# SOTI

## MOBILIZING THE DELIVERY WORKFORCE: **STATE OF MOBILITY IN TRANSPORTATION AND LOGISTICS** 2021 REPORT

HOW MOBILE TECHNOLOGY CAN MODERNIZE T&L OPERATIONS



### WELCOME



Anyone who works in transportation and logistics (T&L) will not be surprised to hear that the industry has gone through considerable change during the past 12 months. Some sectors have performed exceptionally well while others have had to react quickly to stay competitive.

With the global logistics market estimated to be worth \$12.97 billion USD by 2027, with a compound annual growth rate (CAGR) of 6.5% from 2020 to 2027, staying competitive and dealing with demand is clearly a concern.<sup>1</sup> This has led the sector to experience one of the most rapid digital transformations in modern times. Whether it's sensorenabled telematics delivering up-to-the-minute information about every critical component on and in a vehicle, or digital-freight brokerage reducing empty miles and increasing vehicle utilization rates, technology is making logistics leaner, faster and more efficient.

In this rush to modernize, one aspect of successful digital transformation is not often given the priority it deserves: people. For the new technologies and ways of working to deliver the desired return on investment (ROI), organizations need the right tools, as well as systems that are integrated and communicate with each other.

Do employees have the right tools? Are their organization's systems truly connected and integrated? How have they coped with the challenge of a global pandemic – and where do they see the future of the sector going?

To answer these questions, SOTI, the market leader in business mobility solutions, wanted to speak to the people at the forefront of the evolution to understand their needs. We surveyed 550 global IT decision-makers working in the transportation and logistics sector from North America, South America, Europe and Oceania. The study delved into the sector to find out how they expected the industry to evolve over the next 12 months, how ready their organizations were for proposed changes and how they plan to meet the challenge.

Where possible, we compared the responses between countries and with those from last year's study to highlight changes in the market.

What becomes apparent is transportation and logistics is an industry in the process of wide-ranging transformation. The data reveals where there are opportunities, where there are gaps that need to be filled and where the industry needs to invest.

We know you will find these insights useful.

Shash Anand, Vice President of Product Strategy, SOTI

1. https://finance.yahoo.com/news/global-logistics-market-worth-12-095400478.html?



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## **METHODOLOGY AND SAMPLE**

550 interviews were conducted using an online methodology by Arlington Research, among IT Managers, IT Directors, Senior Management and C-Suite (all disciplines) working in the transportation and logistics sector across eight countries. All respondents are aged 18 and over, and work in companies with 50 or more global employees. Fieldwork was conducted between March 18 and 30, 2021.

The 550 interviews were split across eight markets as follows: U.S. (100 respondents), Canada (50 respondents), Mexico (50 respondents), UK (100 respondents), Germany (100 respondents), Sweden (50 respondents), France (50 respondents) and Australia (50 respondents).

#### **KEY FINDINGS**

99% claim they are looking to implement technology to increase the speed of their operations' performance.



98% claim they deal with technical or system difficulties that delay shipments in a normal week.



99%

80% claim their organization plans to invest considerably in new technology such as mobile devices, wearables and IoT devices and solutions in the next 18 months.



76% agreed they are exploring new ways in which they can handle returns from consumers.



75% of respondents said their organization has invested considerably in new technology over the past 12 months.



72% believe their systems and technology are not integrated.



71% felt that a mobile-first piece of technology would be the key to the last mile delivery in five years' time.



70% stated that reducing downtime of mobile devices in the field is a top business concern for their business.



#### THE STATE OF TECHNOLOGY IN THE TRANSPORTATION AND LOGISTICS SECTOR

The transportation and logistics sector is undergoing rapid transformation. Digitization is increasing its efficiency and visibility, reducing downtime, slashing empty miles and allowing the movement of more goods at a lower cost and with fewer emissions.

Given these benefits, it's unsurprising to hear that 75% of respondents said their organization has invested considerably in new technology over the past 12 months. This figure rises to 81% in the UK and 78% in Germany. This is the same figure recorded in 2020. What is clear is that investments in the sector are not an impulsive reaction to the pandemic, but a trend highlighted by the State of Mobility in Transportation and Logistics report for two years running.

When looking a little deeper into what is driving this investment, it isn't the obvious answer of outdated technology, as the study shows less than half (45%) of respondents flagged this as a problem. Instead, it is the downtime of mobile devices.

According to 70% of respondents, reducing the downtime of mobile devices in the field is a top concern for their business. This is highest in Germany (73%), closely followed by the UK with 71%. Seeing that reducing downtime is so high on the list of concerns for businesses, it is little surprise to find that 80% of respondents claim their organization plans to invest considerably in new technology such as mobile devices, wearables and IoT devices and solutions in the next 18 months. This figure rose to 82% in North America and 81% across Europe.

Looking ahead, over a third of respondents said that improving operational efficiencies, reducing costs and downtime are identified as the most important benefits that mobile technology can deliver for organizations looking to increase profitability in the next five years. This figure rose slightly in North America.

Given this desire to invest in new technology and to improve operational efficiencies, it is concerning to see that 72% of respondents believe their systems and technology are not integrated. In addition, 45% claim that updated information is not shared or that staff manually update multiple systems. Purchasing decisions do not consider technology that can support older operating systems, form factors, or have flexibility for both on-premise and cloud deployments. These purchasing considerations must be thoughtfully considered, and survey data reveals that workers in the industry recognize this as a business requirement.

The sector is undeniably at a turning point, ripe for disruption. The shift to e-commerce has been growing and the pandemic has placed even greater demands on the sector. Businesses have correctly identified that technology can help improve efficiencies and solve many of the issues they are facing, but if the systems are still not integrated, they will continue to experience difficulties. Investment in technology is important, but so is automation and the elimination of manual and paper-based processes that can cause delays in operations, and downtime for business-critical devices.



#### CHANGING BUSINESS MODELS AND THE CHALLENGE OF THE PANDEMIC

Even before the pandemic, business models were shifting rapidly. To overcome barriers to purchase, many e-commerce providers have implemented a 'try-and-return' model. This allows – and even encourages – consumers to use easy and cheap product returns as a way of trying out household items, clothes and other consumer goods.

Around three-quarters of respondents (76%) agreed they are exploring new ways in which they can handle returns from consumers more effectively. Interestingly, in a year that saw an increase in e-commerce transactions, this figure was also 76% last year in SOTI's study.

It is also recognized by two-thirds of the respondents (67%) that retailers asking a customer to keep an item instead of returning it would have a negative impact on their operations. This figure rises to 71% in North America. As a result, 72% of transportation and logistics professionals are working with retailers to improve the returns process for their customers, rising to 77% in North America and 75% in the UK.

The last year has brought other changes to the e-commerce process. Over a third of respondents (37%) said they have seen increased demand for deliveries or returns, or pressure from subscription models resulting in 99% of respondents stating they are looking to implement technology to increase the speed of their operations. In the UK, U.S. and Australia, this rises to 100% of respondents, showing the commitment and drive to find efficiencies using technology on a global scale.

It is clear that post-pandemic supply chain complexities are not going to fade. In fact, governments in Europe, the U.S. and elsewhere are re-assessing supply chain risk and looking at ways in which supply chains can be made shorter, more diverse and more resilient.

There is also considerable pressure on the industry, and incentives from within it, to make the sector more environmentally sustainable. The road-freight sector is responsible for over 24% of CO2 emissions worldwide.<sup>2</sup> If countries are to meet their commitments under the Paris Climate Agreement, they need the road-freight sector to become more sustainable.

To meet these pressures, the sector must identify the gaps to be filled and digitize accordingly. If businesses can combine mobile technology with an integrated business-critical mobile strategy, they will undoubtably see performance gains.

2. https://www2.deloitte.com/global/en/pages/risk/articles/covid-19-managing-supply-chain-risk-and-disruption.html











98% OF RESPONDENTS SAY THEY DEAL WITH TECHNICAL OR SYSTEM DIFFICULTIES THAT DELAY SHIPMENTS IN A NORMAL WEEK.



70% STATED THEY NEED TO REDUCE DOWNTIME OF MOBILE DEVICES IN THE FIELD AS A TOP BUSINESS CONCERN.









#### THE DANGERS OF DOWNTIME

A British study conducted in 2019 found that vehicle downtime costs fleets \$3.3 billion USD\* a year.<sup>3</sup> In an average fleet, 20% of vehicles incur unplanned downtime every year from accidents alone.<sup>4</sup> That's before unanticipated mechanical and system failures are considered.

As freight volumes rise, alongside the pressure for fleets to cut emissions, the need to reduce downtime has become more urgent than ever. The alternative is having more vehicles on the road. The downside is that this increases staffing costs, emissions and road traffic congestion.

What is often less appreciated is the impact system downtime has on business, creating inefficiencies and unplanned costs. If mobile devices are not available, then the systems which run on those devices are also not available. This includes route-mapping software, toll and services payment apps, telematics dashboards and more.

When it comes to a mobile strategy, there is no time for downtime, yet 98% of respondents say they deal with technical or system difficulties that delay shipments in a normal week. This rises to 100% in the UK, Sweden and Canada.

With 70% stating the need to reduce downtime of mobile devices in the field as a top business concern, the research looked at the main causes of downtime and delays in shipments. Almost onethird of respondents explained that drivers not having immediate access to IT help to remote into their devices, IT technology designed to resolve mobile device problems, or training apps to help them manage or fix the devices independently while on the road, were the highest causes for downtime and delays. This rose to over a third in North America.

3. https://www.commercialfleet.org/news/van-news/2019/04/02/van-downtime-costing-business-24bn

4. https://www.automotive-fleet.com/341694/managing-the-cost-of-unscheduled-vehicle-downtime

\*In the article the value is reported as £2.4 billion but has been converted to U.S. dollars for this report using a currency conversion of £1GBP = \$1.38USD.



The study showed that most organizations lose 3.3 hours per employee each work week dealing with technical or system difficulties (device downtime) that delay shipments. Over the course of a month, this is undeniably a sizable and costly waste of resources for a sector already dealing with rapid disruption and increased volume. In Canada, the average number of hours lost per employee, per calendar month was 17, with a global average of 14 hours.

| COUNTRY/REGION | AVERAGE NUMBER OF HOURS LOST<br>PER EMPLOYEE PER WORK WEEK | AVERAGE NUMBER OF HOURS LOST<br>PER EMPLOYEE PER CALENDAR MONTH |
|----------------|--|---|
| GLOBAL         | 3  | 14  |
| NORTH AMERICA  | 4  | 16  |
| EUROPE         | 3  | 14  |
| U.S.           | 3  | 15  |
| CANADA         | 4  | 17  |
| MEXICO         | 3  | 11  |
| UK             | 3  | 15  |
| GERMANY        | 3  | 15  |
| SWEDEN         | 4  | 15  |
| FRANCE         | 3  | 12  |
| AUSTRALIA      | 4  | 15  |

Calculation = average number of hours lost per week multiplied by 52 (weeks) and divided by 12 (calendar months)

When trying to understand the cause of employee downtime, almost one-third of respondents explained that updated information that was not automatically shared across systems was their main concern. Coupled with the fact that 72% claimed their systems and technology are not integrated, it is clear that IT decision-makers from the T&L sector are less concerned about their investments in new technologies as they are worried about how to integrate them.

This is confirmed with 24% flagging legacy systems as the main cause of problems faced. It's clear that the ability to take old and new devices and ensure they speak to each other is essential for reducing downtime.



#### MOBILE TECHNOLOGY AND THE FUTURE OF THE TRANSPORTATION AND LOGISTICS SECTOR

Where will this technological drive for innovation lead? Major players in the sector are investing heavily in new tech with delivery by drone set to be the fastest growing segment of that market by 2024, according to a recent study.<sup>5</sup> Already presented at the consumer technology event, CES 2021, Verizon and UPS have announced a collaboration to pilot delivery drones in Florida.<sup>6</sup>

Drone technology isn't the only technology innovation likely to shake up the logistics industry in the coming decade. In Stockholm, Sweden, online food delivery company, Foodora, launched an automated self-driving droid that delivers food across the city. In the UK, online grocer Ocado has invested £10 million in developing self-driving vehicles that can deliver direct to a customer's door.<sup>7</sup>

It is of little surprise that when respondents were asked about where they plan to invest in the future, 44% of respondents said they are preparing to increase their spending on technology that will make deliveries faster – this rose to 49% in North America. Over a third (36%) plan to increase investments in advanced data analytics and measurement, rising to 40% in North America. 36% of respondents are interested in mobile app investment, with this figure rising slightly to 37% in North America.

Autonomous vehicles were chosen by a quarter of respondents (25%), while 15% stated they planned to invest in drone technology for delivery purposes.

Interestingly, when asked what will play an important role in last-mile delivery in five years, 71% felt that mobile-first technology would be key. A further 50% indicated that mobile-first technology that increases the speed of the delivery process will be important. Almost half (47%) felt improved visibility for customers will be crucial, while 37% chose autonomous vehicles and advanced data analytics.

Although drone technology is a hot topic in the media, only 20% of respondents felt it would play an important part in the last mile delivery in the next five years, falling to 19% in North America.

Each of these technologies will either run on or draw data and inputs from mobile devices. This makes it imperative that companies ensure their devices and platforms are set up for the technologies they intend to adopt in the future. Past and future investments need to be able to work together in tandem so companies can confidently adapt as required.

<sup>5.</sup> https://www.globenewswire.com/news-release/2020/03/25/2006020/0/en/The-Drone-Delivery-Market-Forecast-to-2024-Drone-Deliveries-Will-Be-the-Fastest-Growing-Application-Within-the-43-Billion-Global-Drone-Market.html

<sup>6.</sup> https://www.gpsworld.com/verizons-skyward-and-ups-announce-connected-drone-delivery-at-ces-2021

<sup>7.</sup> https://www.theguardian.com/business/2021/apr/16/ocado-looks-to-kerb-to-kitchen-robot-deliveries-in-10m-oxbotica-deal















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### DISRUPT OR BE DISRUPTED

It's clear that T&L technology decision-makers are facing the challenging task of providing immediate value in the form of improved operational efficiencies and reduced costs, at the same time as keeping their focus on the challenges and opportunities coming down the road.

This research shows that the squeeze to improve operational efficiencies and cut costs is being hindered by downtime, which is a persistent thorn in the side of executives and employees alike. They have no time for downtime, yet do not always have the assistance they need to do their job efficiently. Many have no structured IT support so necessary fixes cannot be made remotely while the driver is stranded by the roadside.

Ultimately, the T&L industry is making advances with investments in technology, however they are not always investing in the right areas such as integration and remote connectivity. Technology, both new and legacy, need to work together with the ability to scale in the future.

The adoption of an intelligent mobile strategy that considers how to connect everything is essential. Whether it's app development, mobility management, diagnostics, business intelligence, security, the IoT or collaboration, every piece of the puzzle needs to integrate and talk to each other. The more mobile it is, the better!

Organizations that invest will be disrupters and take advantage of the opportunities of the future. Organizations that don't are at risk of being disrupted – potentially out of the market completely.



### **NEXT STEPS**

Technology decision-makers are now at a crossroads. The pace of innovation is only going to increase. Their next step is the adoption of intelligent mobile technology, designed specifically for the T&L industry to accelerate their innovation in the sector.

With the right partner and the right technology, T&L organizations can improve and future-proof their operations.

SOTI is a market leader in mobile and IoT technology for the transportation and logistics sector. Its mobile technology experts help design, source and build the mobile solutions needed to reduce downtime and improve integration across the business. The focus is on increasing efficiencies within the business but, more importantly, strengthening customer brand trust.

### **ABOUT SOTI**

SOTI is a proven leader at creating innovative solutions that reduce the cost and complexity of business-critical mobility and the IoT. Thousands of companies around the world depend on us to secure, manage and support their mobile operations.

The company's two decades of success has built strong partnerships with leading mobile platform providers and device manufacturers. These relationships give us unparalleled insight into new technology and industry trends before they happen.

A proven innovator, SOTI's clear vision, laser focus and a commitment to R&D has made it the market leader at delivering exciting, new business mobility solutions. SOTI helps businesses take mobility to endless possibilities.



#### TO LEARN MORE:

For further information about how SOTI can help your T&L organization, click here.

To learn more about the SOTI ONE Platform, click here.

To find out how SOTI can help with the latest T&L technology, click here.

SOTI is a proven innovator and industry leader for simplifying business mobility and IoT solutions by making them smarter, faster and more reliable. SOTI helps businesses around the world take mobility to endless possibilities.

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