European Logistics Survey II 2020: The Ecommerce and Digital Evolution

in association with Transport Intelligence

Contents

Contents

Foreword

Dear Sir / Madam

Thank you for taking the time to read our second survey, which was produced in partnership with industry experts Transport Intelligence. We hope you find it interesting.

The Covid-19 pandemic has exposed the vulnerability of global supply chains and local economies to exogenous shocks. It has also accelerated some existing emerging trends in consumption patterns, such as the shift to e-commerce, teleporting us as much as 5 years into the future. While the pandemic has been a specific and unpredicted disruption, we believe the trends highlighted in the survey have their roots in deep structural changes to the way we live such that the messages and conclusions are still valid in the long run.

To help us better prepare for the inevitable disruption, the environmental, social and governance (ESG) team at Aberdeen Standard Investments has identified four 'forces for change'. These include technology, demographics, environment and governance. The rigidity of bricks and mortar pitched against the extreme fluidity of these four forces of change, mean that our industry will be vulnerable if we do not act soon.

But how do we prepare for an unstoppable force meeting an immovable object?

As landlords, it is imperative that we help our tenants to cope with the effects of change. As such, the real estate tenant and landlord relationship is evolving rapidly, with assets becoming ever more operational in style.

We have the power to make positive change and to add value for our investors, too. Indeed, this survey shows the benefits of increased engagement for both parties. And it underlines the inevitable role that logistics warehouses play in economic infrastructure. But the survey also demonstrates that we need to be part of the solution when it comes to reducing environmental effects and improving employee welfare. We want to contribute to the prosperity of our tenants, too, given the immense pressures they face.

From here, our research will be increasingly focused on potential regulatory risks for industrial real estate. The court ruling on the 3rd runway at Heathrow only emphasises the point that our investments must treat environmental sensitivity, social welfare and ethics with the highest degree of importance. The direction of travel is clear and we must be proactive.

Please do get in touch with one of the team if you would like to discuss the survey or your own property requirements.

Yours faithfully,
Craig Wright

Head of European Investment Research
Aberdeen Standard Investments

Executive Summary & Key Messages 2020

This survey of major global and European logistics operators was conducted in December 2019 by leading research organisation Transport Intelligence in partnership with Aberdeen Standard Investments. It is designed to provide valuable insights into the critical drivers of the logistics real estate industry.

The significant findings included:

1. **The industry is growing** strongly. In this context, respondents declared a growing shortage in existing capacity to service more contracts. Furthermore, the availability of new premises for expansion is a growing problem.

2. **Structural changes through technology, demographics, the environment and subsequent governance are affecting supply chain infrastructure in new ways.** This is reshaping operator property requirements whilst placing increased focus on the environment and employee welfare.

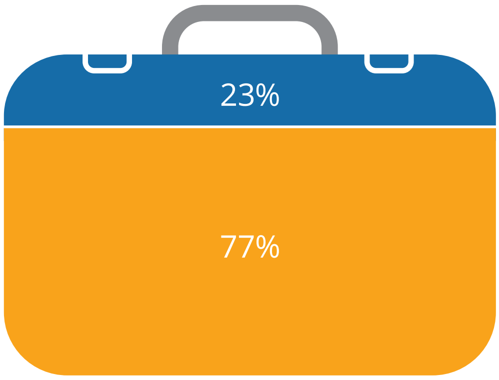
3. **Digitalization has replaced physical technologies** as the focus of business investment. This rotation into data analytics, artificial intelligence, blockchain and the Internet of Things is driven by growing demand from customers for speed of delivery and transparency in the age of "instant delivery".

4. The increasing focus of demand for logistics real estate will be in **urban fringe locations due to the acute pressures from Ecommerce.** his increases the pressure on regulators to support the duality of economic infrastructure and human welfare in urban areas.

5. **Logistics companies are already taking the initiative when it comes to sustainability.** Key reasons include corporate awareness, energy cost reduction, employee retention and customer alignment.

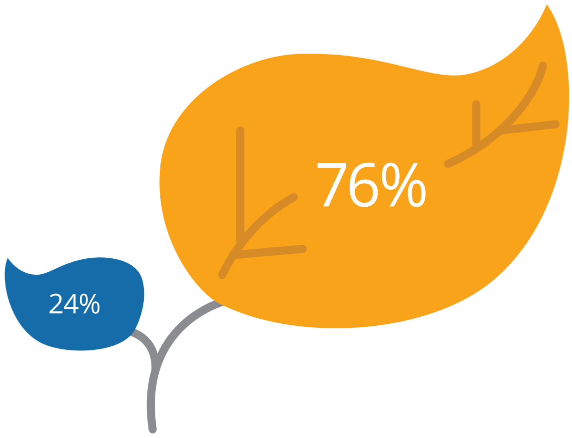
Top Trends Impacting Logistics Real Estate 2020

Business activity levels?



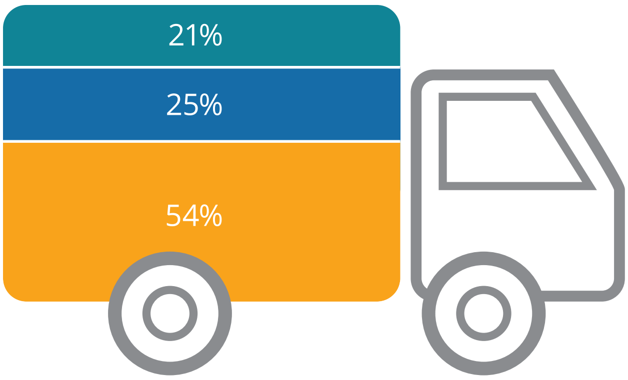
Growing | Not Growing
Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Implementing sustainability initiatives?



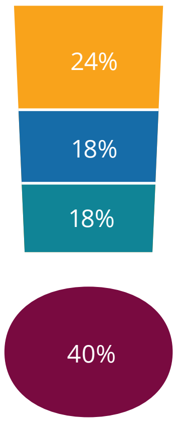
Sustainable Initiatives | No Sustainable Initiatives
Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Urban logistics to grow?



Yes | No | Not sure
Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Top Risks?



Changing customer purchasing habits | Lack of cost-effective labour
Changing Technology | Other
Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Introduction

In partnership with leading research organisation Transport Intelligence, Aberdeen Standard Investments has undertaken a second annual survey of Europe's leading logistics companies.

As one of Europe's largest real estate investors, it is critical for us to understand what is driving the challenges facing our tenants. The logistics industry is experiencing unprecedented disruption, resulting from both gradual and sudden systemic changes to the global economy. These challenges are manifesting themselves in local bricks and mortar trends.

The global economy is likely to be feeling the effects of Covid-19 for a decade at least. Many new challenges will arise from the pandemic, but it is also already clear that it will act as an accelerator to preexisting drivers.

Aberdeen Standard Investments has identified the major disruptive influences on the global economy. These can be categorised into four main groups: technological, demographic, environmental and governance. The reason logistics companies are under particular pressure to adapt is because their business are tangible and visible. This leaves them exposed to pressures from all four forces for change.

Technology: the results show that changing technology is creating huge challenges for supply chains. The paradox is that while technology is responsible for disrupting demand and creating the complex requirements of modern living, the solution also lies within technology. The solution requires advanced robotics, picking systems and the data analytics that constantly monitor, adapt and improve every aspect of the supply chain.

Demographics: urbanisation trends and the rapid growth of world cities are creating major challenges for logistics companies. Cities need the supply of goods to be smooth and uninterrupted if they are to function. However, the competition for land between urban freight handling and housing is relentless. This is bringing about new operating models for parcel delivery companies, who are battling to satisfy instant delivery expectations.

Environmental: the debate about the damage humans are having on the sustainability of the global ecosystem is evolving. Balancing economic growth drivers with congestion, emissions, adverse environmental impacts and social cohesion is challenging. We believe there will be increasing political scrutiny in this area, particularly in a post-Covid-19 world.

Governance: regulation is inevitable. The effects of breaching EU nitrogen limits in the Netherlands is disrupting the flow of goods and agricultural vehicle usage. It will be harder for logistics companies to establish supply chain networks and to make real estate decisions without paying attention to the regulations involved in the movement of goods and the pollution and social impacts that come with it.

As a result of these pressures, real estate is becoming more operational in nature. Landlords need to have symbiotic relationships with tenants and to understand the pressures they are under in order to identify disruptive forces early on.

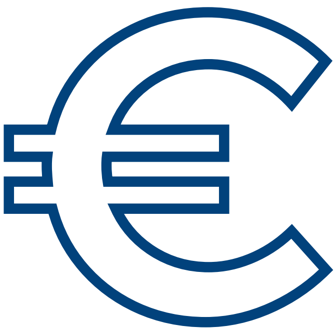
This is increasingly true in logistics. There is huge potential to make great leaps in sustainability, employee welfare and social cohesion. This is particularly evident in a world where the lines between living and working are increasingly blurred through urbanisation.

In the following survey results, we will be examining these issues alongside the specific feedback on the challenges of logistics operators across Europe.

123 Respondents

24 Countries

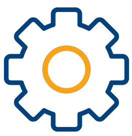
Owner-occupiers & Tenants



vs.

5 Operator Types

38%
Logistics



19%
Manufacturers

15%
Ecommerce

13%
Retailers

5%
Parcel Couriers

"The logistics industry is experiencing unprecedented disruption, resulting from both gradual and sudden systemic changes to the global economy."

The sample

ASI and Transport Intelligence conducted the survey in the last two weeks of December 2019 and the first two weeks of January 2020. This means the responses did not capture the disruption to global supply chains from the Covid-19 pandemic. We believe the insights are still valid in the long term and many of the existing drivers have clearly been accentuated by the crisis.

We received 123 responses from across 24 countries.

We feel that the sample represents a robust cross-section of the supply chain from which to draw high-level observations.

There was a good range in respondent types: 38% logistics, 19% manufacturers, 15%e-commerce, 13% retailers, and 5% were couriers and parcel handlers.

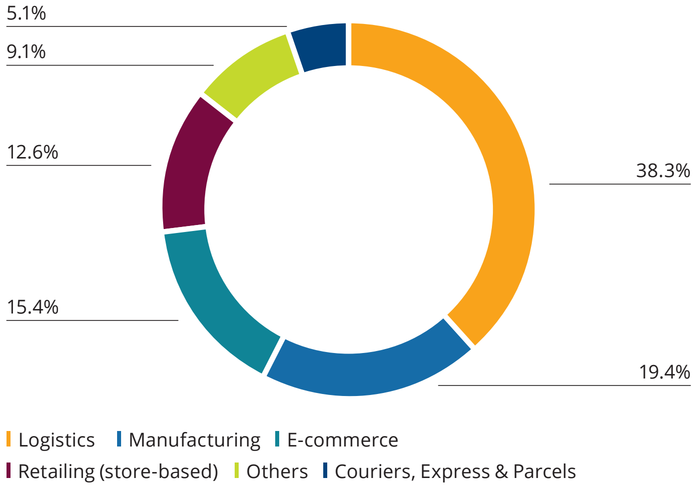
In terms of how the respondents source their properties, 39% said they have a mixture of owner-occupied and leased premises, 30% said they exclusively leased their premises, 26% built their own premises or bought them, while 5% said their customers owned their facilities.

The sample itself gives us some clues as to the potential role investors can play in supporting future supply chain configurations. It is more important than ever to understand the pressures our tenants are under, as real estate becomes more operational. Indeed throughout the survey, the message is clear: tenants and landlords need to work together to adapt to the forces of change influencing their businesses.

Mature businesses tend to lease their premises. This helps to release capital tied up in real estate that can be used more effectively elsewhere. According to the survey, just 30% of respondents exclusively lease their facilities, while 38% have a mixture of both owned and leased. This implies that there are opportunities for investors to play a more active role in the ownership structure in the logistics industry.

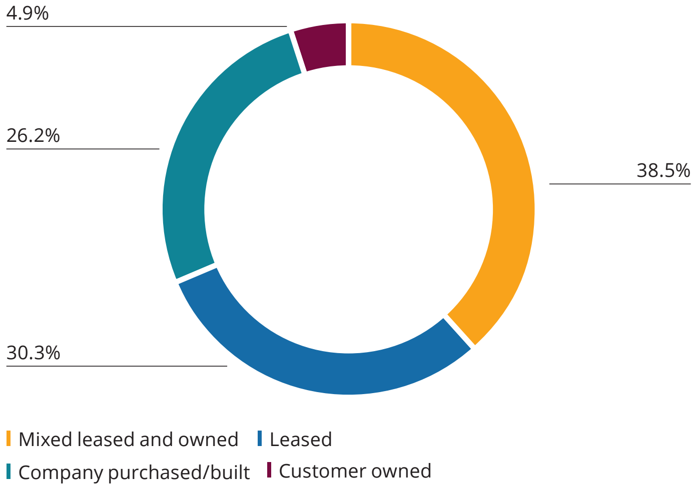
We predict that the share of logistics property being leased as opposed to owner occupied will increase in Europe. The main drivers of this include the need to operate less capital intensive business models, consolidation among the major operators, the need for more investment in technology to enable greater efficiencies and faster processing and the need to be more flexible to adapt to changing consumer demands.

Respondents by business sector



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Premises ownership structure



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Business growth and property constraints

One of the main objectives of the survey was to track how demand for supply chain services is responding to the economic cycle. It also looked at the structural changes to the movement of goods.

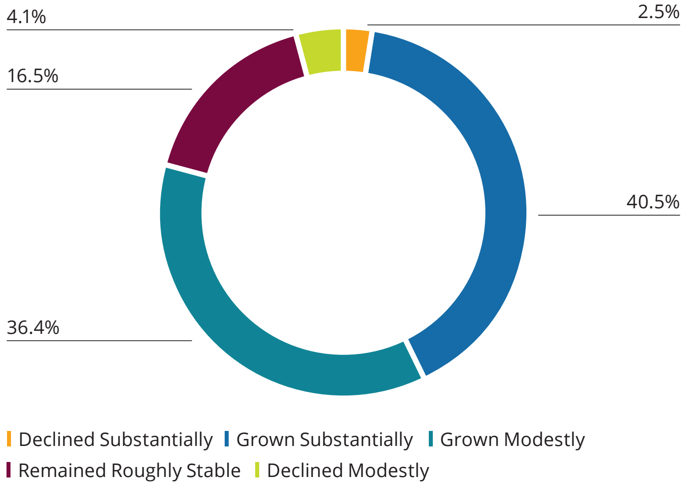
In 2019, Eurozone gross domestic product (GDP) increased by 0.9%, a notable slowing in pace since the 3% rate set in 2017. The economy has been running at two speeds, with manufacturing entering recession, while consumption and services have continued to perform well. At the turn of the year, industrial confidence was at the lowest level since May 2013.

But have our respondents felt this industrial slowdown? The evidence suggests not. Indeed, 77% of respondents said their business activity **had grown either modestly or substantially** in 2019 (76% in 2018). Only 6.6% said their businesses had contracted. Of those who said their businesses had contracted, two-thirds blamed strong competition taking their market share.

Breaking up the retail model into smaller and more frequent purchases through e-commerce has added to the number of times goods are moved. This is more than offsetting the weaker macroeconomic environment. We believe this is a clear by-product of the technological force of change and this is having a structural impact on operators.

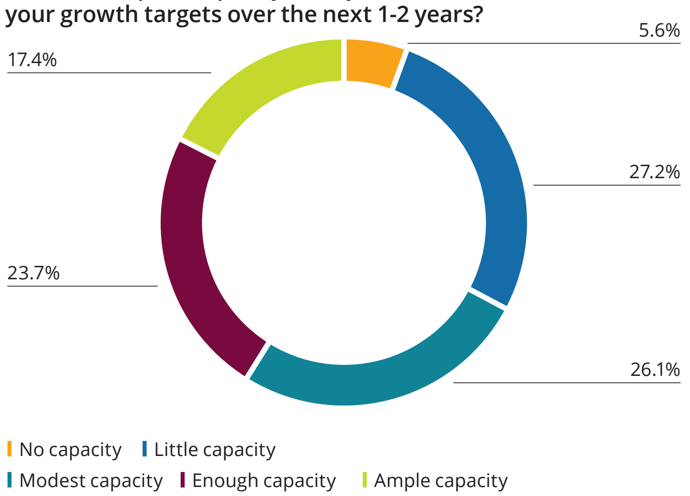
Growing demand for deliveries places pressures on service providers to find capacity to incorporate more contracts. Of our respondents, **59% indicated they had supply constraints across their existing real estate.** This compares with 34% of respondents who indicated supply constraints in our previous survey in 2018. The combination of higher demand and a lack of suitable supply in key cities is a challenge for the industry.

In 2019, how much has your business activity changed?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

How much spare capacity does your business have to meet your growth targets over the next 1-2 years?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"Around 77% of respondents said their business activity had grown either modestly or substantially in 2019."

Business growth and property constraints

In this survey, around 38% of respondents said that a **lack of available property constrained** their business ambitions, almost the same share as in 2018 (38.8%). The lack of good-quality space has not eased. We estimate that the vacancy rate for the European logistics market is below 5%, on average. In many areas, the only source of good-quality space is through development.

Yet, development is not easing the supply constraint. Around 28% of developments were speculative in the third quarter of 2019. Developers are constrained by bank funding costs, while tenants are snapping up most schemes before they break ground.

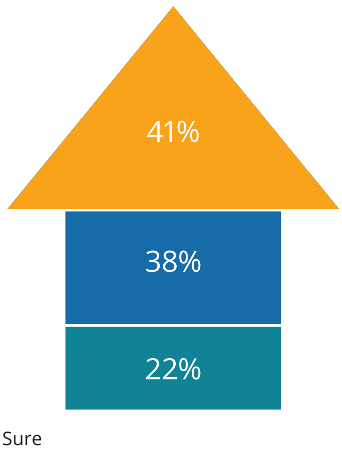
The shortage of space is becoming more acute in urban areas, in particular, and this was backed up by the survey. Of our respondents, **54% believe that demand is going to shift closer to urban areas** in the future, while 21% said they were undecided.

On-demand warehousing – the flexible office model for logistics – is becoming common, with 65% expecting this area to grow in the next five years. This is an increase from 62% in 2018. The push factor for this is the difficulties retailers and their suppliers face in meeting seasonal demand given the 'instant delivery' expectations.

However, a growing driver of the on-demand model could be legislation. There is increasing political focus on how freight enters cities. It will become necessary for operators to share their platforms or use consolidation centres in fringe city locations in order to meet carbon emissions standards and comply with low-emission zoning. This is already happening in Amsterdam.

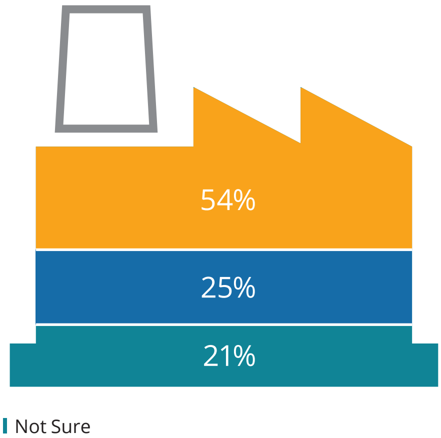
Around 75% of the UK respondents said on-demand warehousing will become important. This is unsurprising and reflects the pressures on land availability experienced in the UK around the major cities.

Is a lack of available logistics facilities restricting your business's growth?



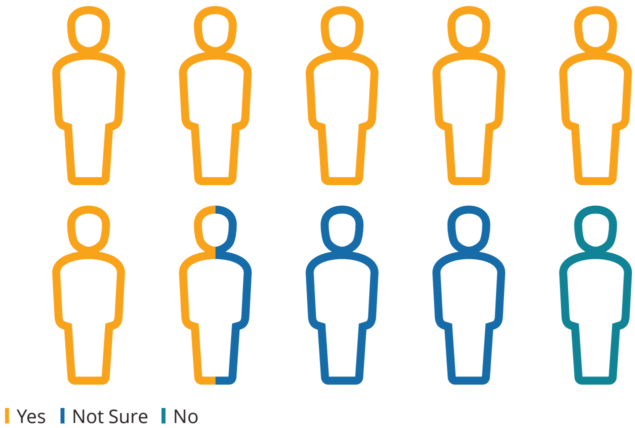
Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Over the next five years, do you expect your warehouse requirements to move closer to cities and urban areas?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Will on-demand warehousing close to city centres, which allows customers to access flexible space on a pay-per-use basis, pick up as a result of this in the next 5 years?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"Around 38% of respondents said their businesses are constrained by a lack of available property."

Case Study: Amazon, France

Since 2007, Amazon has been rolling out its platform across France. This has involved four distinct phases. While there are some large format warehouses, the clear focus of the strategy is to provide direct instant delivery access to consumers and consolidation centres. This is mainly for third-party parcel delivery companies to service regular transactions. As a result, the majority of Amazon's warehousing is in close proximity to the most densely populated areas of France. One of the Amazon Prime Now facilities is in the 18th Arrondissement, highlighting just how strong the requirement is to be in touching distance of consumers.

The four phases are as follows:

Initial roll out of the fulfilment centres

- 2007 – Orleans
- 2010 – Montelimar
- 2012 – Sevrey
- 2013 – Lille
- 2017 – Amiens

New mega centre for Paris

- 2018 – 142,000 square metres (sqm) mega centre delivered in Bretigny-sur-Orge, 30km south of Paris.

Amazon Prime Now facilities

- 2016 – first 4,000 sqm facility on Boulevard Ney in the 18th Arrondissement. This obsolete warehouse was converted to an instant delivery centre servicing Paris and 20 other smaller cities.

Cross dock sorting facilities

- 2017 – two urban sorting facilities of 10,000 sqm each, employing 80 people at each facility. Local third-party delivery companies operate last-touch parcel delivery operations from these facilities and provide additional flexibility for the Amazon Marketplace platform.

1. 15km north west of Paris, close to Charles de Gaulle airport, major motorway intersections
2. 13km south east of Paris close to residential suburbs and major industrial zones.

"Around 54% of respondents believe that demand is going to shift closer to urban areas in the future, while 21% said they were undecided."

Amazon's footprint in France

Source: "Ecommerce trends and implications for urban logistics",
Laetitia Dablanc, Amazon, Aberdeen Standard Investments. December 2019.

Accelerating trends in ecommerce, urban logistics and digitalization

Ecommerce:
Growth in online retail sales is fuelling increased parcel delivery volumes in densely populated areas. “Changing consumer purchasing habits” was considered the largest risk to the respondents’ businesses and 58% said that it was more essential for their facilities to be closer to consumers. The pressures on the industry are clearly centred on supplying major urban areas.

Technology:
There is a clear shift in the adoption of technology from physical machinery to data analytics. 45% of respondents said they are increasing investment in data analytics. This is fuelled by the need to respond to greater requirements for speed and “live” visibility of the location of consumer goods bought online.

Demand:
77% of respondents said that their businesses had grown in 2019, either modestly or significantly. Furthermore, 59% indicated that they have a level of capacity constraint across their existing facilities, limiting their growth potential.

Cross docking:
50% of respondents said it was more essential to have cross docking functionality in the configuration of the warehouse design.
Cross docking enables the rapid throughput of goods through a warehouse, at the expense of storage capacity. This again highlights that demand is coming from the emergence of “instant delivery” capabilities, particularly in urban areas.

Risks to the outlook and cost sensitivity

Last year, the clear message was that technology was creating upheaval across the industry. While it has been manifesting itself in additional contracts for many operators, adapting to change is a costly experience for many.

In contrast, **"changing customer purchasing habits"** dominated the survey in 2019. The powerful impact of e-commerce is sweeping into continental Europe, and our respondents have zeroed-in on this being the main risk to their businesses.

According to real estate brokers Savills, the tipping point at which online retail sales penetration triggers a sharp increase in logistics demand is 10.7%. The current range in Europe is in the mid-single digits in most emerging European economies, rising to around 20% in the UK. The average is approaching this tipping point. With the annual growth rate close to 10%, more and more European markets will be reaching this hurdle in the next two-to-three years. Our survey highlights that the pressures are beginning to weigh on our respondents.

This further reinforces the fact that the pressures are focused on mid-box fulfilment and urban logistics facilities close to the major cities in Europe.

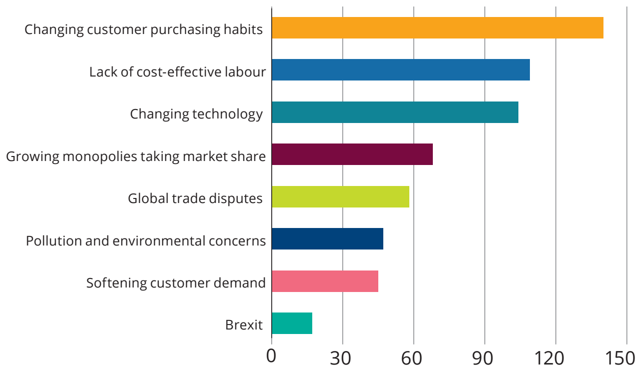
A lack of available cost-effective labour has increased to become the second most significant risk. As unemployment has fallen and as labour-intensive parcel delivery volumes have increased, this has placed greater pressure on human resource. In particular, our survey partner Transport Intelligence estimates that there is a truck driver shortage in Europe in excess of 360,000 drivers. As a result of these staffing shortages, operators are having to source properties in areas where labour supply is more abundant and where they can compete more effectively for resource. This is typically in major conurbations, which further reinforces the urbanisation of freight theory.

Furthermore, in order to adapt and resource their operations, logistics operators will need to improve employee welfare to ensure staff do not leave. We note that improved working conditions should already be an important focus.

Global trade disputes, softening customer demand and Brexit worries feature as the least concerning risks for operators. This supports the data that slowing economic growth and politics are not affecting tenant demand. It also suggests that structural changes to supply chains are more than offsetting the slower macroeconomic environment.

Since the survey was conducted, Coronavirus has emerged as a significant disruption to global supply chains. It is likely that growth concerns would now feature more prominently as a concern for respondents. Global growth forecasts have been halved for 2020 by some analysts, while financial markets are pricing in weaker growth. This is exposing the fragility of global economies to exogenous effects on supply chains, an additional risk to the structural changes to consumption patterns.

What do you believe are the biggest risks to the success of your business?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"The powerful impact of e-commerce is sweeping into continental Europe, and our respondents have zeroed-in on this being the main risk."

Risks to the outlook and cost sensitivity

A rising tide is not floating all boats, and those companies not set up to adapt and grow with the times are suffering. Just as Nortel, Nokia, Kodak and Eddie Stobart experienced, if you do not adapt, your number will be up. It only took five years from 2007 for the iPhone to virtually kill off Nokia.

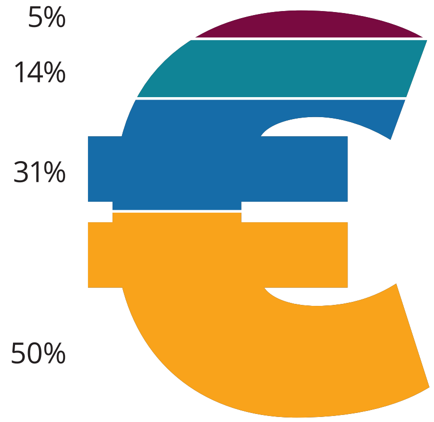
Indeed, of those who said their "business activity had declined substantially", two thirds named "growing monopolies taking market share" as the primary challenge for their businesses.

This reinforces the clear message that growth in the industry does not mean all businesses will thrive. Profit margins are notoriously tight in the industry. Competition for contracts is fierce and only those operators able to adapt, introduce technology and offer the most complete cost effective solutions will survive.

Cost sensitivity remains centred on labour, with 50% suggesting this is their biggest cost centre. This matches the 2018 survey at 48%. Over one-third said premises costs were their biggest overhead. When looking into the data in more detail, only 35% of those who said premises costs were their biggest overhead exclusively lease their properties.

Regionally, 73% of Southern European respondents said that labour costs were their largest cost centre, a substantially higher share than the average. This is unsurprising given that rents are lower in markets where population density is lower and land supply is greater.

What cost is your business most sensitive to?



Energy costs (including fuel for transportation) | Other | Labour / employment costs | Rental and premises costs

Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"Competition for contracts is fierce in the logistics industry. Operators that are able to adapt, introduce technology and offer the most complete cost-effective solutions will survive."

Brexit Risks

It is apparent that July 2016 was just the start of a long and complex journey known as Brexit. We asked our respondents two questions on the subject.

Firstly, we asked if Brexit had resulted in a material impact on their business activity. Around 53% of respondents said that their businesses had felt no effect so far, with 22% stating that Brexit had actually contributed to an increase in business activity.

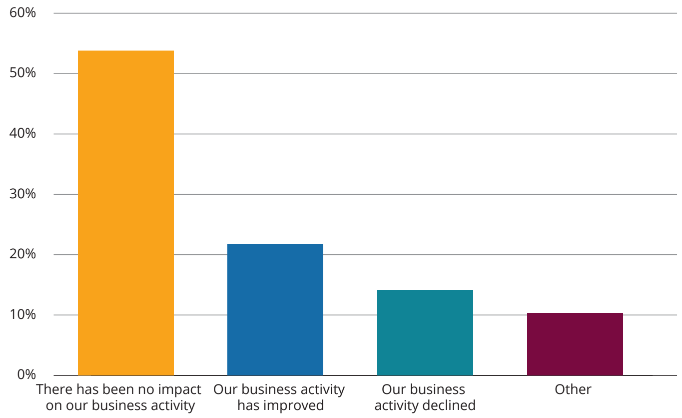
This might have resulted from increased inventory building ahead of the breakdown of the customs union and trade relationships, or the weaker pound resulting in favourable exporting conditions.

Secondly, we asked them if they considered it one of the major risks to their business outlook. Generally, the response was muted, with Brexit coming in as the lowest business risk score.

But digging further into the data, it is clear that there are two countries far more concerned about Brexit than the rest. In the UK and in Germany, 50% of respondents picked out Brexit as their top risk out of the eight available options.

This is clearly driven by the significance of Brexit to those two countries, in particular. Germany is one of the UK's biggest trading partners and this has been front and centre of the negotiations. UK respondents are clearly concerned by what a future trade agreement might look like with the largest economy in Europe.

Has the UK's EU referendum result and the implications for trading relationships and customs arrangements impacted your business to date?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"In the UK and in Germany, 50% of respondents picked out Brexit as their top risk out of the eight available options."

"Around 76% of our respondents confirmed that their businesses are already undertaking initiatives to reduce environmental effects."

Sustainability and employee welfare

According to the Luxembourg Institute of Socioeconomic Research, urban freight is responsible for 30-40% of all transport-related CO2 and more than 50% of harmful particle emissions. In this context, we believe that legislation around the delivery of goods to urban areas will be a major disruptor for the industry this decade.

The European Commission launched a transport white paper in 2011, targeting "near-zero emissions for urban logistics by 2030". This leaves 10 years to make significant progress. Since then, the EU has produced "Sustainable Urban Logistics Plans". These blueprints are designed to guide cities towards reducing the environmental and social impact of goods movements in urban areas. Furthermore, with technology improving through the design of electric or hydrogen-powered vehicles, there are fewer places for distributors to hide from tighter legislation.

The positive message from recent legislation is that there is growing emphasis on the support for the duality of urban freight handling versus environmental protection and social cohesion. We now consider environmental policy in the context of economic sustainability. Cities need to function in order to create socially sustainable environments. Planning policy is adjusting to incorporate the health of mankind and economic prosperity too. We are seeing this manifest itself in industrial consolidation zones in cities such as Amsterdam and Tokyo. Here, sufficient land is provided to support sustainable urban freight infrastructure. But the environmental impact is also being addressed by controlling freight movement through less sensitive areas and via low emissions vehicles.

This theme is growing in importance among our respondents. Around 76% confirmed that their businesses are already undertaking initiatives to reduce environmental effects. This is an increase from 70% in the 2018 survey.

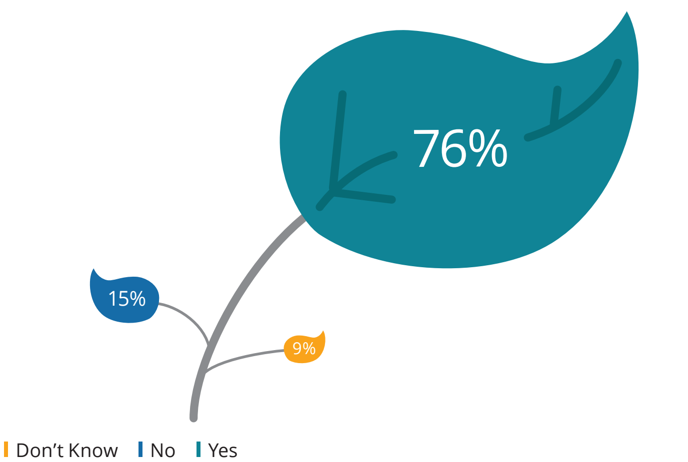
Occupiers are demanding more engagement from landlords on this subject – particularly in the provision of alternative energy supplies, including PV cells (23% of respondents are already using alternative sources of energy). Importantly, the focus is not only on the source of energy but also on reducing energy consumption. Around 22% of respondents indicated they have installed LED lighting and 19% use electric material handling equipment.

The survey suggests that more can be done to improve the environmental and social welfare of buildings with help from landlords. Only 5% of respondents were able to take advantage of shuttle bus services and only 12% reported the provision of electric charging points for cars.

In our question about business risk, the most surprising aspect was the omission of **pollution and the environmental concerns** from the top risks to the outlook. Respondents considered this to be the third-least important risk, despite 76% of them indicating that they are already investing in initiatives to reduce the impact on the environment.

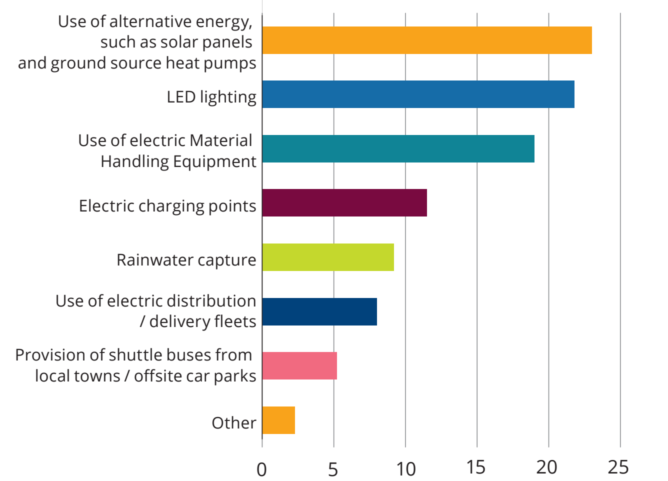
Looking further into the data, there were no specific geographical trends from the respondents on this risk. Perhaps the Dutch respondents were notable by their absence – none of which acknowledged this as a risk. This is surprising as the Netherlands has breached EU nitrogen limits, resulting in a dramatic detrimental impact on nature and biodiversity. The Remke Commission will feedback its recommendations in May 2020. They will focus part of their feedback on vehicle usage, speed limitations and industrial activity. This is just one example of how pollution will lead to major consequences for the movement of goods. The industry needs to start paying closer attention.

Is your business undertaking any initiatives to reduce or offset environmental impacts in your logistics facilities?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

If yes, please indicate which initiatives from the list below:



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

“Around 65% of respondents said their businesses had implemented initiatives to improve working conditions for staff.”

Sustainability and employee welfare

Similarly, information about the 'gig economy' and zero-hour contracts has also ignited a debate about employee welfare. Warehouse activities can be dangerous environments, which mean that logistics tenants face tighter legislation and more media attention.

At the time of writing, Amazon is being criticised in the UK media for allegedly failing to recognise the effects on employee welfare. According to a report in the Guardian in February 2020, more than 600 Amazon workers have been seriously injured or narrowly escaped an accident in the past three years. This has prompted calls for a parliamentary inquiry into safety. Trade union GMB intervened in support of Amazon employee welfare, while Labour leadership contender Lisa Nandy has also joined calls for tighter regulation.

In this context, it is unsurprising that 65% of respondents said their businesses had implemented initiatives to improve working conditions for staff. Only 11% have not and were not planning to. These numbers will only move in one direction and landlords need to be proactive in engaging with tenants to ensure staff are happy. Labour shortages are significant in the industry, particularly with truck drivers, and companies are therefore incentivised to take employee welfare seriously if they want to remain operational.

Case Study: dnata City East – Heathrow

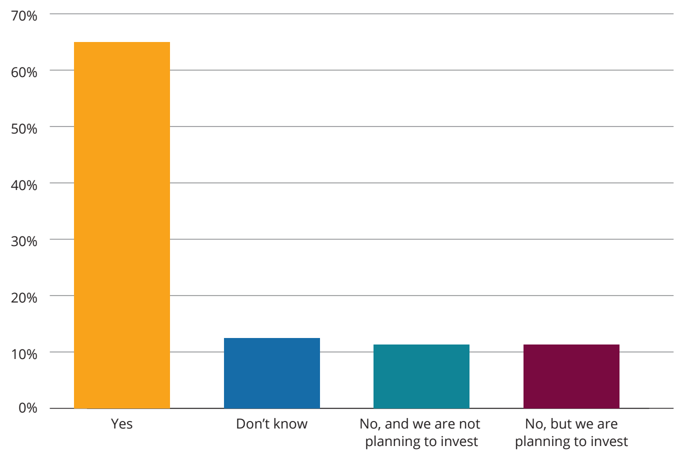
dnata is the largest of the three independent cargo handlers at Heathrow. It has a new 11,500 square metre facility at dnata City East. This operates in conjunction with a recently completed 25,000 square metre warehouse, which handles Virgin Atlantic Cargo and Delta Cargo's airfreight at Heathrow.

From a sustainability perspective, it rates highly. The facility will use solar PV panels, air-source heat pumps and electric vehicle charging. It is targeting environmental standard BREEAM's 'Very Good' rating as a minimum.

However, the focus for dnata has been the employee welfare aspect of the facilities. dnata is focusing on welfare because hiring staff is challenging when the economy is performing and unemployment is frictional. For dnata, this has the double effect of motivating staff in a positive environment, while increasing staff retention.

In the larger warehouse component of dnata City East, the company has created office space that is of central London standards. The welfare facilities for both warehouse and office staff are market leading – not just in terms of warehouse standard, but all industry standards. This includes a gym for employees to use at their leisure.

Is your business undertaking any initiatives to improve working conditions?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

Warehouse design requirements

Modern warehouse requirements allow us to learn more about how the forces of change are affecting the industry. In the context of what we have learned about the risks operators face, the changing physical requirements of logistics facilities begins to make more sense.

In terms of warehouse requirements, respondents considered **automated technology (80%) and cost-effective space (72%) to be increasingly important.** Automation was also high in the 2018 survey, but it has taken another leap forward in prominence this time. Technological solutions are improving, labour is becoming more expensive and scarce, and the speed of delivery is becoming more important. These points support the rationale for greater automation.

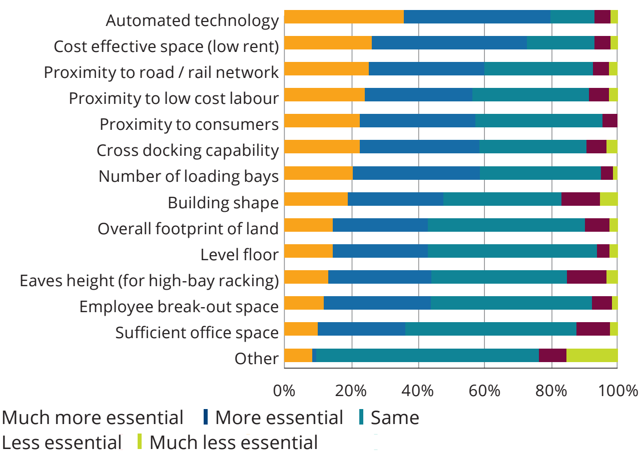
Associated with this theme of automation, it is interesting that the importance of **proximity to low cost labour** declined. Only 24% indicated they found it much more essential. Businesses aim to be lean and adopting automation means the need for staff is likely to fall.

Around 38% of respondents said the number of loading bays was increasingly important – one of the biggest increases in the survey. Given the increasing importance of e-commerce and urban freight movements in the survey answers, this is not surprising. Time is money in logistics and there is a greater focus on shifting goods through the warehouse rapidly. It might imply that cross-dock facilities should be increasingly considered as the preferred structure for speculative developments close to cities.

The height of the eaves and the shape of the building were of least importance in this survey. Operators could compromise on building design if it met the other important requirements of location and accessibility. The height of the eaves is less important for higher frequency, urban and parcel-handling functions. Speed is more important here, rather than the storing volume. That said, there are examples where some occupiers now want to use mezzanine layers in their fulfilment warehouses.

Sufficient office space draws little attention. This is slightly surprising given that many smaller e-commerce operations often like to keep all the business functions under one roof. This helps to increase efficiency and cost effectiveness. Given the sample is focused on the bigger operators in the industry, the office functions will most often be separate functions in consolidated locations in major cities.

Are the features listed below becoming more or less essential to you warehouse function?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

"Around 38% of respondents said the number of loading bays was increasingly important – one of the biggest increases in the survey."

Technology and innovation

In line with 2018 results, the most recent findings suggest that warehouse management systems, and labelling and packaging, have been an area where respondents have already invested substantially (68% and 65%, respectively). Operators have made significant investments into physical technology across their supply chains in recent years. As per the last survey, the 2019 survey shows that while technology is the major disruptor to the industry, it is also the solution.

The one area of physical technology that remains a growing feature is robotics. Those respondents who are already invested increased from 10% in 2018 to 25% in 2019. A further 39% indicated they are still planning to invest. The barriers to entry for robotics include being able to absorb the cost, underwriting the potential return on investment, sourcing the right equipment, and testing it.

This year, it is clear that the emphasis is switching to finding more efficiencies in the supply chain through better data analytics and digitalisation. Indeed, it is clear that operators are shifting attention away from physical automation towards data-driven strategies to improve their supply chain profitability. These will include blockchain, artificial intelligence, the internet of things, and other platforms offering accelerated parcel tracking and digitalisation of systems.

Data analytics, the internet of things and **warehouse automation** are growing areas of current investment, according to the 2019 survey. When comparing these findings with those from 2018, it becomes obvious that **data analytics** is gaining more traction (28.8% in 2018; 45.2% in 2019).

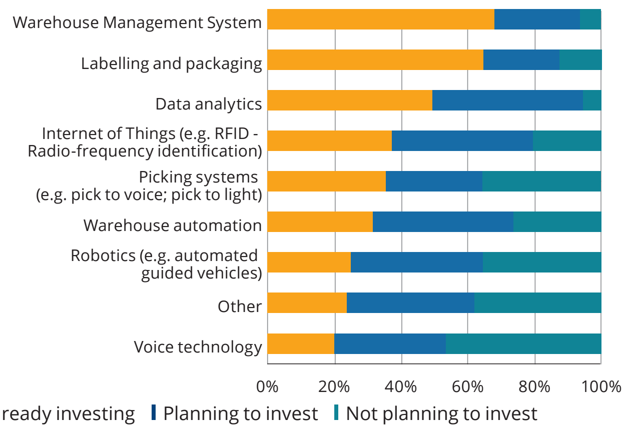
Digitalisation enables faster response times for new orders. Given that a growing share of operator contracts involve e-commerce, speed is increasingly critical. These contracts , which are reliant on information processing and transparency with customers all the way through the supply chain, are a growing area of focus for the respondents. Indeed, data is increasingly seen as a commodity itself, and logistics operators are trying to use a global network of information relating to the flow of goods to create new revenue streams.

Greater digitalisation of the supply chain is also necessary for absorbing unwanted and returned goods through reverse logistics. It is more efficient if the item can be traced 'live' from cradle to grave and back again. We estimate that around 15-45% of goods bought online are returned to the seller, compared with just 9% of goods returned from in-store purchases. It also depends on the type of product. Estimates of how much the reverse logistics industry is worth per annum are as high as $642 billion globally, according to data gathered from Statista.

However, according to Supply Chain 247, 42% of retailers reported that they do not fully understand the financial impact of reverse logistics. In context of the substantial cost and inefficiencies of running large reverse logistics operations, it seems logical that more investment in data analytics would support this area.

"The 2019 survey shows that while technology is the major disruptor to the industry, it is also the solution."

Have you already invested or are you pursuing investment in any of the following areas?



Source: Transport Intelligence, Aberdeen Standard Investments. December 2019.

mirror_mod.use_x = False
mirror_mod.use_y = True
mirror_mod.use_z = False
elif _operation == "MIRROR_Z":
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True
#selection at the end -add back the deselected mirror modifier object
irror_ob.select= 1
odifier_ob.select=1
py.context.scene.objects.active = modifier_ob
rint("Selected" + str(modifier_ob)) # modifier ob is the active ob
#mirror_ob.select = 0

Case study[1]: DHL invests €2 billion in digitalisation platform

Having reported strong profit growth across all five business units, and particularly in express parcels in 2019, DHL stated that it cannot perform without further investment in its platform. For many businesses this would involve increased spending on physical infrastructure. However, the focus of their investment plan is on the creation, storage and processing of data.

Launching "Strategy 2025", DHL announced the plan to invest €2 billion in speeding up the digitalisation process. This is designed to capture the growth in e-commerce, in particular. In the last five years, DHL has invested heavily in building its physical infrastructure to meet future requirements. Now it is creating a better understanding of the use and efficiency of its physical supply chain network. This is being delivered through digitalisation as opposed to warehouse technology.

According to DHL, the new digitalisation project will involve modernising existing systems, integrating new technology and retaining staff. Investment will be in new technology designed to increase the automation of data transactions and therefore the speed of warehouse operations. Improved data analytics should also optimise delivery routes and predict volumes more effectively. The key message is about growing market share as efficiently and quickly as possible.

DHL predicts 4-5% growth in express, time-dependent, international market share and 5-10% compound annual growth in e-commerce services revenue over the next five years.

[1] Information regarding DHL's plans to invest in its digitalisation pltform was gathered from press releases and not from the survey.

Conclusions and Key Observations

Our first survey highlighted the stronger real estate market conditions developing in the logistics sector. These long term market attributes have only gained strength, according to the second survey. It has also continued to add colour and a depth of understanding to the challenges faced by warehouse operators across Europe.

It is clear that logistics operators are under intense pressure to adapt. The changing demands of globalisation, urbanisation, changing consumption patterns and the growing constraints of environmental and social legislation all require their attention.

The challenge for landlords is that the rigid nature of physical real estate is part of the mismatch between the need for supply chains to adapt and their inability to do so. To mitigate any loss of income, landlords need to engage with tenants throughout the duration of their lease agreement to ensure their facilities are meeting their requirements, identifying any complications arising from changes to their business model.

We see increasing evidence of landlords helping their tenants to source the sustainability features they desire, or to incorporate facilities supporting employee welfare. In a world where real estate is becoming more operational and therefore cash flows are less certain, landlords should treat tenants as partners to prevent downside risks from emerging.

In the last survey, we concluded that it would be important for investors to continue to track trends in urbanisation, technology disruption and supply chain risk. While we would reiterate the importance of these three factors, we would recommend adding legislation to that list. The forces of change on urban infrastructure are intense and cities are responding proactively. For real estate investors, they need to consider the environmental and social impact of their buildings to ensure they limit their exposure to potential regulation or at least ensure it is appropriately priced in.

Key observations:

- The majority of disruption in the industry is specifically about e-commerce, but this is having a knock-on effect for the whole industry. The pressures of trying to adapt to a more fragmented 'instant delivery' supply chain are creating property shortages in the most pressured locati ons near major cities.
- The combined forces of urbanisation and e-commerce are driving demand into more urban locations at a rapid pace. This is creating a demand and supply mismatch. This will need local government intervention to ensure cities are provided with the economic infrastructure they need to survive, while minimising the detrimental effects on the environment and social infrastructure.
- Many tenants are implementing sustainability features. Yet in terms of the risks to the outlook, pollution and environmental challenges are less concerning than other more immediate disruptors. In an industry experiencing substantial change, the focus is clearly on efficiencies and adapting to changing demand. Are operators prepared for a decade of stricter legislation?
- There is a switch taking place between investment in physical technology and data analytics. Operators have invested heavily in physical technology in recent years and continue to do so. However, with margins still tight and expectations for 'instant delivery' rising, the emphasis is switching to the implementation of data analytics and digitalisation to drive responsiveness and efficiency gains.
- Legislation will force companies to adapt to new minimum standards on emissions and employee welfare conditions – particularly in urban areas where social and economic infrastructure begin to overlap. If operators are not thinking ahead, they could be regulated out of sensitive areas, despite this often being the optimal location for their infrastructure.

The value of investments and the income from them can go down as well as up and your investor may get back less than the amount invested. Real estate is a relatively illiquid asset class, the valuation of which is a matter of opinion. There is no recognised market for real estate and there can be delays in realising the value of real estate assets

Important information

Contact Us

To find out more, please speak to your usual contact or visit our website aberdeenstandard.com.

Other important information

Visit us online
aberdeenstandard.com
121042038 06/20 | GB-030620-118521-4

Aberdeen Standard Investments