# The Disruptive Strategist

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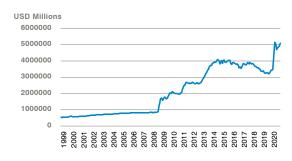
In 1862, Congress passed the Pacific Railway Act that authorised the connectivity of the East and West coasts of America by railway. From 1871 to 1900, track laying almost quadrupled to 170,000 miles added. New laws and the granting of stateowned land to the railways for right of way created the catalysts for possibly the most significant first example of Metcalfe's Law in operation. Of course, Robert Metcalfe was not even born back then, but the principle of the value of network was clear: by connecting towns and cities across America, the industrial revolution gained a significant stepchange in speed and intensity. We believe the same will hold true for the effect of Covid on the digital world. Network effects brought about by the internet and smartphones have had a profound effect in the last decade on platform businesses but it will be the step-change in digital adoption brought on by the Covid pandemic that will define the acceleration of the next decade. It may even be the moment we look back on as the catalyst for change in perhaps one of the most entrenched systems in the world today - fiat currencies - as digital replacements led by Bitcoin gain critical network effect acceptance.

#### Analysis of 2020

Casting our mind back to the start of 2020 is a surreal exercise. The year started with great optimism off the back of a strong 2019 (the S&P 500 had appreciated 29% and the Nasdaq 38%). The markets were focused on the US and China moving forward with a trade deal. It also looked like there would be a deal in regard to Brexit in Europe. Within a matter of weeks that optimism faded away as news of a devastating virus in China hit the wires. Yet even as this news made global headlines, the consensus view was that it was another SARS or Bird Flu, and the impact would be constrained to Asia. No-one could have conceived that within two months, a third of the world's population would be in lockdown, unable to leave their homes. From the perspective of those stewarding client assets, 2020 was a year of profound change.

What started as a virus in China ended up being the dominant story of the year, not just dominating headlines and topping the 'Year in Search 2020' chart, but driving global monetary and fiscal policy, supercharging technology adoption and decimating many industries. In US\$ alone, the dollar monetary base was increased by 40%. The debasement of fiat currency since the Global Financial Crisis is quite astonishing.

### **Total Monetary Base**



Source: Federal Reserve Bank of St Louis, December 2020.

As it became apparent that the R rate of Covid-19 was high enough to categorise it as a pandemic, and that its fatality rate was high, investors started to fear that the impact would stretch beyond disrupted Chinese supply chains and could cause widespread turmoil. Consequently, markets started to sell off at the end of February as news of the virus spreading to new countries emerged. One by one, countries started to lock down their citizens. By the middle of March, not only was Asia almost totally locked down, but much of Europe was closed and the US was following suit. As panic and fear set in, markets collapsed from February highs, with the S&P 500 falling 34% and the Nasdaq 28%. Both indices fell over 12% on 16th March, the biggest one day fall for either since 1987.

### **Management team**



Mark Hawtin Investment Director



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Investment Manager



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Head of Equity
Investment Specialists



Although the market sell off was broad, losses were focused on sectors that would be disproportionately hurt by the pandemic and subsequent lockdowns. Travel and retail were hit hardest. Governments and central banks leapt into action reducing interest rates, commencing quantitative easing and stimulative fiscal policy. This huge monetary stimulus and accommodative fiscal policy reached levels that had not been previously seen, fuelling one of the biggest bull markets in history. From their March lows, the S&P 500 and the Nasdaq then rallied 68% and 84% respectively. As managers of concentrated portfolios, identifying which specific stocks will generate the most client alpha is somewhat complicated when the rising central bank tide seeks to lift every boat.

With exuberance comes irrational behaviour and this reflationary rally was no exception. Everyone wanted in on the 'game'. The retail investor in particular struck with a vengeance, reminiscent of the dotcom boom some 20 years ago. As global lockdowns forced people inside, and major sporting events were cancelled globally, people looked for new forms of entertainment. In the US specifically, casinos closed and with online gaming banned in many states, taxpayers also received up to USD 1,200 stimulus cheques. The combination of these factors turned the stock market into the biggest casino on earth. This was summed up by Dave Portnoy, CEO of Barstool Sports and messiah of the retail investor (with 1.8 million followers on Twitter) - "It's the combination of no sports - so you can't bet on that - and you can't go outside. There's a lot of people sitting in front of their computers who ordinarily can't be day trading. For a gambler, investing has a ton of similarities." During this period trading volumes multiplied. From a reasonably steady 2 million average daily trades over the previous four years, daily trades leapt by over 3x to more than 6 million.

This was demonstrated most clearly by the rapid growth seen at Robinhood, a popular commission free stock trading app that allows investors to trade in fractions of stocks. During the first quarter of 2020, Robinhood reported an increase of 3 million new accounts (a growth rate of 30%) taking total accounts to 13 million. This growth coincided with the bottoming of the market and the commencement of the stimulus cheque programme. Unlike other online trading platforms such as Fidelity and TD Ameritrade (both of which also saw rapid growth with Fidelity adding 1.2 million new accounts between March and May and TD Ameritrade seeing 249% new account growth in the first quarter), the Robinhood investor has a much younger growth profile. The median age of the Robinhood investor is 31 years old, a stratum of society that has traditionally shunned the stock market. These new investors brought with them a totally different approach to investing/trading: one that is led by the amplification that social media brings, with little (or no) regard to valuation or even fundamental analysis.

#### Top 10 most widely held Robinhood stocks (Dec 2020)

- 1. Apple
- 2. Tesla
- 3. Ford
- 4. General Electric
- 5. Microsoft
- 6. American Airlines Group
- 7. Nio
- 8. Amazon
- 9. Disney
- 10. Delta Air Lines

In contrast, many institutional investors sat on the sidelines, weighing up the shocking economic data and focusing on the doom and gloom predictions. Consequently, many such investors missed out on much of these gains although it remains to be seen what happens when reality (or rather, fundamental analysis and a realistic valuation) strikes some of those stocks.

#### How overvalued are IPOs?

2020 has also been the year of the IPO. According to Bloomberg, the amount raised in IPOs globally in 2020 exceeds USD 160 billion and sets a new record. Historical data compiled by University of Florida Professor Jay Ritter shows Airbnb was the 19th company in 2020 to double in its first day of trading. Such moves have drawn plenty of commentary about the dot-com bubble of 2000 (when 77 companies at least doubled in their first day and 117 companies in 1999). We believe that there are clear signs of irrational exuberance in the IPO market at present, but unlike 2000, when all disruptive companies (whether real or perceived) surged to eye-watering levels, today's IPO and work-from-home names are a subset within a far more rational valuation framework.

## Gorgeous IPO Bubble - 5-Year % Change: Renaissance IPO ETV vs S&P 500



Source: YCharts, Wolfstreet.com.

The Renaissance IPO ETF clearly shows how the hype cycle is playing out in the IPO world. Traditionally the performance of IPOs over time closely matches the S&P 500 Index, but more recently this relationship has broken down. The impact is even more marked when considering first day price moves for the included names.

There are numerous patches of concerning price action in the current landscape but because this is set against the context of numerous companies trading on reasonable, if not cheap, valuations, the alpha generating opportunity is significant. This is completely different from the context in which the internet bubble burst. In our view, an intrinsic valuation-based approach to investment is now paramount to avoid pitfalls. Where the thundering herd is defining share prices, a sensible approach to value is likely to pay off.

### Covid as the catalyst for an accelerated digital world - Digital 4.0

As Covid spread globally and whole countries imposed lockdowns, entire companies were forced to shift to working from home within a matter of days. This brought to the foreground a mass of technical challenges that needed to be solved. In the past, transitioning an entire workforce from a centralised office-based structure to a remote working one would have been a monumental IT task that would have taken months of planning and multiple beta tests, most likely one department at a time, before being rolled out to the entire company. Covid did not provide for that luxury. Instead, major transitions had to occur within days. Companies had to ensure their technology could cope with all employees working remotely; Covid ended up being the impetus for the biggest ever beta test of remote working. Our own industry was no exception although we are careful not to over-extrapolate from personal experience.

Prior to Covid, many companies were 'dipping their toes into the water' of digital transformation, but the crisis jumped it up to the top of priority lists and made it a board room discussion. Enterprises that did not see digital as a priority suddenly realised that it had to be a core part of their future strategy to survive.

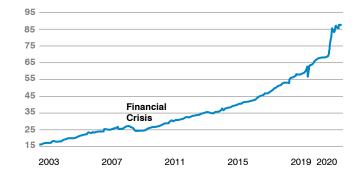
At the very centre of this theme is the cloud. Remote working and the ability to scale up systems quickly would not be possible without it. Similarly, adopting SaaS applications enabled companies to scale quickly and efficiently without having to invest heavily in capex. What started as firefighting investments to ensure that companies could remain operational, has transformed into c-suites reassessing the future and contemplating permanent changes. Prior to 2020, remote working was a luxury and a niche concept. As we look forward to 2021 and beyond, it will become more of the norm. A Deutsche Bank survey showed 57% of financial market professionals will work remotely between one and three days a week post-Covid. Similarly, Hitachi Capital found that 55% of property and construction workers wanted more remote working opportunities post lockdown with the main reason cited as wanting to avoid the commute. A Gartner study conducted in April suggested that 74% of companies intend to move at least some employees to remote working permanently. This shift in attitude and behaviour places a greater emphasis on the need for digital transformations. The demand for cloud-based tools and applications is only set to increase as a result.

#### Retail

The retail sector has also seen big changes with an acceleration in the move to online. Ecommerce is not a new phenomenon; however the rate of growth has dramatically accelerated this year as physical retail was forced to close its doors. Consumers who had previously thought that they would not try online shopping, tasted it for the first time when there were no other viable options. According to the US Census Bureau, before the pandemic, ecommerce's share of US retail sales was increasing by 1% per year for the past four years. In Q2 that share increased by 4%, indicating that we saw four years of change in three months!

### **Non-Store Retailers**

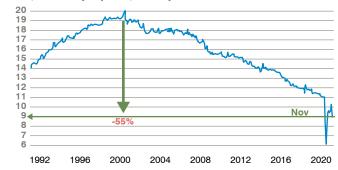
Billion \$, seasonally adjusted



Source: Census Bureau, Wolfstreet.com.

### **Department Store Sales**

Billion \$, seasonally adjusted, monthly



Source: Census Bureau, Wolfstreet.com.

Although the pace of change from offline to online slowed as the year progressed, the pandemic has opened up the world of ecommerce to a new set of consumers who are unlikely to fully return to pre-Covid habits. Traditional retailers had to scramble to either get online offerings in place or improve them so that they were fit for purpose. Companies such as Wix (the 'do-ityourself' website builder) and Farfetch (white label retail solution for the luxury sector) were sought-after solutions for companies that did not have existing strategies. Traditional retail was already struggling to compete, and the pandemic accelerated the process of decline. Over the course of the year several high profile bricks and mortar retailers have filed for bankruptcy and many who are still trading have announced permanent store closures. In the UK, the changes to proposed planning laws combined with store closures is likely to result in a dramatic change to local high streets. As a consequence, we believe customer experience will be increasingly important and often that comes down to tech. In-store experiences will be enhanced by sales assistants having data about customers and products on mobile devices, combining online and offline experiences to increase sales conversion and basket sizes.

#### Online beyond retail

'Do-it-yourself' website builder Wix was a big beneficiary from the shift from offline to online but this growth was not limited to the retail segment. Verticals that had never considered the need to have an online strategy, for example personal trainers, were faced with the realisation that online was the only option in 2020. Wix was the easiest and quickest way for these individuals and small businesses to get an online presence that looked professional. Wix operates a freemium model, offering premium services and features for additional cost. Throughout 2020, Wix saw a continued increase in total users, but also an increase in subscriber penetration and spend per subscriber, resulting in its stock price increasing 207% from the March lows.

Even as economies reopened over the summer, subscriber numbers continued to increase, indicating that small businesses will not turn away from digital even as normality returns.

#### Media

From the start of this century print media revenue has been in decline, however during the financial crisis of 2008/09 it was hit the hardest and never really recovered. More recently we have seen declines in TV and radio spend; Covid has accelerated the decline. At the start of the pandemic, due to upfront commitments, brands were unable to cut TV spend as quickly as they would have liked. Relationships between advertisers and channels have been soured as a result and brands have understood the benefit of using formats that have a clear ROI and can be dialled up (and down) quickly. During the height of the pandemic digital advertisers such as Facebook, Snap and Roku (growing their advertising revenue 11%, 17% and 46% respectively in Q2), continued to gain share, at the expense of advertising agencies such as WPP and TV networks such as ITV (WPP revenue shrank by 4% and ITV's by 28% in Q2). As more businesses shift online, the demand for digital advertising will continue to grow. As businesses struggle to reduce costs in an uncertain operating environment, the need to see a strong and clear return on advertising spend has never been greater - digital is the best channel both to deliver results and to evidence them.

Roku has been a clear beneficiary of the shift in advertising dollars away from traditional linear TV to digital. Roku started its life as a hardware play, manufacturing dongles that converted 'dumb' television sets into smart TV's and selling its software to OEMs. This large and growing installed base of Roku TV gave the company the platform to launch its own advertising network. Channels can choose to offer subscriptions or monetise through adverts, with Roku taking a slice. Roku enables channels to offer digital advertising that is highly targeted and therefore delivers a strong ROI (comparing positively to traditional TV advertising that still relies on broad demographics). Roku has three main advantages that enables it to achieve those greater ROIs; i) broad reach due to the large installed base of Roku devices; ii) most households provide Roku with credit card details during the set-up process. This not only gives Roku accurate information about who is using the device, but also allows for credit card information to be used (anonymously) for ad targeting; iii) viewing data from the device allows a strong interest graph to be built. This combination creates a positive flywheel: advertisers can get a strong ROI with a large reach which translates to higher revenue for channels, therefore more channels want (or need) to be on Roku devices and that in turn attracts more consumers, which further improves the reach. The introduction of Roku's own channel, bringing together content from other channels as well as some exclusive programming, has enabled Roku to boost its advertising product further.

As viewing habits continue to shift away from linear TV and expensive cable bundles towards skinny bundles and free content, we believe Roku is ideally positioned to benefit. During 2020 Roku demonstrated the strength of its platform and the effectiveness of its advertising products. As a result, it grew its share from just over 1% at the end of 2019 to slightly less than 2%. Although this represents stunning growth, it also highlights that this is still at the early stages of the opportunity.

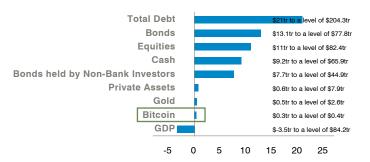
#### Bitcoin and Metcalfe's Law

We spent a great deal of time starting in early 2019 looking at cryptocurrencies and the underlying technology, Blockchain. It seemed clear to us that Blockchain as a digital automation of trust would have far reaching opportunities, both embedded into existing software products, but also as the gate keeper for trust based transactions like KYC and AML. We believe there are opportunities across multiple sectors, from financial services through to ticketing sales in leisure and airlines.

What seemed less clear was the long-term case and the winners within cryptocurrencies. We could see plenty of opportunity for token-based cryptocurrencies, where the tokens carried a tangible value within their own specific ecosystem. For example, an accounting product with tokens that can be used to buy digital accounting services has a clear value attached to the service. What was harder to assess was a pure store of value, with no attachable rights per se. Covid has, we believe, generated that clarity: much of it is based on Metcalfe's Law and the network effect, something we have been thought leaders on for many years. Metcalfe's Law states that the value of a network increases exponentially with every new user. As Covid has led to a huge increase in the monetary base to drive the liquidity wave, so the value of fiat currencies have been called into question. Investors have asked where is the true store of value, one that governments cannot interfere with. Traditionally, gold has been that safe haven store but it does have leakage as new gold is mined. Not unsurprisingly, vintage items like watches have been surging in price as they too are viewed as a finite store of value. Indeed, one watch dealer told us that he has had the best last quarter of a year by a multiple in terms of value traded in vintage Cartier watches.

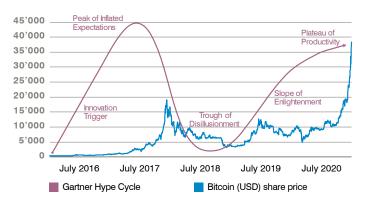
So, suddenly, there is a strong case for a new finite store of value and because of the network effect, it looks clear now that Bitcoin will be that digital winner, in our view. Once that step in belief is made (and Covid has really cemented that), it may merely be a question of how big will that store become.

## YTD Change in the Market Value of various Asset Classes in \$tr



Source: J.P. Morgan.

### Bitcoin Price - Gartner Hype Cycle



Source: Bloomberg, Gartner.

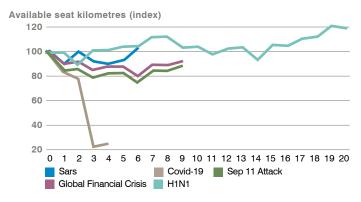
This chart from JP Morgan shows the 2020 year-to-date increase in various asset classes. It also shows the huge increase in total debt up USD 21 trillion. If one takes the view that a digital finite store of value is accepted and proliferated through Metcalfe's Law and assumes for a start that store is the size of the gold asset base, then Bitcoin would need to be priced at USD 130,000. However, this might be only the beginning; there are street forecasts from major banks like Citi with targets in excess of USD 300,000. Mainstream adoption is clearly taking shape with brand name wallets like Revolut and Paypal allowing Bitcoin ownership. We believe 2020 could be seen as the true point of acceptance for Bitcoin as the digital gold equivalent. With its unique frictionless tradability and transportability, we feel it will surpass gold as the global standard for value storage.

#### What happens next? Disruptive Trends for 2021 and beyond

As we look ahead to 2021, we can already see signs that we are at the 'beginning of the end' of this crisis. While many of the winners from 2020 are now on higher growth paths than pre-pandemic, in many cases they do not necessarily represent the best opportunity for investors in 2021. Instead, some of the less loved companies of 2020 provide good opportunity as Covid-related restrictions are lifted. For almost all of 2020, travel (both business and leisure) literally ground to a halt and understandably travel companies suffered. Recent survey data suggests the number one activity people want to do post-crisis is travel, particularly for leisure, implying huge pent-up demand. Yet at the same time, consensus estimates do not expect a full recovery to the travel industry for several years. This gap between recovery estimates and pent-up demand offers opportunities for investors.

For the first half of the year, international travel was incredibly difficult and even domestic travel was shunned. The impact to the travel industry was significantly greater than any impact seen in the past, with seat capacity on airlines collapsing.

## Impact of Covid-19 on Airline Capacity is catastrophic



Source: Bain & Co.

Consensus estimates indicated that the recovery for the travel sector would be slow and long, and that revenue would not return to 2019 levels for several years. This seemed to us a clear mismatch between consensus estimates and the evidence of consumer priorities, as evidenced in the surveys and we have made selective investment on one particular company where we see strong fundamentals both on the revenue side and the cost side, in addition to an attractive valuation.

In addition to this cyclical opportunity, there is a multi-year structural opportunity at play. We are moving from a world with billions of devices (digital 3.0) to a world with trillions of devices (the Internet of Things and digital 4.0). Although the concept of IoT is not new, we are at the inflection point where it really takes off. Advancements in AI, the ability to process, use and store data and the build out of 5G, means that this is now possible.

As digitalisation increases and a greater number of devices and applications are digitalised, particularly within enterprise, the amount of data generated has exploded and continues to grow at an ever-faster pace. In 2015 there were 584 data interactions per connected person per day; this is set to grow more than 8x by 2025 (to 4,909 interactions per connected person per day). It may feel like digitalisation has been a story that has been around for a long time, but we are still in the early innings: in the US, digital GDP as a percentage of total GDP is still only 5%. This theme is playing out in multiple verticals, most notably healthcare, transportation, robotics and the automation of knowledge work.

#### **Healthcare**

Healthcare has always been an important vertical for disruptive growth and during 2020 it was propelled to the front of our minds more than ever before. One of the biggest issues within the healthcare sector is cost; technology is the single biggest hope for dealing with this. Technology utilising big data and Al played a leading role in the development of vaccines for Covid but also paves the way for better modelling of disease and pharma research in the future. In 2019 the investable market opportunity for digital health was USD 106 billion; this is expected to grow over 6 times by 2026.

Although healthcare was front of mind for most of 2020, the pandemic forced hospitals to close their doors to regular operations and procedures. This impacted medical device manufacturer, Intuitive Surgical, manufacturer of the Da Vinci surgical robot. This machine has pioneered robotic surgery and is the de facto leader. It is the standard robot that surgeons are trained on during their residencies and consequently is the most demanded by surgeons as they build their practices (again, the network comes into play). As surgeons become experts on Da Vinci, they no longer want to bounce back and forth between open, laparoscopic and robotic surgeries. Consequently, they spend more time learning additional procedures on Da Vinci so they can operate fully robotically. Intuitive Surgical's revenue model is directly linked to the number of procedures and was therefore negatively impacted by the pandemic. However, surgeons used the time they were not operating to train on the devices, improving skills and building muscle memory: in Q3 alone, 87,000 sessions were completed on simulators.

In 2021, we expect procedure growth to recover fully and due to the pent-up demand, the pipeline should be strong. Looking ahead to the future, Intuitive Surgical is investing in connecting its devices to the cloud and enabling experts to 'sit-in' on procedures remotely. Currently, experts are only able to offer feedback and share best practices; however, with the growth of 5G, the ability to conduct procedures remotely will become a reality.

#### **Transportation**

Another vertical ripe for further disruption is the transportation sector. We are already seeing an increase in electric vehicles and shared mobility through companies such as Uber and Lyft. However, the next stage of disruption will come from the growth of robotic vehicles, infotainment and advanced driver assistance systems. The three segments alone accounted for a USD 174 million opportunity in 2018, but that is expected to explode to a USD 13.8 billion opportunity by 2028.

Regulation is a dominant driver within the transportation sector with China being a key country pushing electric vehicle adoption. Although there is strong government support for electric vehicles, the infrastructure to support this is still lacking. From a purely quantitative perspective there appears to be sufficient charging infrastructure to satisfy current demand and future demand. However, from a practical standpoint, detailed analysis shows the infrastructure is severely lacking: chargers are often located away from demand hotspots and only function sporadically in any case. This problem cannot be solved easily by private chargers; Chinese cities are dominated by high rise buildings and therefore residents do not have dedicated parking spaces. The solution arose from a company using technology to deliver disruptive growth.

The Chinese firm Li Auto developed an EREV (extended range electric vehicle) to solve these problems. Similar to a hybrid but with a greater emphasis on the battery than the engine, the vehicle meets the criteria set by the Government and does not rely on the inadequate charging infrastructure.

Although EREV has proved to be the perfect solution for the current problems in China, Li Auto believes that ultra-fast charging (15 min charge for 500km) will be possible several years earlier than expected and is therefore investing in the space.

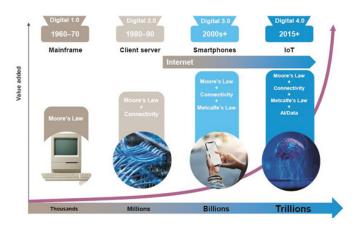
Right at the heart of digital 4.0 is the cloud and the opportunity ahead is still enormous (penetration of the cloud is still below 10%). 2020 will be seen as the turning point, where digital transformation, forced in many cases by the pandemic, was pushed to the top of priority lists. However 2021 and beyond will represent true implementation, underlining a widespread change in mindset to putting technology at the core. A report by McKinsey estimates that 400 million full time jobs will be displaced by 2030 by technology. Already today, 50% of current work activities can be automated by adapting currently available technology and consequently the workforce will need to adapt to survive. As companies have battled to survive in 2020, the

quest to reduce costs and improve productivity has heightened. As we look ahead into 2021, the pressure to digitalise in order to achieve remote working will fade slightly. However it will be replaced by a need to utilise technology as a means of further reducing costs.

#### 2021 Strategy and Positioning

From an investment perspective, generating client alpha in 2020 was about running with the Covid winners and over the course of the year, pivoting to both post-Covid winners as well as focusing on the beneficiaries of the next wave of disruption - Digital 4.0.

## Disruptive Growth is accelerating further - the biggest Driver continues to be digital...



Source: GAM.

The roadmap for Digital 4.0 laid out above shows that the next phase of adoption within disruptive technologies involves some or all of, the Internet of Things (IoT), 5g, Data and AI. These are the drivers of what we believe will deliver the biggest opportunities over the next 5-10 years. While Digital 3.0 was the cycle of the platform, digital 4.0 is a cycle of data creation and use for competitive advantage. The connectivity of everything, increasingly in real time, will drive change in sectors that have not yet seen the most severe levels of disruption - these include the automation of knowledge work, healthcare, transportation, industrials and fintech.

As a concluding remark, we would remind all of the need to be dispassionate in this space. The world of disruptive growth is not without hype around certain names. In contrast, the successful fiduciary investor relies on detailed, dispassionate analysis to generate client alpha.

For more information, please visit GAM.com

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