

LOGISTICS INDEX REPORT

CartonCloud.com

Foreword

Over the past two years, we've seen significant changes across the logistics industry.

The pandemic rapidly accelerated trends already forming across supply chains, increasing e-commerce demand and expectations for omnichannel fulfilment and last-mile tracking.

Global disruptions and workforce shortages were met with bold technological advancements in automation and robotics, which led the industry to redefine operations, and what the logistics sector workforce looks like.

Welcome to the March 2022 CartonCloud Logistics Index Whitepaper.

The CartonCloud Logistics Index captures the sentiment and industry opinions at a snapshot in time, which we can use to track changes and explore current trends and issues impacting our industry.

This whitepaper captures industry sentiment regarding the current economic climate and business growth potential, as well as hiring opportunities in the coming months. Following periods of record demand, we hear from industry members about their business plans to boost growth in the coming months.

We ask what companies are looking for from technological investment and explore how technology can support businesses to grow and meet changing customer expectations. What are businesses looking for? What hurdles must they overcome, and what challenges or opportunities are they expecting in the year ahead?

For those who are new to the CartonCloud Index, welcome. You can access our past whitepapers and participate in the latest surveys via the CartonCloud website Logistics Index Archive page.

To our return respondents and readers, welcome back and thank you for your ongoing support and participation.

Vincent Fletcher Founder, CartonCloud

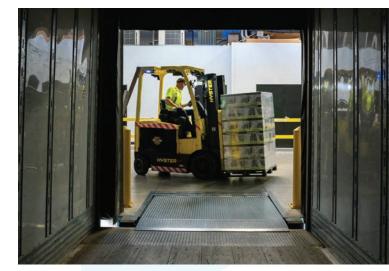


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CARTONCLOUD LOGISTICS INDEX REPORT MARCH 2022



WHAT IS IN STORE FOR THE LOGISTICS INDUSTRY IN 2022?

After a year of unprecedented demand and significant changes in consumer and B2B market behaviour, industry sentiment remains high.

Last year, logistics supply chains hit the global spotlight. Unprecedented demand, paired with delays and disruptions caused by the worldwide pandemic and skilled workforce shortages, resulted in significant public awareness and discussion regarding supply chain and logistics operations.

E-commerce activity soared, and last-mile delivery expectations evolved to reflect the needs of communities in lockdown and isolation, which, in turn drove greater expectations for tracking, reporting, and flexible options in ordering and delivery. At CartonCloud, we saw a 63% YoY increase in customer transaction volumes in 2021, with a 22% increase in the final quarter.

AS LOGISTICS PROVIDERS CONTINUE TO GRAPPLE WITH AN UNPARALLELED RISE IN DEMAND, NEW CHALLENGES CONTINUE TO EMERGE IN 2022.

The global economy is reeling from the flow-on impact of Russia's invasion of Ukraine. Global oil prices have skyrocketed, causing fuel prices to soar — high e-commerce demand is predicted to continue, and consumer expectations for multi-channel ordering and delivery drive businesses to adopt new technology and offer additional services. While business confidence across the logistics industry is higher than in Ql 2021, sentiment for growth opportunities has dropped slightly since the end of last year. The current industry outlook shows as demand begins to stabilise at a new norm, companies are looking internally to drive growth and revenue in the coming 12 months.

This quarter, we explored the most valuable outcomes that logistics operations are hoping to gain from implementing new technology and what, if anything, is holding them back from implementing new systems.

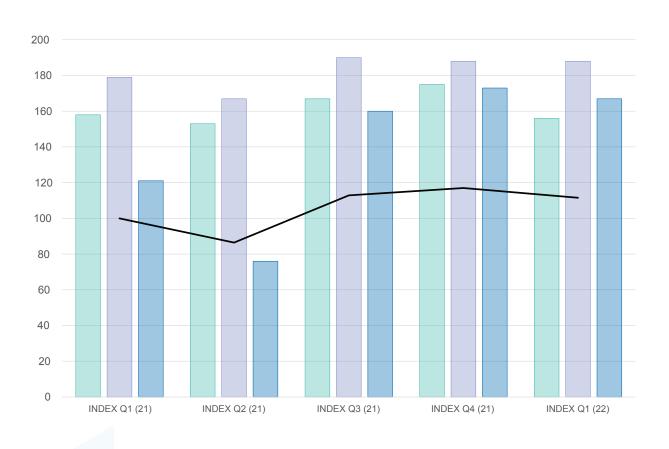
Businesses are looking to invest in technology and new assets and how they can use business data analysis to drive revenue growth. Concern for workforce shortages, increased operating costs, and global supply chain delays continue to drive interest in technology adoption to boost service capacity.

While technology adoption may relieve many of these concerns, respondents cited high entry costs and set up fees and difficulty choosing the right system for their business as the two main barriers preventing technological investment.

WANT TO KNOW MORE?

View the full whitepaper report below.





TRACKING LOGISTICS INDUSTRY SENTIMENT ACROSS 2021

CartonCloud Logistics Industry Sentiment Index

The CartonCloud Logistics Index is a finger on the pulse of the logistics industry

Tracking sentiment over time across current economic outlooks, perceived business growth, and hiring potential for the coming months. While the overal index has dropped slightly from the previous quarter, this index shows a YoY increase in industry sentiment.

Industry optimism regarding the current economic climate remains high, with a slight YoY increase in optimism compared to early 2021. Expected business growth remains steady across the board with a positive outlook for the coming months.

While previous reports have highlighted the shortage of experienced workforce and multilicensed drivers to an issue in recent times, hiring optimism has remained high throughout mid-late 2021, and into 2022.

THE INDEX — HOW IT WORKS

The CartonCloud Logistics Industry sentiment index is calculated based on responses to the following three questions, which are included in each survey:

- 1. How do you expect your business to perform in the next six months?
- 2. What is your view of the current economic climate for your business?
- 3. Based on the economic climate and the performance of your business, how would you rate the likelihood that your business will bring on additional staff within the next six months?

METHODOLOGY

The survey asks participants to respond to each question on a 1-5 scale, from very poor to very good. Responses for the first three questions in the quarterly survey are combined (business conditions, growth prospects and hiring plans) based on the response values (very good = 5, to very poor = 1) to calculate the overall index value. The relative scores across these three questions are combined and compared over subsequent periods.

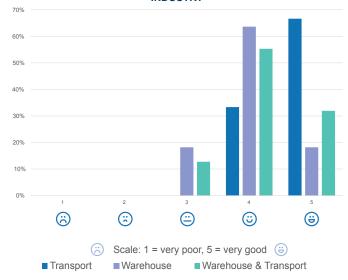
An index of 100 indicates that overall sentiment is the same as the baseline from QI 2021. An index of greater than 100 shows that optimism is higher than Q1 2021, and likewise, an index of less than 100 indicates that pessimism is more prevalent than Q1 2021.

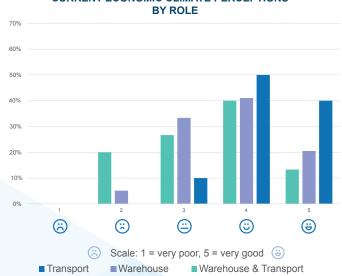
Supervisor and manager roles recorded the highest optimism, with 90% viewing the current economic climate as good or very good — up from 44% in early 2021.

BY INDUSTRY 70% 60% 50% 40% 30% 20% 10% 0% $\overline{\mathbf{i}}$ $(\ddot{})$ (<u>...</u>) (ï) (;) Scale: 1 = very poor, 5 = very good (3) Transport Warehouse ■ Warehouse & Transport

CURRENT ECONOMIC CLIMATE PERCEPTIONS

BUSINESS GROWTH EXPECTATIONS BY INDUSTRY





CURRENT ECONOMIC CLIMATE PERCEPTIONS

CARTONCLOUD LOGISTICS INDEX REPORT MARCH 2022



LOGISTICS INDUSTRY MARCH 2022 SNAPSHOT

Forecasting the most valuable actions to drive growth — and the top issues to overcome in the coming 12 months.

From a year of unprecedented industry demand, our industry is establishing new avenues for growth and adjusting to current concerns as a 'new normal' begins to form.

The logistics industry has shown incredible resilience over the past year. Overcoming global supply chain disruptions and workforce shortages, responding to unprecedented demand, and adapting to meet expectations for faster and more flexible delivery options.

Throughout 2021 and into 2022, we're continuing to see high optimism for growth, hiring and business potential — with new growth opportunities and new challenges on the horizon.

Last year companies were looking at maximising the industry boom by offering new services and tapping into e-commerce fulfilment. This year, as the market stabilises, companies are looking at how they can increase operational efficiencies and workforce capacity to drive revenue growth.



Driving Revenue Growth

There is a significant shift from expanding services to maximising wider market activity to companies now focusing internally on optimising operations.

At the start of last year, respondents selected activities they anticipated would drive revenue growth in the coming year, with the most popular responses being:





Tapping into e-commerce B2C fulfilment

Expanding their range of services offered



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general increase in market demand

This year, respondents were asked to select the single most valuable activity they believed would drive revenue growth in the next 12 months. The top selected activities for 2022 were;





Investing in new assets

Investing in technology



Using data for future planning

Interestingly, when looking back to 2021, using business data to plan ahead was also a key driver in business decisions to invest in new technology.

We're looking to use data more effectively to plan for what we need, when we need it.

- Combined Warehouse/Transport operations.

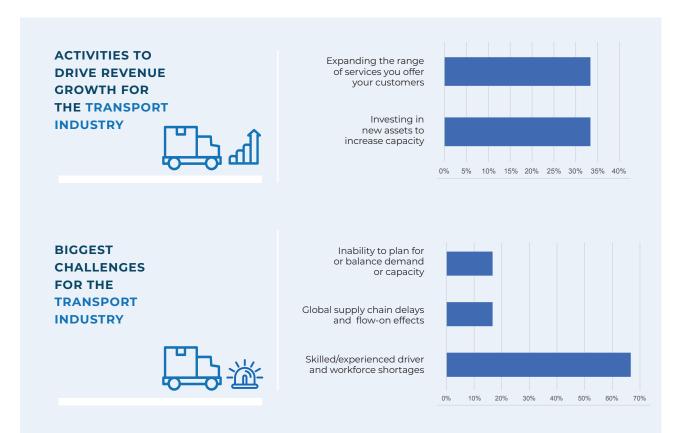


Transport Industry Snapshot

Members of the transport industry had the highest optimism for business growth over the coming months, with 100% of March 2022 respondents forecasting business growth in the coming months.

The top actions selected to build revenue growth focused on the building capacity to take on more business; expanding the services offered to customers, and increasing assets to boost capacity.

The transport industry has expressed recent concerns over driver and experienced workforce shortages on a global scale — a top concern in 2021. This concern continues to be a key issue impacting the industry. While transport businesses showed intent to increase assets and offer new services, the majority of respondents forecast overcoming workforce shortages as the top issue they would need to overcome in the coming months.



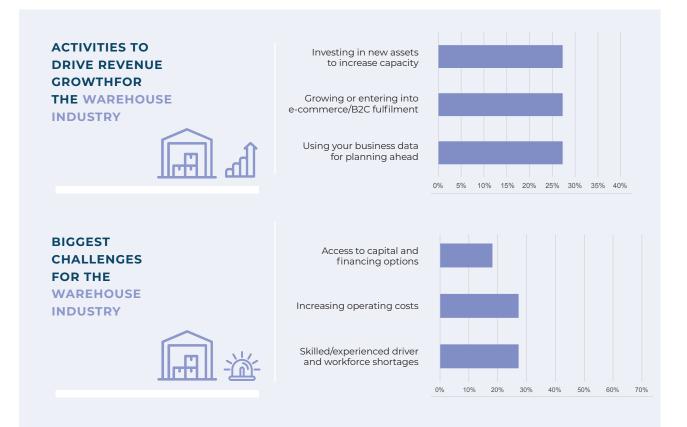
Warehouse Industry Snapshot

While warehouse respondents show similar optimism for the current economic climate and outlooks for business growth in the coming months, the warehouse industry was significantly less optimistic about hiring potential in the coming months.

Despite leaps in automation and robotic technologyleading global headlines and industry news over recent months; investing in automation and robotics was not selected by any warehouse respondents as their primary action to drive revenue growth over the coming months.

For warehouse respondents, investing in new assets, entering into B2C and e-commerce fulfilment, and using business data to plan ahead were the top selected actions to drive revenue growth. The main challenges forecast to face the industry in the coming months were seen to be increasing operating costs, and skilled workforce shortages.

Warehouse respondents also saw the main value of investing in technology systems and software as a means to increase their workforce capacity and reduce overheads — which will be explored further in the next section of this whitepaper.



Combined Warehouse/ Transport Operators Industry Snapshot

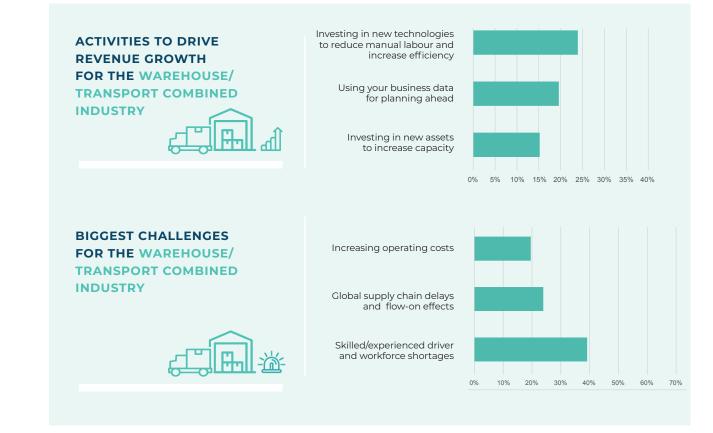
The majority of responses for our March 2022 industry survey were from warehouse and transport combined operations. This group showed high optimism for business growth, the current economic climate and hiring potential in the coming months. The results suggested businesses were looking to get the most from their current workforce, with new assets and technology adoption, while looking further into business data use to plan ahead for the future.

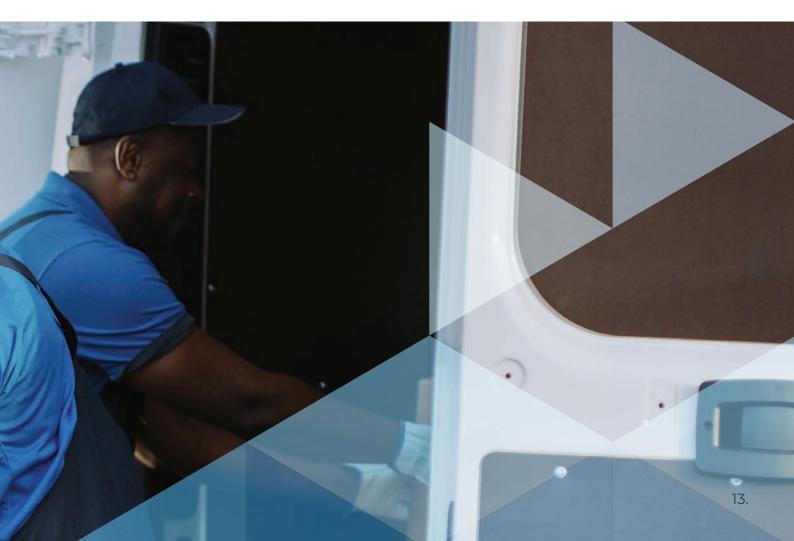
For combined warehouse and transport operators, the challenges predicted to face the industry in the coming months reflected the same top choices from early 2021. The biggest challenge forecast by this group was overcoming the skilled workforce shortages, followed by global supply chain delays, and increased operating costs.

In order to overcome workforce shortages, supply chain delays and increased costs, warehouse and transport combined operators are looking to technology to reduce manual labour, looking to use business data to plan ahead, and invest in new assets to increase capacity.



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Technology Adoption

What benefits are businesses looking for from technology, and what's holding them back from investing?

With technology adoption becoming more common in all areas of supply chain and logistics, we asked members of the industry to share what benefits they were looking for from their tech investments.

From implementing new software or business operating systems to providing wifi for the warehouse, buying new scanners, mobile computers, and other areas of technology — the expected benefits of investing in new technology can vary greatly, depending on what outcomes the business is looking for.

This report found that across the board, the top benefits expected from investing in new technology were;



Do More With What You Have, and Keep Customers Happy

Interestingly, the expected benefits of technology implementation also align with the key activities businesses forecast for driving revenue growth in the coming months; increasing services offered, and boosting customer service. Technology adoption was also seen as a means to boost workforce capacity, overcoming one of the main concerns facing the industry.

However, the top expectations varied slightly between industry types, suggesting a variance in technology use and value perception within the industry operations. This report found that across the board, the top benefits expected from investing in new technology were;



Transport providers sought to reduce overheads, and increase services.



Warehouse providers saw the most significant benefits in increasing workforce capacity, and reducing overheads.

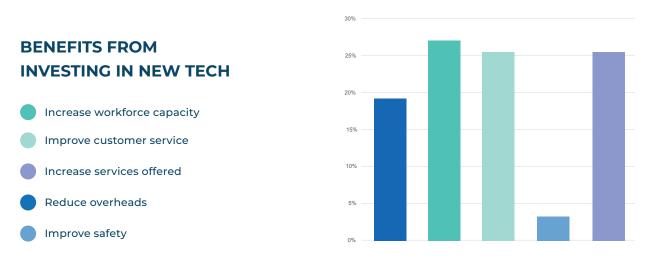


For combined Warehousing and Transport operators, the most popular expectations for technology were to increase workforce capacity, and improve customer service.

Robotics and Automation

While there appears to be high intent to invest in technology for increased services offered, workforce capacity, and customer service — this does not carry over to attitudes toward the adoption of robotics and automation.

Interestingly, although investing in new assets and technology were seen as high-value actions for revenue growth; investing in automation and robotics came in low on the list of key actions to drive growth in the coming months. For warehouse respondents, this was not selected at all.



Barriers to investing in technology

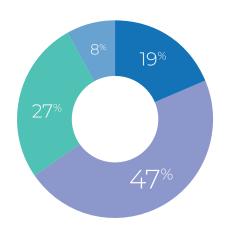
The main barriers preventing companies from investing in technology now, remain consistent with the barriers companies cited in 2021.

In early 2021, our industry report showed financial cost and set-up was the main barrier preventing members of the Warehouse industry, while Transport industry members saw insufficient knowledge and skills for tech as the main barrier.

One year on, in March 2022, the main barriers provided by industry members were entry cost and set-up, and not knowing what technology was right for their business.

ROADBLOCK FROM INVESTING IN NEW TECH

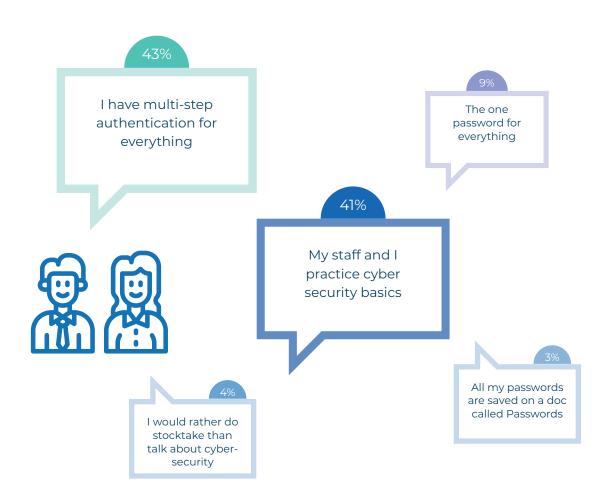




Let's talk about cyber security

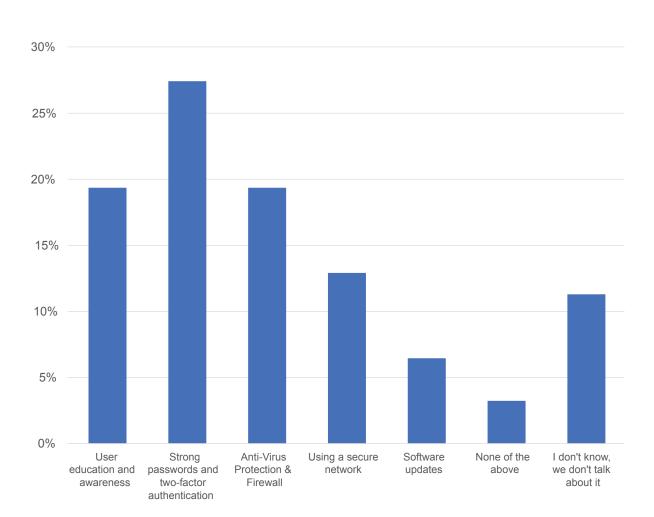
In May 2020 logistics leaders Toll Group were hacked by a cyber attack. In February 2022, industry giants Expeditors International also fell victim to cyber-attacks. They were not alone, and these cases among others brought cyber security again to global headlines.

We asked members of the industry about their own cyber safety practices and what they thought about cyber safety.



While the majority of respondents had basic cyber security or multi-step authentications in place, almost 1/3 of supervisor roles said they would rather do stocktake than talk about cybersecurity.

Most companies were also looking at means to increase their cyber security in the coming months; by implementing multi-step authentication, providing staff education on cyber security, and implementing anti-virus protection and firewalls. Only 15% of respondents said they didn't know, or would do none of the options.



STEPS TO STRENGTHEN CYBER SECURITY





SUMMARY

As we move toward the EOFY in 2022, industry sentiment remains high. With demand begining to stabilise and set at a new norm for the sector, it appears many companies are looking internally to drive growth and revenue in the coming 12 months.

Workforce shortages, paired with global delays and disrputions has led more and more companies to look at technology and automation to increase their workforce capacity, and offer greater customer service.

While technology adoption may relieve many of these concerns, many companies are unsure of the correct solution for them, and high entry/ set up costs form a significant barrier to many in taking the leap to invest.

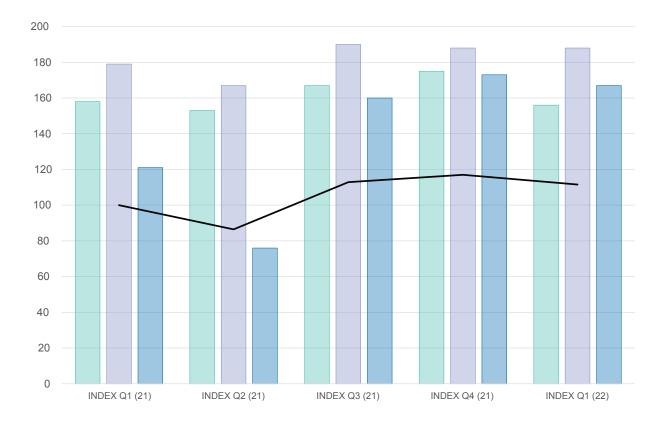


APPENDIX



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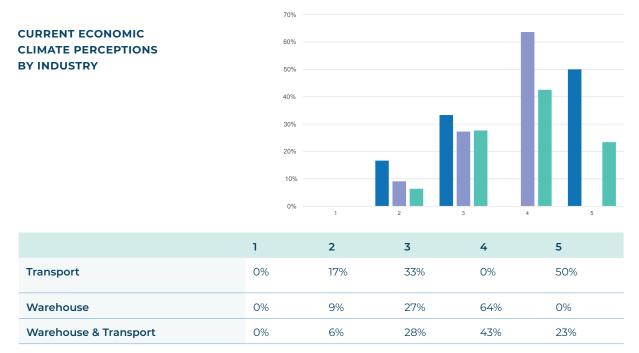
CARTONCLOUD LOGISTICS INDEX SENTIMENT TRACKING 2022

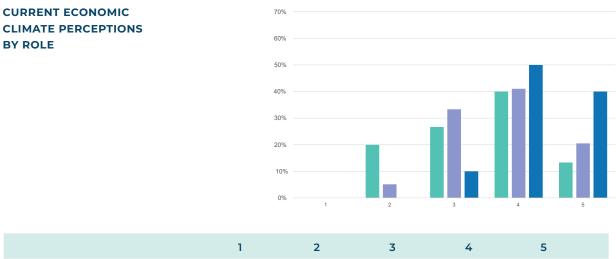
	INDEX Q1	INDEX Q2	INDEX Q3	INDEX Q4	INDEX Q1 (22)
Question 1	158	153	167	175	156
Question 2	179	167	190	188	188
Question 3	121	76	160	173	167
Overall Index Score	100	86	113	117	112

Question 1:

What is your view of the economic climate for your business?

1= very poor, 5=very good)





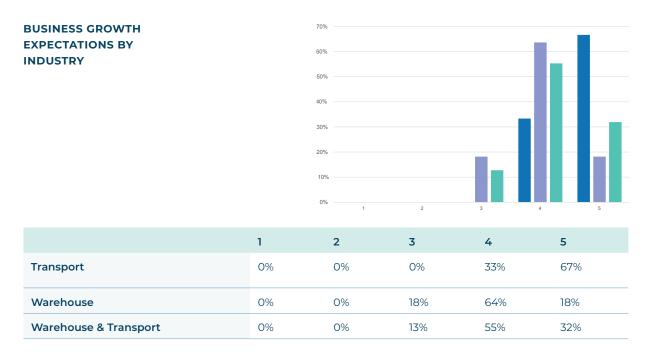
Operations / Driver / Warehouse	0%	20%	27%	40%	13%
Senior Manager/ Business Owner	0%	5%	33%	41%	21%
Supervisor / Manager	0%	0%	10%	50%	40%

Appendix B

Question 2:

How do you expect your business to perform in the next six months?

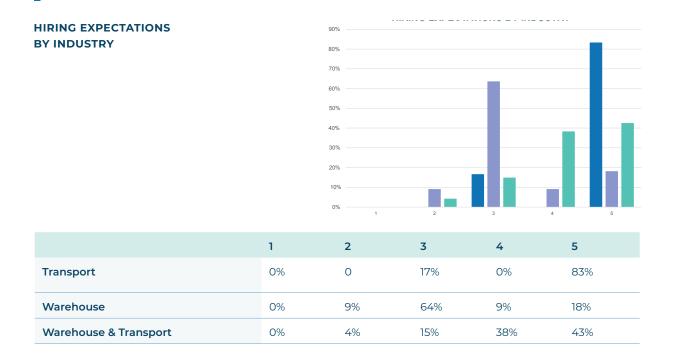
1= very poor, 5=very good)



Appendix D

Question 3:

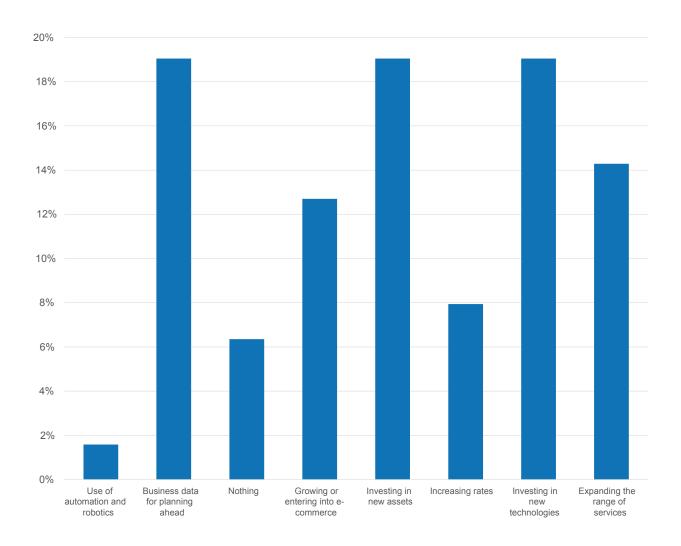
Based on the economic climate and the performance of your business, how would you rate the likelihood that your business will bring on additional staff within the next six months? (1 = very low, 5=very high)



Appendix E

Question 4:

Which of the following activities, if any, are you planning in the next 12 months in order to drive revenue growth?



ACTIVITIES TO DRIVE REVENUE GROWTH

Use of auto- mation and robotics	Business data for planning ahead	Nothing	Growing or entering into e-commerce	Investing in new assets	Increasing rates	Investing in new technologies	Expanding the range of services
2%	19%	6%	13%	19%	8%	19%	14%

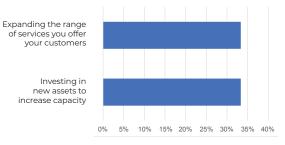
ACTIVITIES TO DRIVE REVENUE GROWTH BY INDUSTRY

ACTIVITIES TO DRIVE REVENUE GROWTH FOR THE TRANSPORT INDUSTRY

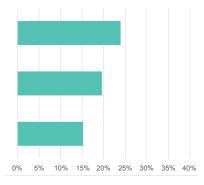
ACTIVITIES TO DRIVE

REVENUE GROWTH FOR

THE WAREHOUSE INDUSTRY



Investing in new assets 0% 5% 10% 15% 20% 25% 30% 35% 40%



e-commerce/B2C fulfilment								

to increase capacity

Growing or entering into

Using your business data for planning ahead

ACTIVITIES TO DRIVE REVENUE GROWTH FOR THE WAREHOUSE/ **TRANSPORT COMBINED** INDUSTRY

Investing in new technologies to reduce manual labour and increase efficiency

Using your business data for planning ahead

Investing in new assets to increase capacity

	Use of auto- mation and robotics	Business data for planning ahead	Nothing	Growing or entering into e-commerce	Investing in new assets	Increasing rates	Investing in new technologies	Expanding the range of services
Transport	17%	0%	0%	0%	33%	0%	17%	33%
Warehouse	0%	27%	0%	27%	27%	9%	0%	9%
Warehouse & Transport	0%	20%	9%	11%	15%	9%	24%	13%

Question 5: What will be the biggest challenges facing your business in the next 12 months?

BIGGEST CHALLENGES BY INDUSTRY

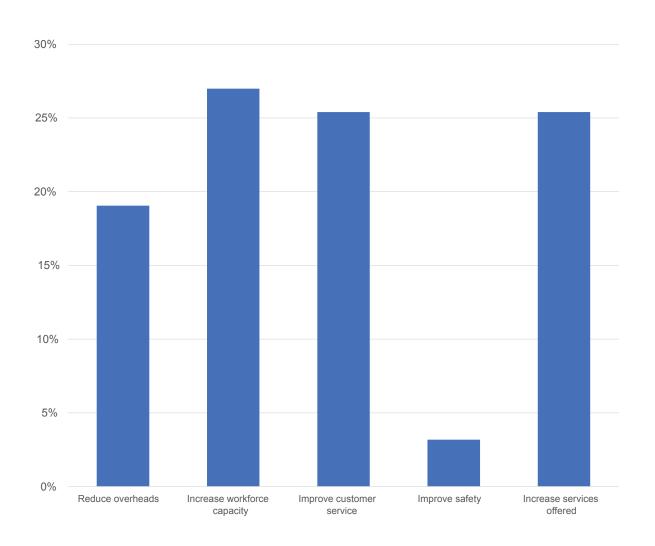


	Skilled and workforce shortages	Planning for demand of services and capacity	Increasing operating costs	Decreasing prices for logistics services	Increased	Access to capital and financing options	Govern- ment regulations and comp- liance	Global supply chain delays
Transport	67%	17%	0%	0%	0%	0%	0%	17%
Warehouse	27%	9%	27%	0%	9%	18%	0%	9%
Warehouse & Transport	39%	7%	20%	4%	7%	0%	0%	24%

Question 6:

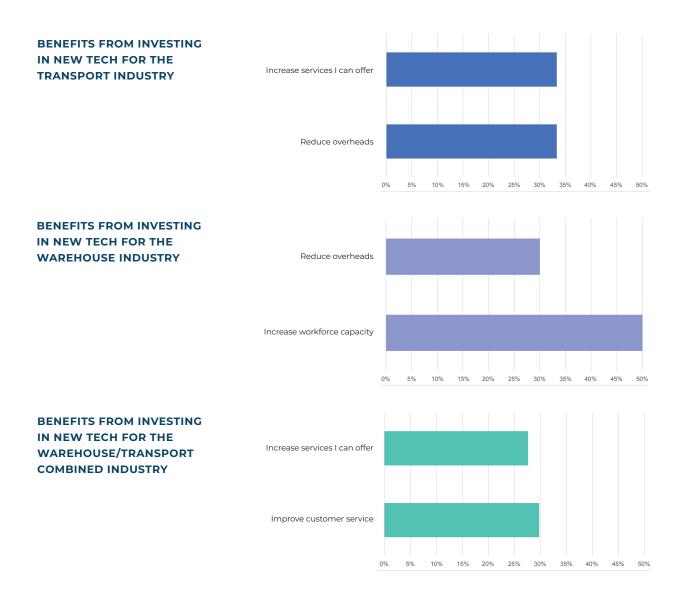
(a): What benefits would you expect from investing in new tech?

BENEFITS FROM INVESTING IN NEW TECH



Reduce overheads	Increase workforce capacity	Improve customer service	Improve safety	Increase services offered
19%	27%	25%	3%	25%

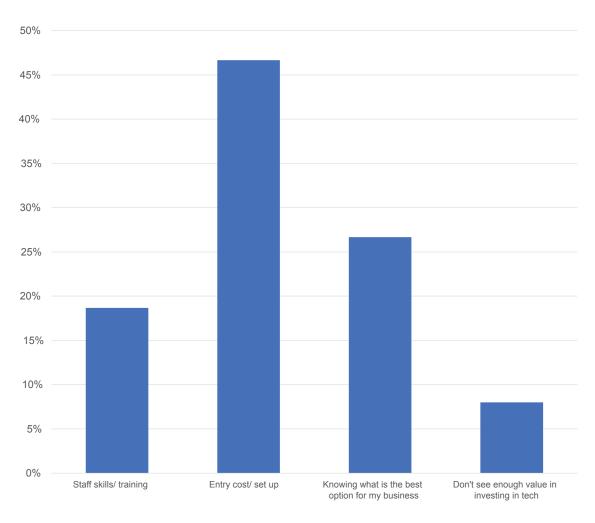
BENEFITS FROM INVESTING IN NEW TECH BY INDUSTRY



	Reduce overheads	Increase workforce capacity	Improve customer service	Improve safety	Increase services offered
Transport	33%	0%	17%	17%	33%
Warehouse	30%	50%	10%	0%	10%
Warehouse & Transport	15%	26%	30%	2%	28%

Question 6:

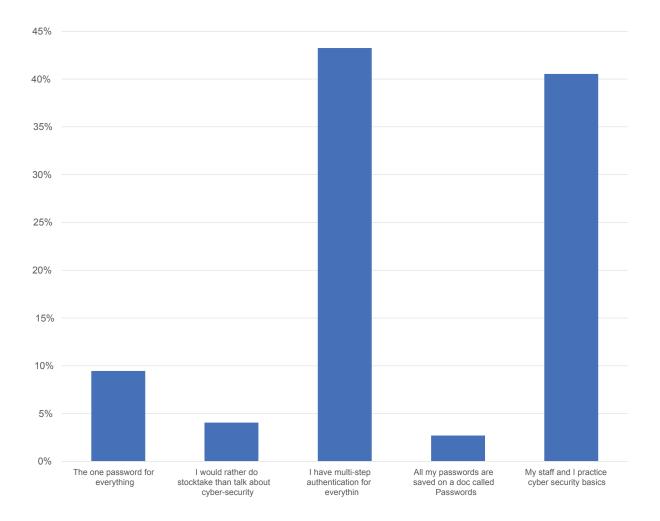
(b): What is holding you back from investing in new technologies?



ROADBLOCKS FROM INVESTING IN NEW TECH

Staff skills/ training	Entry cost/ set up	Knowing what is the best option for my business	Don't see enough value in investing in tech
19%	47%	27%	8%

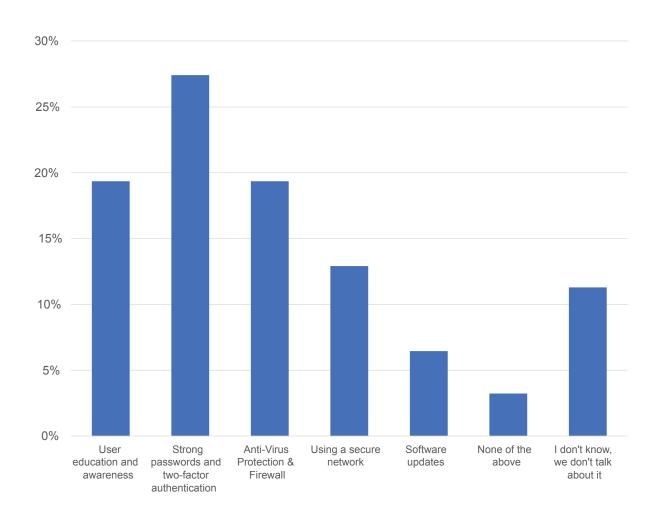
Question 7: Which of the following best describes your opinion towards cyber-security?



OPINION TOWARDS CYBER-SECURITY

The one password for everything	l would rather do stocktake than talk about cyber- security	I have multi-step authentication for everything	All my passwords are saved on a doc called Passwords	My staff and I practice cyber security basics
9%	4%	43%	3%	41%

Question 7: (b): What steps (if any) are being considered by your company in the next 12 months to strengthen cyber security?



STEPS TO STRENGTHEN CYBER-SECURITY

User education and awareness	Strong passwords and two- factor	DAnti-Virus Protection & Firewall	Using a secure network	Software updates	None of the above	l don't know, we don't talk about it
19%	27%	19%	13%	6%	3%	11%

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