



ACC NEWS



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YOUR WEEKLY UPDATES

Week 45 of 2020



Healthcare



Ports



Shipping



Rail



Supply Chain



Still So Much To Learn



Beverages



Retail



C-Stores



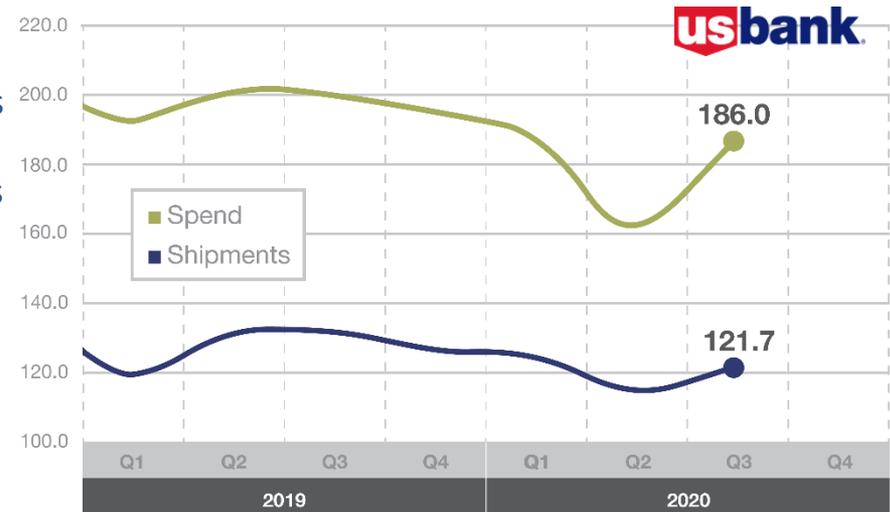
Road



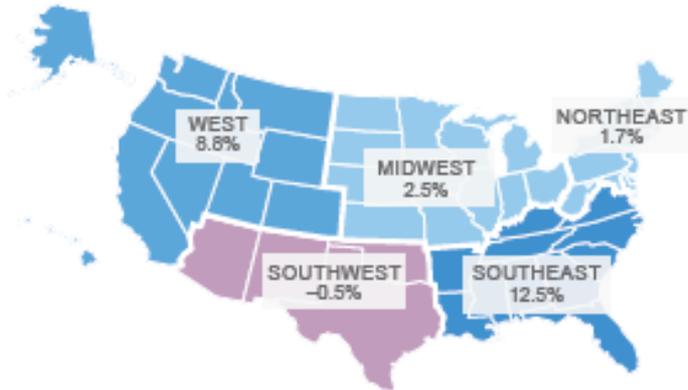
Handling

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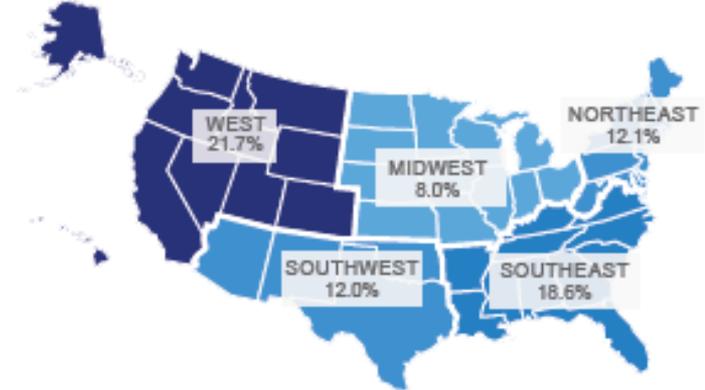
- Despite what's now considered a recession, gains in shipment volumes and spend this quarter indicated that many sectors of the goods economy are doing well. E-commerce sales continued to be strong, and brick-and-mortar sales also rose as household spend continued to shift from services to goods. Overall, freight rates and spending increased due to tight capacity.
- The Q3 2020 U.S. Bank National Shipment and Spend Indexes point to a trucking industry, and an economy, managing through a recession. Gains in both shipment volumes and spend from the previous quarter confirm that many sectors in the goods economy are doing well despite the pandemic. According to the contributing economist, Bob Costello, spending during this period appears to have shifted from services to goods, which is more truck-dependent. One area of continued strength in the third quarter was e-commerce sales, although traditional brick-and-mortar sales rose as well. Additionally, as households spent more purchasing goods, retail inventories were depleted over the summer. This led to a restocking effort by retailers in the third quarter, which provided carriers in those supply chains an added boost.
- Not all trucking sectors or shippers saw freight growth during the third quarter though. For example, some parts of the tanker truck industry continued to struggle with the lower energy consumption and production, as well as soft chemical output. Flatbed carriers hauling for residential construction witnessed strong volumes, but the industrial side of flatbed freight was less robust. For example, primary metal production during the quarter was off roughly 20% from a year earlier.
- As shipments rallied, spending increased along with freight rates because trucking capacity tightened during the quarter. Factors leading to the tighter capacity include increased shipment volumes, for-hire fleets operating fewer trucks, difficulties training new drivers during the pandemic and the return of the truck driver shortage.



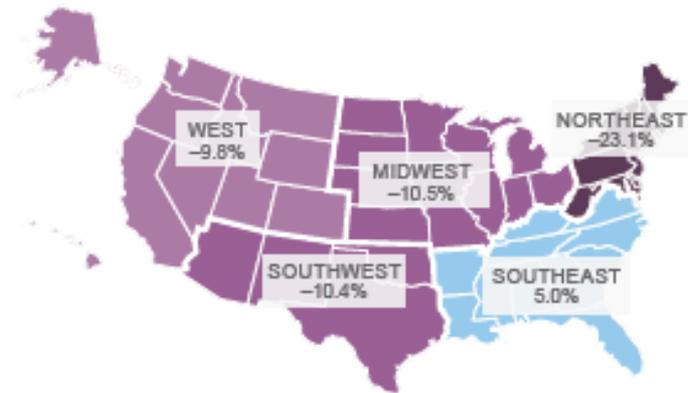
Shipments – Regional Quarter-over-Quarter % Change



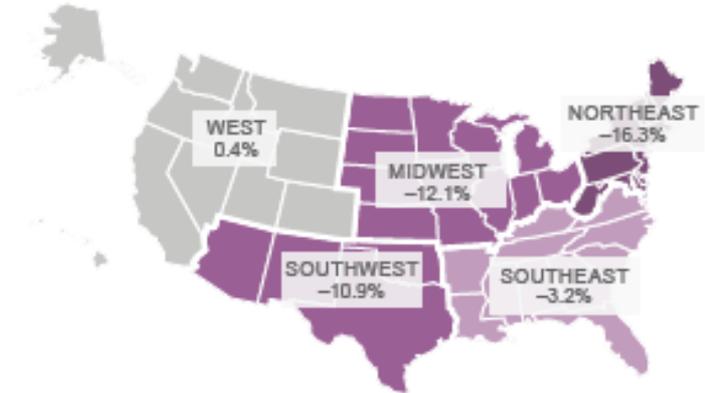
Spend – Regional Quarter-over-Quarter % Change



Shipments – Regional Year-over-Year % Change



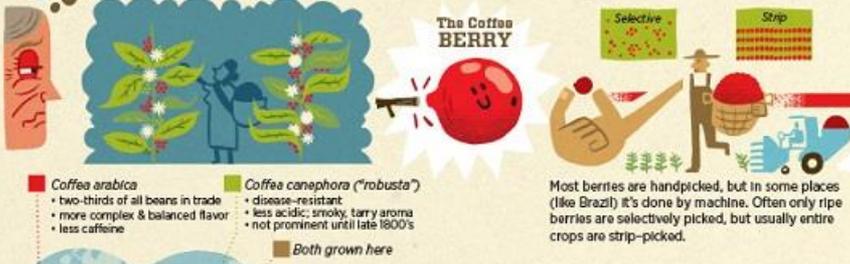
Spend – Regional Year-over-Year % Change



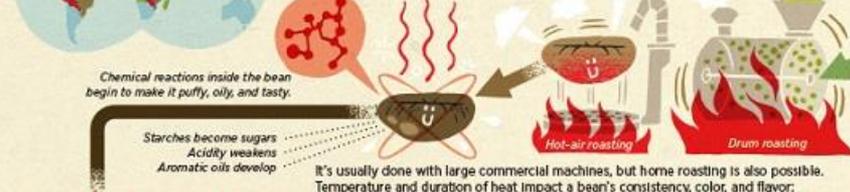
HOW COFFEE WORKS!

Each particle of pick-me-up in your morning coffee has traveled a great distance, not to mention been transformed and refined, to be there for your daily grind. Here's the life cycle of a typical bean:

- 1 GROWING** There are two species of tropical plants, both bushy overgreens, that provide most of the world's coffee.
- 2 PICKING** Five years after planting, and as berries ripen from green to red, the bush is harvested.

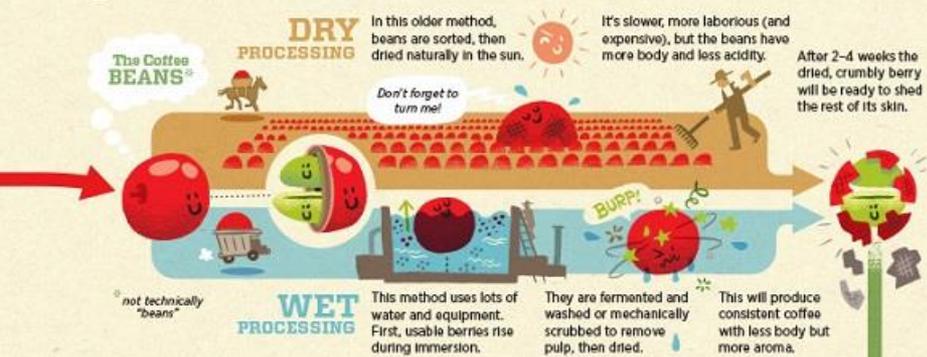


- 3 PROCESSING** In this important step, the outer covering and pulpy fruit are removed from the berry, leaving the seeds (aka the "beans"). There are two primary ways to do it:
- 4 MILLING** Any remaining fruit or parchment will be removed and dry coffee will become sought-after "green coffee" beans.



10 Steps from Shrub to Mug!

- 3 PROCESSING** In this important step, the outer covering and pulpy fruit are removed from the berry, leaving the seeds (aka the "beans"). There are two primary ways to do it:



D. ZETTWOCH



Walmart's new look shows how the role of the store is changing



- Walmart recently announced a low-cap X refresh of its look that dials up the store's role as a marketing platform to promote its omnichannel shopping experience. This new look signals that Walmart leadership understands the opportunity to strengthen customer relationships through increased in-store communications and digital connections.
- The program will be rolled out to nearly 200 supercenters and some Walmart Neighborhood Stores by Jan 2021 and reach a total of 1,000 stores by January 2022.
- Bright and colorful signage built around icons from Walmart's new app alert the customer that digital and omnichannel options make the store easier to shop and find what they want more quickly. It's an invitation to come in and try some of the new features located around the store.++



Ross Stores in 30 new store openings

- Ross Stores has completed its 2020 expansion.
- The off-pricer opened 30 Ross Dress for Less and nine dd's Discounts stores across 17 different states in October. The new locations complete Ross' stores growth plans for fiscal 2020 with the addition of 66 new stores.
- The retailer added a total of 12 stores to its largest markets of California, Texas, and Florida, while also opening two stores in its newest Mid-Western state, Ohio. In addition, Ross entered the state of West Virginia, its 40th state, and dd's opened its first store in Arkansas, its 21st state.

Adobe: 2020 holiday online spending to break all previous records

- E-commerce spending is set to skyrocket this holiday season as customers continue to limit their time in physical stores amid the pandemic. U.S. holiday online sales will total \$189 billion, up 33% over last year, according to Adobe Forecast 2020. The increase, equal to two years' growth in one season, would shatter all previous records.
- If consumers receive another round of stimulus checks or physical stores need to close in large parts of the country due to COVID-19 outbreaks, online spending will jump an additional \$11 billion, surpassing \$200 billion, for a 47% year-over-year increase.



Declining Rents And Investor Concern Forcing Mixed-Use Developers To Rethink Retail **BISNOW**

- The twin crises of e-commerce’s rise and the coronavirus pandemic hit retailers hard, diminishing their reputation among investors and lenders. But mixed-use developers say whatever its current troubles, retail will always be needed to create properties appealing to the widest possible range of tenants, and it still plays a key role in their work.
- “While retail is not directly driving value in the near term, we still strongly believe retail indirectly drives value by setting a tone for the building, generating traffic and providing a unique building amenity,” said Lindsey Senn, executive vice president of finance and development at Fifield Cos.
- That doesn’t mean it isn’t being looked at differently now. Institutional partners are more skeptical of using retail and can cite data on its declining rental income, Senn added. Assembling the puzzle pieces of a mixed-use development won’t be as easy as it was even one year ago.

China's Big Fashion Problem: How to Recycle 26 Million Tons of Clothes **SUPPLYCHAINBRAIN**

- In a country that makes more than 5 billion T-shirts a year, there is a stigma to wearing old or second-hand clothes and millions of tons of garments are discarded every day. An aspirational middle class, combined with a boom in e-commerce, has turned China into the world’s biggest fashion market, overtaking the U.S. last year. Greater China accounts for a fifth of Japanese retail giant Uniqlo’s global revenue and the company’s sales in the region rose almost 27% in the 2017-2018 fiscal year to more than \$4 billion. Most of China’s purchases are fast fashion – mass produced, cheap, short-lived garments.
- The result: China throws away 26 million tons of clothes every year, less than 1% of which is reused or recycled, according to state news agency Xinhua.
- The environmental cost of this waste is huge. The fashion industry accounts for around 10% of global carbon emissions, more than is produced by all flights and maritime shipping combined, according to the Ellen MacArthur Foundation. By one estimate, reusing 1 kilogram of clothing saves 3.6 kg of carbon dioxide, 6,000 liters of water, 0.3 kg of chemical fertilizers and 0.2 kg of insecticides, compared with making garments from virgin resources.
- Part of the problem in China is that recycling clothing is unprofitable by law. Non-charitable sales of used apparel are banned for health and safety reasons.



What will Amazon do next in grocery?



brick meets click.

- Amazon has been able to capture the low hanging fruit that represents a fraction of the total grocery market. To get to its ultimate goal in grocery, however, it will have to go after the business the big players currently own.
- We expect Amazon will likely focus on three areas over the next couple of years as it works on improving its offer and operations to earn the role of primary grocery provider for more US households:
 1. Leveraging Prime to attract more customers
 2. Building out strategically placed physical locations
 3. Optimizing its product mix between national brands and private label

J.C. Penney signs agreement with Brookfield, Simon **CSA**

- J.C. Penney has taken a big step towards its financial restructuring and emergence from bankruptcy.
- The department store retailer announced that it has entered into an asset purchase agreement with Brookfield Asset Management, Simon Property Group and a majority of the company's first lien lenders. Penney said it expects to operate outside of Chapter 11 before the holiday season.
- Under the agreement, and as previously reported, Brookfield and Simon — Penney's two biggest landlords — will acquire substantially all of Penney's retail and operating assets through a combination of cash and new term loan debt.

Amazon.se launches in Sweden **amazon**

- Customers in Sweden can start shopping on Amazon.se today, with low prices on more than 150 million products across more than 30 categories and reliable, free delivery on eligible orders above SEK 229 that are fulfilled by Amazon. Customers can shop from thousands of European and local Swedish businesses on Amazon.se.
- Amazon is offering a wide variety of products from local Swedish brands, as well as big brand favorites. Customers can find great prices on products offered by Swedish brands like Electrolux, Lagerhaus, OBH Nordica, Ellos, BRIO, Bonnierförlagen and Ifö, as well as international brands like ASUS, Mattel, Hasbro, LEGO and Bosch. With the launch of Amazon.se, it'll be easier for Swedish businesses to sell products on Amazon, reach more customers and expand.



Death of the middleman? The myth of selling straight to the customer **CITYA.M.**

- Retail brands are making changes, increasingly going direct to the shopper through their own websites, cutting out online retailers like Amazon and bricks and mortar stores completely.
- This isn't all about Covid, of course. The shift to online has been a running trend over the past few years, disrupting the stale retail market and levelling the playing field for small, single-product startups. These brands were able to launch quickly, with a cool aesthetic and exciting product innovations, and sell straight to the buyer.
- VCs invested billions of dollars in these firms, and it quickly became a “me too” market.
- At first glance, the opportunity seems huge. Take out the cost of retailers, bricks and mortar stores, supply chains and billboard ads, and it's no wonder the market exploded.
- However, far from being the golden ticket it might first appear, the direct-to-consumer (D2C) market has already taken as many casualties as it has borne success stories. Simply being available online doesn't win you customers, especially when there are other copycat brands nipping at your heels. Once the darling of the model, Caspar mattresses has piled up \$223m in losses since its launch. Clothing brand Outdoor Voices lost up to \$2m a month.
- So is it really a smart move to cut out the middleman?
- The truth is that the very idea of cutting out the middleman is something of a myth. Brands selling straight to the consumer must swap traditional retailers for social advertising platforms, predominantly Facebook and Google. Buying attention is expensive — each customer comes at a rising price. Facebook ads cost 90% more in December 2019 than they did during that month in the previous year.
- In order to succeed you need a powerful brand story, impeccable customer service and community building, unique content and — importantly — the right technology to drive down the cost of logistics.
- While the retail market is ripe for disruption, we should heed the warning signs. Yes, our shopping habits might have changed, but in the future, brands will need a mix of physical retail space, partnerships with online retailers and selling through their own channels. Companies will have to be present wherever there are customers.
- This shift to online only can only be part of the story — and while it is tempting to cut out the traditional middleman, be cautious about who you're inviting through the door instead.



Fueling the foundation for eGrocery growth: What's changed & how much



brick meets click.

- COVID-19 has not just driven a surge in online grocery sales, it is changing the way many customers shop for groceries – and we expect coronavirus concerns and improved online shopping experiences to continue.
- What's changed & how much? - Here are three key points that summarize COVID’s impact so far as the online grocery market rebalances at levels significantly higher than a year ago.

1. Greater share of spending

- In the past year, the total share of weekly grocery spending done online has almost doubled – from 6.4% in August 2019 to 11.9% in August 2020. The online share of grocery spending peaked in May 2020 at 27.4% according to Brick Meets Click research; since then, there has been an anticipated pullback as stay-at-home orders and other restrictions were lifted or relaxed. Despite this adjustment, for at least the next couple of years expect continued growth for online spending higher than prior to the pandemic - in both absolute terms and percentage points as well.

Online's Share of Grocery Spending
Total US, Past 7 days – All Retail Formats & Fulfillment Methods



Sources: Brick Meets Click/Mercatus Grocery Shopping Survey, Aug 2020; Brick Meets Click Grocery Survey, Aug 2019.

2. More monthly active users

- By Aug 2020, the number of US households buying groceries online in the past month had increased 75% year-over-year to 55.4 million households.
- What this says is a lot of the growth in the online share of grocery spending is driven by the increase in the number of households recently shopping online.

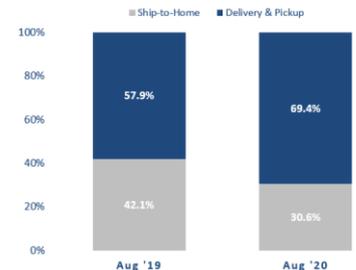
Online Grocery Monthly Usage: Aug '20
Total US, Past 30 days – All Retail Formats & Fulfillment Methods



3. Pickup and delivery options are becoming more important

- The Covid-19 sales increases in all three segments of online grocery – pickup, delivery, and ship-to-home grew – but the growth for pickup and delivery was nearly twice as high as the growth for ship-to-home.
- Customers are clearly becoming more comfortable buying a larger range of grocery produce online.

Sales Share of the Online Grocery Market: by Segment
Total US, All Retail Formats



Sources: Brick Meets Click/Mercatus Grocery Shopping Survey, Aug 2020; Brick Meets Click Grocery Survey, Aug 2019.

Still So Much To Learn





Understanding Consumer Behavior in the New Next 2020 **ORACLE**

2020 has been a year to remember and to forget. The pandemic had a dramatic impact on the retail industry and the consumer experience. Consumer expectations — online and offline shopping experiences — have dramatically influenced and inspired new behaviors for consumers. The year remains dynamic and unexpected, continuing to redefine what it means to have a superior consumer experience, from speed and selection to safety and sanitation. Three critical factors impacting consumer behavior as global conditions have changed—the pandemic effect, the social influence, and the holiday impact—and how retailers can anticipate, embrace, and thrive in the New Next.

1. **The Pandemic Effect** - As the COVID-19 virus spread and lockdowns took effect, retailers saw consumer priorities change in parallel. Initially, consumers moved en masse to online shopping platforms, with a clear preference for home delivery and other alternative fulfillment options for both essential and nonessential items. While these shifts continue, as restrictions on in-store shopping lift, consumers of all ages are beginning to return to retail locations where they feel their safety is a priority. Consumers demanded a new delivery experience that brought the digital and physical experiences together. As we approach end-of-year holidays, retailers must be agile to meet the online and in-person demands of consumers over an extended shopping season.
2. **The Social Influence** - Social distancing protocols may drive physical separation, but they naturally haven't dampened the desire to connect with others. Predictably, social media has become more central to how consumers interact with each other and how they explore the world around them. With consumers in all age groups worldwide spending more time on social platforms, they are also discovering more brands and making new purchasing decisions based on their experiences on social channels. Retailers that raise their visibility and entice consumers on social media will be well positioned to realize the full potential of connecting with a newly curious online audience.
3. **The Holiday Impact** - In an unprecedented year for retail, all eyes are on the holiday season. Consumers plan to spend as much on holiday gift-giving as in 2019. Consumers stated that they intend to shop BOTH online and in stores over a more extended period this holiday season. With ongoing limits on in-person shopping and increased demand for online shopping and alternative fulfillment options, traditional retail milestones like Black Friday and Cyber Monday will evolve into the next generation of retail (online) milestones. Despite the unpredictability of the year, consumer expectations remain high with a slice of forgiveness. Retailers must be agile in response. Brands who tap into the inventory irrespective of its location (in-store or in warehouse), deliver on time via multiple channels, and provide uncompromising online and in-person experiences will win the consumer's heart this holiday.



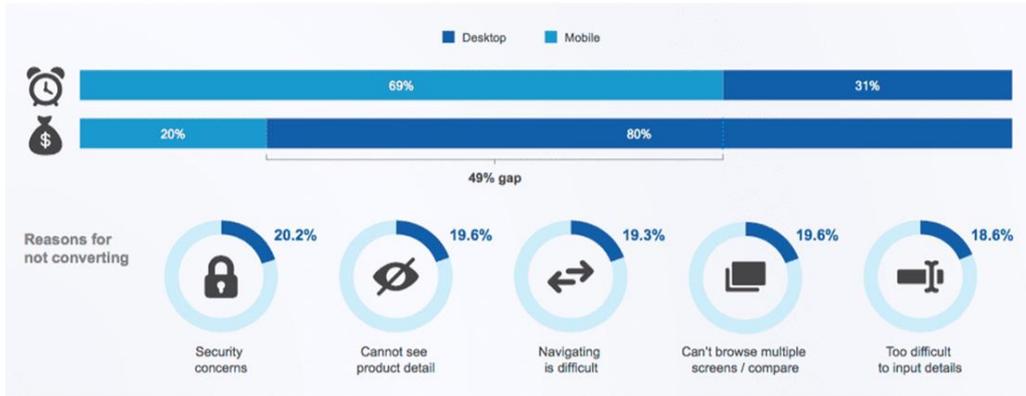
What are the reasons consumers are less likely to buy on smartphones?



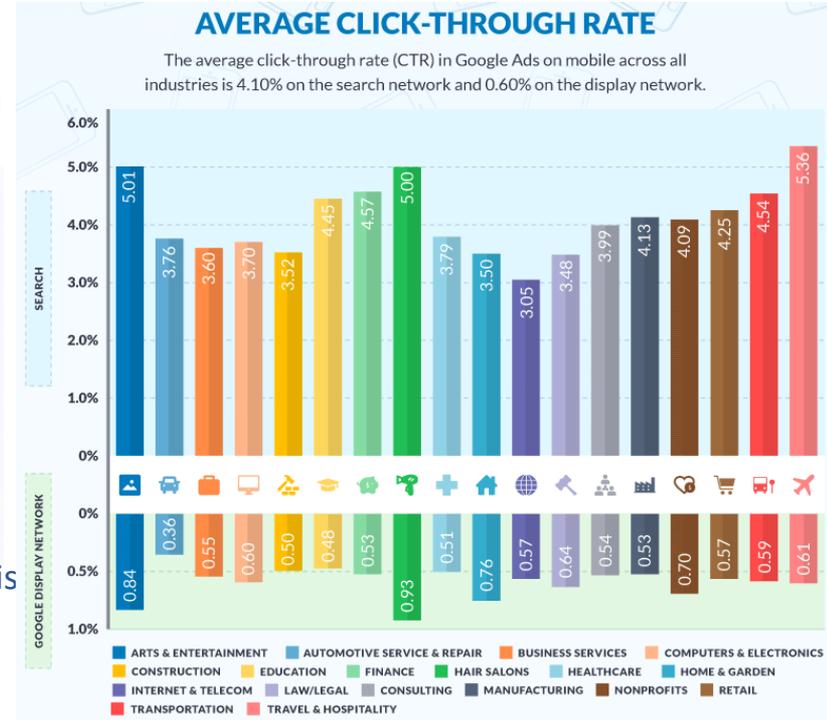
- The comScore Mobile Hierarchy report has some useful insight into this, which retailers can use to improve their service or messaging to reassure consumers.

The m-commerce 'gap' (and what's causing it)

Mobile retailers have not fully capitalised on mobile share of consumer time, with a gap between share of minutes and dollar spend. Four of the top five reasons cited by consumers involve basic usability difficulties



- It's no surprise that the conversion rate in the search network is much higher than in the display network since, in the search network, searchers are typing in product and brand names when they have a specific intent. This isn't the case in the display network where they are responding to banner and text ads, typically on publisher sites.
- The results from 18 industries could be useful if you are a startup modeling conversion rates as part of a business plan, or if you want a top-level comparison for your activities with others in your industry.
- Of course, outcome as measured as conversion rate varies according to sector and type of keyword, brand searches always have higher clickthrough and conversion rates than generic searches, for example. For retail, the outcome will be conversion to sale, but in many other sectors show, the conversion will be converted to lead.





DOD planning ‘every logistical detail’ of COVID vaccine distribution American Shipper

- U.S. military leaders and logistics specialists are working on multiple fronts to ensure rapid distribution of COVID-19 vaccines. Efforts include reducing red tape for imports and exports of clinical trial materials and coordinating logistics plans with public health jurisdictions across the country.
- The Department of Defense is essentially serving as a lead logistics provider, applying its vast logistical capabilities to coordinate with private sector manufacturing and freight transportation companies the on-time delivery and availability of critical materials.
- Whether military assets will actually be used to supplement commercial logistics capabilities remains an open question. Pentagon officials claim there is no need for wide-scale deployment of transportation equipment, although industry sources and analysts indicate scenarios being studied include the use of U.S. Air Force cargo planes to ferry vaccines that need to be deep frozen.

Patriot Rail acquires Salt Lake City short line operator FREIGHT WAVES

- Jacksonville, Florida-headquartered Patriot Rail plans to acquire fellow short line operator Salt Lake Garfield & Western Railway (SLGW).
- The transaction, which is subject to customary closing conditions and regulatory approvals, will also include SLGW’s entities Caballero and Caballero 2, which are storage and transload service providers. SLGW is based in SLC.
- “The agreement aligns with Patriot’s vision of future growth as a premier service provider in the U.S. short line railway industry and complements the Patriot portfolio,” said Patriot CEO John Fenton. “SLGW provides premier service to its customers and we are honored to carry that legacy forward. [SLGW] CEO Mariana Mavor and her team have done a tremendous job expanding capacity and finding creative solutions for shippers.”
- Financial terms weren’t disclosed. SLGW is designated as a Class II rail company.
- SLGW connects to Union Pacific and BNSF, and the 26-mile line runs adjacent to two major interstates and is near Salt Lake International Airport.
- The railway, which has been operating for over 125 years, handles more than 6,000 loaded railcars annually.



DSV Panalpina CEO: Q3 results beat odds during pandemic **American Shipper**

- Third-party logistics giant DSV Panalpina reported on Thursday a pretax operating profit of 2.7 billion Danish kroner (DKK) (\$428 million) for the third quarter, up from DKK 1.78 billion (\$280 million) for the same period last year and despite the supply chain disruptions caused by the coronavirus pandemic.
- “Market conditions have been better than anticipated across most of our markets, and at the same time we benefit from efficient cost management,” said Jens Bjørn Andersen, DSV Panalpina Group CEO, in a statement.
- DSV Panalpina said the negative impacts from COVID-19 began easing off during Q3, and it estimated with the exception of the bump in airfreight that the rest of its business activities are now “close to the level in the same period last year.”

Future of Supply Chain Technology **Gartner**

- These eight technology trends are some that supply chain leaders must rapidly assess to accelerate supply chain digital transformation:



Cloud platforms



Mobility



In-memory computing (IMC)



Robotic process automation (RPA)



Digital twins



Internet of Things (IoT)



Machine learning and AI



Business networks

- For example, organizations are more frequently seeking ways to capture data from external data streams to help provide input for future planning activities. This data could come from IoT devices from the manufacturing floor, POS, social sentiment, weather data and other data types. As a result, data — and processing of this data — requires increasingly extensive use of IMC to help with planning speed, granularity and model adaptability. At the same time, as higher volume, velocity and veracity of data is brought into supply chain planning, the need increases for organizations to use advanced analytics to drive process automation and get insights from all this newfound data



The Real Estate Problem That Could Delay The Coronavirus Vaccine Rollout **BISNOW**

- As cases of the coronavirus reach new all-time highs, the production and distribution of an effective vaccine is the moment most of the world is waiting for before life can return to some sort of normal.
- But as the race for a vaccine continues, a real estate problem has emerged that could slow its rollout, potentially delaying any real economic recovery in the process.
- Some of the vaccines currently in development need to be kept at extremely low temperatures at all times from development to injection; some at negative 80°C or lower. Public health experts have raised serious doubts that the country has enough space to store hundreds of millions of vaccines at extreme subzero temperatures.
- “We have never seen anything like this before,” said Catherine Troisi, an infectious disease epidemiologist at the University of Texas’ School of Public Health. “Distributing the vaccine through that cold chain, or a frozen chain ... It’s going to delay when we get people vaccinated.”
- Local, state and federal governments are still in the beginning stages of securing such storage space. While cold storage companies have seen an uptick in interest and demand for their product, commercial real estate owners and brokers said they have not seen an increased interest in cold storage industrial space for a COVID-19 vaccine from private companies or the government.
- None of the groups involved in funding or distributing vaccines, from federal and state governments to pharmacies and supply-chain companies, have outlined comprehensive plans for vaccine storage.
- Last week, all 50 states were required to submit plans for vaccine distribution to the Centers for Disease Control and Prevention. New York State, which public health experts say has been a leader in vaccine preparedness, released a public COVID-19 Vaccination Program Oct. 16, but the 96-page document is short on specifics.
- The DOH doesn’t outline a plan to create cold storage, nor does it outline leasing any additional space for cold storage. Gov. Andrew Cuomo also created a distribution and delivery task force, which includes pharmacy trade organization leaders, state health officials and hospital and health center leaders.
- Even with a vaccine, the percentage of cold storage facility space used for medicine is small and massively outpaced by the percentage of cold storage facilities used for groceries.

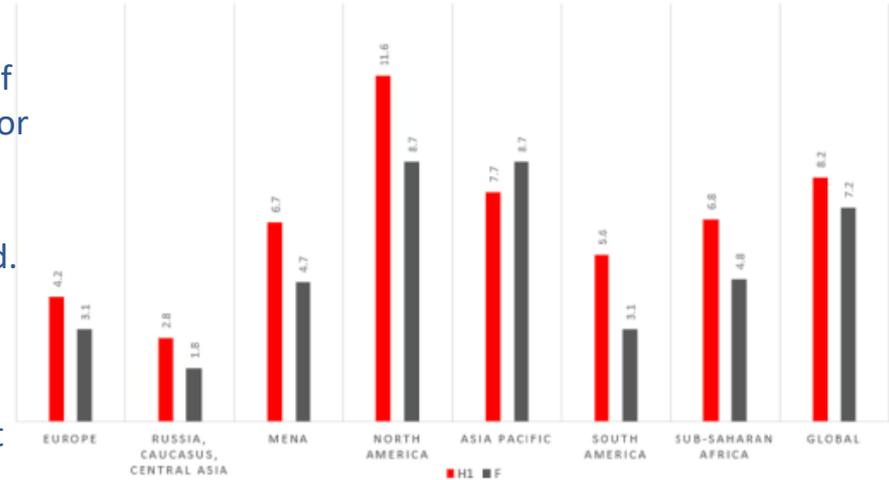


Global Express & Small Parcels Market Size & Growth 2020



- Growth in the US was very strong. E-commerce penetration in total retail was already high at around 15% pre-COVID and the switch from bricks-and-mortar to online has been relatively easy to make for consumers. e-commerce reached around 25% of total retail sales during the height of the pandemic. This was shown by the performance at UPS, where B2C volumes were up an astonishing 65.2% in Q2. At UPS and also at rival FedEx, B2C increased to around 70% of total volumes at this time. Worryingly for the bottom line, B2B parcels appear to have slid heavily, although both companies said they were beginning to see year-on-year growth in this segment in the middle of Q2.
- Like in the US, UK e-commerce is mature and accounted for close to 30% of all retail sales during the height of lockdown according to the ONS. With a high existing mix of B2C volumes relative to B2B, and store closures imposed for a longer period of time when compared against its neighbors, parcel growth rates have been very strong. However, across the continent, the picture has been mixed. With Europe struggling to control the outbreak in its early phases, the economic downturn has been particularly severe by global standards. This has led to greater harm in the B2B segment of the market, dragging overall market growth rates lower.
- The second half of the year is likely to see global growth slow somewhat. E-commerce penetration is expected to remain elevated relative to long-run trends, but y-o-y growth sales will not come close to the rates seen whilst the tightest lockdown orders were in force.
- Conversely, a bounce-back for the economy should see B2B parcels pick up again. The recovery in this higher margin element of the market will be good news to those who have struggled to cope with B2C delivery costs.

2020 Total Express & Small Parcels Market Growth by Region - %



How BMW turned Spartanburg, South Carolina, into a supply chain hub SupplyChainDIVE

- South Carolinians, especially residents of the upstate region around Greenville, anxiously waited. It was 1992 and the area was on the shortlist to become the home of BMW's new manufacturing operation. Lawmakers and deal makers put together an attractive offer that, if successful, could impact the state's economy for decades.
- The region was home to one of the largest textile manufacturing industries in the U.S. in the early 20th century. With its arrival, BMW would turn Spartanburg, South Carolina, into a logistics hub.
- The state finally got its answer in June 1992, with an announcement at the Greenville Marriott Hotel where a meal of bratwurst and Bavarian cabbage was served, according to Automotive News. BMW was coming to South Carolina.
- Generous state-incentives aside, South Carolina had a solid supply chain infrastructure. BMW was attracted to "the proximity of both the port of Charleston and numerous automotive suppliers,"
- *Read the full article at <https://www.supplychaindive.com/news/logistics-BMW-upstate-south-carolina-supply-chain-hub>*

What BMW Sees In South Carolina

A right-to-work state with a pleasing port and breaks on taxes.

By DORON P. LEVIN

CLEAMING black BMW 740 sedans, costing \$46,000 each, glide up and down the broad boulevard that is this city's main street, their elegance a striking contrast to the crumbling buildings and vacant lots, once home to so many textile mills. The cars belong mostly to BMW executives, who are becoming more numerous by the week. They are here because BMW A.G., after scouring the world, has chosen a 900-acre stretch of red clay halfway between Spartanburg and Greenville to build a car assembly plant. The attraction: promises of an eager, technically trained work force, the proximity of both the port of Charleston and numerous automotive suppliers, tax incentives and a favorable climate.

The BMW plant, with its high-paying jobs and lustrous spiffy revenues for local business and government, represents hope to a diverse group of South Carolinians, from young students in technical colleges to senior development officers. Moreover, it is a crowning flourish in the migration of manufacturers and automotive suppliers to the foothills along Interstate 85: It is the first car-assembly plant in the Carolinas.

It may not be the last. Many industrial development experts are convinced that Mercedes-Benz A.G. is leaning toward the nearby Charlotte, N.C., area. Mercedes said last Monday that within a few months it would select an American site at which to build a new model of a sport-utility vehicle. Buyers also abound that Volkswagen A.G. is looking for an American site to make its Audi luxury cars. All three German auto makers have edged heavily in the United States market since the early 1980s, as the mark has climbed in value and the Japanese have introduced successful luxury imports like Acura, Lexus and Infiniti.

Conversely, the weak dollar, eager recruiters from regions like the Carolinas and generous tax incentives are turning the United States into an attractive manufacturing site and a boon for export.

Whether the Carolinas evolve into an im-

table that in most plants, and even better than those in Japanese plants. "A lot of auto makers invest in technology, not in people. We're going back to the basic line and investing in people," said Allan G. Greer, president of BMW's manufacturing plant here. He was the first American manager hired by the Honda Motor Company 10 years ago and is a former Honda senior vice president who helped supervise the Marysville, Ohio, operation.

Borrowing from Honda and others, BMW wants to enlarge on the concept of work teams, in which members can perform one another's jobs. Eventually BMW wants to authorize teams to operate quickly and independently, with little moment-to-moment supervision. If a model isn't selling well, the work force must be able to adapt quickly to building a different model.

Like the Japanese auto makers who located transplants in rural locations, BMW expects to benefit from the strong agrarian work ethic that still influences many workers in South Carolina. Susan E. Conway, who helped introduce "self-directed" work teams in five Sara Lee Corporation knitting mills in the South, has been hired as vice president for human resources. She will help recruit the workers and shape the teams.

THE NEW YORK TIMES, SUNDAY, APRIL 11, 1993



Clocking Up Costs

Labor and labor costs at some automotive assembly plants.

Company, plant	Vehicles built	Labor per car
Ford, Atlanta	Taurus, Sable	2,49 \$727
Ford, Louisville, Ky.	Explorer sport-utility	2,73 \$875
Chrysler, Princeton, Ontario	Infiniti, Conquest	2,80 \$950
G.M., Jackson, Tenn.	Chevrolet Lumina	2,76 \$1,010
Mercedes, Stuttgart, Germany	Beamer	18,00 \$4,500

At 50¢ an hour, based on 1992 median and median cost. Associated with a newly hired, younger work force. Source: Robert A. Simmons, The New York Times.



The union message in New Jersey: "America is no banana republic."



UPS struggles with continuing high demand

UPS has been caught again in the growth conundrum of higher demand for less profitable services. The Atlanta based giant had a good third quarter, with the results showing “consolidated revenue of \$21.2bn, a 15.9% increase over the third quarter of 2019. Consolidated average daily volume increased by 13.5% year-on-year. Net income reached \$2.0bn for the quarter, 11.8% above the same period in 2019, or 10.7% on an adjusted basis. Operating profit totaled \$2.4bn, up by 11.0% compared to last year’s third quarter, or 9.9% on an adjusted basis”.

Lessons from COVID-19: 4 inventory management strategies

- The outbreak of COVID-19 has exposed the fragility of the global supply chain and, in turn, the organizational structures of many companies.
- In an inflexible system populated with companies run from the top down that are too slow to adapt, traditional supply chain channels that prove so efficient in periods of calm are now a source of severe disruption.
- 4 critical inventory management strategies - The COVID-19 pandemic has provided numerous lessons, including for all aspects of the supply chain. Here are four inventory management strategies supply chain leaders and inventory managers can use going forward.
 1. **Pay closer attention to consumer signals** - Some e-commerce retailers are seeing a 250% increase in demand for such products as hand sanitizers, soap, and cold and flu medication. When it comes to these essential health needs, it's important to check on inventory levels, particularly in areas where there are more coronavirus cases.
 2. **Focus on data** - Because inventory management can be so complex, prioritizing data is a critical inventory management strategy for virtually every company.
 3. **Diversify the supplier network** - Organizations better positioned to weather the COVID-19 outbreak or any pandemic, are those able to quickly find alternative suppliers to keep operations running.
 4. **Focus on inventory accuracy** - Organizations that don't have good inventory management processes and access to accurate numbers will likely find themselves struggling to keep up with demand in some categories or having an oversupply of items that customers are suddenly less interested in.



Another on-highway autonomous truck test completed *Overdrive*

- Autonomous trucking tech firm Locomotion recently completed an on-road pilot program that showcased autonomous trucking technology for the SmartBelt Coalition, a collaboration of transportation agencies in Michigan, Ohio and Pennsylvania.
- Over the course of one week, two Locomotion trucks performed three separate interstate routes under close observation from the involved organizations. One route started at the Pittsburgh Community Food Bank and delivered food donations to families in need in Toledo, Ohio.
- Locomotion's Autonomous Relay Convoy (ARC) platform allows one driver to pilot a lead truck equipped with technology augmentation while a follower truck operates in tandem through Locomotion's fully autonomous system.

Parking, ELDs among top trucking concerns for drivers *Overdrive*

- Owner-operators view truck parking, the ELD mandate and driver compensation as the top issues facing the trucking industry, according to results of the American Transportation Research Institute's annual Top 10 Trucking Industry Issues survey.
- Based on survey responses from more than 3,100 industry stakeholders – including owner-operators, company drivers, fleet personnel, industry suppliers and more – the overall top issue facing the industry is the perceived driver shortage.
- However, when drivers' issues are separated from carriers' issues, truck parking ranks as the No. 1 concern. This lines up with how owner-operator/independent contractor responded in the survey, and differs slightly from company drivers' rankings, which had parking as their No. 2 issue.
- The full Top 10 Industry Issues list for truck drivers – both company drivers and owner-operators – is as follows: (i) Truck parking, (ii) Driver compensation, (iii) Detention/delay at customer facilities, (iv) Hours of service, (v) Driver training standards, (vi) Automated truck technology, (vii) FMCSA's Compliance, Safety, Accountability program, (viii) Driver health and wellness, (ix) Speed limiters and (x) ELD mandate
- Only three issues that appeared on drivers' top concerns list also appeared on carriers' top concerns list – CSA, detention and hours of service.



Sears Seats now standard on several Peterbilt models *Overdrive*

- Paccar has chosen seats from Sears Seating to be standard in several 389, 367, 365 and the 389-wreck replacement. The seats became standard on Sept. 7, 2020.
- The Sentry seat line will serve as the standard option for the Atlas seat line will be a premium option.
- Peterbilt cited “more foam in critical areas,” “better lumbar support,” “improved adjustability,” and “superior suspension” as key reasons for choosing these Sears



popular Peterbilt models, including the standard in these models beginning Sept. 7, 2020. The seats are standard on Peterbilt driver and passenger seats, and provide “more foam in critical areas,” “better lumbar support,” “improved adjustability,” and “superior suspension” as key reasons for choosing these Sears seats.

Amazon shipping costs outpace sales growth as pandemic operating expenses soar

- Amazon's shipping costs increased 57% YoY in Q3 to reach \$15 billion, the company reported Thursday. Shipping costs grew faster than online sales (up 38% YoY) in the same period, which contained an unusually late Prime Day.
- Operational costs related to COVID-19 have added up to \$7.5 billion for the year so far, according to comments by Chief Financial Officer Brian Olsavksy on the Thursday earnings call. The expenses include new procedures to facilitate social distancing in fulfillment centers, ramp-up costs for new facilities, an influx of roughly 250,000 new employees' training and onboarding costs, enhanced cleaning, and personal protective equipment. The company expects to spend \$4.5 billion on incremental COVID-19-related operational costs in Q4, Olsavsky said.
- The company pulled forward some spending on logistics capacity building planned for next year to Q4 to meet the seemingly endless demand. "We're not trying to cut it close, and we're erring on the side of having too much capacity, and we think that's the right call," Olsavsky said
- Olsavsky confirmed that the company is on track to grow fulfillment and logistics infrastructure 50% this year, as he forecast in July. Most of the new square footage opened late Q3 or early Q4. Half of the new spaces are delivery-focused facilities, either sort centers or last-mile delivery stations, Olsavsky said.
- Transportation capacity (for internal use) will be a major target for investment for the years to come at Amazon, Olsavsky said. Over the last several years, Amazon began the work of hiring out its logistics capacity in direct competition with carriers like UPS and FedEx. The company paused that effort in April.



Mounting evidence that container spike could last into 2021 **American Shipper**

- Bullish news on container shipping keeps pouring in, implying demand strength through February 2021.
- The latest green light comes from container-equipment lessor Triton International. Triton, the largest player in its sector, reported Q3 2020 results Friday and described Q4 2020 demand for equipment as “exceptionally strong.”
- Ocean carriers generally lease more than half their boxes from companies like Triton. The carriers’ forward visibility on shipper demand drives their box-leasing demand. If leasing volume and rates jump, it’s easy to connect the dots and anticipate higher future consumer demand.
- “Market conditions will remain strong at least through early next year,” reported Triton CEO Brian Sondey during a conference call on Friday. “We hear from customers [ocean carriers] that they expect a fairly significant container shortage to remain through at least Chinese New Year, which this year is in the middle of February.
- “What happens after Chinese New Year is obviously harder to predict,” acknowledged Sondey. “There is a lot of macro uncertainty out there ... although we haven’t heard customers saying they expect anything negative.”

Lost Container Incident in Bristol Channel, England **Captain**

- Authorities in the UK are continuing to monitor the response to an overboard container incident in the Bristol Channel in southwest England.
- The incident was first reported October 20 when eleven containers were lost overboard from a passing containership that has not yet been identified. According to the Torridge District Council, five of the containers contained non-hazardous cargo and six were empty.
- Some of the containers have likely sunk, but several have washed ashore or been spotted in the water.
- On October 26, one container washed ashore at Bucks Mills in north Devon and another today washed up on the beach of Aberthaw Power Station near Breaksea Point. At least three have been discovered in the water and were either recovered or are being monitored.
- As a result, the HM Coastguard is continuing to advise vessels in the area to keep an eye out for floating containers in the water.



Towering VB10000 Arrives at Golden Ray Wreck Site Captain

- The heavy lift vessel VB10000 has arrived in St. Simons Sound, Georgia for the highly anticipating cutting and lifting operation in the salvage of the Golden Ray.
- The vessel arrived Tuesday and is now in place above the capsized wreck. The vessel will use a 3-inch anchor chain to cut the wreck into eight sections weighing thousands of tons apiece. The chain will move at roughly 8 feet per minute to slowly cut through the wreck from the bottom up then switch to a tungsten carbide cutting chain for any “top-down” cuts when necessary.
- The VB10000 will then lift and place the sections on barges and dry docks inside the Environmental Protection Barrier (EPB) for transport to a shore-side recycling facility.



US Gulf pulls more Asian imports amid West Coast congestion JOC.com

Forwarders and logistics experts say the arc of ports stretching from Houston to Tampa can become an even larger gateway for Asian imports as ocean carriers add more capacity between the two regions and ports upgrade and expand.

Australia invests in new blue highway PORT TECHNOLOGY SMART DIGITAL LIVE

- The government of Queensland, Australia, has announced an AUS\$21 million project to improve the region’s shipping industry and maritime connectivity.
- It is the latest initiative designed to make Australia’s internal supply chain more efficient and will specifically focus on building a so-called ‘blue highway’ along Queensland’s coast with a new shipping service between the ports of Townsville and Brisbane.
- In addition to improving freight traffic, the project will increase marine safety and protect the environment, in particular the Great Barrier Reef, by utilizing highly-skilled local seafarers, according to Stephen Cumberlidge, Queensland Branch Secretary, Maritime Union of Australia (MUA).
- The investment will also include upgrades to port infrastructure, details of which have not yet been disclosed, and an assurance that gateways will remain publicly owned



Canada's Port of Prince Rupert expects to double capacity by 2040 shippinggazette.com

- The Port of Prince Rupert in northern British Columbia, expects to double container capacity by 2040 to 1.35 million TEU under a newly released land use plan, reports Vancouver's Glacier Media.
- DP World's Fairview Container Terminal saw movement of 1.2 million TEU in 2019, a 17% increase over 2018.
- "Container shipments are critical to future growth at the Port of Prince Rupert," the plan said.
- Port president Shaun Stevenson said the plan would guide continued growth and diversification.
- An anticipated C\$2 billion (US\$1.5 billion) in capital expansion projects starting in 2020 was expected to support further cargo growth, including DP World's Fairview Terminal expansion project that will bring the terminal's capacity up to 1.8 million TEU by 2022; the Vopak Pacific Terminal project, which is currently under environmental assessment and expects to make a final investment decision in 2020; as well as Pembina's \$175 million Prince Rupert Export Terminal which was deferred in March due to a downturn in gas prices and pandemic impacts.

'Near-record' import volumes slow BC port flow JOC.com

An October surge in imports from Asia, coupled with rail-related disruptions, is generating delays and excessive container dwell times at the Canadian ports of Vancouver and Prince Rupert.

Georgia Ports wants to expand inland port as volumes soar JOC.com

The Appalachian Regional Port has been more successful than port officials hoped, so the Georgia Ports Authority wants money to develop more land to store containers.

Container volume at major Chinese ports jumped 18.4% in early October **THE TOPOCEAN GROUP** Worldwide Freight Forwarding & Logistics Services

- The ports of Tianjin, Shanghai, Ningbo-Zhoushan, Xiamen, Guangzhou and Shenzhen all posted a growth rate of over 20%. Export container volume of the eight ports increased 19.8% year-on-year while the inland container volume up 14.6% in early October.
- The surge in container volumes coincides a reinstatement of blanked services on the transpacific, a surge in freight rates, and a shortage empty containers at major Chinese ports.



The Messy, Booming Business of Recycling Cruise Ships *g Captain*

- Carnival Fantasy was a ship famous for its outlandish décor, all-night revelry and its size—back when 2,000 was an incredible number of passengers. The “Fun Ship” vibe it introduced in 1990 came with such whimsical spaces as an Egyptian-themed piano bar, decorated with a fake sarcophagus, and a glitzy glass-topped atrium that was the hub of the social scene.
- Today the Fantasy is attracting a whole different breed of booty-seeker. In July, the 30-year-old ship sailed to the Aegean Sea, wrapping its final voyage in the shipbreaking capital of Aliaga, Turkey.
- Its resting place there is a demolition yard where old cargo ships, tankers, research vessels—and now cruise ships retired during the Covid-19 pandemic—get torn apart and broken into pieces. In this case, they’re not being broken in half to get upgraded and stitched back together. Instead, circling the Fantasy’s partially deconstructed innards are buyers from all sorts of industries, looking for rock bottom deals on everything from artwork and kitchenwares to electrical wires and stainless-steel sinks.



Royal Caribbean Posts Third Straight Billion-Dollar Loss *g Captain*

- Cruise operator Royal Caribbean Group’s revenue turned negative for the first time and it posted a billion-dollar net loss for the third straight quarter, underlining the impact of prolonged suspension of voyages due to the COVID-19 pandemic.
- Third-quarter revenue was negative \$33.7 million, a rare event for an S&P 500 company, as it reversed previously recorded income from refunds and cancellations. Analysts were expecting revenue of \$12.4 million.
- “It’s been almost 7 months since we paused our cruise operations, and every single day has been extremely frustrating and challenging on so many levels,” Chief Executive Officer Richard Fain told analysts.
- The cruise industry has come to a virtual standstill after many vessels became hotbeds of infection and some operators even faced lawsuits for onboard outbreaks.



Congestion Hits the Panama Canal and the Pandemic Isn't Helping Captain

- Ships carrying cargoes around the world are waiting for days to pass through the Panama Canal, as pandemic-hit staffing caused congestion at the key pinch point.
- Long waiting times are affecting shipments of liquefied natural gas and liquefied petroleum gas from the U.S. Gulf Coast to Asia, according to people with direct knowledge of the situation.
- The waiting time, which for vessels with unbooked slots is as long as between 10 and 15 days, have contributed to a rally in the cost of chartering an LNG tanker on the spot market and added to disruptions affecting the supply of super-chilled fuel, the people said.
- The Panama Canal is a crucial waterway for cargoes from the U.S., the fastest growing LNG supplier, to reach markets in Asia, the biggest consumer. Delays coupled with soaring charter rates may affect economics of supplies from the U.S. into Asia and force cargo owners to choose alternative routes.
- The delays stem from traffic congestion as well as the Covid-19 pandemic reducing resource capacity, the people, who asked not to be identified said.

Ocean carriers add 'unprecedented' capacity on transpacific THE TOPOCEAN GROUP Worldwide Freight Forwarding & Logistics Services

- Capacity on the Transpacific lane is up 20% YoY, as carriers have injected resources into the trade lane resulting in "unprecedented capacity increases in Q4," according to a release from Sea-Intelligence.
- Capacity levels on the Transpacific have been a roller coaster ride throughout 2020 — plunging as carriers blanked sailings in the early days of the pandemic, only to be met with unexpected demand that resulted in shipping companies bringing resources back online.
- The capacity cuts earlier in the year brought deployment levels lower than any seen since 2015, according to Sea-Intelligence."
- In some weeks, we are seeing capacity grow by as much as 30% compared to last year at the same time," Sea-Intelligence CEO Alan Murphy said in the release.
- Container shipping demand has surged in the back half of 2020 as companies catch up on restocking and consumer spending rose through the summer.



JAXPORT hails progress in Blount Island Marine Terminal project

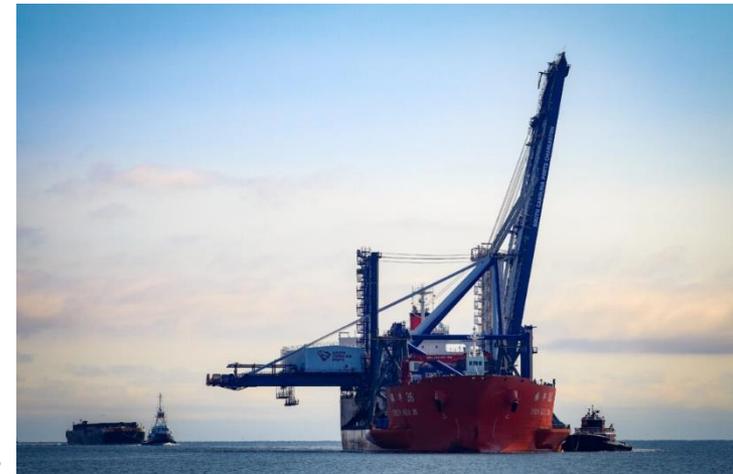


- The Jacksonville Port Authority (JAXPORT) has said significant progress has been made in the expansion of the Blount Island Marine Terminal and claimed it will be completed by the end of 2021.
- In a statement, JAXPORT said the project will cost \$109 million, with the latest phase involving substantial berth enhancements. Additionally, there will also be 700 linear feet of newly rebuilt deepwater berthing space to be complete in December 2020. A further 700 linear feet will be finished by the end of 2021.
- Combined with the first phase of berth enhancements that have been in operation since 2017, the SSA Jacksonville Container Terminal will feature two newly reconstructed 1,200-foot-long container berths capable of simultaneously accommodating two post-Panamax vessels.

SC Ports receives STS cranes as Hugh K. Leatherman Terminal takes shape



- South Carolina Ports (SC Ports) has received two new ship-to-shore (STS) cranes, the first cargo-handling equipment to arrive for the under-construction Hugh K. Leatherman Terminal.
- According to a statement, the cranes will be some of the tallest on the US East Coast and will be made operational when the terminal opens in March 2021. They will have 169 feet of lift height above the wharf deck and an outreach of 228 feet, enabling them to work the biggest container ships calling on the East Coast.
- The cranes, fabricated by Shanghai-based ZPMC, arrived at Columbus Street Terminal on the Zhen Hua 36 this afternoon. They are the first two of five ship-to-shore cranes to arrive for the Leatherman Terminal.
- The cranes, which were disassembled for the journey, will remain at Columbus Street Terminal for about two days to be reconfigured to fit under the Arthur Ravenel Jr. Bridge.
- They will then make their way up the Cooper River to the Leatherman Terminal. Upon arrival, the ZPMC USA team will erect, commission and test the cranes over several months before they become operational.





Pepsi, Nestlé, and Bacardi are all using this new plastic-like packaging that's compostable anywhere **FASTCOMPANY**

- A new bottle in development for Bacardi looks like ordinary plastic. But if it ends up in a landfill or the ocean—or a backyard compost bin—the material will completely biodegrade. Called PHA, or polyhydroxyalkanoate, the plant-based material will soon start showing up in all kinds of packaging on store shelves.
- PepsiCo is working on a compostable chip bag made from the material. Nestlé is working on a biodegradable water bottle. Genpak is creating biodegradable food containers. PSI is making compostable film packaging; CPG is making compostable produce bags. UrthPact and WinCup already have PHA drinking straws in the market.
- The material's primary ingredient is canola oil. "Plants absorb carbon dioxide, and we take the carbon out of those plants in the form of vegetable oil," says Steve Croskrey, CEO of Danimer Scientific, the manufacturer that developed the material. "We feed that to bacteria, who convert that carbon into PHA and store it as an energy reserve. We extract polymer from inside the cell wall and make the plastic item out of it. So let's just say you make a straw, and it gets accidentally thrown in a lake somewhere. When the bacteria in that lake find it, they eat it because it's a preferred food source for bacteria. When it breaks down, it returns to carbon dioxide and water, and it's just a big loop."



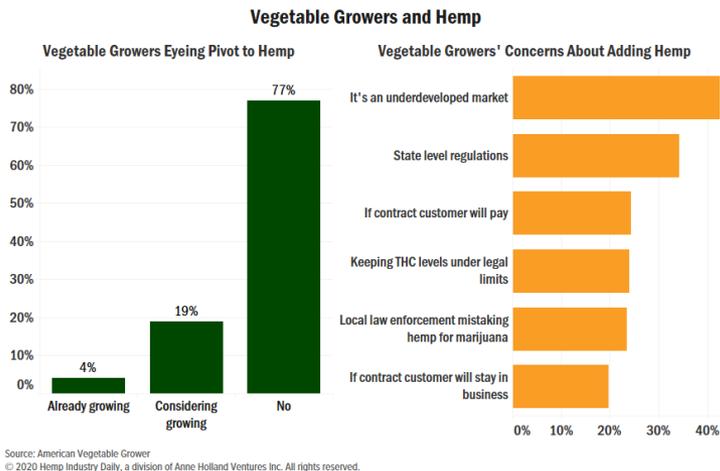
Dunkin' Brands in potential blockbuster deal to sell itself **CSA**

- Dunkin' Brands Group confirmed it is in talks to be acquired in a move that would take it private.
- The parent company of Dunkin' Donuts and Baskin-Robbins said that it has held preliminary discussions to be acquired by Inspire Brands, the parent company of Arby's, Buffalo Wild Wings, Sonic and Jimmy John's. Inspire is backed by the private equity firm Roark Capital.
- According to The New York Times, the deal is valued at \$8.8 billion, or \$106.50 per share. The price represents a 20% premium over Dunkin's closing price on Friday, Oct.23.



Majority of US vegetable growers steering clear of hemp production for now Hemp Industry Daily

- Vegetable growers across the U.S. weren't among the traditional farmers heavily diversifying into hemp production in 2020.
- According to a survey of 437 farmers by trade journal American Vegetable Grower, 77% said they had no intention of planting the crop this year. Just 4% of farmers said they planned to grow hemp while 19% indicated they were considering it.
- The largest concern among 43% of the vegetable survey respondents was that the market for hemp crops is underdeveloped, which is especially true compared to the well-established vegetable industry, which was showing positive revenue projections for the season, according to 28% of the surveyed growers.



Village Farms closes deal to take over MJ producer it started Hemp Industry Daily

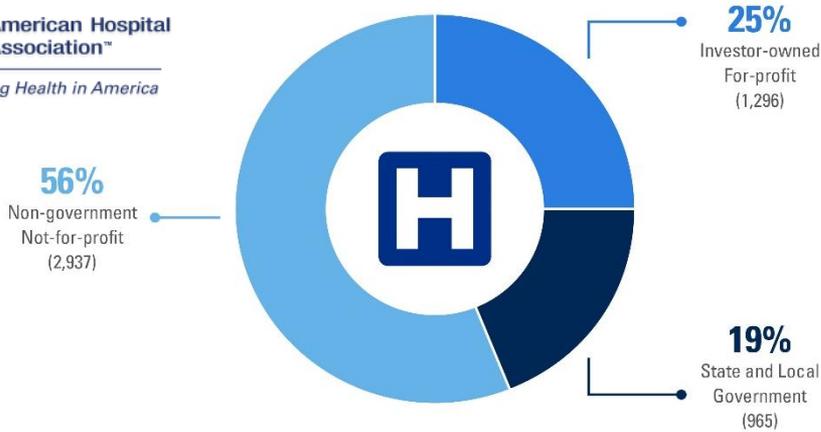
- Canadian greenhouse giant Village Farms International is moving ahead with plans to take over a firm it started as a joint venture to produce marijuana and CBD in British Columbia.
- Village Farms, one of North America's largest producers of greenhouse tomatoes, bell peppers and cucumbers, has approval from its joint-venture partner Emerald Health Therapeutics to acquire full ownership of Pure Sunfarms Corp., a company they created to sell products in Canada.

Coca-Cola works with bottlers to convert operations as it cuts 200 product lines SupplyChainDIVE

Coca-Cola's new operating plan — accelerated and inspired by the company's experiences during the coronavirus pandemic — will cut the number of brands the company produces in half while still developing new products, Coca-Cola said on an earnings call. The company announced a new operating model in late August that will consolidate 17 operating units into nine to eliminate duplicated efforts. The company announced new operational leaders for these units a few days later. Since then, Coca-Cola announced wind-downs of Tab soda and Zico coconut water.



Most Community Hospitals Are Not-for-profit



Community Hospitals by Ownership Type (Total 5,198), FY2018

Two-thirds of Community Hospitals are Urban



65%
Urban
(3,377)



35%
Rural
(1,821)

Community Hospitals by Urban vs Rural (Total 5,198), FY2018

Two-thirds of Community Hospitals are System-affiliated



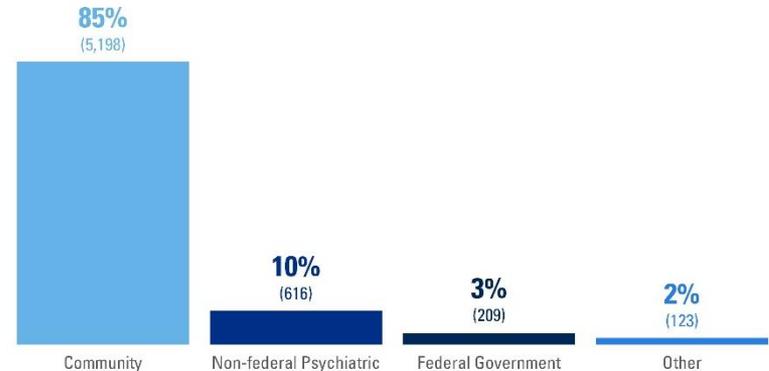
67%
System-affiliated
(3,491)



33%
Independent
(1,707)

Community Hospitals by System-affiliated vs Independent (Total 5,198), FY2018

Most Hospitals Are Community Hospitals



Number of Hospitals by Type (Total 6,146), FY2018

Still So Much To Learn



CVS Health to add 30-minute rapid-result COVID testing

- CVS Health is expanding its commitment to COVID-19 testing.
- The company plans to expand the COVID-19 testing services currently offered at select CVS Pharmacy locations to include rapid-result testing. The tests take about 30 minutes, from start to the delivery of the results.
- The tests will be available at nearly 1,000 CVS sites by the end of the year, with nearly 100 of the sites to be operational this week. Patients must register in advance on the CVS web site to schedule an appointment.

QuikTrip Invests in Urgent Care Clinics

- Convenience store retailer QuikTrip Corp. is making an investment in healthcare.
- MedWise LLC, a wholly owned subsidiary of QuikTrip, will break ground Thursday on a MedWise Urgent Care Clinic at 6336 E. Admiral Place, reported Tulsa World.
- The roughly 4,000-square-foot center is the fourth of 15 planned urgent care facilities in the Tulsa metro area. The facility will employ 10-15 people.
- MedWise Urgent Care offers a broad range of urgent care services, including:
 - Testing for COVID-19, flu and strep;
 - Treatment for illnesses, injuries and infections for all ages;
 - Vaccinations and flu shots; and
 - Occupational medicine services such as DOT, state and government physicals, pre- and post-employment physicals, and Workers' Comp assessment.

Kroger Health Launches COVID-19 Rapid Antibody Testing at Pharmacy Locations

Kroger Health, the healthcare division of The Kroger Co. (NYSE: KR), today announced the launch of rapid antibody testing across its family of pharmacies, expanding the company's existing portfolio of in-clinic and at-home COVID-19 diagnostic tests, to help inform patients if they have previously been infected with SARS-CoV-2, the virus that causes COVID-19.



Massive UK study finds coronavirus antibodies wane over several months **NEW ATLAS**

- UK researchers are suggesting levels of antibodies produced by the immune system in response to SARS-CoV-2 may significantly drop in the months following an initial infection. Testing hundreds of thousands of subjects over three months, a study saw the prevalence of antibodies drop, raising questions over long-term immunity.
- For many months now, researchers have been using antibody tests to retroactively understand how the novel coronavirus has spread throughout different populations. Antibodies against the virus, detectable in finger-prick blood tests, can effectively indicate whether a person has been previously infected.
- The new research tested 365,104 adults, across three rounds of testing between June and September. Over the study period more than 17,000 subjects tested positive for SARS-CoV-2 antibodies, and 30 percent of those subjects presented with asymptomatic infections.
- The prevalence of antibodies declined across the three rounds of testing, from 6 percent in the first round to just 4.4 percent in the most recent round. The biggest drop in antibody prevalence came in those subjects with no reported history of COVID-19. This suggests antibodies may decline more rapidly in those milder asymptomatic cases, compared to those presenting with more severe symptomatic infections.
- One significant implication of these new findings is that prospective antibody studies may not be useful in tracking how many people in a given population have been infected with the virus. If detectable antibodies do begin to wane a few months after an infection, then these kinds of tests are not helpful in measuring cumulative population exposure.
- The new study does not offer any explicit insight into questions regarding coronavirus reinfection or long-term immunity. Paul Elliott, director of the antibody research program at Imperial College London, suggests waning antibodies do not necessarily mean a person can be reinfected with the virus but, on the other hand, the presence of antibodies doesn't imply immunity either.
- Eight months into this pandemic one of the biggest unanswered questions is how long immunity lasts following an initial infection. Clinically confirmed cases of COVID-19 reinfection are still very rare, and despite this study finding antibody levels seem to decline, there are several other strategies our immune system uses to battle infections.



Digitalization and autonomous shipping **Logistics** MANAGEMENT

In global shipping, the trend toward digitalization and autonomous vessels will continue to make transport more environmentally friendly, safer and cost effective. According to a study of the World Maritime University, autonomous ships may account for up to 17% of global shipping by 2040. Autonomous vessels are in development in Europe and Asia, while cargo vessels already in operation are getting retrofitted with autonomous technologies. The first autonomous pilot projects, Yara Birkeland (pictured right), an inland electric container ship developed by Kongsberg and Yara in Norway, is due this year.



Record-breaking hybrid quadcopter flies for over 10 hours **NEW ATLAS**

- With perhaps a few exceptions, battery-electric multicopter drones typically can't fly for longer than about 30 minutes. Such is not the case, however, with their hybrid counterparts – one of which recently broke its own endurance record.
- Made by Spanish startup Quaternium, the HYBRiX 2.1 quadcopter features a gasoline/battery-electric hybrid drive system that reportedly gives it a flight time of up to four hours per fill/charge – in its stock form, that is.
- Back in 2017, the 2.0 model set a world record by remaining aloft for precisely four hours and 40 minutes. This February, an experimental version of the 2.1 model surpassed that figure, going for eight hours and 10 minutes. Now it's broken the record again, by hovering in place for a reported 10 hours and 14 minutes.
- Several enhancements made this possible, with the most notable being an oversized 16-liter (4.2-US gal) fuel tank slung underneath



Still So Much To Learn

ACC



World's most energy efficient vehicle rolls on to new heights **NEW ATLAS**

- Electric vehicles have come a long way in the last decade or so, moving people from A to B with ever-improving efficiency, but none quite match the levels of a student-built railroad car called Eximus IV. The vehicle has taken to the tracks at the annual Delsbo Electric contest for the world's most energy-efficient vehicles, setting yet another record on its way to yet another title.
- Taking place in Sweden, the Delsbo Electric competition tasks students with building ultra-efficient battery-powered electric vehicles for a maximum of six passengers. These are placed on rails to keep rolling resistance to a minimum and made to cover a 3.36-km (2.1 mile) course using as little energy as possible, which is tallied up in watt-hours and then divided by the number of passengers onboard.
- Delsbo Electric says that all vehicles taking place in the 2020 event are so efficient that they use less energy than the headlights in an ordinary car. But none could quite match it with the Eximus IV, with the reigning champion again outpacing its rivals to post an energy efficiency of 0.517 Wh/person-km.



U.S. Federal Lawmakers Call for the End of Gas-Powered Vehicle Sales **ConvenienceStore NEWS**

- Two federal lawmakers introduced legislation to end U.S. sales of new gas-powered vehicles in 15 years. U.S. Senators Merkley and Levin unveiled the Zero-Emission Vehicles Act of 2020 on Oct. 20. According to the legislators, the path-breaking legislation would create jobs, improve health and address climate chaos.
- "If we don't make things in America, we won't have a middle class in America. And if we don't save our planet from climate chaos, our entire economy and our nation's public health will end up in shambles," Merkley said.
- According to the Senators, the Zero-Emission Vehicles Act will fix a patchwork of state-level policies by setting a federal zero-emissions vehicle standard to boost the market for battery electric vehicles and hydrogen fuel cell vehicles.

The standard would require that by 2025, 50 percent of sales for new passenger vehicles are ZEVs, and ramp up 5 percent each year to 100 percent by 2035. The ZEV standard would only be applied to the sale of new cars.



Crowley readies dive into offshore wind farm work



Chris Gillis American Shipper

- Crowley has spent the past 53 years providing U.S.-flag vessel assets and logistics support to the offshore oil and gas industry and now is gearing up to provide that same transportation skill set to the burgeoning offshore wind farm industry in America.
- It is forecast that as many as 2,000 gigantic, multi-megawatt wind turbines will be generating 29 gigawatts of electricity off the U.S. coast for hundreds of thousands of American households by 2040. However, the industry is only at the starting line in terms of construction. Available portside infrastructure and U.S.-flag vessel assets are also largely in their infancy.



Read article at <https://www.freightwaves.com/news/crowley-readies-dive-into-offshore-wind-farm-work>

CMA CGM unveils latest LNG-powered vessel

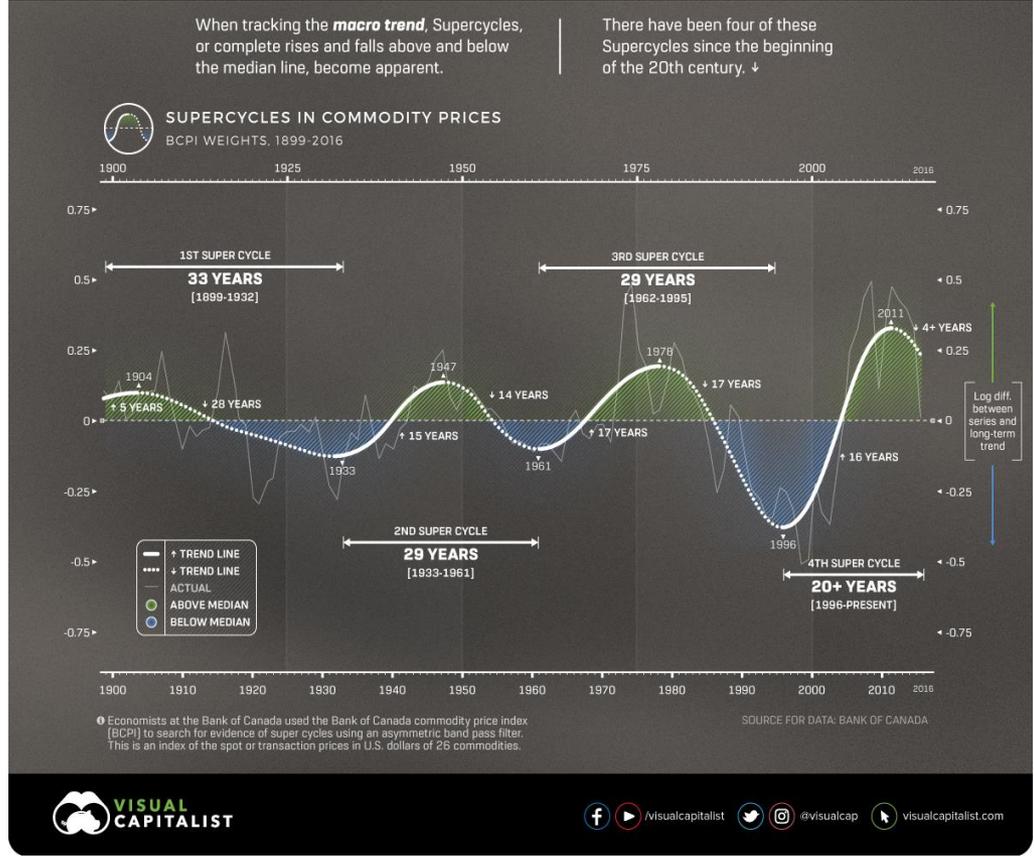
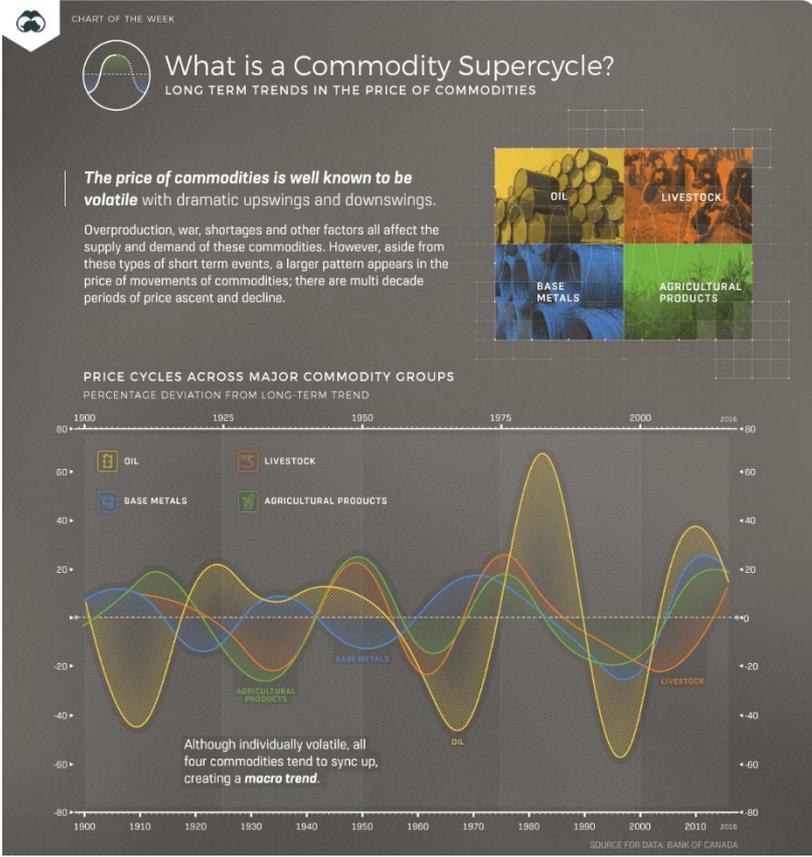


- The CMA CGM Champs Elysees has become the latest member of CMA CGM's fleet of liquefied natural gas (LNG) powered mega-ships, joining the CMA CGM Jacques Saade.
- The vessel was blessed and officially named by her Godmother, Dany Qian, Vice President SSE at Jinko Solar, who wished the ship, the captain and its crew the best of luck on their future voyages with the traditional words "May God bless this ship and all who will sail on her".
- The carrier said LNG is the most advanced solution when it comes to preserving air quality. It enables a 99% reduction in sulfur dioxide and fine particle emissions, and an 85% reduction in nitrogen dioxide emissions, going well above and beyond existing regulation.
- LNG emits up to 20% less CO2 compared to fuel motorization. This technology is one of the first step towards achieving CMA CGM Group's ambitious 2050 objective of carbon neutrality.
- The nine-vessel fleet are packed with innovations, the result of a long cooperation between CMA CGM's research and development experts and industrial partners, the carrier said.





What Is A Commodity Supercycle?



Still So Much To Learn

ACC



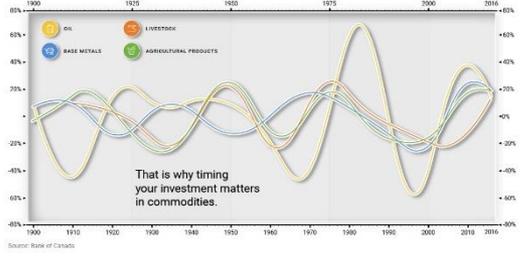
Volatile Returns

Commodity Investing Through Miners & Explorers

Commodities are the basic materials that build the goods and services we use everyday. Despite this, they are prone to massive swings in their prices which creates opportunities for investors.

Price Cycles Across Major Commodity Groups

Deviation from long-term trend



There are **three primary ways** for investors to invest in commodities.

	Direct Physical Investment	Commodity Futures	Commodity-Related Equities
BENEFITS	<ul style="list-style-type: none"> Purest form of exposure Intrinsic value of a commodity Physical possession 	<ul style="list-style-type: none"> Commodity investment without the need for storage Diversification benefits and inflation hedge 	<ul style="list-style-type: none"> Exposure to commodity prices without storage or transaction limitations Opportunity to benefit from commodity prices and company performance
LIMITATIONS	<ul style="list-style-type: none"> High transaction costs (buying, shipping, transport) Costs of physical storage limit the quantity and returns 	<ul style="list-style-type: none"> Complex and frequent transactions Risk of contango which occurs when the futures contract price of a commodity is higher than the spot price 	<ul style="list-style-type: none"> Returns depend on the company's valuation Companies may mitigate risks by producing multiple commodities - reducing leverage



The Fundamentals

THE BENEFITS AND DRAWBACKS OF COMMODITY EQUITY INVESTING



These ups and downs can create explosive opportunities for those who time it right.

Metal Prices

MINERS AND EXPLORERS

Metal price increases can translate into higher profits for mining companies, but they can also change the outlook and the value of the equity of related speculative companies.

Explorator companies can create greater returns over a short period of time when metal prices are high, but they also can dramatically turn negative when prices decline.



GOLD PRODUCING AND EXPLORATION COMPANIES

See listed companies include those that released an NI 43-101 report between Jan 2016 - Dec 2016. Exp: 2016 (end Jan 2017) - Jan 2018

Company	Market Cap (\$M) (Oct 31 2017)	Market Cap (\$M) (Jul 29 2017)	Bull Market Equity Performance (Nov 1 2015 - Jul 29 2017)	Bear Market Equity Performance (Jul 29 2015 - Jul 29 2017)
BanyanGold	\$5.84	\$39.57	566%	-14%
Goldcorp	\$8.34	\$13.29	11%	10%
AURYN	\$180.85	\$329.65	6%	-38%
WESDOME	\$1,104	\$1,833	66%	110%
Church & Dwight	\$5.45	\$148.79	139%	23%
RealPoint	\$12.92	\$21.48	29%	-55%
REYAL	\$27.45	\$74.37	113%	5%
ERD	\$39.04	\$111.24	222%	-66%
Endeavour Mining	\$2,872	\$5,914	54%	-13%
YAMANAGOLD	\$4,571	\$9,219	87%	-22%

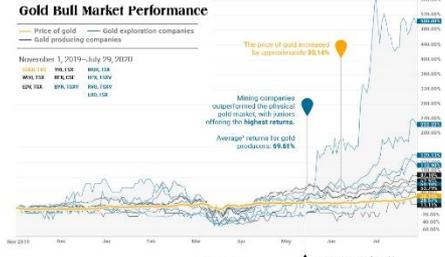
Gold BEARS VS BULLS

Gold Bear Market Performance



A Discovery Can Make All the Difference
Average return for producers (Exp: December 31, 2018): **24.83%**

Discovery Drives Value in Bear and Bull Markets Pt. 1
Explorers in gold miners tend to underperform the price of gold during a bear market. However, even a discovery during a downturn can create positive equity returns as seen for Endeavour Gold Mines.

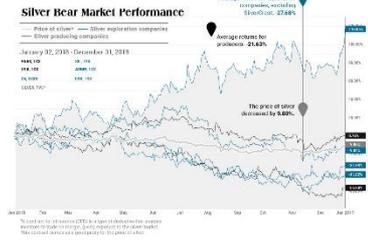


SILVER PRODUCING AND EXPLORATION COMPANIES

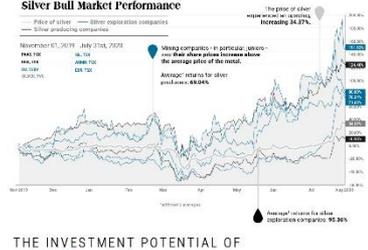
Selected companies include those that released an NI 43-101 report between Jan 2015-Dec 2015 and Jan 2019-July 2020

Company	Market Cap (\$M) (Oct 31 2017)	Market Cap (\$M) (Jul 29 2017)	Bull Market Equity Performance (Nov 1 2015 - Jul 29 2017)	Bear Market Equity Performance (Jul 29 2015 - Jul 29 2017)
SilverCrest	\$693.81	\$1,448	78%	117%
Pan American	\$2,975	\$10,550	124%	1%
Golden	\$30.42	\$80.50	80%	-42%
Americas Gold Miner	\$335.41	\$462.28	11%	-56%
Dolly Varden	\$28.38	\$71.28	152%	-32%
Endeavour	\$457.50	\$837.14	72%	-10%

SILVER BEARS VS BULLS



Discovery Drives Value in Bear and Bull Markets Pt. 2
Through 2018, SilverCrest Mines announced multiple high-potential discoveries and a significant increase in its share price. The company's share price increased by 115% over the course of the year.



THE INVESTMENT POTENTIAL OF Exploration



Exploration mining companies offer a greater return over a shorter period of time, but with more risk. You have to know the risks and catch the market at the right time.