

# The Business Value of Samsara



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# Table of Contents



CLICK ANY HEADING TO NAVIGATE  
DIRECTLY TO THAT PAGE.

<b>Executive Summary</b>	<b>3</b>
<b>Business Value Highlights</b>	<b>3</b>
<b>Situation Overview</b>	<b>4</b>
Samsara Overview	4
<b>The Business Value of Samsara</b>	<b>5</b>
Study Demographics	5
Choice and Use of Samsara	6
Business Value and Quantified Benefits of Samsara	7
Vehicle Use Benefits	8
Fuel Cost Benefits	10
Vehicle Maintenance Cost Benefits	12
Vehicle Life Span Benefits	13
Vehicle Availability Benefits	13
Driver Safety and Insurance Benefits	14
Sustainability Benefits	16
Financial Value Summary	16
<b>Challenges/Opportunities</b>	<b>18</b>
<b>Conclusion</b>	<b>18</b>
<b>Other Notable Benefits Beyond ROI and Business Value</b>	<b>19</b>
<b>Appendix 1: Methodology</b>	<b>20</b>
<b>Appendix 2: Supplemental Data</b>	<b>21</b>
<b>About the IDC Analysts</b>	<b>23</b>

# Executive Summary

Since its inception in 2015, Samsara has been providing Internet of Things (IoT)-based connected technology and services to its customer base, operating horizontally across verticals such as construction, field services and manufacturing for fleet management, video-based safety, and equipment monitoring. The company's platform—the Connected Operations Cloud—is actively leveraged by its customers to monitor and analyze data across their operations to drive efficiencies and insights. The video-based safety system has been instrumental for customers in reducing vehicle crashes, personalizing training operations, mitigating liabilities, and exonerating drivers when not at fault.

IDC assessed the value for organizations using Samsara vehicle telematics and video-based safety solutions to run and manage their vehicle fleets. IDC's research demonstrates that Samsara delivers significant cost and operational efficiencies, in addition to important safety and sustainability gains.

**Based on the information provided by a subset of current Samsara customers, IDC calculates that customers can realize average benefits worth \$2.02 million per organization surveyed, with an average of 1,755 employees, which equals an average 815% return on investment (ROI), by:**

- **Spending less on fuel** by reducing idling time and overall miles driven
- **Lowering maintenance costs and extending vehicle life span** by minimizing wear and tear on vehicles and taking proactive steps to maintain fleets
- **Reducing costs related to vehicle crashes and insurance** by improving driver safety and having fewer and less severe vehicle crashes
- **Minimizing lost revenue and other business losses associated with vehicle availability** by better managing vehicle fleets and ensuring access through optimizing fleet and asset utilization
- **Increasing driver productivity** by minimizing nonproductive time and reducing paperwork



*Click highlights for related content in this document.*

## BUSINESS VALUE HIGHLIGHTS

**815%**  
ROI

**\$2.02 million**  
in fleet-related benefits  
per organization  
per year

**6%**  
lower overall cost of  
operating vehicle fleet

**14%**  
less vehicle time  
spent idling

**4%**  
lower fuel costs

**9%**  
lower vehicle  
maintenance costs

**10%**  
longer vehicle  
life span

In addition to these impact areas that translate directly to financial value, IDC's research shows that Samsara customers put significant value on other very important impact areas. For example, ensuring driver safety was featured prominently as a core benefit of Samsara use in in-depth interviews, as was the ability to reduce total emissions and better meet sustainability goals.

## Situation Overview

In today's competitive business landscape, where margins are tight and customer expectations are high, a growing number of fleet operators are uncovering the value of leveraging vehicle telematics data for process optimization, emissions reporting, and operational intelligence. Fleet telematics data can enable fleet managers to track the location and movement of vehicles in real time. Moreover, telematics systems can collect a wealth of data on vehicle performance, including fuel consumption, engine health, and driver behavior. Telematics data collected can be further analyzed for route planning and optimization, resulting in lower fuel consumption, optimized maintenance efforts, and elimination of downtime due to breakdown.

Safety is another critical aspect of fleet telematics. Paired with AI-enabled dash cameras, video-based safety systems can monitor driver behavior, such as speeding, harsh braking, and erratic lane changes. These systems provide feedback to drivers and allow managers to intervene when necessary. This reduces the risk of vehicle crashes and helps companies comply with regulations and mitigate liability.

Furthermore, fleet telematics facilitates compliance with regulatory requirements and industry standards. Telematics solutions can automatically record and report data related to driver hours, vehicle inspections, and emissions, simplifying administrative tasks and reducing operational expenses. With the power of AI, organizations can leverage telematics data for predictive assets analysis and business process optimization.

## Samsara Overview

Samsara is a technology company that specializes in Internet of Things solutions for fleet management, industrial operations, and connected assets. The company offers a comprehensive platform—called Connected Operations Cloud—that integrates software, cloud-based services, and hardware to provide real-time visibility and insights into various aspects of operations. Samsara's solutions are designed to help organizations optimize their fleets, monitor critical assets, enhance safety and compliance, and streamline workflows. The company's customers include the world's leading organizations across construction, transportation and warehousing, field services, manufacturing, retail, logistics, and the public sector.



Samsara's cloud-based software platform aggregates and analyzes the data collected by its hardware devices and third-party data sources, such as OEMs and other IT systems it integrates with. Key features of Samsara's platform include real-time alerts and notifications, customizable reporting and analytics tools, and seamless integration with third-party systems. The platform provides real-time visibility into operations, enabling organizations to monitor their fleets, assets, and frontline worker operational workflows remotely. The platform also includes analytics capabilities that enable organizations to derive insights from aggregated telematics and operational data. This may include identifying trends, predicting maintenance needs, and optimizing resource allocation.

One of Samsara's flagship offerings is its core fleet management applications, which include telematics and a video-based safety solution. These allow companies to track the location and performance of their vehicles, improve route efficiency, and promote safer driving practices, notably by reducing crashes. In addition to fleet management, Samsara provides solutions for equipment monitoring. These offerings enable organizations to remotely monitor equipment and processes, detect issues proactively, and optimize operations for improved efficiency and reliability.

Samsara provides real-time visibility into physical operations. Samsara helps customers manage their operational workflows in one system of record.

# The Business Value of Samsara

## Study Demographics

IDC conducted a survey and in-depth interview-based research to understand the impact for organizations using Samsara's sensor-based vehicle telematics and video-safety solutions for their vehicle fleets. All research participants possessed detailed knowledge about the impact of using these Samsara solutions compared with not having a sensor-based technological solution to run, manage, and support their vehicle fleets.

The online survey had a sample size of 130 Samsara customers from a variety of industries. Survey participants were relatively evenly divided between organizations with <150 employees (43%), 150–499 employees (26%), and 500 or more employees (29%). Typical fleet sizes matched this relatively even split in overall organization size, with 50% of organizations having fleets of 100 or fewer vehicles and 50% having fleets of more than 100 vehicles.

IDC supplemented this survey research with in-depth interviews with three Samsara customers. These interviews focused on understanding the same areas of impact as the survey-based research and sought deeper insights into reasons for selecting Samsara, drivers of core benefits of using Samsara, and additional use cases of Samsara that generate value for these customers.

## Choice and Use of Samsara

Samsara customers interviewed for this research explained that they made their purchasing decision after deciding that Samsara would offer the right mix of technological capabilities and support to achieve needed improvements in their fleet operations and driver safety. They recognized that they could not meet operational efficiency and safety standards without a new approach based on telematics, video, and other new technologies, to run and manage their vehicle fleets. Samsara offered the right functionalities and approach.

### The senior leaders (i.e., vice presidents and directors) in areas such as fleet operations, safety, and compliance discussed their selection of Samsara:

#### **Functionality, safety, and partnership:**

*“We chose Samsara based on its functionality and because it brought the best partnership for us ... It’s all about safety when you’re looking at Samsara with the cameras, our drivers’ safety, and improving that. We also want to have the right visibility to claims against our drivers. Our ultimate goal is to ensure driver safety and protect them in case of false claims.”*

#### **Strong reputation for technology and willingness to partner closely to achieve objectives:**

*“Bottom line, what attracted us to Samsara is that they were a technology company with demonstrated success, and they wanted to listen to us, develop our recommendations, and not tell us how we were going to fit into their platform. So, for us, that was a game changer.”*

#### **Customer support and responsiveness, as well as the quality of solutions for understanding and reducing vehicle crashes:**

*“We were impressed with Samsara’s customer support, their people, and how they helped us find an installation vendor and get a schedule set up and determine the equipment we needed. They were just more efficient and responsive than the other companies we compared them to ... We first chose Samsara to protect our employees. Number 2 would be to protect ourselves from litigation, and the third thing was just really to get to the root cause of why we were having vehicle crashes.”*

## Business Value and Quantified Benefits of Samsara

IDC's research demonstrates a consistent value proposition for Samsara customers of important cost, efficiency, and safety benefits for their vehicle fleets. They attributed substantial direct cost savings to their use of Samsara, including lowering spending on fuel, maintenance, and insurance while optimizing their ability to use their vehicle fleets to serve their businesses and ensure higher standards of driver safety and use of driver time. An organization interviewed for this study summed up the substantial across-the-board value it is achieving with Samsara as follows: *"It is hard to put a number on the value of Samsara, but it has opened up a whole new world for us. When we are talking about services in the tens of thousands of dollars per hour per crew, every minute of efficiency gained is significant. As a result of our systems with Samsara, we are now able to operate near-optimal efficiencies. Samsara is our most utilized companywide business system and is responsible for millions in savings in our bottom line."*

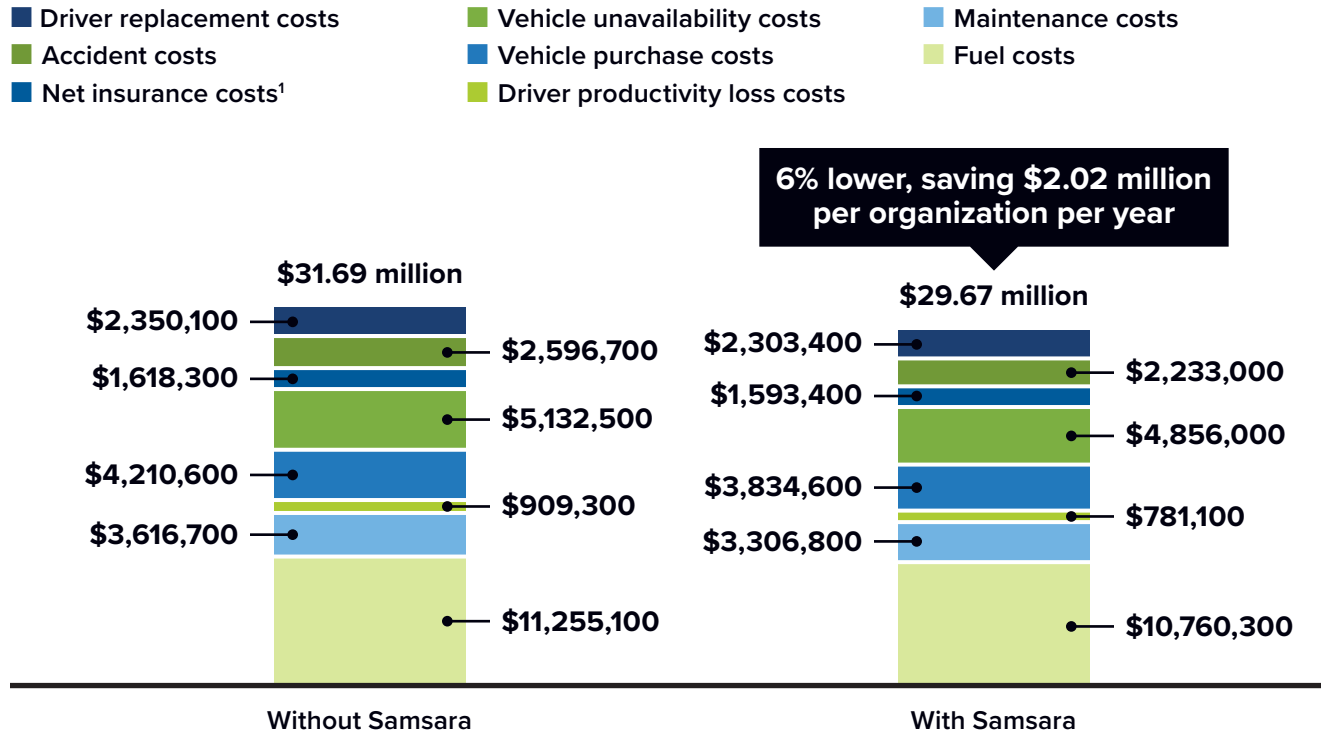
IDC's findings show both significant operational cost savings for study participants and strong value relative to their investment in Samsara. On average, IDC finds that study participants lower their total cost of buying, running, and supporting their vehicle fleets by an average of 6%, saving over \$2 million per organization per year. In comparison, these cost savings and productivity gains translate into benefits worth more than nine times their direct investment in Samsara (815% return on investment). **Figure 1** (next page) shows how the use of Samsara has benefited study participants in these areas and led to a 6% average lower fleet operations cost.

IDC findings show a ROI of over 8x, resulting in savings of \$2 million per organization annually. These savings were calculated using net insurance costs and could be greater when considering gross insurance costs.

FIGURE 1

## Impact on Vehicle Cost of Operations

(\$ per year per organization)



<sup>1</sup> Survey respondents reported reducing net insurance costs by an average of 2% or \$24,900. While the market experienced a 22% increase in insurance premiums—according to a March 2024 Consumer Price Index figure from the United States Bureau of Labor Statistics—Samsara customers reported a 2% decrease. This could equate to an effective 24% gross insurance savings, which would potentially be up to 12 times more than the net savings.

n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

For an accessible version of the data in this figure, see [Figure 1 Supplemental Data](#) in Appendix 2.

## Vehicle Use Benefits

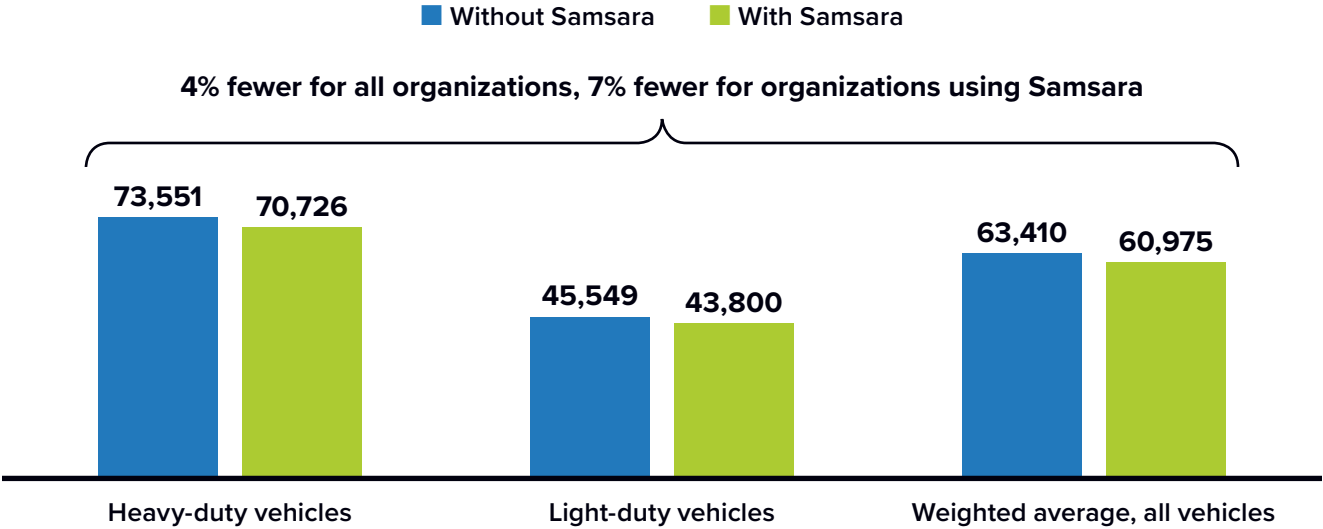
Organizations' ability to run their vehicle fleets cost effectively depends in large part on achieving and maintaining efficient operations. To a significant extent, this means trying to streamline day-to-day driving activities. Inefficient driving routes generate friction for drivers and business operations and create additional costs, which puts the onus on organizations to help their drivers get from one point to another in the most direct and time-efficient way possible.

**Figure 2** (next page) shows how Samsara customers optimize their routes to reduce total mileage driven. The organizations using Samsara for route optimization reported reducing total mileage by an average of 7%, with an average 4% reduction across all surveyed organizations. This route optimization with Samsara reduces the average driving mileage per vehicle per year by over 2,400 miles.

Organizations reported a 7% reduction in miles driven from improved routing and a 20% reduction in vehicle idling, resulting in an annual savings of \$1,552 per vehicle.



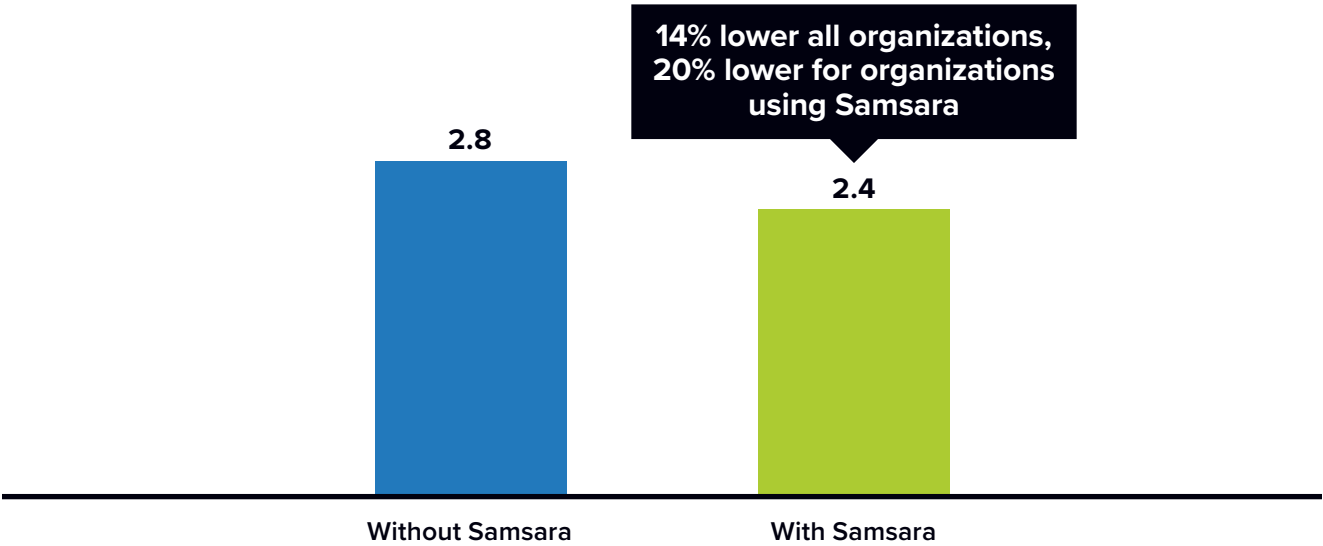
**FIGURE 2**  
**Impact on Miles Driven per Year**  
(Number of miles per year)



n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024  
For an accessible version of the data in this figure, see [Figure 2 Supplemental Data](#) in Appendix 2.

Samsara customers also reported an improved ability to minimize vehicle idling time. Vehicle idling is often inescapable, but having the ability to proactively coach drivers to take steps to avoid idling by turning off vehicles or avoiding situations that may require idling with Samsara leads to an average reduction in time spent idling of 20% for organizations using this functionality and 14% across all organizations (see **Figure 3**, next page). This improvement represents time savings of 0.4 hours per vehicle per day in reduced time spent idling, ensuring better use of driver and vehicle resources and limiting costs and negative environmental effects associated with idling.

**FIGURE 3**  
**Impact on Vehicle Idling**  
(Number of hours per day)

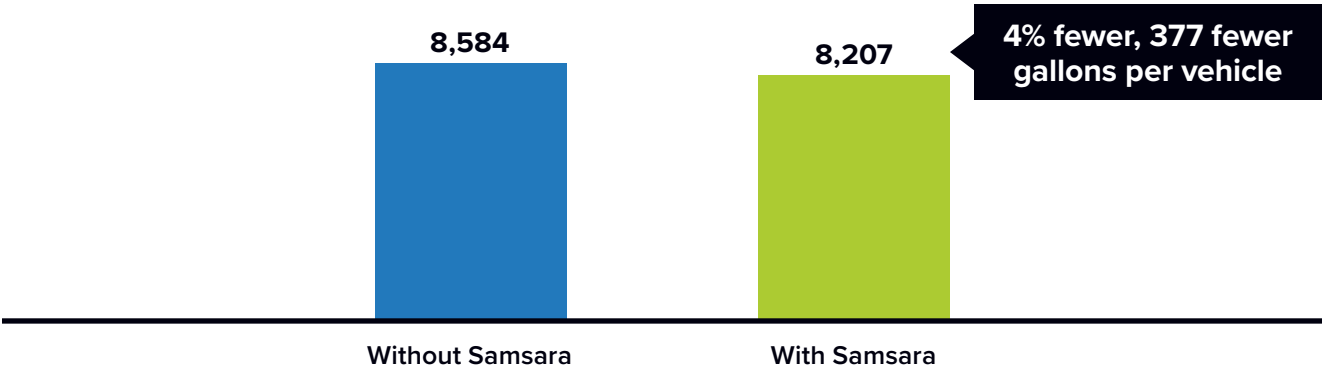


n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

## Fuel Cost Benefits

Lowering fuel consumption through route optimization and reduced idling time delivers multifaceted benefits, with study participants realizing lower emissions and requiring less driver time to refuel. One interviewed organization reported: *“We know how many of our tractors should not be idling during a given job, and Samsara devices give us the facts, not fully known prior. On average, a tractor that does purposefully idle can consume around 2,000gal of extra fuel a year.”* As shown in **Figure 4** (next page), IDC calculates that study participants reduce fuel consumption for an average vehicle in their fleets by 4%, equivalent to requiring 377 fewer gallons of fuel per year per vehicle.

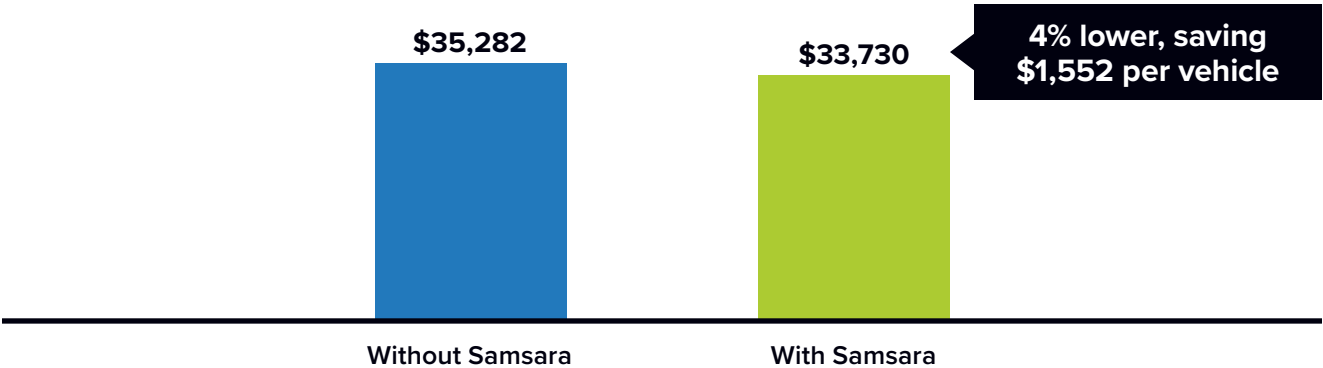
**FIGURE 4**  
**Impact on Fuel Consumption per Vehicle**  
(Number of gallons per year per vehicle)



n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

As study participants operate their fleets in a way that requires less fuel on average, they also realize significant savings in fuel costs, which constitutes one of the greatest areas of costs for operating both heavy- and light-duty vehicles. One interviewed Samsara customer noted: *“With Samsara, we get a good idea of the fuel usage that’s being used by our trucks. With that, we can use that data to look at whether we have the right route.”* As shown in **Figure 5**, IDC calculates that study participants benefit from fuel savings of an average of \$1,552 per vehicle per year through their use of Samsara, as they put fewer miles on a typical vehicle and waste less fuel idling.

**FIGURE 5**  
**Impact on Total Fuel Costs per Vehicle**  
(Cost of fuel per vehicle per year)



n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

## Vehicle Maintenance Cost Benefits

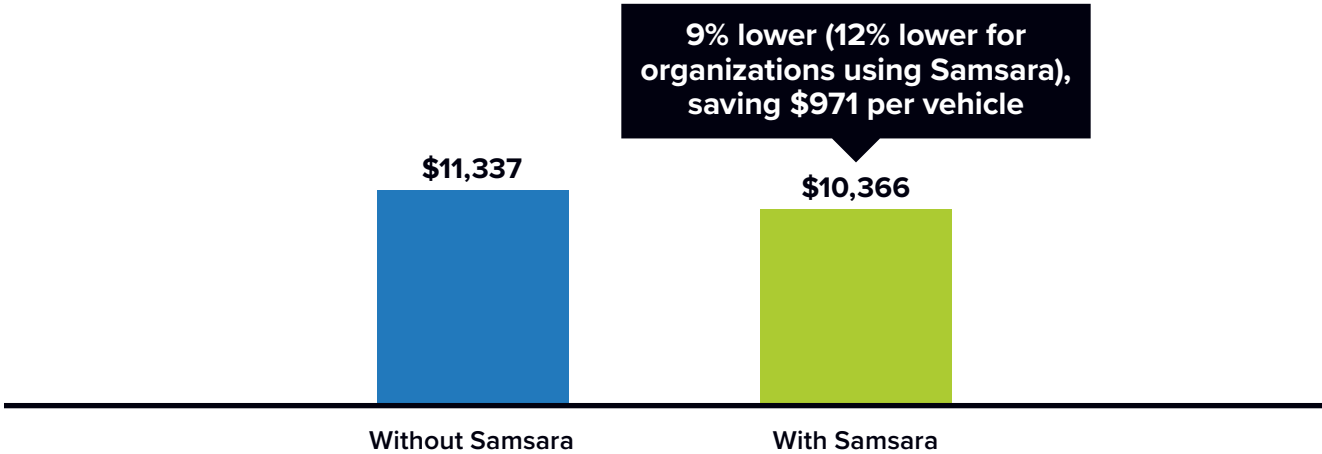
Maintaining the quality and capabilities of vehicle fleets is another significant cost for study participants. These costs can escalate when vehicles are used in inefficient ways, take routes that cause damage, or are insufficiently maintained. Samsara telematics helps study participants minimize the frequency of vehicle use inefficiencies, which, in turn, allows them to optimize their direct spending on vehicle maintenance. One interviewed Samsara customer commented:

*“From a preventative and a predictive maintenance perspective, we’re getting the telematics on vehicles with Samsara, we’re getting the miles of service that come off the trucks, and we can input that into our maintenance systems to either do something from a predictive perspective or just allow for the preventative maintenance work orders that need to work into the maintenance teams.”*

As shown in **Figure 6**, IDC puts the savings at an average of 12% for organizations using Samsara for this purpose and 9% across all surveyed organizations, leading to maintenance cost reductions worth an average of \$971 per vehicle per year.

Vehicle maintenance costs can quickly escalate. Organizations are reporting a 12% reduction on direct spending for vehicle maintenance, resulting in savings of \$971 per vehicle annually.

**FIGURE 6**  
**Impact on Maintenance Costs per Vehicle**  
(Cost of maintenance per vehicle per year)



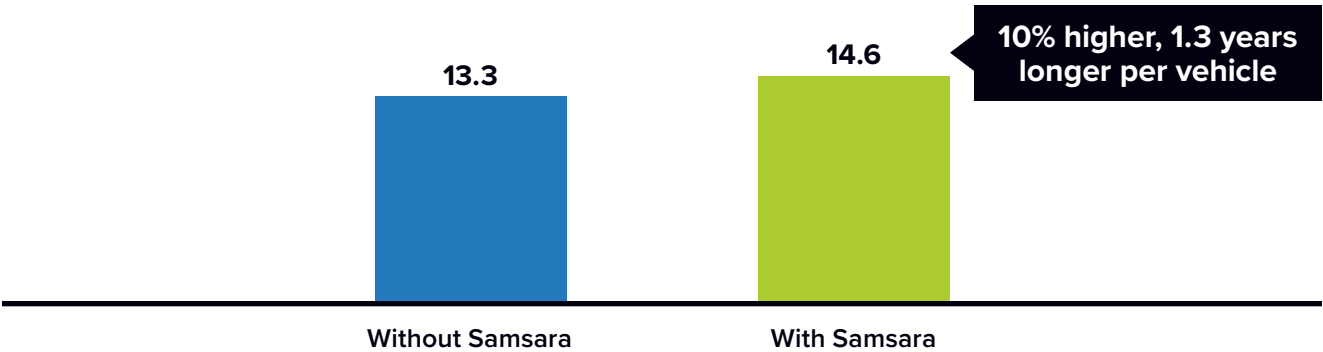
n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

# Vehicle Life Span Benefits

Purchasing vehicles is one of the most significant costs associated with having a vehicle fleet, which leads organizations to want to maximize the useful life span of their vehicles. Their ability to manage vehicle mileage, limit vehicle wear and tear, and proactively service and maintain their vehicles all factor into how long they can use a vehicle. IDC’s research shows that the ability to realize improvements in all of these areas with Samsara enables study participants to extend the life span of a typical vehicle in their fleets. On average, study participants reported gaining 10% longer use of a vehicle, worth an average of 1.3 years of additional use (see **Figure 7**). In turn, this means that study participants must purchase fewer vehicles each year, with IDC calculating that they will save an average of \$1,179 per vehicle per year by having longer vehicle useful life spans.

Maximizing vehicle life span allows organizations to purchase fewer vehicles per year, translating into direct savings. Organizations reported gaining 10% longer use of a vehicle, resulting in savings of \$1,179 per vehicle annually.

**FIGURE 7**  
**Impact on Vehicle Life Span**  
(Number of years)



n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

# Vehicle Availability Benefits

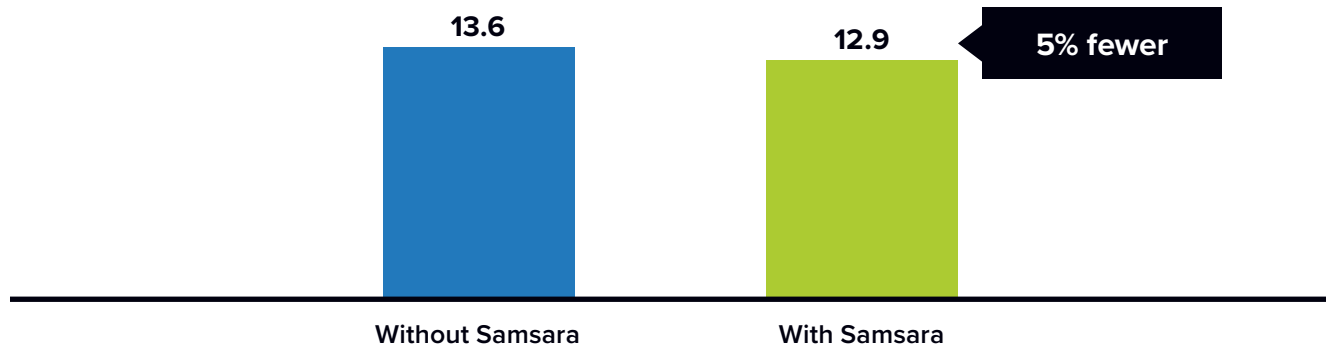
Study participants also reported that Samsara helps them ensure vehicle availability for carrying out their organizational activities. When vehicles are not available, whether for maintenance reasons or because they need to be relocated, study participants can incur significant potential losses. As shown in **Figure 8** (next page), Samsara customers participating in IDC’s research reported reducing the frequency of vehicle unavailability by an average of 5%. This increased availability translates into limiting revenue losses associated with not having access to a vehicle, which IDC calculates as being worth an average of \$867 per vehicle per year.



FIGURE 8

## Impact on Vehicle Unavailability

(Number of days per year)



n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

## Driver Safety and Insurance Benefits

Study participants put significant value on Samsara’s ability to help reduce the number of vehicle crashes their fleet is involved in and improve driver safety. Interviewed organizations noted that Samsara has a positive impact on driver behavior that leads to safer driving and, ultimately, fewer vehicle crashes. One interviewed Samsara customer reported: *“Light duty integration allows us to track individuals who speed, with pickup trucks, over preset amounts.”* Survey participants confirmed improved outcomes in terms of limiting the frequency of vehicle crashes involving vehicles from their fleets by reporting that they experience 14% fewer vehicle crashes on average, avoiding four vehicle crashes per year across their fleets. For organizations making use of Samsara video-based safety solutions across their fleet, the reduction in accidents is more significant, with an average of 29% fewer accidents. While these vehicle crashes vary from having minimal impact to involving serious injuries or even deaths, this reduction in vehicle crashes leads to reduced direct costs that IDC quantifies as having an average value of \$1,140 per vehicle per year.

Further, by reducing vehicle crashes and improving driver safety outcomes, study participants can reduce their insurance costs and mitigate the impact of increasing premiums. One Samsara customer explained: *“Once the insurance company knows that Samsara is on your fleet, it does improve your premiums or your costs when it comes to insurance.”* On average, survey respondents reported reducing their direct net insurance premium costs by an average of 2%, worth \$78 per vehicle per year in reduced insurance costs. While the market experienced a 22% increase in insurance premiums — according to a March 2024 Consumer Price

Organizations surveyed reported an average of 29% fewer accidents, resulting in savings of \$1,140 per vehicle annually, and a 2% reduction in net insurance costs. While the market experienced a 22% increase in insurance premiums, Samsara customers reported a 2% decrease, equating to an effective 24% savings, which would potentially be up to 12 times more than the net savings.

Index figure from the United States Bureau of Labor Statistics — Samsara customers reported a 2% decrease, equating an effective 24% savings, which would potentially be up to 12 times more than the net savings.

Study participants who participated in in-depth interviews emphasized the significant value of Samsara in ensuring their drivers' safety and that their drivers will not be blamed for vehicle crashes they do not cause.

### Interviewed Samsara customers spoke to these types of benefits:

#### **Strong improvements in safety and efficiencies:**

*"Our safety scores have drastically improved with Samsara. We can look at leading indicators for driver performance and provide coaching to the drivers on their behaviors based on the data that's gathered from Samsara. The other thing that we get is telematics data that comes from our vehicles, so we're able to capture data regarding fuel use and overall input to the maintenance of our vehicles."*

#### **Reduced distracted driving:**

*"In-cab coaching that Samsara provides (e.g., telling you that you are on your cell phone, you're following too closely, speeding, or on distracted driving alone) has led to a 40% reduction in distracted driving just measuring when we first put the cameras into our vehicles until now. That is with our Samsara installation ongoing."*

One metric that demonstrates improvements in terms of driver satisfaction is survey participants' ability to reduce driver turnover by 2% on average, helping them lower costs associated with hiring and training new drivers. One interviewed organization noted that it was initially concerned with driver response to the use of the Samsara video-based safety solution, but actual use had changed perspectives: *"The initial thought was we were going to put Samsara in there, we were going to lose all our drivers, but now we're getting the opposite. We're getting positive stories of how it's improved business or processes."* Another interviewed customer commented on the value of exonerating its drivers from blame in vehicle crashes: *"In the last four years, in more than half of our reportable crashes, we were able to exonerate that driver from fault based on the camera footage with Samsara. So the camera's been a real game changer."*

## Sustainability Benefits

The efficiencies in terms of driving mileage, fuel consumption, and reduced idling achieved with Samsara all help study participants achieve sustainability objectives that they have set for their vehicle fleets. While sustainability-related benefits may not translate as directly to financial value as some other types of benefits, they are increasingly becoming areas of emphasis for companies. Based on findings related to driving mileage efficiencies, IDC calculates that study participants will reduce CO<sub>2</sub> emissions from their fleets by an average of 4%, reducing emissions on a per vehicle basis by over 8,000 pounds of CO<sub>2</sub> per year.

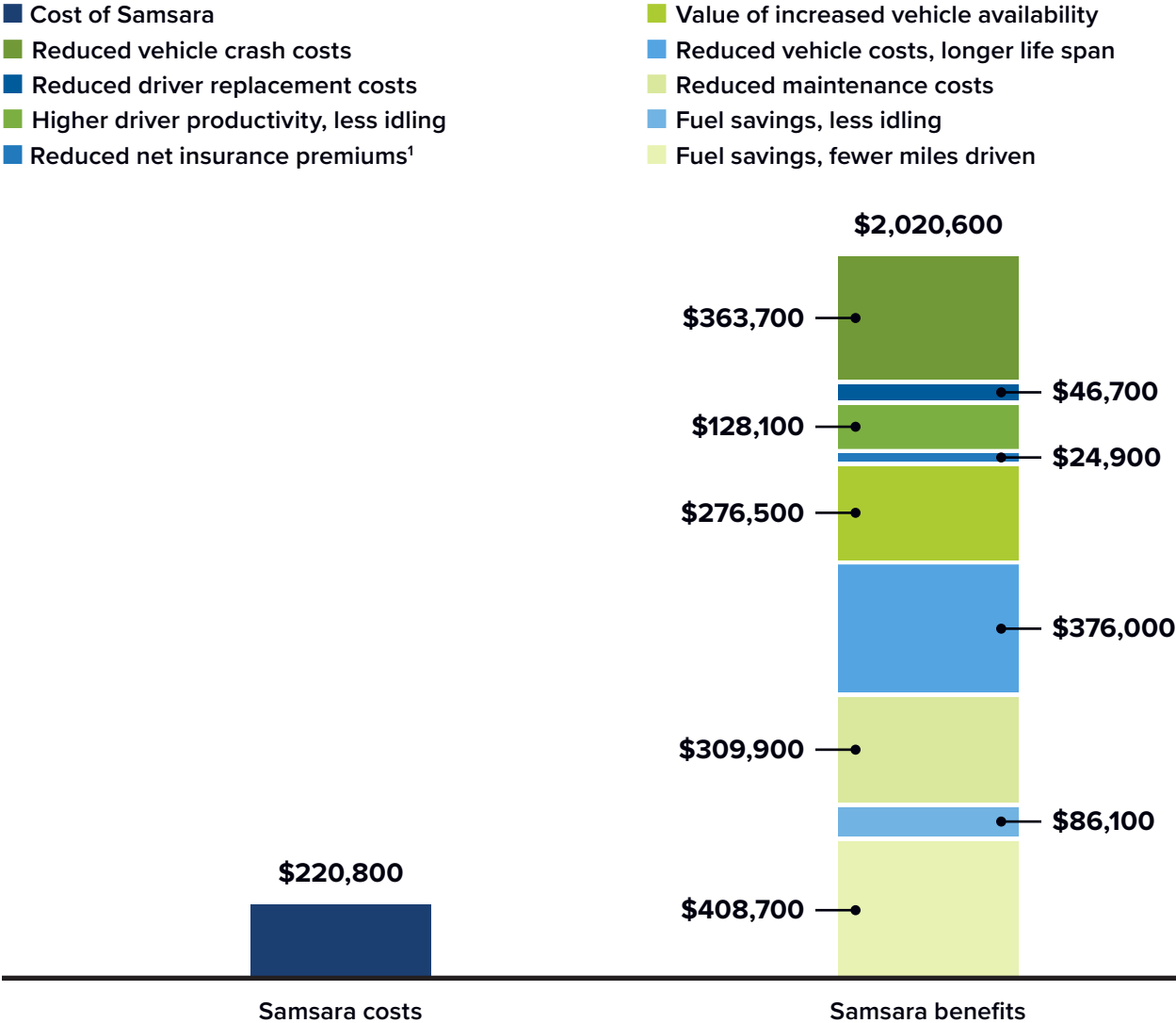
Organizations surveyed will reduce CO<sub>2</sub> emissions by an average of 4%, reducing emissions per vehicle by over 8,000 pounds of CO<sub>2</sub> annually.

## Financial Value Summary

These diverse areas of value achieved through the use of Samsara combine to create a compelling value proposition in terms of both optimizing fleet operations costs and value compared with investment in Samsara. As noted previously, IDC calculates that surveyed organizations will realize benefits worth a total of \$2.02 million per organization, which reflects their ability to run each vehicle and, ultimately, their entire fleets at an average 6% lower cost (refer back to **Figure 1**, page 8).

These benefits were compared with the average direct costs of using Samsara of \$220,800 per surveyed organization per year, which means that benefits outweigh investment costs by more than 9:1 on average. This equates to an average return on investment of 815%, as shown in **Figure 9** (next page).

**FIGURE 9**  
**Cost/Benefit Analysis per Organization**  
(\$ per year per organization)



<sup>1</sup> Survey respondents reported reducing net insurance costs by an average of 2% or \$24,900. While the market experienced a 22% increase in insurance premiums—according to a March 2024 Consumer Price Index figure from the United States Bureau of Labor Statistics—Samsara customers reported a 2% decrease. This could equate to an effective 24% gross insurance savings, which would potentially be up to 12 times more than the net savings.

n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

For an accessible version of the data in this figure, see [Figure 9 Supplemental Data](#) in Appendix 2.

# Challenges/Opportunities

A few of the key upcoming changes/challenges affecting Samsara include:

- Vehicle OEMs are now providing new vehicle fleets with in-built IoT sensors and gateways, with a vision to provide fleet management services in the near future. However, Samsara's ability to expand its platform beyond fleets and work with organizations with mixed fleets can reduce the impact of this challenge, given that Samsara is integrated across key OEMs like Ford, Stellantis, GM, and John Deere.
- Connectivity-related challenges for transmitting large data volumes can occasionally hinder the company's ability to use real-time capability and video-based telematics, especially while operating in rural areas and remote locations. However, with expanding 5G coverage, higher bandwidth, and data processing at the edge can enable high-speed and large-volume data transmission and further enhance the potential for real-time telematic data transmission.

## Conclusion

IDC's study demonstrates the significant benefits that organizations can achieve by implementing Samsara's vehicle telematics and video-based safety solutions. The findings demonstrate that Samsara delivers a compelling value proposition, offering substantial cost savings, operational efficiencies, safety improvements, and sustainability gains in terms of operating and maintaining its vehicle fleets and operations. As organizations continue to seek ways to optimize their fleet operations and enhance driver safety, Samsara's technology presents a proven solution that can help them achieve these objectives while delivering a strong return on investment, as shown by IDC's finding of more than 800% average ROI for study participants and an average reduction in overall fleet-related operational costs of 6%.



# Other Notable Benefits Beyond ROI and Business Value

- Customers view Samsara as a connected ecosystem company rather than just a fleet management service provider. The ability to connect all assets, house all data on one platform, and export it across other management platforms is a key differentiator from competitors.
- Samsara's strong customer support and openness to working with customers on certain domain-specific use cases are key strengths.
- The AI-powered video-based safety systems are helping businesses:
  - Identify concerning driving practices, driver fatigue, and rash driving scenarios
  - Decrease preventable/at-fault accidents with more personalized training for drivers
  - Protect and exonerate driver when not at fault with video evidence
- Enabling customers to automate certain back-office operations, such as accounting and payroll systems, logging systems, and tax structures, has led to significant savings in staffing costs.

# Appendix 1: Methodology

IDC used its Business Value methodology for this study, which gathered data from organizations currently using Samsara. For this study, IDC completed an online survey with 130 Samsara customers and conducted three additional in-depth interviews to gain a deeper qualitative understanding of the impact of their use. The quantitative and financial findings of this study are based on the average experiences of the surveyed participants.

IDC's analysis is based on various assumptions derived from the research, credible third-party industry sources, and IDC-driven assumptions.

## For purposes of this study, IDC applied the following assumptions that were not taken from research results:

- Idle time per day, heavy duty: 3.0 hours
- Idle time per day, light duty: 2.5 hours
- Weighted average, idle time per day: 2.8 hours
- MPG, heavy duty: 6
- MPG, light: 11
- Weighted average, MPG: 7.8
- Cost of fuel per gallon: \$4.11
- Maintenance cost per mile: \$0.17
- Life span, heavy duty: 14.2 years
- Life span, light: 11.6 years
- Weighted average life span: 13.3 years
- Average vehicle cost: \$175,000
- Average annualized vehicle cost: \$13,199
- Insurance cost per mile driven: \$0.08
- Emissions, pounds of CO<sub>2</sub> per gallon: 22.45
- Percentage of vehicle crashes, no injury: 61%
- Percentage of vehicle crashes, with injury: 28%
- Percentage of vehicle crashes, with fatality: 11%
- Cost per accident, no injury: \$13,829
- Cost per accident, with injury: \$80,008
- Cost per vehicle crash, with fatality: \$594,745
- Driver turnover, heavy duty: 90%
- Driver turnover, light: 11%
- Weighted average driver turnover: 61%
- Cost to replace driver: \$12,000
- Weighted fuel consumption while idling: 0.7 gallons per hour
- Productivity margin assumption: 15%
- Weeks per year of work: 48
- Days per week of work: 5
- Hours per week of work: 40
- Heavy-duty truck driver salary per hour: \$27
- Light truck driver salary per hour: \$30
- Blended driver salary per hour: \$28

*Note: All numbers in this document may not be exact due to rounding.*

# Appendix 2: Supplemental Data

This appendix provides an accessible version of the data for the complex figures in this document. Click “Return to original figure” below each table to get back to the original data figure.

**FIGURE 1 SUPPLEMENTAL DATA**  
**Impact on Vehicle Cost of Operations**

	Without Samsara	With Samsara
Fuel costs	\$11,255,100	\$10,760,300
Maintenance costs	\$3,616,700	\$3,306,800
Driver productivity loss costs	\$909,300	\$781,100
Vehicle purchase costs	\$4,210,600	\$3,834,600
Vehicle unavailability costs	\$5,132,500	\$4,856,000
Net insurance costs <sup>1</sup>	\$1,618,300	\$1,593,400
Accident costs	\$2,596,700	\$2,233,000
Driver replacement costs	\$2,350,100	\$2,303,400
Total	\$31.69 million	\$29.67 million (6% lower, saving \$2.02 million per organization per year)

<sup>1</sup> Survey respondents reported reducing net insurance costs by an average of 2% or \$24,900. While the market experienced a 22% increase in insurance premiums—according to a March 2024 Consumer Price Index figure from the United States Bureau of Labor Statistics—Samsara customers reported a 2% decrease. This could equate to an effective 24% gross insurance savings, which would potentially be up to 12 times more than the net savings.

n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

[Return to original figure](#)

## Appendix 2: Supplemental Data (continued)

FIGURE 2 SUPPLEMENTAL DATA

### Impact on Miles Driven per Year

	Without Samsara	With Samsara
Heavy-duty vehicles	73,551	70,726
Light-duty vehicles	45,549	43,800
Weighted average, all vehicles	63,410	60,975
<b>Difference</b>	<b>4% fewer for all organizations, 7% fewer for organizations using Samsara</b>	

n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

[Return to original figure](#)

FIGURE 9 SUPPLEMENTAL DATA

### Cost/Benefit Analysis per Organization

	Samsara costs	Samsara benefits
Cost of Samsara	\$220,800	-
Fuel savings, less idling	-	\$86,100
Fuel savings, fewer miles driven	-	\$408,700
Reduced maintenance costs	-	\$309,900
Reduced vehicle costs, longer life span	-	\$376,000
Value of increased vehicle availability	-	\$276,500
Reduced net insurance premiums <sup>1</sup>	-	\$24,900
Higher driver productivity, less idling	-	\$128,100
Reduced driver replacement costs	-	\$46,700
Reduced vehicle crash costs	-	\$363,700
<b>Total</b>	<b>\$220,800</b>	<b>\$2,020,600</b>

<sup>1</sup> Survey respondents reported reducing net insurance costs by an average of 2% or \$24,900. While the market experienced a 22% increase in insurance premiums—according to a March 2024 Consumer Price Index figure from the United States Bureau of Labor Statistics—Samsara customers reported a 2% decrease. This could equate to an effective 24% gross insurance savings, which would potentially be up to 12 times more than the net savings.

n = 130; Source: IDC Business Value In-Depth Interviews, 2023–2024

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# About the IDC Analysts



## **Sandeep Mukunda**

**Research Manager, Digital Automotive and Transportation Strategies, IDC**

Sandeep Mukunda is the research manager for IDC's Digital Automotive and Transportation Strategies program, a part of the worldwide Government Insights and Smart Cities and Communities practice. Sandeep's focus areas include IT and OT solutions in digital mobility, such as in-car infotainment, electric cars, connected vehicles, autonomous vehicles, public transportation and Robo-taxis, mobility as a service, and other ride-sharing services. The ongoing proliferation in electric vehicle demand, widescale commercialization of the 5G network, changing consumer adoption patterns, and the growing emphasis on sustainability goals across key economies are leading to ongoing advancements and partnerships among key stakeholders in the mobility value chain. Sandeep's research provides insights and analysis for IT and OT automotive and transportation suppliers, as well as transportation operators and transit authorities.

[More about Sandeep Mukunda](#)



## **Matthew Marden**

**Research Vice President, Business Value Strategy Practice, IDC**

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

[More about Matthew Marden](#)



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