Business models for a post-pandemic world

The corporate impact of Covid-19

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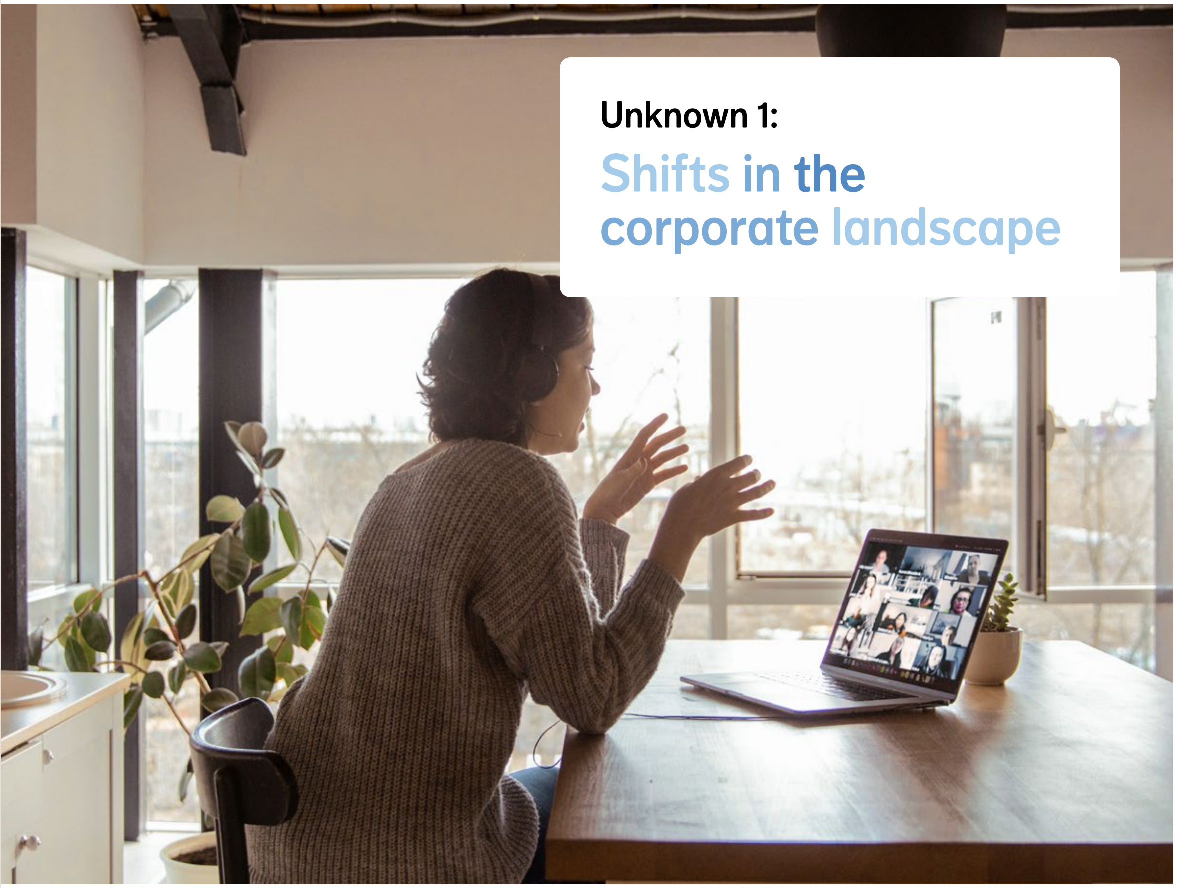
Introduction

The corporate impact of Covid-19



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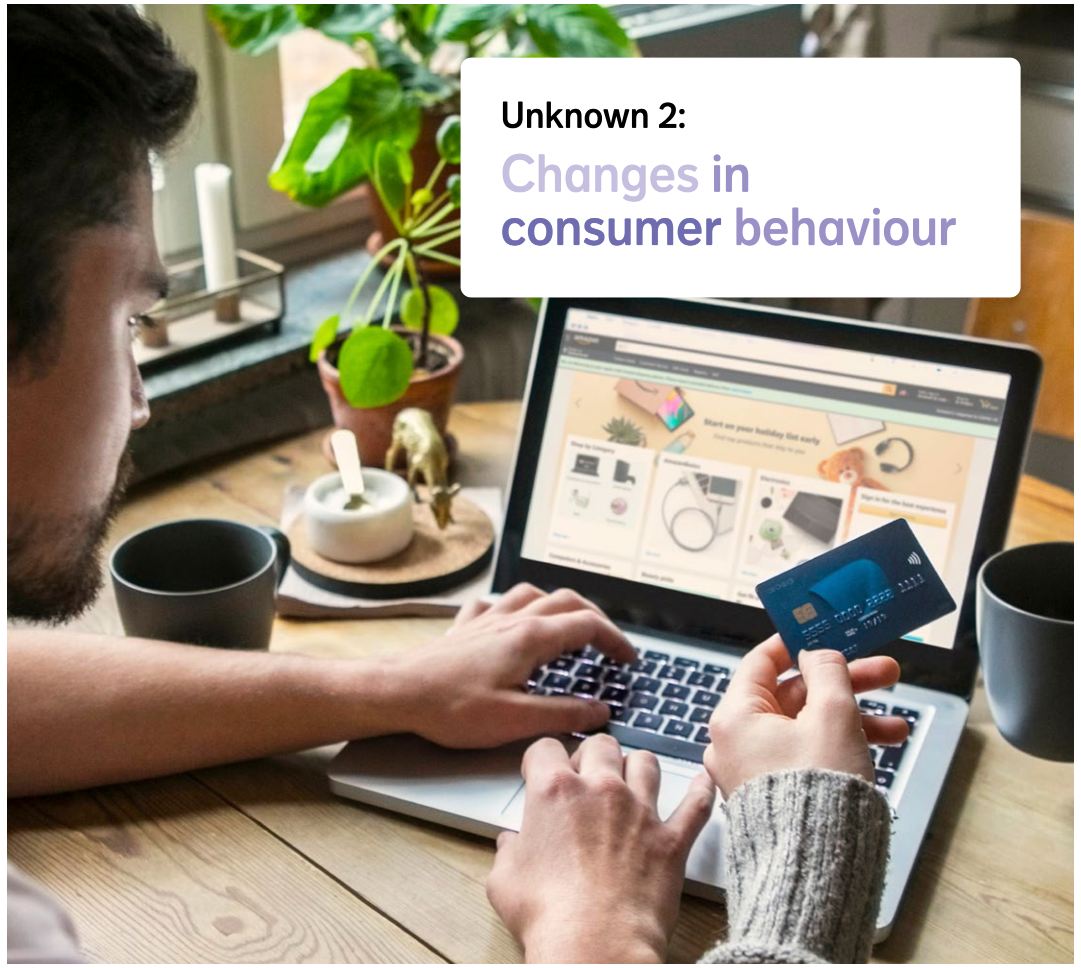
Shifts in the corporate landscape



Unknown 2:

Changes in consumer behaviour

Unknown 3:

The future of company processes

Conclusion

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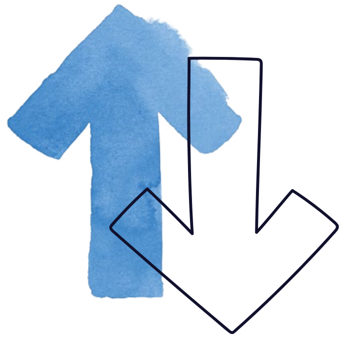

The Covid-19 crisis continues to reshape the realities of our daily lives and the world around us. A path back to "normal" is becoming harder and harder to envision. Companies, governments and individuals are grappling with transformative changes that have put new and unexpected trends in motion in virtually every industry. As the likelihood of a return to the pre-pandemic state of affairs decreases, we explore three key unknowns: what the pandemic might mean for the corporate landscape, for consumer behaviour and for company operations.

The crisis has the potential to create dramatic shifts in the corporate landscape. The pandemic's "winners" have reinforced their dominant positions and are pursuing new avenues for consolidation. The contrast between the US "shareholder first" approach and the European stakeholder model, which also considers the interests of employees, customers, suppliers and local communities, has grown more pronounced as governments on each side of the Atlantic use different tools to stem job losses and limit bankruptcies. China, meanwhile, is managing the crisis in its own way using the "stateholder" model.

Which model will be best suited for a post-crisis world: shareholder, stakeholder or stateholder? Will the big US tech companies be allowed to grow even more dominant in an industry that offers little in the way of real competition? Will a flurry of consolidation ignite in Europe once the dust of the lockdown settles?

The changes wrought by the pandemic have already transformed our lives and our buying habits. Trends such as working and learning from home and online consumerism have accelerated, motivating countless people to get to grips with new technologies. Millions of workers are still displaced from the traditional office environment and are likely to remain so until 2021. Schools and universities are in limbo as administrators debate the safety of reopening. As social awareness and corporate citizenship grow, consumers might pay more attention to the origin of the products they buy, boosting the fortunes of companies that prioritize sustainability. Will these ripples turn into tidal waves for the entertainment, education and retail industries?

The pandemic also has the potential to remodel company processes. Companies that were accustomed to the convenience and cost efficiency of global supply chains found themselves adrift in February and March as supply disruptions resulted in chaos. Will these companies build more resilient supply chains through diversification and localization, or will cost pressures force them to return to old habits? Meanwhile, the steady march forward of intelligent automation continues, offering a potential solution for companies grappling with how to become more agile and flexible. Will companies take full advantage of this opportunity and seek to integrate smart automation with human creativity? Or will the ongoing crisis embolden them to replace their human workers with machines? And who will emerge the winners of the new reality?

Charting a course forward in the current sea of uncertainty is no easy feat. In the following pages we explore crucial questions whose answers will determine what the world looks like after the pandemic releases its grip. We also offer our view on which industries could be most affected, and where we see potential for truly transformative change. By asking these questions and preparing to adapt to the changes that could lie ahead, investors will be better able to deal with the new reality that awaits us.

Maarten Geerdink
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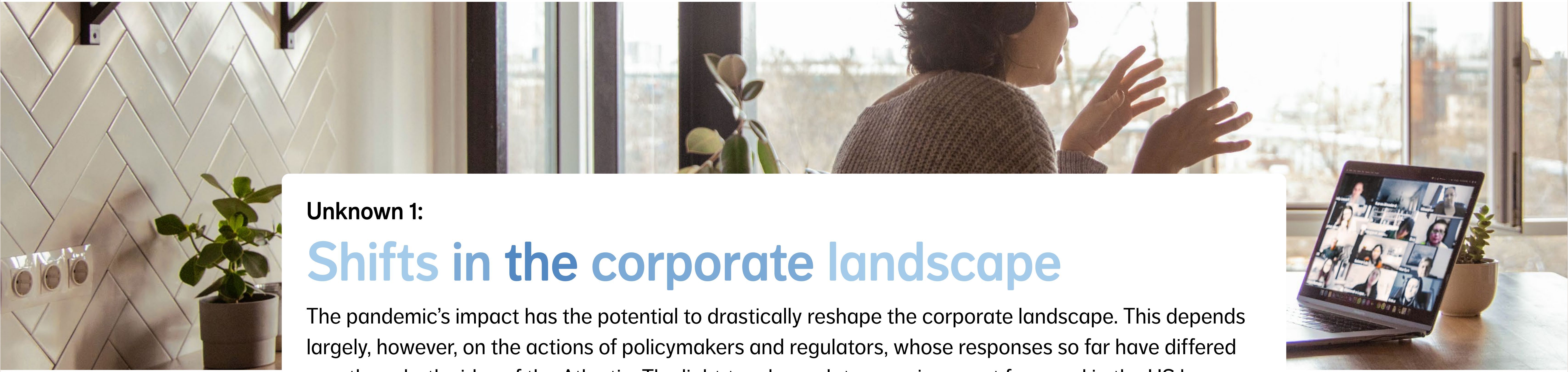

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Shifts in the corporate landscape

The pandemic's impact has the potential to drastically reshape the corporate landscape. This depends largely, however, on the actions of policymakers and regulators, whose responses so far have differed greatly on both sides of the Atlantic. The light-touch regulatory environment favoured in the US has spurred widespread consolidation that shows no signs of stopping. Meanwhile, the regulatory approach in Europe has historically led to a fragmented landscape, but there are signs that this may be easing in the wake of Covid-19.

Could the transformative impact of the pandemic lead to a surge of controlled consolidation in fragmented European industries, from travel to telecoms? And in the US, with big tech firms growing ever larger against the backdrop of the pandemic, could these winners of the pandemic wipe out their smaller competitors and even monopolize innovation itself?

Economic or fundamental shocks often serve as the catalyst to accelerate existing trends. They can speed up the adoption of technologies or practices, or fast-forward the inevitable demise of companies or industries. Companies that can survive this transition are often well-positioned to capture market share from competitors and flourish in the recovery.

A shock can also give rise to capacity rationalization. For example, the over-stored nature of brick-and-mortar retail was already an obvious problem before the Covid-19 crisis, and the pandemic could hasten more bankruptcies and a substantial reduction in total retail square footage.

Increased consolidation need not come through mergers and acquisitions. In many cases, the best operators will simply pick up market share from their weaker peers. This is likely to favour better-capitalized companies whose smaller competitors typically lack the liquidity to survive a long-duration impact to their business. Ultimately, the global trend towards market share concentration could very well continue, with the best-in-class (and usually larger) companies picking up share within an industry.

Overcapacity may make a case for consolidation in stressed cyclical industries such as leisure and travel. However, with many share prices rallying from their March lows to record highs, valuations are now less enticing for potential acquirers. Does this mean that the potential for aggressive consolidation is no longer there? Have markets rebounded so quickly that underlying dynamics are not reflected in current prices? Or are investors looking through the current economic weakness and expecting a full recovery?

The pandemic could also spark domination in certain sectors. The big tech names have posted record second-quarter earnings. Facebook, Google, Netflix, Apple and Amazon[1] have little competition in their subsectors and are capitalizing on the shift towards online consumerism. The scalability of technology could lead to a winner-takes-all scenario where a single dominant provider emerges. This winner's hold over the market and ability to generate monopolistic profits keeps new entrants at bay, while their almost endless access to capital markets allows them to survive and thrive while smaller competitors struggle to weather market disruptions.

What might this trend mean for competition and the overall market structure? Will there still be room for innovation and new entrants, or are we transitioning to a status quo that could become impossible to shake?

The Atlantic divide

The potential for consolidation in any sector or market depends largely on the regulatory and policy frameworks within which it operates. Both the US and EU have authorities that safeguard competition, and with that, innovation. But their approaches are very different and are leading to very different outcomes.

Since its inception, the EU competition authority has largely focused on an efficient internal market system by being very critical of state aid used to bolster national champions at the expense of better competition. Following the Covid-19 crisis, we wonder whether the competition authority will stay disciplined in its approach or if it might leave more room for consolidation. In the latter scenario, it may take a page from the US playbook, which seems much more tolerant of market dominance in certain sectors. Thus far, this approach has led to global winners and worldwide dominance.

1 For illustration purposes only. Company name, explanation and arguments are given as an example and do not represent any recommendation to buy, hold or sell the stock.

The airline sector offers a prime example of the regions' differing approaches. Passenger volume declined by more than 90% in April and May. All major airlines struggled with significant cash flow burn and faced acute liquidity constraints. The operational responses looked very similar in the US and Europe, with many workers being furloughed and capacity being aggressively reduced to offset the cash burn. However, the government-led responses differed greatly, highlighting the much more stakeholder-oriented approach of European governments versus the US government's laissez-faire approach.

The US and European governments have an interest in the well-being of the airlines. The difference lies in their priorities and the type of influence they wield. The European governments, which are focused on the well-being of multiple stakeholders, own shares with voting rights that enable them to influence corporate decision-making. Conversely, the US government owns warrants, which don't provide any say in the business but do provide a positive pay-off when the share price recovers.

Governments in Europe imposed heavy additional rules in order for the legacy airlines to recapitalize, including measures that focus on providing positive outcomes for other stakeholders but might hamper short-term growth. Airlines were asked to reduce night flights and to cut CO2 emissions per passenger in half by 2030, among other requirements. If successful, this approach could enable European airlines to become leaders in sustainable air travel, which would yield longer-term benefits for the airlines as well as all stakeholders.

These differing methods of intervention exemplify the Atlantic divide between the shareholder (US) and stakeholder (Europe) approach, which now seems even more explicit. A third alternative is the "stateholder" model – in other words, the state dictates what happens and is the primary beneficiary. This is prevalent in Asia, specifically in China, which has a wealth of state-owned enterprises (SOEs).

The Chinese state exercises far more control over the corporate sector than Western governments do. This is not just because of its majority ownership in the large SOE sector; it is also due to a broader set of policy tools that the government can wield to control its economy. Situations like the European airline bailout, which come with environmental requirements attached, are therefore not likely to occur in China, where the government is the majority owner of the three largest airlines. If the Chinese authorities want to move an industry in a certain direction, they have access to other effective means to achieve their ends, such as directing firms to invest in certain areas.

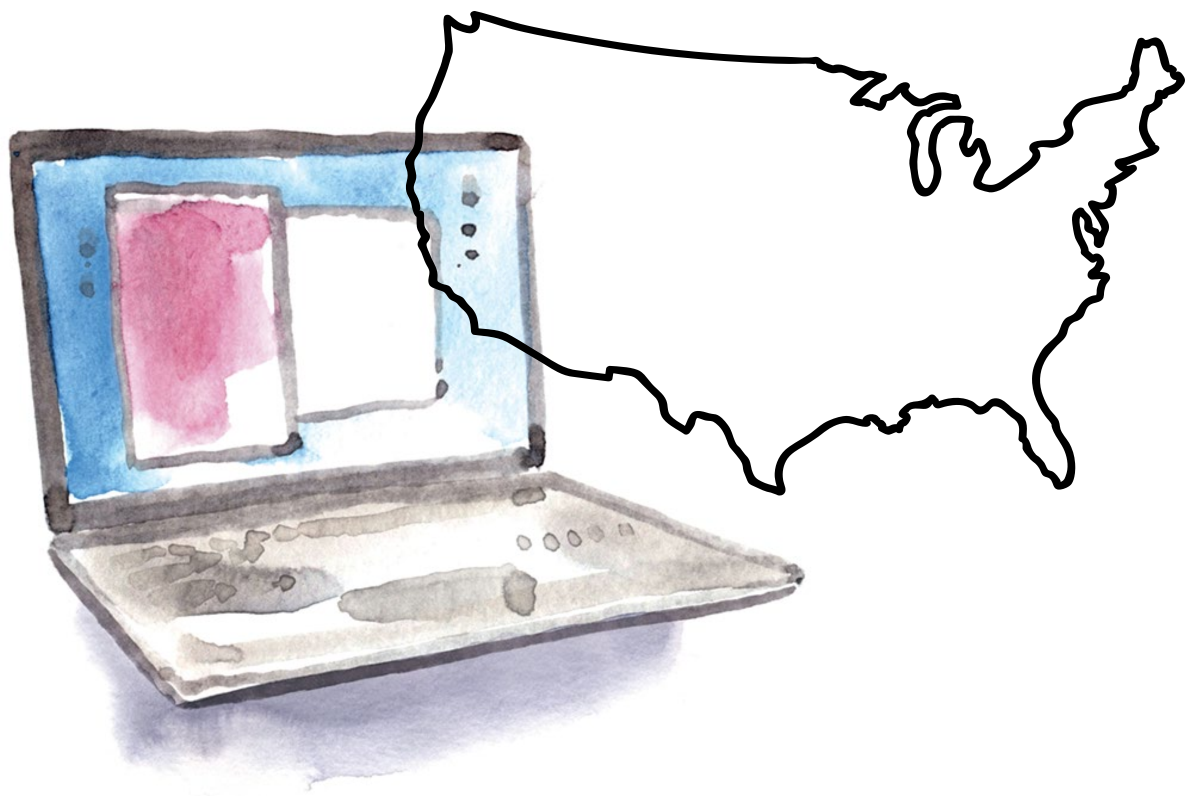
Will Covid-19 fundamentally change the corporate landscape?

With the acceleration in existing trends brought about by the Covid-19 crisis, an increase in consolidation is probably inevitable. This is particularly the case if Europe takes a more benign view of further consolidation in the wake of the crisis, but it could also lead to monopolies in certain sectors in the US. Once the dust of the lockdown settles, a flurry of activity could ignite.

We see potential for consolidation in several sectors. The European travel market, as discussed above, is deeply fragmented along national lines, and the strict rules attached to bailout funds may make it difficult for airlines to survive. If governments decide to stop supporting their ailing national carriers, a wave of consolidation across Europe could follow.

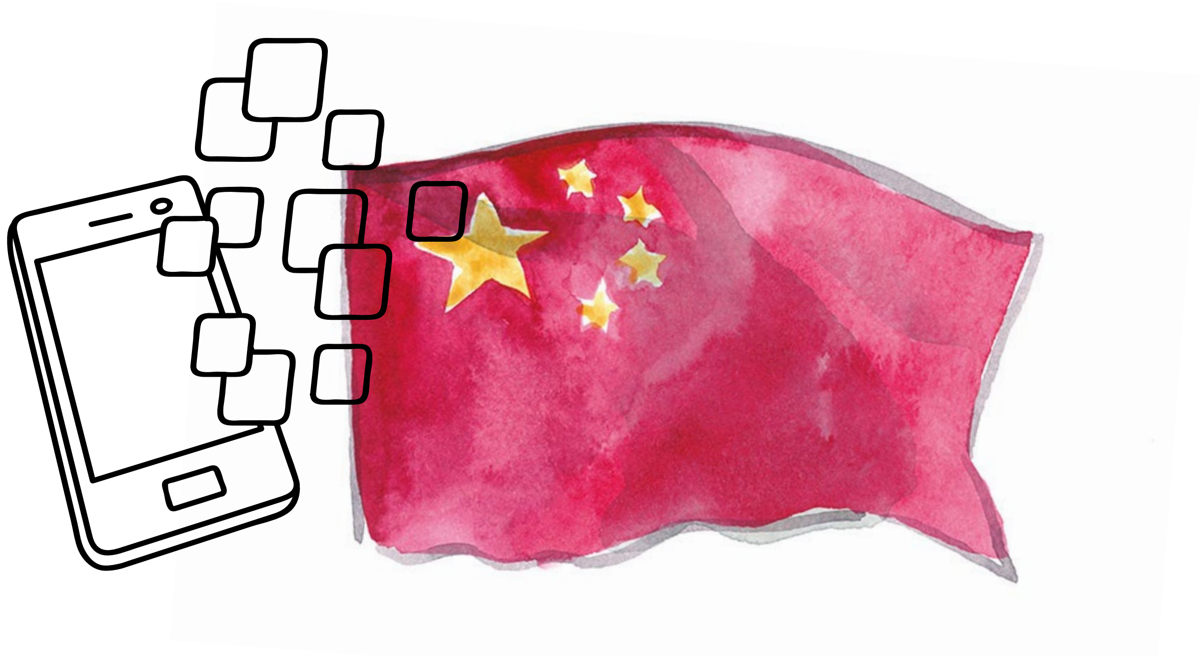
European telecom operators also remain very fragmented. Only a handful of relevant players are left in the US and China, whereas Europe has more than 30 significant telecom operators. This alone makes the European operators less profitable and less able to invest in new and better services than their global peers. The expansion of 5G service over the next five years means that telecom operators that fail to invest in the required technology risk permanently falling behind.

The European Parliament has already sought to quantify the potential benefits of decreased fragmentation. It found that the EU economy would be 2.8% or EUR 415 billion larger with a digital single market and 1.7% or EUR 250 billion larger with an integrated energy market. The gains mainly come from economies of scale and reduced transaction costs. Against the backdrop of an ever-larger single European market, the rationale for consolidation becomes more compelling.



Does the Covid-19 crisis provide an unmatched opportunity for European corporates to further consolidate and take up the challenge of competing on a global scale with US and Chinese companies? Does it offer strong upside for increasing profitability due to scale effects that can be reinvested in profitable growth? Or will Europe remain fragmented and in some areas too small to handle large investments such as the transition to 5G?

Consolidation following the Covid-19 crisis will probably not be limited to Europe. Although the US tech sector is largely consolidated, it could tip irreversibly into a monopolistic structure over the coming years. With a tight grip on their domain and no real competition, Facebook, Amazon, Netflix and Google[1] have seen their share prices rise strongly throughout the pandemic.



They are coming out of this crisis stronger than ever and with structural changes working in their favour. Their deep pockets also enable them to acquire or out-innovate any new entrant that begins to pose a threat, creating a vicious cycle whereby it becomes impossible to challenge them. The main question is whether these firms will be allowed to operate as quasi-monopolies or if they will face a backlash against their perennial dominance.

Profit maximization: shareholder versus stakeholder

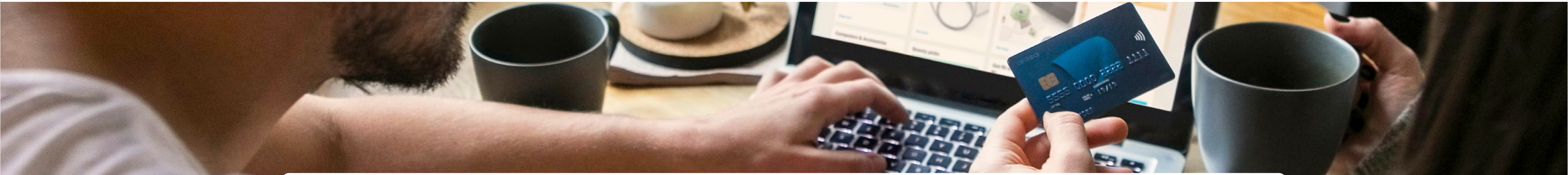
As Europe recovers from the Covid-19 crisis, European companies seem to be embracing the stakeholder model in a quid pro quo, with governments providing ample liquidity facilities, furlough schemes and tax breaks, while companies invest in their employees and commit to more sustainable practices. Social factors are likely to receive more attention from investors; these factors already underpin our responsible investment approach. How a company treats its staff, suppliers and customers and whether it pays its fair share of taxes might influence consumers' perceptions and in turn their patronage. Governance factors could also enter the limelight, especially if governments take a more active role in the ownership structure.

The disruption caused by Covid-19 is unlikely to lead to increased regulation in the US. US corporations that returned significant cash flow to equity-holders have been criticized throughout the pandemic, especially those that also sought aid. Dividend payments and share buybacks offer no tax benefit to companies, so the government has limited ability to restrict these practices. In this context, we view government policy (largely fiscal policy, but also encompassing other policy levers) as more impactful than regulation.

In the short term, companies will probably remain focused on surviving and preserving liquidity, which could lead to a better balance between shareholders and stakeholders as companies seek to repair their balance sheets. In the medium term, profitability may suffer due to higher debt servicing costs and lower margins as firms reshore and diversify their operations. Will shareholders demand a more cautious approach to balance sheet optimization? Will bondholders demand higher equity buffers, and are equity investors nervous about too much debt?

Above all, which model will be best suited to deal with the current crisis: stakeholder, shareholder or stateholder?

The Covid-19 crisis is likely to result in an acceleration of current trends, as the biggest get bigger and the smallest are either taken over or wiped off the map. How this plays out on both sides of the Atlantic will depend largely on the regulatory and consumer response. Will Europe be able to export the stakeholder model to the rest of the world? Will the financial benefits of embracing a stakeholder approach become apparent, or will we fall back on profit maximization and purely shareholder-focused management?



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Changes in consumer behaviour

Most of us have felt the changes wrought by the Covid-19 pandemic most keenly in our personal lives. As consumers, we have largely shifted our buying habits online while avoiding bars and restaurants, cancelling holidays and relying on streaming services for our entertainment. Workers and students have adapted to an entirely online environment, while others have lost their jobs amid the economic upheaval. And as citizens of the world, many have been grappling with concerns about social issues that could potentially push companies in a more socially responsible direction.

Are these changes temporary, or is this a permanent and irrevocable shift? What does the rise of the online society mean in the long term for sectors like entertainment, travel and retail shopping? Will working and studying from home continue, and if so, what wider implications might that have?

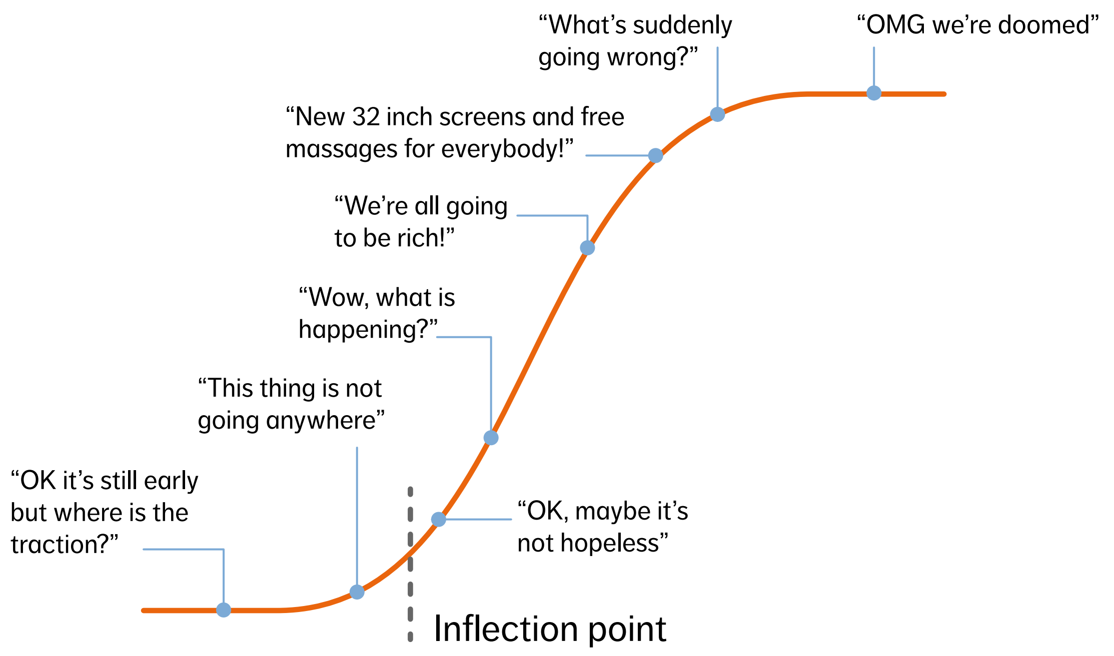
The growth of online consumption

As the Covid-19 crisis spread throughout our communities, sending entire countries into lockdown, it gave rise to a seismic shift in consumer behaviour and sentiment. Consumers are more cautious and the pandemic has affected not just how much money we spend, but also how and where we spend it. Consumer confidence might return to normal levels as the virus recedes from our daily lives, but will our behaviour be irreversibly altered?

First and foremost, the lockdown prompted a new wave of online consumers across countries and age groups, even in previously unpenetrated segments such as groceries. Online retail seems to be in the middle of the technological "S" curve (see Figure 1).

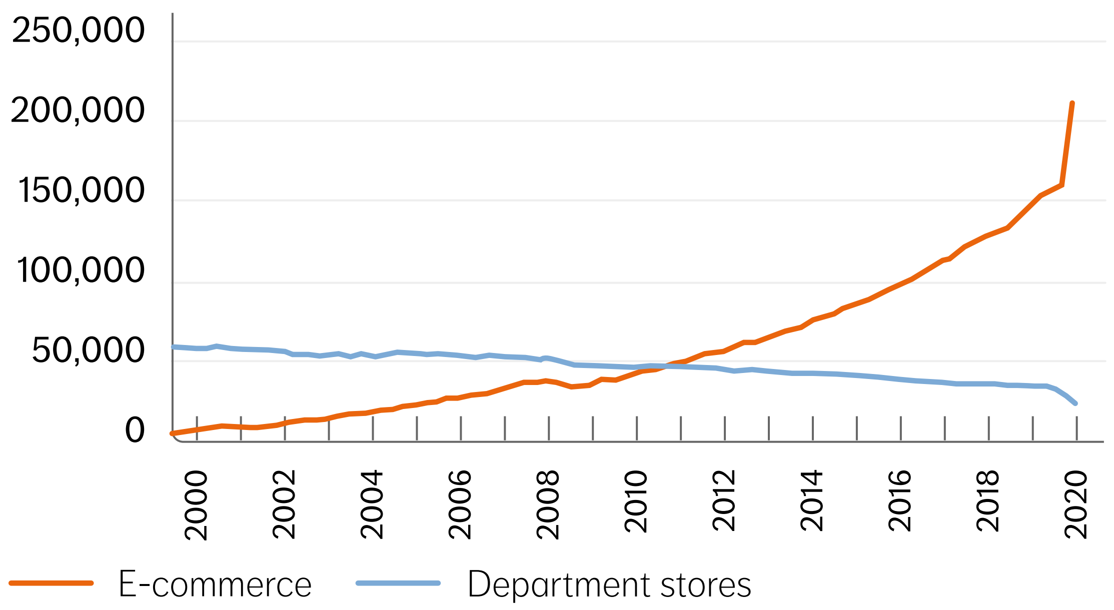
In the US, the pandemic has taken a toll on an industry already battered by the gradual shift to online shopping. The accelerating shift to e-commerce could further depress profit margins and stimulate a shakeup in a country

Figure 1: S-curve illustrating the innovation adoption process



Source: Innospective

Figure 2: US retail sales (USD million)



Source: Retail Indicators Branch, U.S. Census Bureau

that is overstored in the context of an increasingly digital world. In this scenario, retailers with high leverage would run the risk of defaulting on their debt, which could prompt a surge of bankruptcies and increase store closures. This could further exacerbate the shift to online retail as shopping malls struggle to stay afloat amid decreasing rent intake.

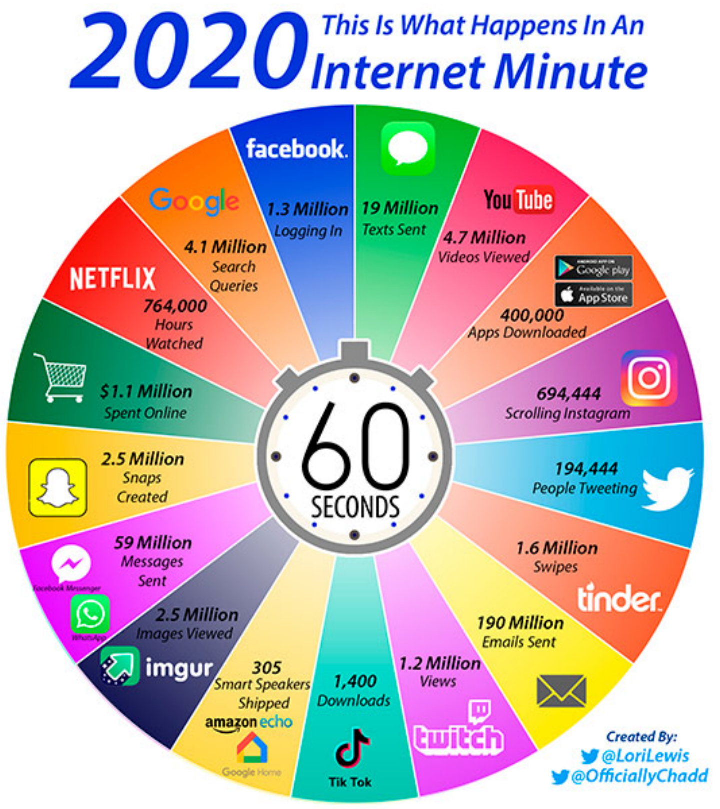
If this is a permanent transition, it could prompt a re-invention of offline retail. To compete with the convenience factor of online retail, physical retail companies would need to offer a unique client experience. Rather than a cluttered layout that crams in as much merchandise as possible, companies could opt for a sleeker minimalist look that showcases their core products, similar to the Apple Store today.

Online shopping is not the only element of e-commerce that has changed profoundly following the pandemic. The transition towards online streaming has also accelerated. Figure 3 shows that in a single minute, viewers watch 4.7 million videos on YouTube and 764,000 hours of content on Netflix.[1] These levels increased even further during the pandemic. A Guardian report states that on average, UK adults watched streaming services for more than an hour a day during the spring lockdown, double the pre-lockdown amount, while 12 million UK adults signed up to a new streaming service.

Could the pandemic also be a key catalyst in the ongoing rise in cord-cutting? As first mover in the streaming space, Netflix created the first wave of cord-cutters by offering new ways of consuming content. Today, according to a Roku survey, a third of US households have no pay-TV subscription, while offline incumbents such as Disney, Comcast and WarnerMedia[1] are trying to catch up with tech companies that have a head start from years of audience building and content creation. A transformative event like Covid-19 could enable one or more streaming companies to leapfrog the competition by taking advantage of the stay-at-home environment to release must-view films or TV shows via their streaming service.

Will this accelerated shift to an online economy turn out to be an aberration, or are these trends here to stay? If these trends continue even after the pandemic has faded and consumers continue to opt for the convenience of the online economy, companies must adapt swiftly to the changing behaviours. Those whose business models are predicated on the old offline economy must evolve or risk irrelevance.

Figure 3: Online consumption in a single minute



Source: All Access. Figures based on pre-pandemic data.

Reshaping employment and education

The pandemic's impact on our daily lives is not limited to our consumption and spending habits. It has also profoundly altered our day-to-day existence, with millions of employees now unemployed or working from home and many students now learning online. But do these changes presage a permanent shift in the landscape?

1 For illustration purposes only. Company name, explanation and arguments are given as an example and do not represent any recommendation to buy, hold or sell the stock.

If the pandemic continues into 2021 without widespread vaccine availability, many of the lost jobs may not reappear. Severely affected sectors include the hospitality sector, the aviation industry, retail and entertainment. Airlines have been among the hardest-hit companies, as is already evident in job losses. About 400,000 airline workers have been fired or furloughed due to the coronavirus. Income for musicians and other performing artists also plummeted with the cancellation of concerts and live events; with continuing social distancing measures, this situation may continue throughout 2021.

Millions of workers have transitioned to working from home. The longer this continues, the lower the likelihood that a traditional office environment will again become the norm. Even if workers return to the office part-time, this could lead to a permanent drop in revenue for many industries. When working from home, people do not drive or take public transport. Avoiding petrol and railway stations, they also do not buy a newspaper or snack at the local kiosk. Further, the restaurants and caterers that mainly catered to local workers are already having a tough time surviving. If 40% of employees work from home at any one time, this could also lead to downscaling of office space, affecting real estate prices. A recent study by KPMG showed that 69% of CEOs expect to downsize their office space. Others contend that office space will merely be reinvented as meeting space. CBRE posits that this might result in new construction if it turns out that old offices cannot be adjusted to the new standards.

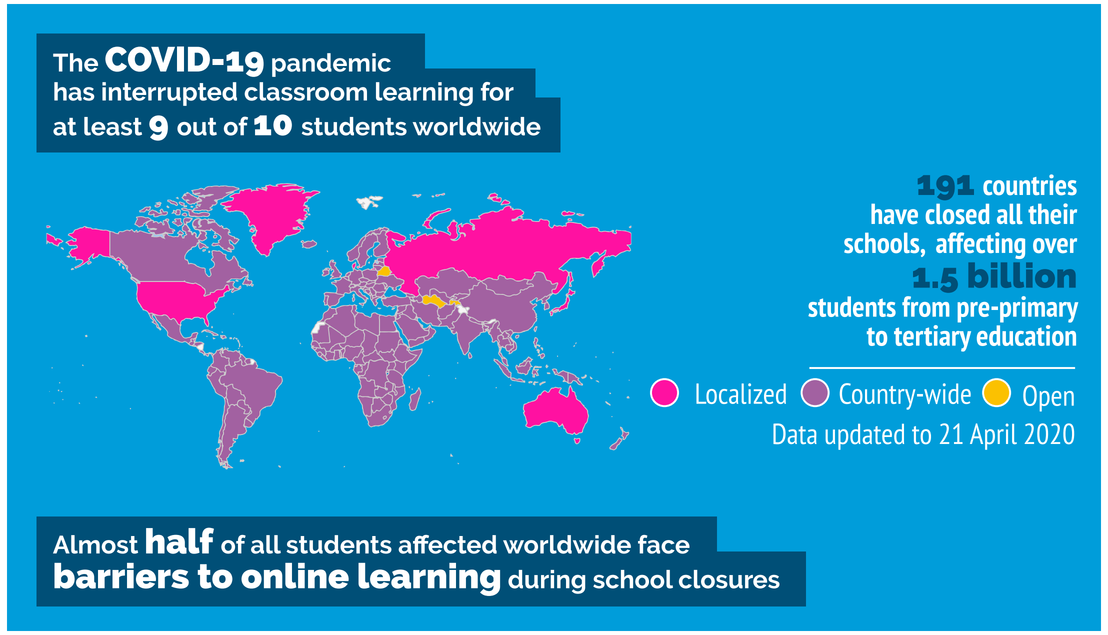
The increases in income inequality may also be here to stay. Most affected jobs are relatively lower-income, and those that have been created in return, such as within the cleaning industry for hygienic protocols, only partly offset the lost jobs. If the shift to e-commerce continues at its current pace, this will also have negative implications for retail workers. Many would be laid off and only a few would find their way to online retail, where the main demand will be for IT developers and marketeers.

A permanent online work environment could also lead to globalization of the higher-skill workforce. Working from home and meeting via online platforms such as Teams and Skype is fast becoming the new normal. The physical location of an employee is no longer especially relevant. This opens up opportunities for companies to offshore work or attract talented workers from different locations that otherwise would not be willing to move for a new job. On the other hand, the benefits of in-person collaboration and discussion may become more apparent as the pandemic continues. In that case, most companies might prefer to retain their in-person workforces, even if they work from home most of the time.

A further unknown is whether online education is here to stay. The Covid-19 crisis has led to the closure of schools and universities on a global scale. More than 1.5 billion children and young adults have been forced to stay home. In a very short time frame, education has shifted almost completely to an online setting, with parents often forced into the role of teacher.

Even before Covid-19, online teaching was partly being implemented via such tools as recording of classes, the use of digital platforms such as Google Classroom, online exams and new ways of learning. However, this transition has accelerated sharply in recent months. This may well be a permanent change. Princeton and Harvard have already announced that all classes for the 2020-21 school year will take place online, and many other universities have shifted partially to an online setting. Others that were planning to return to offline classes have had to reverse this decision amid rising Covid-19 case numbers on campus.

Figure 4: How the pandemic has disrupted classroom learning



Source: UNESCO Institute for Statistics database, 2020

This development might enable universities to educate more students, as they are no longer limited by the physical space. However, as The Economist recently reported, many students do not want to pay high tuition fees for online classes and would rather not attend, which could lead to financial trouble for many institutions. Further, when all classes can be attended online, there is no need for students to move or commute to the university. This would have broad knock-on effects for many businesses. Visas would be withdrawn; demand for student accommodation would plummet; and in extreme cases, university towns could become a shadow of their former selves as shops, restaurants and nightclubs are shuttered. Online education platforms and software developers, on the other hand, would flourish.

Studies suggest that online learning may be more effective because it requires less time, but this heavily depends on the type of study and age of the pupil. In the case of younger pupils, in-person education offers clear advantages. Parents, even those who are themselves working from home, cannot take on a teaching role indefinitely, and younger children are less able to concentrate on online work for long periods. For university-level work, students can benefit from the flexibility of online education, though they may miss the social aspect of in-person study, and universities probably cannot justify charging full-price tuition for online classes indefinitely. A third possibility is a hybrid model, where online learning platforms are combined with practical classwork that works better in a face-to-face environment.

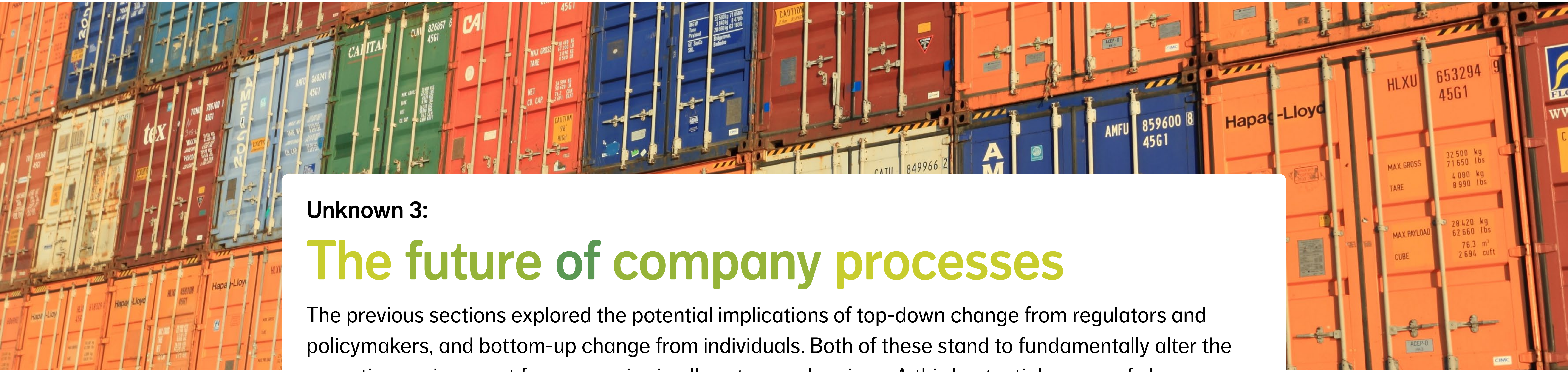
The growth of corporate citizenship

As well as the seismic changes in individual habits that are already apparent, Covid-19 has raised questions of corporate citizenship and social responsibility that are increasing awareness of social issues, such as how companies are taking care of their employees and how they are supporting their communities. This shift is emblematic of a broader increase in awareness, which has been ongoing for some time. The simultaneous developments in the Black Lives Matter movement have also contributed to this rise in awareness, as have the huge numbers of layoffs in the US and the potential negative health effects of lockdown.

Companies have largely responded to this growing awareness by expressing their commitment to corporate social responsibility and highlighting their efforts to support their employees and communities. In industries where health and safety issues haven't been traditionally viewed as concerns, such as certain retail segments and the tech and banking sectors, companies have had to account for how they are keeping their employees and customers safe and healthy. Similarly, hundreds of companies announced their support for the Black Lives Matter protests via social media. More and more, companies are banking on the potential financial benefits of expressing their support for social causes rather than remaining neutral.

This could ultimately lead to companies prioritizing their social responsibilities as a matter of course. Particularly if consumers vote with their wallets and hold companies accountable for their commitments, we could see a wave of genuine social progressiveness among corporate leaders. In this scenario, companies may organically come to prioritize all of their stakeholders, not just their shareholders, in the pursuit of financial success.

Still, the big question is whether this shift towards corporate citizenship is sustainable for the long term and whether consumer awareness will remain at its current high level. As individuals, will we push companies to follow through on their promises and become better corporate citizens? Will companies that go the extra mile to ensure the health of their employees and generate a positive environmental impact be rewarded? Alternatively, if the current high levels of awareness dwindle or if other factors begin to take priority for consumers, will corporate citizenship become a thing of the past?



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The future of company processes

The previous sections explored the potential implications of top-down change from regulators and policymakers, and bottom-up change from individuals. Both of these stand to fundamentally alter the operating environment for companies in all sectors and regions. A third potential source of change in the corporate landscape is change from within. How might companies themselves reshape their processes in the wake of the pandemic? And what might be the long-term impact of these changes?

Two key areas where we see the potential for far-reaching change in company processes are company supply chains and automation. The Covid-19 crisis has illuminated the failings and weak points in our system of globalized supply chains and highlighted the need for flexibility that current automated technology often fails to provide. The convergence of both areas could lead to a tipping point that entirely reshapes traditional company processes.

Exposing the cracks in supply chains

The arrival of Covid-19 on Western shores was first felt not in the form of the virus itself, but in the shape of disruption. In January and February, as the virus spread throughout China and other countries in Southeast Asia, factory closures and the accompanying manufacturing delays led to innumerable broken links in supply chains. A survey conducted by the Institute for Supply Management indicated that 75% of US companies had experienced supply chain disruption due to the pandemic. Further, 44% of companies had no plans in place to respond to these disruptions, highlighting the large-scale inadequacy of planning for such an event.[1]

Global trade has led to widespread availability of cheaply sourced products in almost all consumer-focused industries, from high-tech devices to clothes and personal care products. With the ability to outsource labour to developing countries and minimal shipping and tariff costs for selling to Western consumers, the vast majority of large companies make use of global supply chains built on lean manufacturing principles to deliver their products. These supply chains are often deeply opaque and consist of many layers, to the extent that the companies themselves do not know where the components of their products truly originate. Moreover, a single broken link in the chain can lead to supply disruptions. In the case of a black swan event like Covid-19, these disruptions can escalate to pandemonium.

The disruption stemming from Covid-19 was an uncomfortable wake-up call for Western companies accustomed to sourcing goods from China and Southeast Asia. Even though China has largely weathered the pandemic and its manufacturing industry is back up to normal capacity, Western companies may very well opt to revamp their supply chains in the light of the pandemic. The big unknown is how they might do this. Two potential routes are diversification and localization.

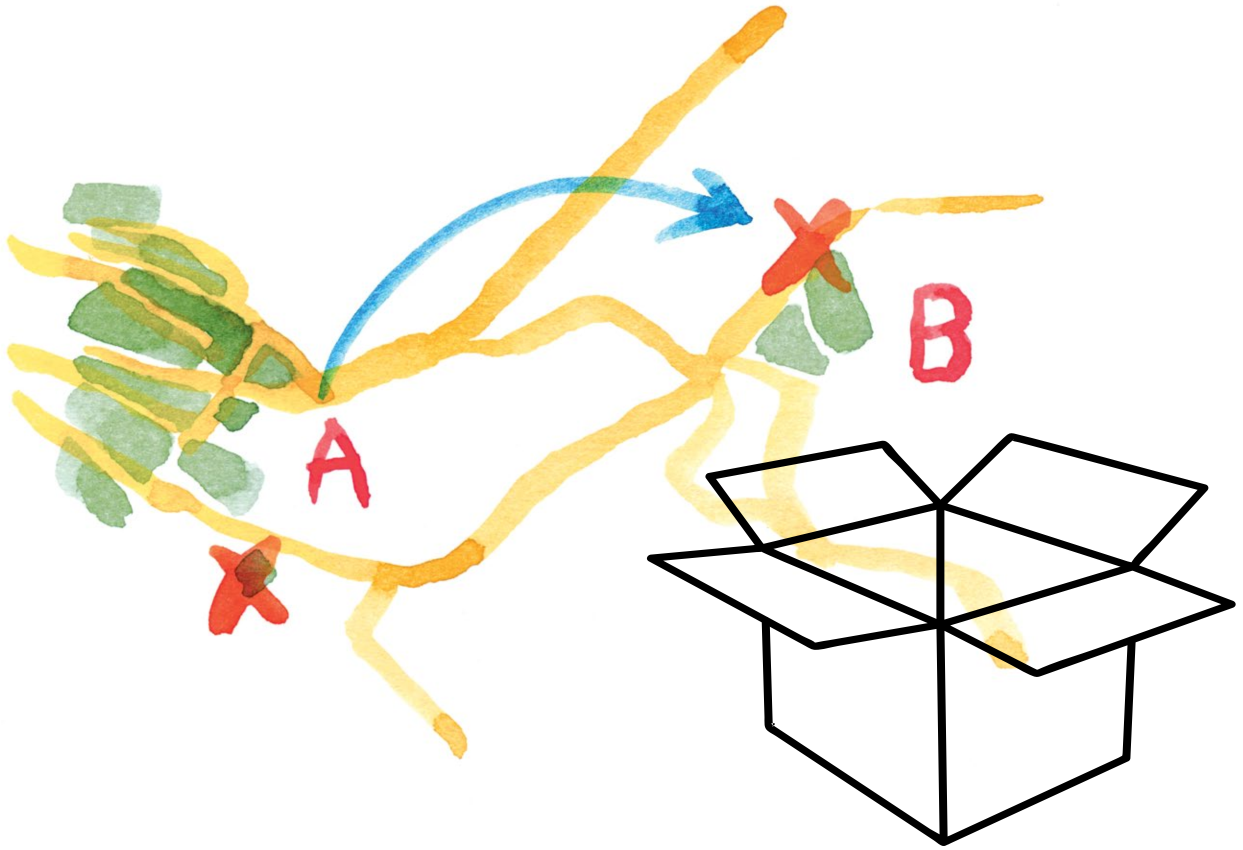
Diversification of supply

Diversification of supply chains refers to spreading out the sourcing of products across a wider range of suppliers and regions, so as to provide backups in the case of a broken link. Many companies use a single supplier, often based in China, for each component in their products because this provides economies of scale. Sourcing a component from multiple suppliers offers resilience but can quickly become very costly, especially for products that contain a huge number of components

A general desire to expand production out of China may also motivate companies to diversify supply chains following the pandemic. A Gartner survey conducted in February and March indicated that 33% of global supply chain leaders either have already moved production out of China or have plans to,[2] largely motivated by the ongoing US-China trade tensions. If these tensions ramp up again, increasing tariffs might make it financially non-viable to source goods from China.

The World Economic Forum has identified manufacturing hubs such as Mexico, Vietnam and India as likely destinations for companies seeking to limit their reliance on China.[3] Such a move would serve to bolster the economies of these regions while also, in many cases, bringing production closer to home.

1 https://businessfacilities.com/2020/03/covid-19-survey-impacts-on-global-supply-chains/
2 https://www.gartner.com/en/newsroom/press-releases/2020-06-24-gartner-survey-reveals-33-percent-of-supply-chain-leaders-moved-business-out-of-china-or-plan-to-by-2023
3 https://www.weforum.org/agenda/2020/05/this-is-what-global-supply-chains-will-look-like-after-covid-19/



However, it is also possible that companies might diversify their supply chains for the near and medium term but shift back to single-sourcing in the long term, whether in China or elsewhere. The impact of Covid-19 will not be forgotten, but over time, cost factors could take priority over resilience. Companies that are pressured to maximize shareholder value might view a return to single-sourcing as an easy way to increase cost efficiency, without heeding the risk of future black swan events. On the other hand, companies focused on long-term resilience rather than short-term optimization of profits might well permanently diversify their supply chains.

The shift from global to local

The second option for companies seeking to overhaul their supply chains post-pandemic is localization: moving production closer to the end consumer. Certain companies with the means to do so might even opt to bring production partly or fully in-house. Localizing supply chains would strengthen their resilience, ensuring they are no longer susceptible to trade wars or other global events. However, the majority of companies could not feasibly meet their business needs entirely through local sourcing, and even attempting to do so could significantly increase costs.

Localization of supply chains appears more doable in certain industries than in others. In food production, recent years have seen the rise of companies like HelloFresh[4] that source local ingredients and deliver them directly to customers, who are willing to pay a premium for high-quality and locally sourced produce. Conversely, in segments where low costs are paramount and that depend on human labour, such as fast fashion, it is hard to envision widespread localized production for selling to Western consumers. It is also hard to envision in the tech sector, given the number of components included in each device and the need for each component to be manufactured according to very precise specifications.

Despite these obstacles, the rise of intelligent automation provides a potential pathway towards localized supply chains even in industries that involve complex production processes. With the Covid-19 crisis providing an impetus for companies to invest in their supply chains and improve the flexibility of

4 For illustration purposes only. Company name, explanation and arguments are given as an example and do not represent any recommendation to buy, hold or sell the stock.

their processes, could automated and localized production processes be the key to both resilience and cost efficiency?

The rise of a-commerce

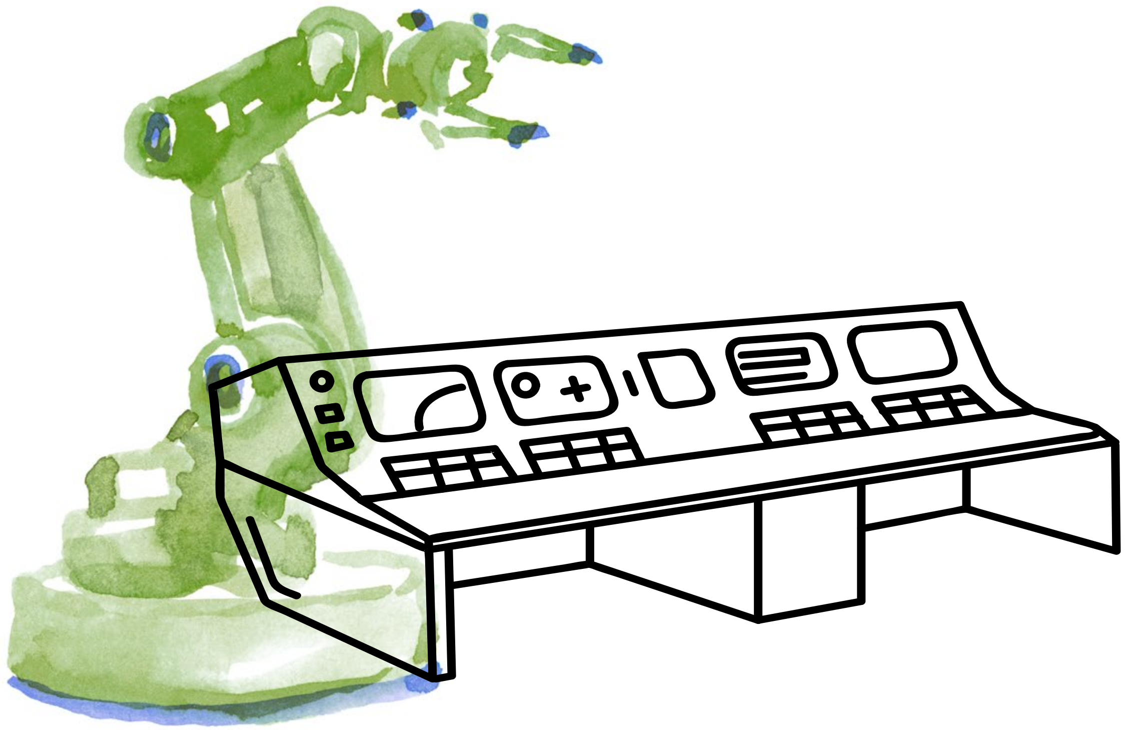
Covid-19 has demonstrated the importance of flexibility and the need to respond swiftly to new developments. Until now, these qualities have largely been confined to the domain of human intelligence, while automated processes are typically used for automating repetitive, routine tasks. However, the pandemic and its reverberations also provide a potential impetus for a rise in "intelligent automation": technologies that enable digital transformation and business process automation. These technologies cater to fast-evolving demand dynamics and consumer behaviour, ultimately making companies more flexible and agile. But will companies take full advantage of this opportunity, and if so, what implications might it have?

Clayton Christensen, who has been called the guru of disruptive innovation, once remarked that the process of disruption is enabled by technological change and business model innovation. In this case, the next wave of disruptive innovation in business and operational models might well focus on achieving the optimal balance between automation and agility, with the goal of responding to fast-changing consumer behaviour and demand while maintaining cost-efficiency.

As companies seek to improve their flexibility and agility in the wake of the Covid-19 crisis, we see the potential for accelerating a-commerce and intelligent automation to improve decision intelligence and augment the labour force. Example technologies include robotic process automation, artificial intelligence, the cloud and smart machines.

Augmenting human intelligence

For many years, manufacturing companies have been deploying automation processes on their factory floors to address problems like labour shortages, high unemployment rates and high staff turnover. However, most of these automation processes are currently based on a rules-based approach, for example robotics programming with a defined set of top-down scenarios and workflows. This offers very little flexibility in unexpected situations such as the Covid-19 outbreak, which might require manufacturers to alter entire workflows. Furthermore, re-orienting production processes takes considerable effort.



The unstoppable progress powered by the Internet of Things is fundamentally reshaping all of these accepted truths. In the near future, production floors could fully turn to intelligent automation to gain new insights from smart machines and connected sensors. Human collaboration with machines would open the door to new possibilities and allow companies to invest more time in practical projects like product development, brand-building, or customer support. With this in mind, augmenting the power of a human workforce with a set of automation tools could become a powerful workforce-multiplier.

Smart manufacturing might also open the door to localization of supply chains. With the reduction of labour costs in manufacturing – which is one of the biggest motivators for outsourcing production – companies could invest in small, localized factories that respond directly to local customer needs.[5]

If this vision materializes, the implications for the human workforce would not entirely be positive. A McKinsey report points to a Philips[4] plant where robots outnumber human workers by 14 to 1, which is just one example of robot workers replacing (rather than simply complementing) human labour.[6] The temptation to phase out human labour in favour of an automated workforce, with perhaps just a few humans still needed for maintaining and supervising the robot processes, is already strong. Could the transformational impact of the Covid-19 crisis exacerbate this trend, emboldening companies to slash their workforces in the name of cost-cutting?

5 https://www.weforum.org/agenda/2019/06/localized-micro-factories-entrepreneurs-and-consumers/
6 https://www.mckinsey.com/business-functions/operations/our-insights/automation-robotics-and-the-factory-of-the-future

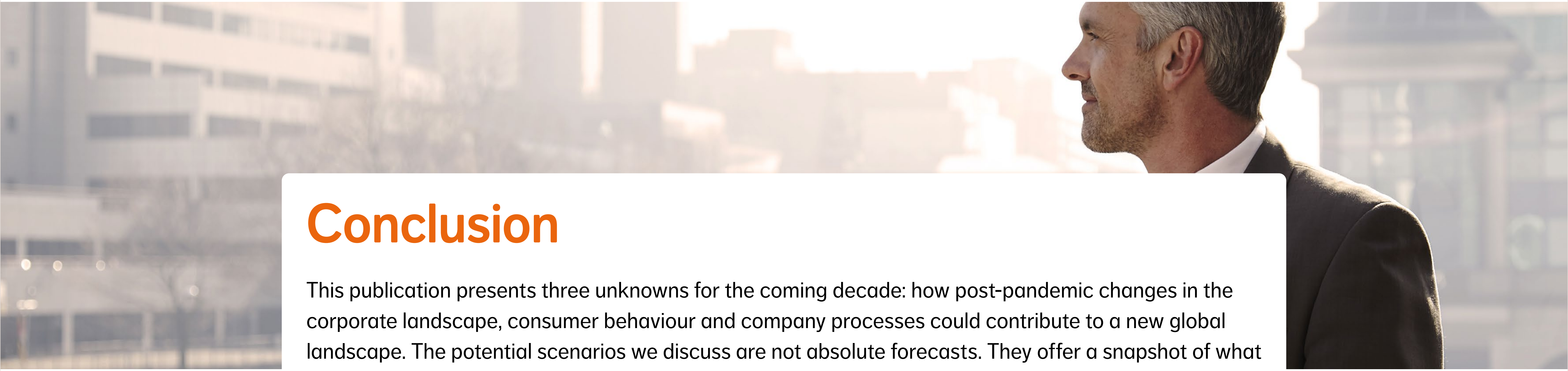
If this occurs, it may lead to short-term gains for those companies that downsize their human workforce, but there are dangers in this approach. Such companies may be less well equipped for long-term innovation, as they would lack the creativity that the human element can provide. On the other hand, companies that take a long-term view and carefully consider how to integrate their human and machine workforces, and how new forms of human labour could fit into their organizations, may be best positioned to build truly innovative solutions.

Intelligent automation could be the next disruption

We have identified crucial applications for intelligent automation in the manufacturing sector, which could help to overhaul supply chains and potentially lead to more localized forms of production. These are only a few of the hundreds of applications, both real and theoretical, in sectors ranging from healthcare and financial services to consumer cyclicals and telecommunications. With this in mind, intelligent automation could be the next widespread disruption. It would allow companies not only to automate routine work, but also to innovate and respond more quickly to rapidly changing consumer and business needs.

Integrating emerging technologies with the existing labour force would remain a key challenge. There is an undeniable risk that many companies could exploit the transformative nature of Covid-19 to eliminate workers and replace them with automated systems. Moreover, because intelligent automation changes the way work is done, new skills would be needed both within IT and in business areas where processes are automated.

The Covid-19 crisis has exposed the weak points and inflexibility endemic in almost every industry, but it has also provided a transformative opportunity to change company processes for the better: stronger, more resilient supply chains bolstered by agile decision-making and complemented by human intelligence. In this vision of the post-Covid landscape, organizations that succeed with innovative solutions and products would be those with a clear vision, strategy and approach to capturing value. Companies that strive to safeguard their supply chains for the long term, whether through diversification or localization, would also be well-placed to survive the obstacles that lie ahead.



Conclusion

This publication presents three unknowns for the coming decade: how post-pandemic changes in the corporate landscape, consumer behaviour and company processes could contribute to a new global landscape. The potential scenarios we discuss are not absolute forecasts. They offer a snapshot of what we believe the future might hold, based on the probable trajectory of the Covid-19 crisis and the ripple effects on businesses and our daily life.

Many of these uncertainties also reflect ongoing trends that have been supercharged by the pandemic. Consumers have been transitioning to online retail and digital consumerism for several years now; the question is to what extent the pandemic will ultimately speed up the process, and whether it is irrevocable. Meanwhile, working from home had become standard practice for many workers prior to the crisis, and companies were already aware of the potential cost savings of a remote workforce. The rise of corporate citizenship is also not a new development, though it remains to be seen whether consumers will truly hold companies accountable for their promises.

In the realm of company processes, the rise of automation and the push towards "intelligent automation" have been ongoing for many years, while global companies have long pondered the benefits of moving their supply chains away from China. The overarching question is whether companies will seize the opportunities afforded by the pandemic to build permanently stronger supply chains and more flexible business models that take full advantage of smart automation. Doing so would require huge investments but potentially reap equally huge rewards in the form of long-term resilience and innovative solutions.

With regard to the shape of the corporate landscape, the Atlantic divide seemingly continues to grow wider as European governments and regulators commit to the stakeholder-focused model while US companies are free to puruse a shareholder-friendly approach. Dominant US companies are making gains for now, but their short-term focus could jeopardize their license to operate in the longer term. Meanwhile, China's stateholder approach threatens to topple the established US hegemony. The big questions are whether the pandemic will incite consolidation in fragmented European industries, and whether consumers will ultimately rebel against the domination and self-interest of US corporate giants. If so, we could see a resurgence in European strength and innovation.

The potential futures we have sketched out in these pages also raise the spectre of new uncertainties. Will we allow the continued domination of Facebook, Amazon, Netflix and Google[1] to dictate the items we buy, the entertainment we consume and, ultimately, our worldview? How might the travel, retail and entertainment sectors reinvent themselves for a virtual society? What new forms of work and production could arise in a world of intelligence automation, and what old forms could disappear? And what role might China take in this new landscape?

These questions and many others will shape our investment perspective as we move forward. By keeping an agile mindset and responding pre-emptively to the developments we see on the horizon, we can steer more safely through the crisis and better position ourselves for the sea changes that lie ahead.

1 For illustration purposes only. Company name, explanation and arguments are given as an example and do not represent any recommendation to buy, hold or sell the stock.

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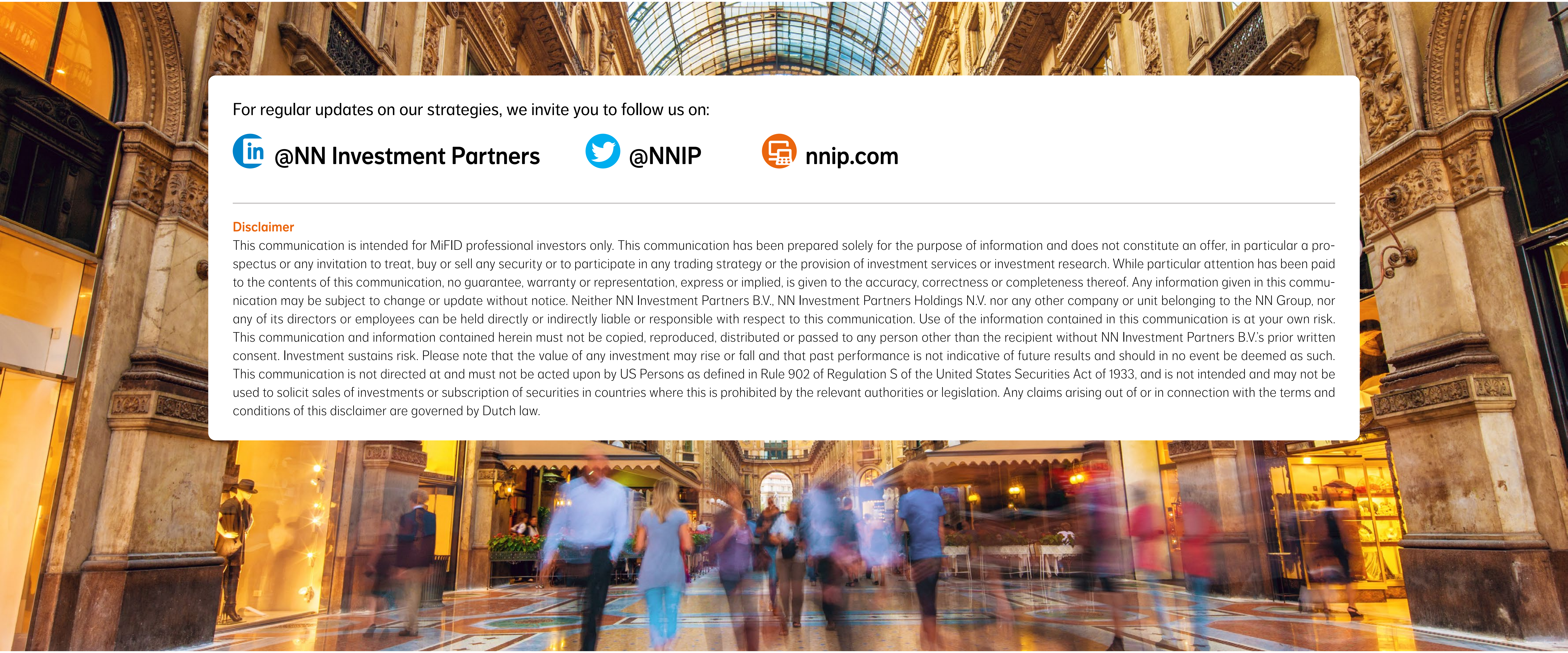

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