

# IoT & Logistics

**Happier customers, quicker ROI.**

An overview of current uses and future trends.

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# IoT delivers for logistics

Of all industries, IoT could have been made-to-order for supply chain management, transportation, and logistics. Since its inception, the top uses for IoT sensors remain unchanged: speed, temperature, and asset security.

***Top 3 uses  
for sensors  
in supply chain:***



***Monitoring Speed***



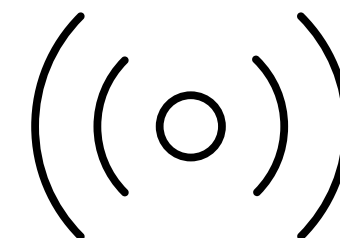
***Temperature***



***Asset Security***

No wonder that, in two years, use of IoT has grown by 19% among logistics and supply chain pros. If you're one of them, congratulations; chances are, you're running more efficiently—and profitably—than ever before.

If you're not up-to-speed on IoT, this e-book, based on a global survey conducted by eft and AT&T, outlines the possibilities IoT offers shippers and logistics providers, now and in the future.



**19%**  
***More sensors***

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# IoT: A working definition

The broadest definition of IoT is pretty straightforward:  
Collections of network sensors  
that impact operations.

The tasks those sensors can accomplish always seem to be multiplying. The constant flow of near real-time data they generate can help (among other things) shorten delivery routes, reduce vehicle downtime with predictive maintenance alerts, and reduce inefficiencies by finding the “blind spots” in your operations. All of which cuts your daily costs, pleases your customers, and fuels future growth.



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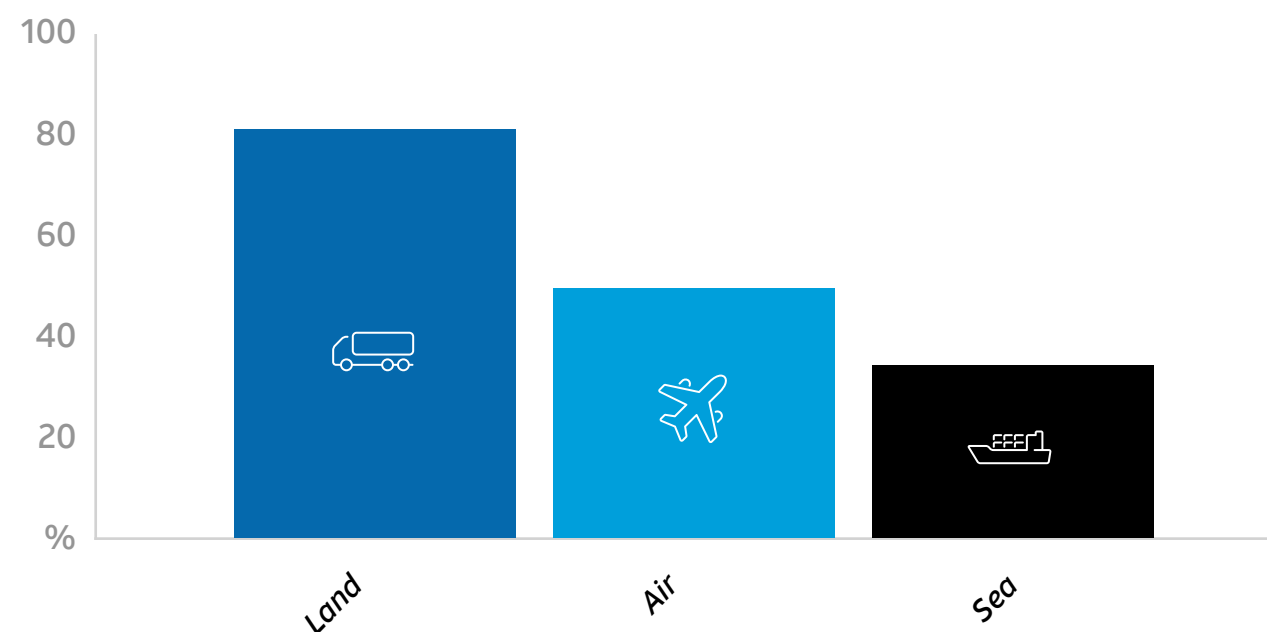
# Where is IoT used most?

## The logic behind the logistics.

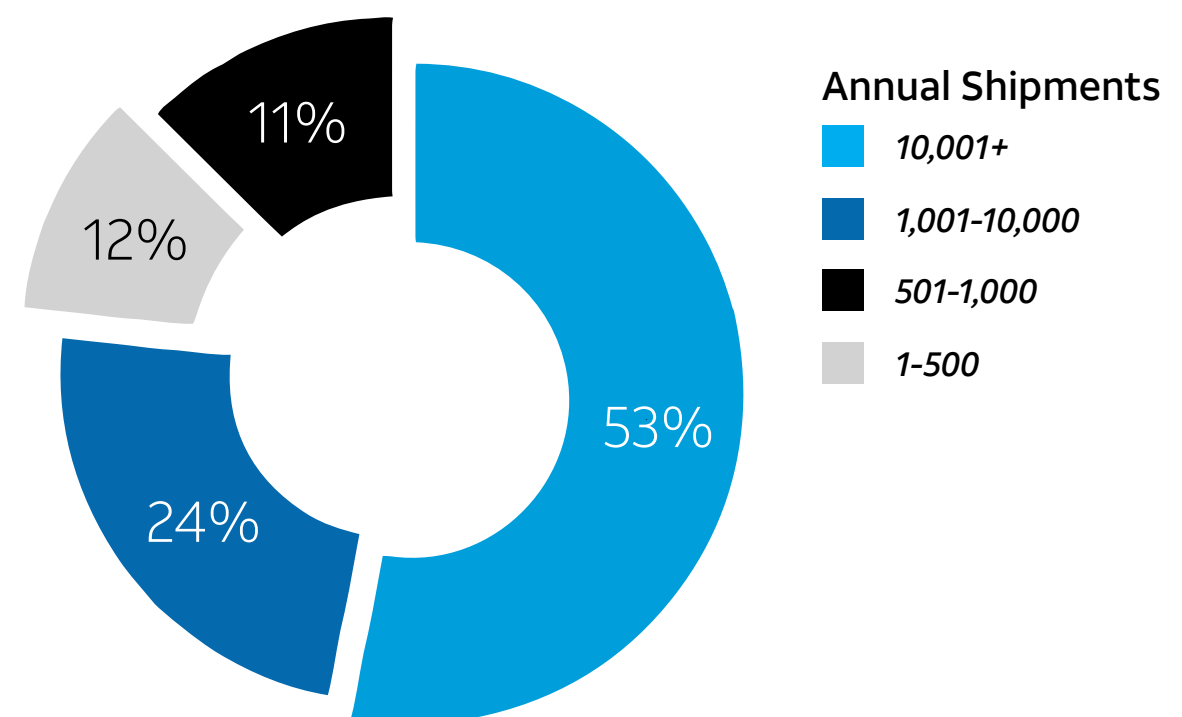
How extensively IoT is deployed depends largely on how a shipment is being transported. Logically, the need for end-to-end visibility increases as the variables involved increase.

Similarly, the use of IoT solutions increases with the number of annual shipments. The bigger the operator, the harder it is to keep a personal eye on operations.

**More Variables = More IoT Use**



**More Shipments = More IoT Use**

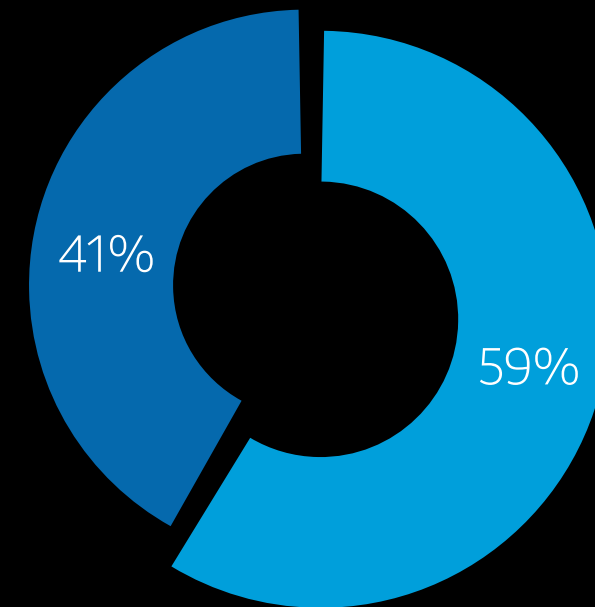


# Visionary possibilities. Workaday applications.

For all their predictive possibilities of IoT, right now the majority of sensors are used for alarms and real-time monitoring—entry level applications. That’s unsurprising, seeing as loss and theft prevention remain the number one concerns in supply chain and logistics.

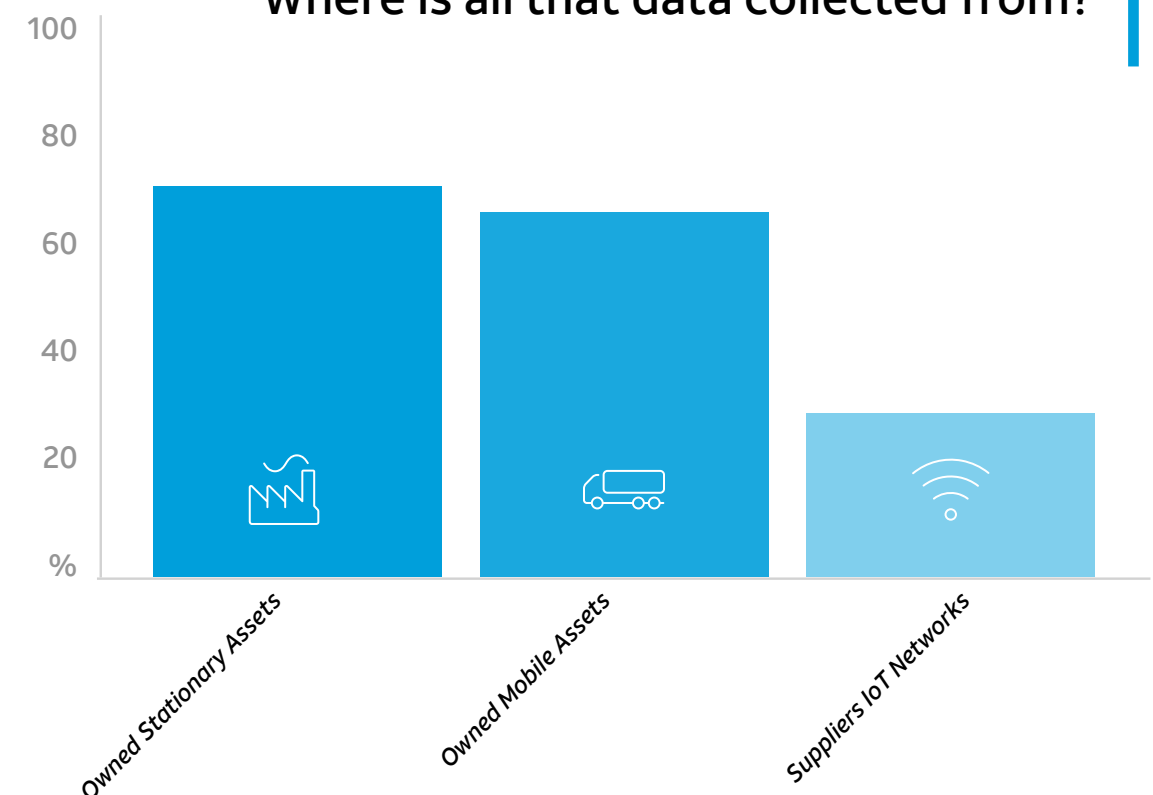
It’s also unsurprising, considering that 61% of respondents admit they’re analyzing less than half the data IoT provides. Though analysis is the first step to more sophisticated applications, few have the tools (let alone the time) to tackle the tidal wave of data IoT generates on a daily basis.

Oddly enough, that doesn’t stop 20% of those surveyed from collecting data from their supplier’s networks as well as their own. In other words, the synthesis of IoT and logistics deepens every day. More advanced solutions, such as optimization and prediction, can’t be that far off.



■ Optimization and prediction    ■ Alarms and real-time monitoring

## Where is all that data collected from?



# The more data you analyze, the bigger the benefits.

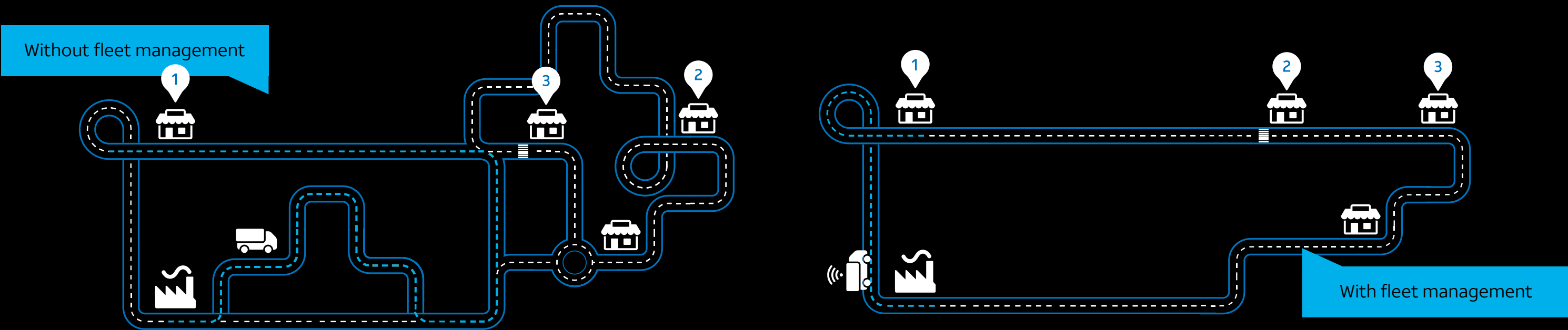
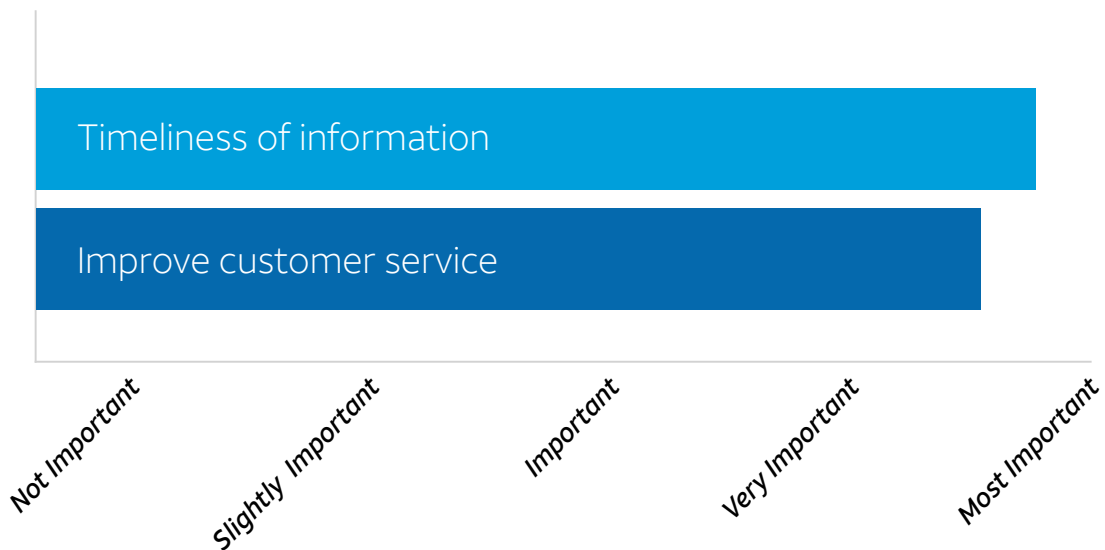
Admittedly, entry-level applications that shorten response times and increase customer satisfaction are the primary reasons for IoT adoption.

And, it's just as true that analyzing all your IoT data would be (to put it mildly) a daunting task. *But evaluating even a fraction can have a positive impact.*

It can help your operations sidestep hitherto-unforeseen delays, with predictive maintenance alerts that reduce machine and vehicle downtime.

Asset management and mobile productivity tools can build your operational effectiveness.

Finally, IoT can help you stay compliant with ever-changing local and federal laws, policies and regulations.



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# The more data you collect, the more compliant you are.

The good news? You don't have to analyze all the data you collect. You can leave some of that to the government.

For example, the Electronic Logging Device (ELD) mandate aims at reducing on-road fatalities by keeping tabs on records of duty status (RODS). An IoT fleet management solution, with features like Hours of Service, streamlines the sharing of that data.

Sensors that monitor and record shipping times, temperatures, and other vital metrics can help keep you compliant with the new Food Modernization and Safety Act (FSMA), as well as other FDA regulations.



**IoT solutions can help your  
business manage regulatory  
and compliance needs**



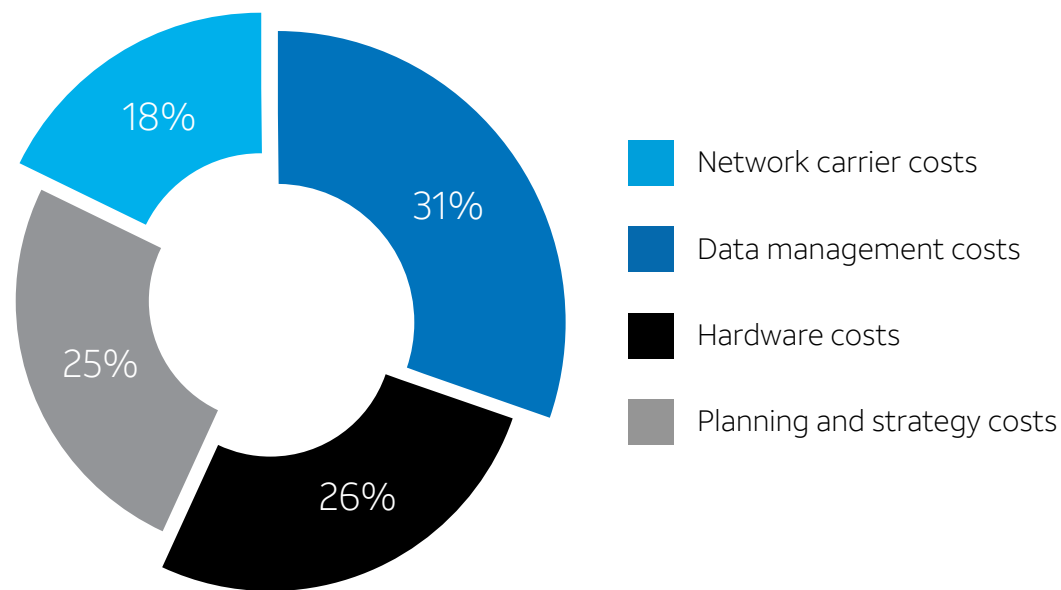
Hours of  
Service



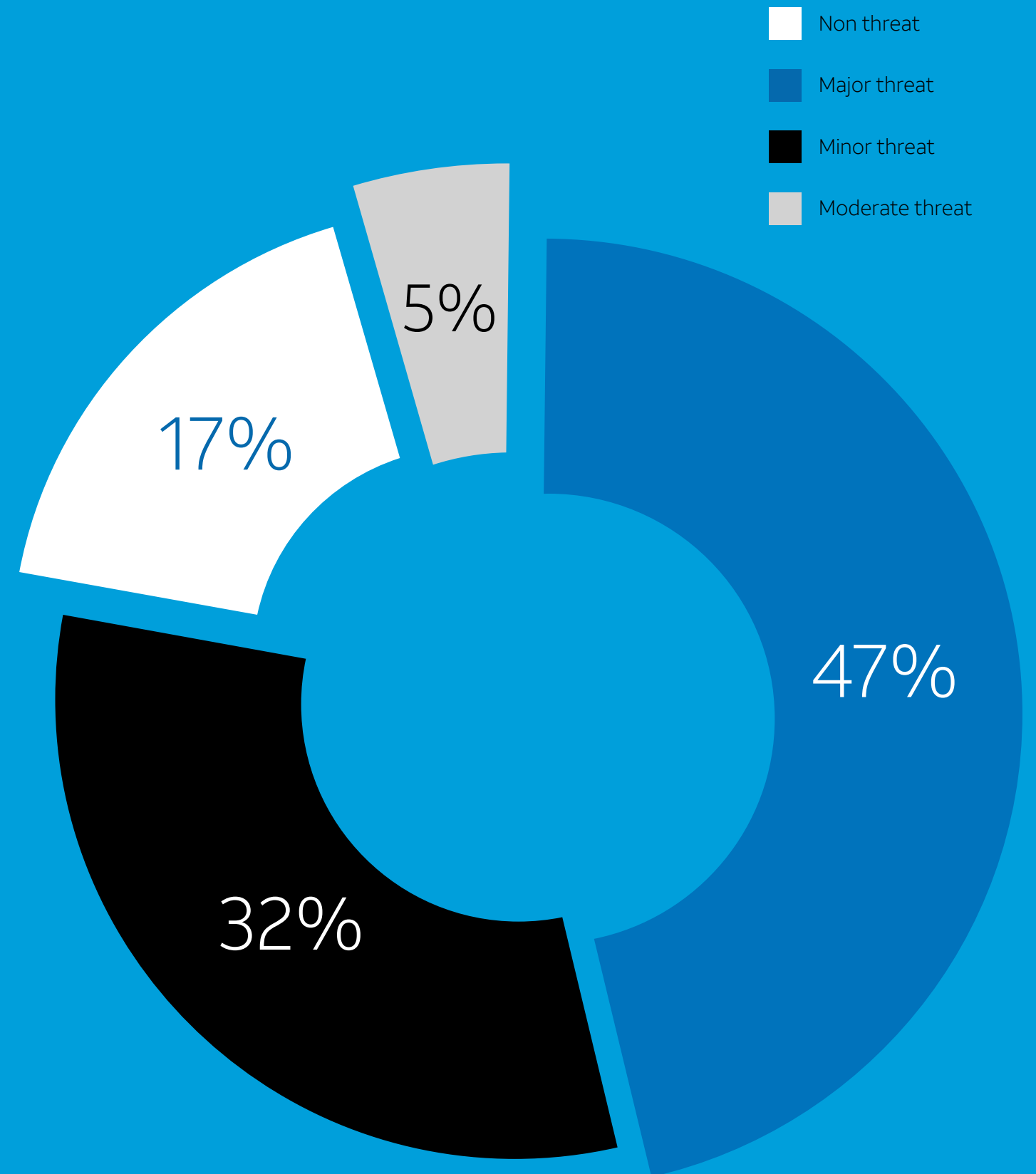
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# So, what's holding you back?

Ironically, it's not the time and expense of analysis that gives transport and logistics professionals pause. Rather, the single biggest barrier to increasing IoT investments is, the cost of storing and managing the massive amounts of data IoT produces.



And while only 5% of respondents categorized cybersecurity issues as a “non-threat”, 64% felt it was a “moderate” to “major” menace. True, neither factor is really going to deter anyone’s IoT implementation plans, but they’re sure to be at the back of everyone’s mind moving forward.





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# Realizing ROI, ASAP

Half of supply chain decision makers surveyed said they achieved a return on their IoT investments in as little as 12 to 18 months. And that's not the only return you could expect. Other advantages include:

- Increased visibility
- Improved operational efficiency
- On-time delivery
- Enhanced customer experience
- Risk mitigation
- Response time speed
- Inventory visibility
- Increased asset utilization
- Quality assurance



**ROI**  
12 to 18 mos.



To learn more about how technology is transforming your businesses, go to [AT&T Transportation Solutions](#).