Gen Z, Millennials, and Gen X) prioritized buying alcohol, baking, and comfort items versus older generations (Boomers and Seniors) buying cooking ingredients, instant potatoes and vegetables (IRI, 2021b). Younger generations' purchasing decisions drove top growing consumable brand manufacturers, like Mark Anthony Brands' White Claw Hard Seltzer and Boston Beer's Truly Hard Seltzer, to see peak growth rate numbers. White Claw Hard Seltzer sales grew 145% and Truly Hard Seltzer sales grew 614% in 2020 compared to 2019 (IRI, 2021b). These smaller CPG brands grew due to the emergence of a new demand for alcohol driven by the restricted living situation and closed down bars/restaurants.

The consumer shift in viewing food and beverages as a form of comfort affected American purchasing decisions that lasted to the end of 2020. Table 2 summarizes this change, highlighting the top growing CPG categories by generation cohorts for consumable and non-consumable categories in 2020, where younger generations bought more comfort items, like premixed cocktails, rather than older generations who bought more flour/meal baking items.

Table 2

Top 2020 Growing Categories by Generation Cohorts, Ranked by Percent Change vs. YA

		Gen Z		Millennials		Gen X		Boomers		Seniors	
	0	Premixed Cocktails	81%	Premixed Cocktails	80%	Premixed Cocktails	75%	Flour/Meal	39%	Seafood - Fz	33%
	2	Seafood - Fz	42%	Seafood - Fz	41%	Flour/Meal	42%	Meat - Rfg	38%	Flour/Meal	30%
	3	Spices/ Seasonings	37%	Flour/Meal	40%	Seafood - Fz	39%	Seafood - Fz	33%	Instant Potatoes	29%
"	0	Flour/Meal	37%	Meat - Rfg	37%	Spices/Seasonings	35%	Dough/Biscuit Dough - Rfg	33%	Vegetables - Ss	24%
J	6	Meat - Rfg	35%	Dough/Biscuit Dough - Rfg	37%	Meat - Rfg	35%	Instant Potatoes	30%	Side Dishes - Rfg	24%
Nonedible	0	Home Health Care/Kits	586%	Home Health Care/Kits	552%	Home Health Care/Kits	600%	Home Health Care/Kits	491%	Home Health Care/Kits	3691
	2	Soap	46%	Soap	47%	Soap	49%	Household Cleaner Cloths	61%	Moist Towelettes	36%
	3	Moist Towelettes	43%	Moist Towelettes	40%	Household Cleaner Cloths	38%	Soap	56%	Gloves	26%
£	4	Candles	38%	Charcoal	37%	Moist Towelettes	38%	Moist Towelettes	45%	Household Cleaner	21%
J	6	Household Cleaner Cloths	36%	Household Cleaner	35%	Household Cleaner	35%	Household Cleaner	31%	Sleeping Remedies	20%

From "Year-end 2020 trends, 2021 emerging growth pockets," by IRI, 2021, January 22, *Information Resources Inc. (IRI)* (https://www.iriworldwide.com/IRI/media/Library/IRI-TL-Leader-Board-Part-1-1-22-2020-vF.pdf)

As the pandemic continued months after its emergence in January, sales data began to highlight how consumer behavior changes affected the CPG industry's competitive landscape. While nearly all big CPG manufacturers (> \$5 billion annual sales) saw growth in sales, this trend did not translate to an increase in market share. In fact, large CPG companies struggled to maintain market share during 2020 (Doering, 2020). Despite a sales boost during the peak of the pandemic when consumers gravitated toward big manufacturer brands, competition for market share began to include smaller brands with the changing consumer preferences as Americans stayed home from April – August 2020.

As consumers spent less time in stores and experienced stockouts of big CPG items both in-store and online, they began to seek more variety in products they purchased. Consumers reached for new products and branched out to brands they normally would not purchase. Table 3 shows a sample of brands that attracted a large influx of new buyers in 2020 (IRI, 2021b). For example, due to severe supply shortages in toilet paper, various toilet paper brands, like Angel Soft, Charmin, Scott and Cottonelle, saw a large increase in new buyers who purchased their brand simply because it was available and in-stock. Small businesses took the opportunity of empty shelves and this demand for variety to place their products on shelves. From April – August 2020, market share for large firms *dropped* 1.6% while smaller CPG businesses *jumped* 0.7% (Doering, 2020).

Table 3

Top 2020 Growing CPG Brands by New Buyers Gained, Ranked by Percent Change vs. YA

F	2020 CPG Top (Ranked by Num Latest Full Year	ber of House	eholds	Buying Chg. vs	s. YA;		Edible Nonedible		
Large			Medium			Small			
1	Angel Soft	13.2 M	34%	Hunt's	8.4 M	57%	Germ X	20.2 M	199
2	Lysol	12.1 M	56%	Bimbo	7.8 M	34%	Microban	8.9 M	7%
3	Charmin	11.2 M	47%	Northern	6.9 M	22%	Kinder	8.7 M	209
4	Bounty	9.3 M	51%	Bertolli	6.8 M	32%	Kikkoman	8.1 M	339
5	Scott	9.2 M	38%	Barilla	6.8 M	59%	Morton	8.1 M	459
6	Cottonelle	8.8 M	31%	Dial	6.2 M	40%	Softsoap	8.0 M	409

From "Year-end 2020 trends, 2021 emerging growth pockets," by IRI, 2021, January 22, *Information Resources Inc.* (IRI) (https://www.iriworldwide.com/IRI/media/Library/IRI-TL-Leader-Board-Part-1-1-22-2020-vF.pdf)

Threshold 6: Living a New Normal (July 2020 – February 2021)

After months of restricted living conditions involving community lockdowns and stay-athome orders across the U.S., the final threshold of consumer behavior change occurs during the slow and cautious lifting of strict COVID-19 restrictions. The term "the new normal" began spreading as mobility returned and people resumed normal daily routines at work and school. This is the stage most Americans find themselves in now as they live with a new sense of caution until a majority of the country receives the COVID-19 vaccine. Holidays, family gatherings, and sporting events are beginning to resume with social distancing and safety precautions in place. This threshold includes lasting trends that emerged earlier in the pandemic, including the shift to online shopping and consumer demand for variety and product availability of both consumable and non-consumable categories.

The CPG industry is adapting to the new normal as companies are pushed to make changes to their production and supply chain management based on new online shopping behaviors and potentially permanent behavioral shifts caused by the pandemic. While peak pantry preparation consumer demands have subsided and most stockouts have been resolved, total grocery sales are settling high above pre-COVID averages. Figure 6 illustrates total grocery store sales for the U.S. over the course of 3 years and highlights how grocery sales are settling higher than pre-COVID sales throughout the new normal threshold. This insight suggests how consumer behavior regarding grocery spending has not yet returned to pre-COVID levels.

Total U.S. Grocery Store Sales, from March 2018 to February 2021

Figure 6



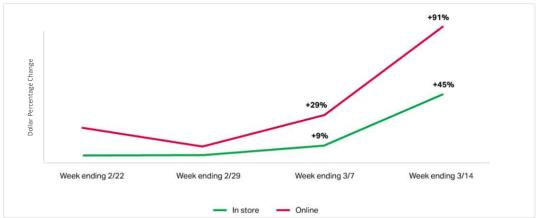
From "US grocery store sales," by Census Bureau, 2021, *Census Bureau*. (https://ycharts.com/indicators/us grocery store sales)

The Major Shift to E-Commerce Shopping

As stockouts of essential products continued to rise at brick-and-mortar grocery stores in March 2020, consumers began to shift their shopping behavior online. This marked the beginning of a significant change to the retail landscape due to consumer behavior changes. The COVID-19 pandemic changed how consumers approached e-commerce shopping as it was a safer and efficient alternative to shopping in-store. Figure 7 illustrates the online shopping growth in the first two weeks of March 2020, where online U.S. CPG sales outpaced in-store shopping growth 91% to 45% (Nielsen, 2021b).

Figure 7

U.S. CPG Sales Growth In-store and Online, from February 22 to March 14, 2020 vs. YA



From "Tracking the unprecedented impact of COVID-19 on U.S. CPG shopping behavior," by Nielsen, 2021, March 30, *NielsenIQ*. (https://nielseniq.com/global/en/insights/analysis/2020/tracking-the-unprecedented-impact-of-covid-19-on-u-s-cpg-shopping-behavior/)

With stockout rates reaching 92% of toilet paper and disinfectant wipes of popular brands like Charmin, Lysol, Clorox, and Wet Ones at retail stores, American shoppers decreased their in-store visits and began utilizing e-commerce platforms in hopes of better product availability (Sabanoglu, 2020). In addition to using online platforms for grocery delivery to compensate for stockouts in-store, online grocery services offered a safer shopping alternative amid increasing COVID-19 transmissions. In the midst of panic-buying during the pantry preparation threshold, the two weeks ended March 21, approximately 35% more consumers had shopped online for essential CPG items compared to a typical week, with most growth driven by health-safety, nonconsumable products (Nielsen, 2021b).

March 2020 started the record breaking level of consumers buying their products online as they prepared their pantries and for possible city lockdowns. This e-commerce boom led to U.S. consumers spending \$211.5 billion during the second quarter in online shopping, up 31.8% quarter-over-quarter (Morgan, 2020). Reckitt Benckiser saw e-commerce sales grow over 60% in the first six months of 2020 (Morgan, 2020). This was largely due to their professional hygienic brands (Dettol and Lysol) accompanied by strong supply chain performance across digital channels (Morgan, 2020).

From March – April 2020, nearly 25% of consumers shopped for grocery essentials online compared to 6% in 2019 (Ross, 2020). This shift in consumer behavior was unexpected for large CPG manufacturers and forced further supply issues. Strong e-commerce platforms like Walmart.com and Amazon.com had their supply chains stressed as surges in sales for essential products filled online orders. Continuous stockouts at retail locations further increased online orders and order fulfillments for essential and nonessential categories with unseasonable demand (Cosgrove, 2020). Walmart saw its online sales increase 74% in the first quarter online alone (IRI, 2020). Following early March, CEO Doug McMillion said "consumers briefly returned to stock up behaviors they displayed early in the pandemic" whenever COVID-19 cases spiked in pockets across the country, creating more unpredictable demand (Cosgrove, 2020).

Other major retailers like Target, who reported a 141% increase in e-commerce sales, and Kroger, who experienced a 92% online sales increase through the first quarter, battled the same shift in consumer online shopping (IRI, 2020). However, these sales boosts were not reflected in many of these retailers' profits due to supply chain complications and their related costs (Ross, 2020). Similar to many retailer situations, Amazon's e-commerce operating income in North America dropped from \$2.3 billion to \$1.3 billion even though the company experienced 29% growth in sales (Ross, 2020). CEO Jeff Bezos commented that all of Amazon's 2020 second quarter earnings of \$4 billion in operating profit will be used to compensate for coronavirus related supply chain management and employee safety costs (Ross, 2020).

Walmart also reported high costs to compensate for the demand surge, spending nearly \$900 million in COVID-19 related expenses (Ross, 2020). However, due to Walmart's strong e-commerce capabilities, they were the only retailer to successfully "generate net income growth in the first quarter" of 2020, despite high COVID-19 costs (Ross, 2020). Walmart quickly scaled up operations to fulfill e-commerce orders by utilizing their pick-up and delivery services and adding an additional 2,400 stores to ship online orders, which is an attribute other retailers couldn't replicate on the same scale (Ross, 2020).

As of April 21, 2020, there was immense growth of 146% in all online retail orders as consumers sought new ways to purchase essential products without leaving their homes (Columbus, 2021). The trend of increasing e-commerce orders continued to stress supply chains and order fulfillment as nearly 306 million Americans (95% of the U.S. population) were

affected by stay-at-home orders and beginning to order online by April 28, 2020 (Columbus, 2021). Nearly all retailers and CPG companies were pushed to adapt to stronger e-commerce models as consumers changed their purchasing decisions with COVID-19 developments. For example, strong supply chain performance by Reckitt Benckiser allowed for high sales growth by including direct to consumer sales and click and collect solutions to meet consumer demands (Morgan, 2020).

Due to COVID-19 health concerns, approximately three in four consumers have tried a new shopping method that is outside of traditional in-store shopping, according to a recent McKinsey & Co. study (Torry, 2020). More consumers not only tried a new shopping method, but nearly 70% of consumers in the study intend to continue shopping online for store pickup after the pandemic is over (Torry, 2020). Experts at McKinsey & Co. expect this consumer trend to remain strong long after the pandemic subsides. However, specific generations were more comfortable using online shopping platforms to obtain their grocery essentials. In another survey conducted in November 2020, 71% of Gen Z and Millennial shoppers reported feeling comfortable shopping online compared to less than half of Boomers (Davis & Toney, 2020). Despite differences in adoption of e-commerce shopping by age groups, 36% of all consumers now shop online weekly since the emergence of COVID-19, which is up from 28% pre-COVID levels (Davis & Toney, 2020). The lasting behavior changes caused by the coronavirus forced a faster adoption of e-commerce platforms in three months for what otherwise would have taken a 10 year process for all American consumers (Torry, 2020).

Case Studies: A Winner and Loser of Consumer Shopping Behavior Changes

When evaluating the large CPG companies that experienced high growth throughout the coronavirus pandemic in 2020, IRI and Boston Consulting Group revealed that the total CPG industry grew 10.4% in the year alone (IRI, 2021a). While most big CPG manufacturers in grocery and health products saw high sales, consumable CPG company Bimbo Bakeries USA saw the highest sales growth over other large companies during 2020 (IRI, 2021a). Insights into their strong performance extend beyond the sales driven by high consumer demand during the pandemic, including adapting to consumer behavior changes in offering product variety and availability. In contrast to the high sales growth experienced by grocery and health-based manufacturers, CPG companies, in cosmetics and hair care like L'Oreal Cosmetics, saw heavy declines in sales during 2020 due to consumer behavior changes.

Winner: Bimbo Bakeries USA

Bimbo Bakeries' sales increased more than \$6 billion in 2020, beating out other growth leading companies like General Mills, Mondelez International, and Conagra Brands (IRI, 2021a). Bimbo Bakeries USA includes brands like Mrs. Baird's, Thomas, Ballpark buns, Sara Lee and other popular bread and sweet baked goods brands. During the company's 2020 third quarter, Bimbo's net sales in North America increased an enormous 23.5%, which helped increase their operating income by 46.8% in the quarter for year-over-year growth (Crawford, 2020).

One of the reasons Bimbo Bakeries outgrew their competition who carried similar brands was that Bimbo managed to meet and benefit from the increased consumer demand for baked goods and snacks during the pandemic. Bimbo brands generated strong performance in all retail channels, including grocery, mass merchandising, club and e-commerce. Alfred Penny, president

of Bimbo Bakeries USA, said that they were able to balance the high demand "without shorting any given region, channel, or customer" by tightly controlling their promotional activity and pricing during the peak of the pandemic (Crawford, 2020, p. 2). This strategy enabled the company to keep their product on the shelves during peak stockout time periods from March – May 2020, when consumer behavior led shoppers to purchase whatever product was available.

By keeping their product in-stock at retailers, Bimbo benefited from consumers switching brands due to availability. As pre-COVID brand loyalty evolved due to stockouts, Bimbo Bakeries experienced an influx of new buyers due to the exposure of their brands in the pandemic and consumers seeking new products. Bimbo was then able to retain as many of the large number of new consumers and millions of new households who discovered or returned to Bimbo brands by investing in incremental marketing support and excellent in-store execution (BakingBusiness, 2021). The company continued strong sales growth into the later months of 2020 by keeping their customers engaged through fine-tuning their marketing investments and promotions. Bimbo's CEO Daniel Servitje said capital expenditures and investments in marketing efforts and projects to increase production capacities and strengthen IT infrastructure are expected to total close to \$1 billion (BakingBusiness, 2021).

Bimbo Bakeries sees these marketing investments as a method to increase their brand quality and innovation game, so they can keep the new households to stay longer with them post-pandemic. Penny also confirmed that part of their 2020 success was driven by product innovation to earn shelf-space and their "solid execution by [their] frontline" supply chain (Crawford, 2020, p. 3). Bimbo Bakeries was the top growth leader in large CPG companies for their strong in-stock performance across all retail channels, ability to capitalize on consumer demand for product availability, and ability to retain their new customer base with product innovation and marketing strategies.

Loser: L'Oreal Cosmetics

The world's largest cosmetics company, L'Oreal, faced drastic sales declines from January – June 2020 driven by consumer behavior changes caused by COVID-19. Consumers who normally purchase cosmetic brands, like L'Oreal, focused their spending on other essential CPG products in grocery and health-safety categories during the first quarter of 2020. L'Oreal sales declined 4.8% in North America from January – March 2020 (Culliney, 2020). Consumers during the first quarter were experiencing rising concerns of COVID-19 spread. This quarter ended with the pantry preparation threshold in March 2020, where shoppers were panic-buying grocery and health-safety items, not L'Oreal cosmetics. Consumer shopping behavior continued to shift away from cosmetics as the pandemic evolved into the second quarter of 2020.

At the beginning of the second quarter in April 2020, another consumer behavior shift led to further sales decline for L'Oreal cosmetics. As Americans increasingly stayed in their homes more often from March – June 2020, consumers no longer prioritized cosmetic purchases as they ventured out of the home less. The restricted living threshold encompassed the second quarter sales decline where L'Oreal saw a 19% sales decline compared to 2019 (CNBC, 2020). Chairman and CEO of L'Oreal Jean-Paul Agon commented how "all geographic zones have progressively been impacted by the closure of sales outlets and the introduction of lockdown measures" worldwide, hitting North America by the end of March (Agon, 2020, p. 2). L'Oreal also faced sales decline in their Profession Products Division of luxury hair care since hair salons were closed for most of the second quarter. L'Oreal's luxury hair care division experienced a 31.7% decline in total sales during the first half of 2020 (Weil, 2020).

Lockdowns not only closed sales outlets for L'Oreal products but also led to consumers not wearing makeup or using hair care as often. The behavioral shift of consumers being less inclined to purchase cosmetic makeup and hair products occurred as many Americans were working from home and there were fewer social interactions requiring them to get ready to leave the house. The consumer behavior changes resulting from COVID-19 affected the cosmetics industry negatively in terms of demand and sales. The shift in consumer purchasing patterns affected L'Oreal's profitability where they reported a 21.8% decline in net profits in the first half of 2020 (Weil, 2020).

Consumer Behavior in the Post-Pandemic Future

Consumer behavior has evolved since the emergence of COVID-19 in the U.S. in January 2020. Shopping behavior changed over the course of the six thresholds described. The American shopper has altered their purchasing patterns from fear-based panic-shopping through the reactive health management and pantry preparation phase, to radically adopting online shopping platforms, and to demanding different product varieties in the restricted living time period. Americans have been living in the new normal threshold for months throughout the slow and cautious lifting of COVID-19 restrictions. However, this phase has shown some consumer behavior changes will likely have lasting impacts on the CPG industry. These lasting behavior shifts include increased online shopping, demand for product variety, and an increase in smaller CPG market share.

While retailers and the CPG industry have strived to meet the changing consumer preferences and unpredictable demand levels at each threshold, CPG brands experienced "more absolute growth in 2020 than in the four-year period from 2016 to 2019" (Alldredge et al., 2021, p. 1). The historical sales growth did not occur without both large and small businesses battling severe supply chain disruptions that resulted in high stockouts online and in-store. High out-of-stock rates of large CPG brands caused a shift in the playing field for market share in the industry.

Consumer behavior changes drove market share toward smaller brands in the restricted living threshold since Americans were spending more time at home. Consumers sought out different consumable products than they previously purchased to add variety to their lives. With most normal outings restricted, like the closing of bars and restaurants, people purchased more alcohol to consume at home which caused high growth in smaller brands like White Claw Hard Seltzer and Truly Hard Seltzer (IRI, 2021b). Consumers saw alcohol and food as a form of comfort during the uncertainty of how long they would stay inside. Furthermore, consumers saw cooking and baking as a fun activity during quarantine and restricted living months, leading to high growth in baking products at retailers (IRI, 2021b). With these behavioral changes in shoppers evolving, small brands capitalized on open shelf-space availability and consumer demand for new product variety to gain market share from big CPG brands.

Competition in the industry now increasingly involves smaller businesses as many consumers tried small brands for the first time in quarantine and continued to embrace them afterwards. The competition between large and small CPG companies will now transcend beyond classic pricing and promotion, and the ability to have a strong presence on the shelf (Doering, 2020). With more consumers shifting their shopping to e-commerce, this opens more channels for smaller businesses to have an advantage over big CPGs as they gain more market share and retain their new buyers from 2020 (IRI, 2020). Competition for market share

increasingly will include marketing expertise, supply chain advantages, and the ability to innovate product lines to meet the changing consumer demands in the post-pandemic world to come (Doering, 2020).

The most impactful transformation the American consumer underwent due to the pandemic was the increase in online shopping. E-commerce platforms served multiple needs of consumers, including a safer shopping method, more product availability to purchase and curbside pick-up and delivery services at the convenience of a mobile device or computer. This behavior change during the pandemic is projected to last far beyond the "living the new normal" threshold and will continue into the post-pandemic world. Although the pandemic is slowly subsiding amid increasing distribution of the COVID-19 vaccine, Americans are still exhibiting general caution around spending time in public restaurants and grocery stores, with indoor restaurant sales down 36.5% as of March 2021 (Davis & Toney, 2020). Growth in online grocery sales has not slowed down as U.S. grocery e-commerce sales will increase by 17.8% in 2021 over 2020 (Davis & Toney, 2020). This e-commerce growth is reported in another study in March 2021, where Aki Technologies and TapResearch found that that 68% of new online grocery consumers said they would continue to shop online in the future, proving how this pandemic trend is likely to continue into 2021 (Wurmser, 2020). According to NielsenIQ forecasts, this trend will only grow as CPG food and beverage online sales are estimated to reach \$109 billion in 2021 compared to \$66 billion in 2020 and \$31 billion in 2019 (Redman, 2021).

Looking ahead at the possible new threshold of consumer behavior, consumer optimism about venturing out of the home is steadily rising as many Americans are pandemic-fatigued and about 50% plan to splurge at restaurants and travel once the pandemic resolves (Charm et al., 2021). This implies that consumers are waiting to get out of the house and dine at restaurants, which could possibly lead to decreased grocery sales growth as consumers eat less at home. There are also early signs that point to differences in consumer behavior between those who are vaccinated and those who intend to become vaccinated. A February 2021 McKinsey & Co. study reported that 33% of vaccinated consumers engage in out-of-home spending and activity, compared to 22% who intend to be vaccinated (Charm et al., 2021). With the vaccine driving more spend outside of the home, restaurants, travel and entertainment outings, it could impact CPG sales as consumers won't be cooking at home as often.

While it is uncertain exactly how or when American shopping behavior will change in the future, the CPG industry will need to adapt to the lasting changes from the pandemic. Large and small CPG companies will need to continue innovating their product lines to meet consumer demands for variety. Consumers loyalty to previous brands is evolving and new buyers gained during the pandemic continue to repurchase. Shoppers continue to expand their sampling of new brands as 40% say they have changed brands since COVID-19 began (Charm et al., 2021). The trying of new brands has caused smaller companies to continue driving up their market share growth in late 2020 to early 2021. CPG companies must continue advancing their e-commerce models since online shopping is predicted to continue growing at rates that are settling above pre-COVID levels since shoppers learned the benefits of e-commerce grocery services. Most importantly, the CPG industry needs to be prepared to quickly pivot their demand forecasts and supply chain capabilities as consumer shopping behavior could enter a new threshold as the pandemic slowly diminishes in the midst of increasing vaccine availability.

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