GENERATIVE AI
RADAR
AUTOMOTIVE

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Generative AI Radar — Automotive

Generative AI is still new, yet enterprises are already exploring its transformative potential

This year will bring further developments in generative AI as organizations familiarize themselves with this transformative technology. So where are they now?

Through this study we aimed to uncover how companies use generative AI, how much they spend on it, how it's being rolled out, and where it makes an impact. We looked at 3,000 companies across 12 industries:

- Automotive
- Consumer packaged goods
- Energy, mining, and utilities
- Financial services
- Healthcare
- High tech
- Insurance
- Life sciences
- Logistics and supply chain
- Manufacturing
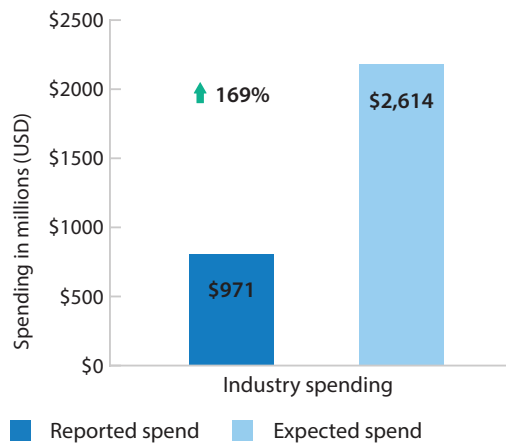- Retail and hospitality
- Telecommunications

Many companies told us they are already spending significant sums of money — and are set to spend more this year. However, this pattern isn't the same across sectors. In this data book, we highlight how automotive compares with the rest of the pack.
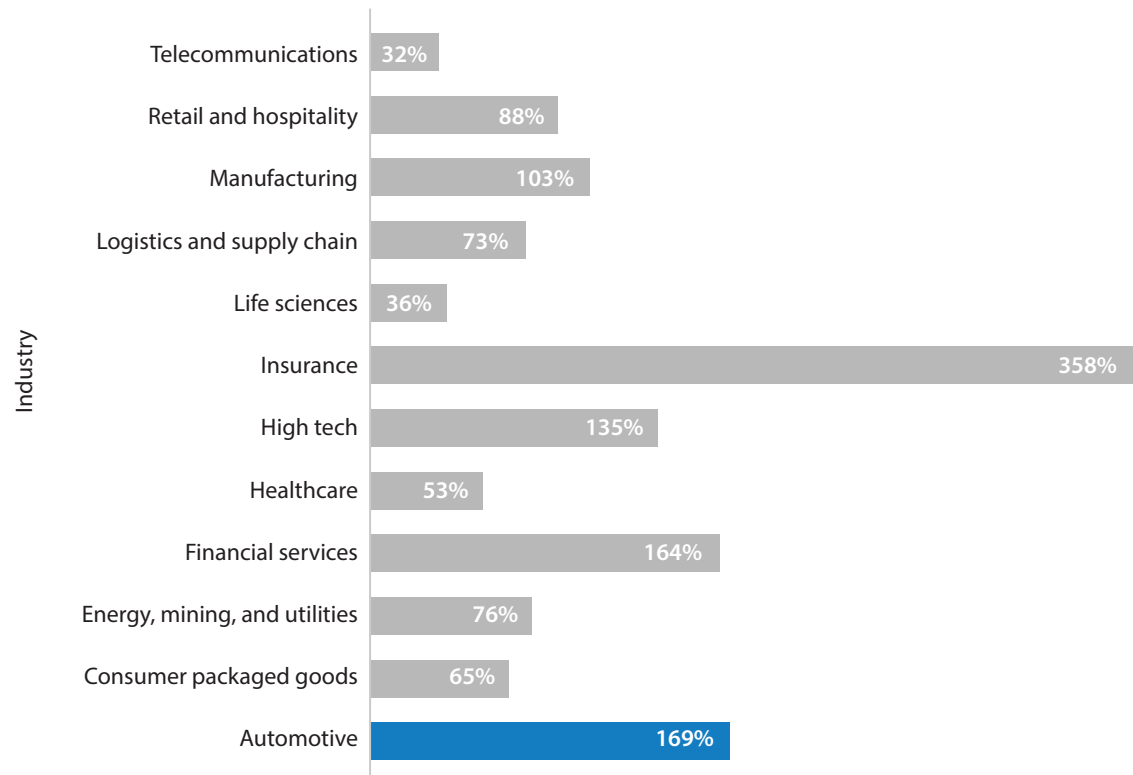
Generative AI spending

Automotive generative AI spending set to explode

Spending by automotive companies is set to grow $2.6 billion in 2024 — Automotive is expected to witness higher spending growth compared with other sectors, lagging only insurance.

Automotive generative AI spending

Spending in millions (USD)

- $2500
- $2000
- $1500
- $1000
- $500
- $0

↑ 169%

$971 $2,614

Industry spending

■ Reported spend ■ Expected spend

Expected generative AI spending growth in 2024 by industry

Industry

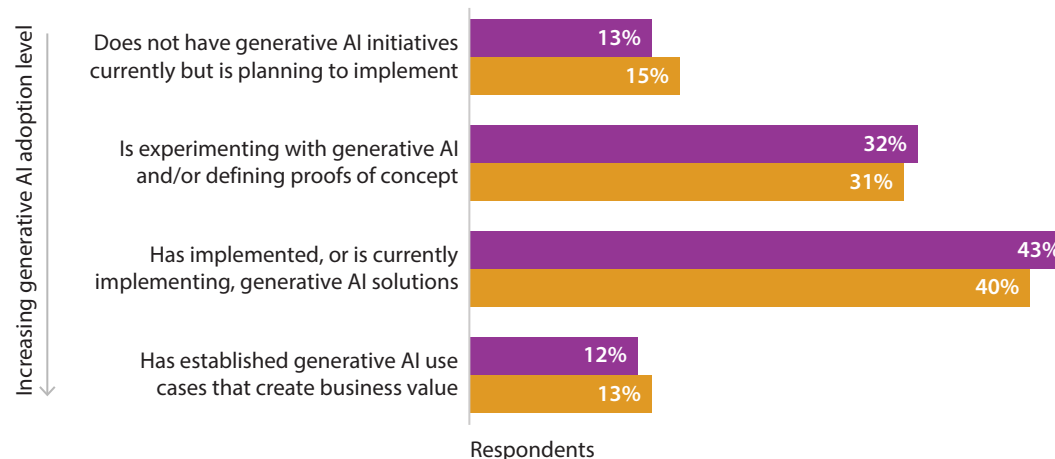| Industry	%
Telecommunications	32%
Retail and hospitality	88%
Manufacturing	103%
Logistics and supply chain	73%
Life sciences	36%
Insurance	358%
High tech	135%
Healthcare	53%
Financial services	164%
Energy, mining, and utilities	76%
Consumer packaged goods	65%
Automotive	169%

Generative AI adoption

More than 50% of automotive companies are implementing or have generated business value from generative AI

87% of automotive firms already use generative AI — Only 13% of automotive firms do not have generative AI initiatives currently. Over 40% have implemented or are implementing generative AI, while 12% have initiatives that create business value.

Generative AI adoption by proportion of respondents

Increasing generative AI adoption level

Does not have generative AI initiatives currently but is planning to implement — Automotive 13%, Total sample 15%

Is experimenting with generative AI and/or defining proofs of concept — Automotive 32%, Total sample 31%

Has implemented, or is currently implementing, generative AI solutions — Automotive 43%, Total sample 40%

Has established generative AI use cases that create business value — Automotive 12%, Total sample 13%

Respondents

■ Automotive ■ Total sample

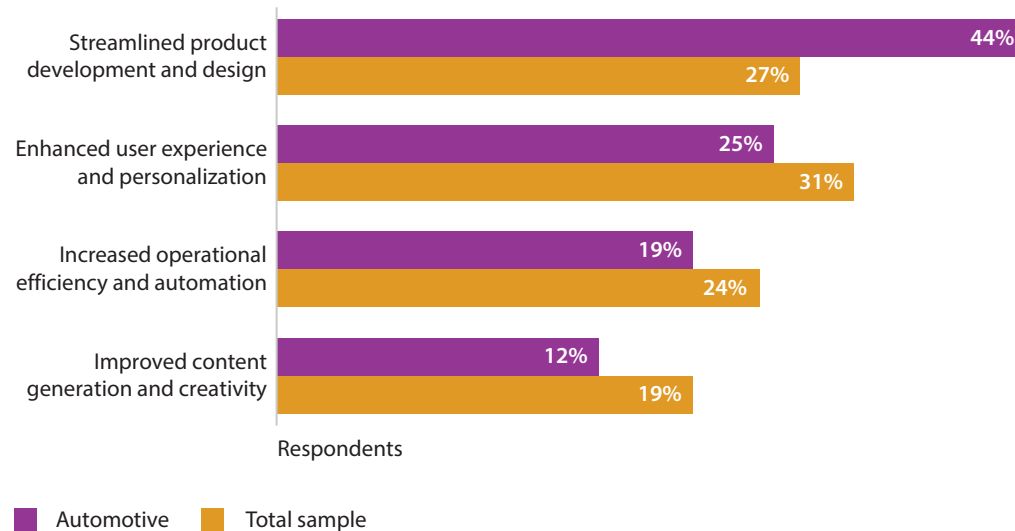*Note: Percentage numbers do not add up to 100% because of rounding.*

Product development drives optimism for automotive firms

44% of the automotive companies are using generative AI to streamline product development

Product development is the main focus for automotive firms — Compared with the overall trend, more automotive firms expect generative AI to have a positive impact on streamlined product development.

Where companies expect generative AI to have the most positive impact

Category	Automotive	Total sample
Streamlined product development and design	44%	27%
Enhanced user experience and personalization	25%	31%
Increased operational efficiency and automation	19%	24%
Improved content generation and creativity	12%	19%

Respondents

■ Automotive ■ Total sample

*Note: Percentage numbers do not add up to 100% because of rounding.*

Generative AI's impact inspires optimism from automotive industry

Automotive firms are as positive about generative AI's business impact as the overall trend

Positive sentiment reigns for automotive firms — Few automotive companies are negative about generative AI's impact. They held the same positive sentiment as the overall trend.

Expected generative AI impact on business areas by proportion of respondents

Respondents

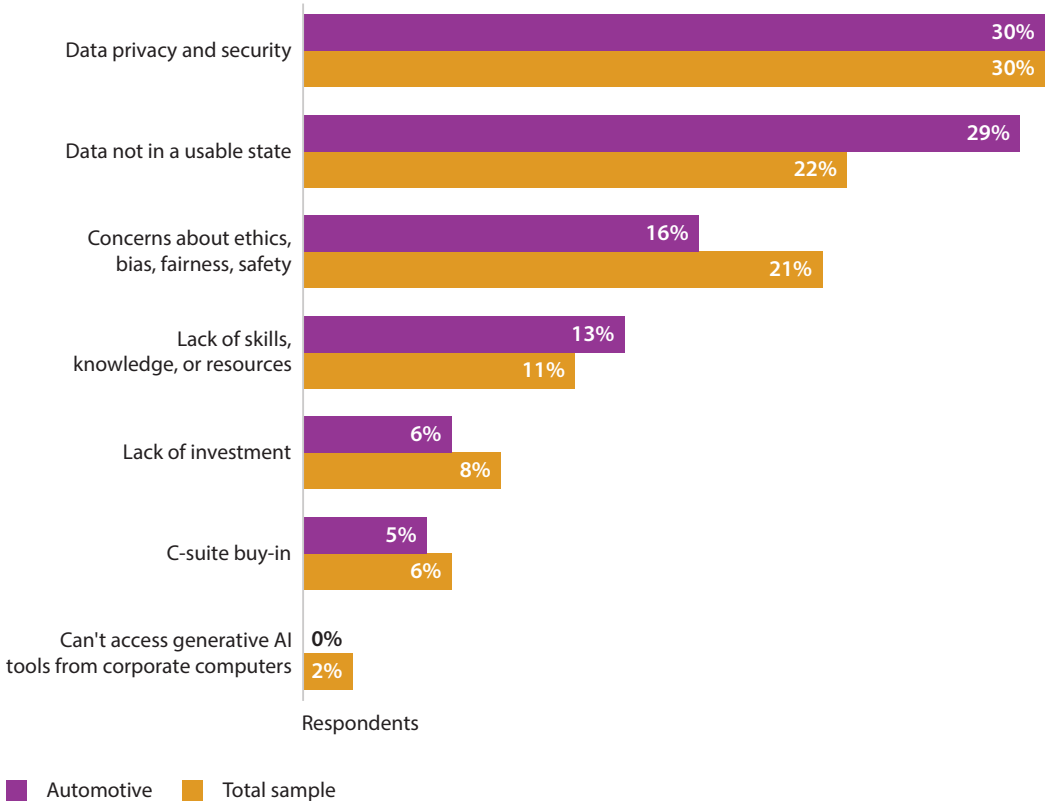■ Positive   ■ Neutral   ■ Negative
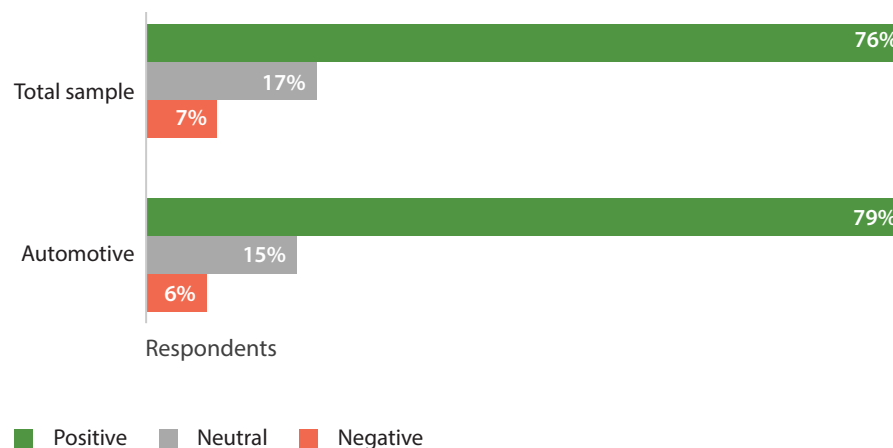
Note: We calculated "business impact sentiment" by asking survey respondents to rate their sentiment on generative AI's impact on the following business areas: business model, cost efficiency, profit, reputation, revenue, and talent. Then we combined those answers into one measure.

Data privacy and data usability block generative AI adoption

Auto firms are less concerned with ethics and bias than the overall trend

Concern for data usability is as high as concerns for data privacy and security — Nearly 60% of automotive companies reported either data usability or privacy as obstacles to generative AI adoption. Data usability was a much more significant concern for the auto industry than the overall trend.

Challenges in implementing generative AI

Challenge	Automotive	Total sample
Data privacy and security	30%	30%
Data not in a usable state	29%	22%
Concerns about ethics, bias, fairness, safety	16%	21%
Lack of skills, knowledge, or resources	13%	11%
Lack of investment	6%	8%
C-suite buy-in	5%	6%
Can't access generative AI tools from corporate computers	0%	2%

Respondents

■ Automotive   ■ Total sample

| *Note: Percentage numbers do not add up to 100% because of rounding.*

Confidence in managing generative AI systems

Automotive firms are confident in generative AI management

More than 75% of automotive firms reported confidence in managing generative AI systems — This confidence is higher than the overall trend. However, they held nearly the same negative sentiment as the overall trend.

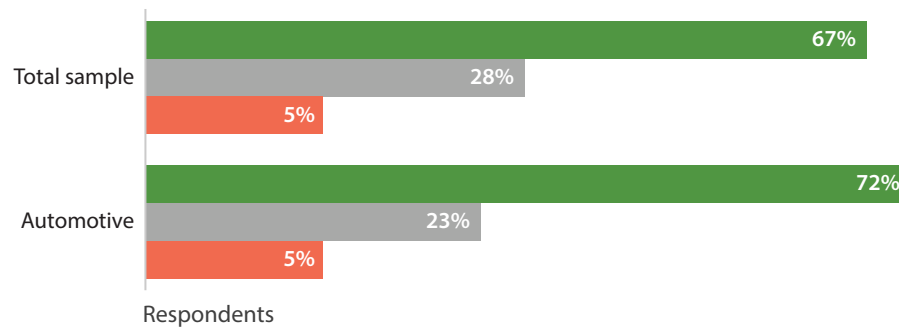Confidence in the ability to manage generative AI by proportion of respondents

Respondents

■ Positive   ■ Neutral   ■ Negative
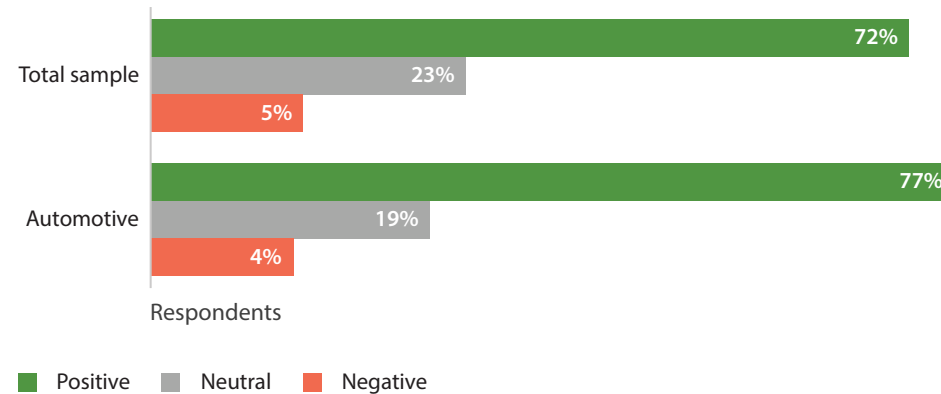
Note: Percentage numbers do not add up to 100% because of rounding.

Workforce generative AI readiness

The automotive workforce is more prepared for generative AI than the overall trend

Automotive firms are confident about their workforces' readiness for generative AI — 72% of the automotive industry is positive that their workforce is ready to adopt generative AI, higher than the overall trend.

Sentiment on workforce readiness to adopt generative AI by proportion of respondents

Respondents

■ Positive   ■ Neutral   ■ Negative

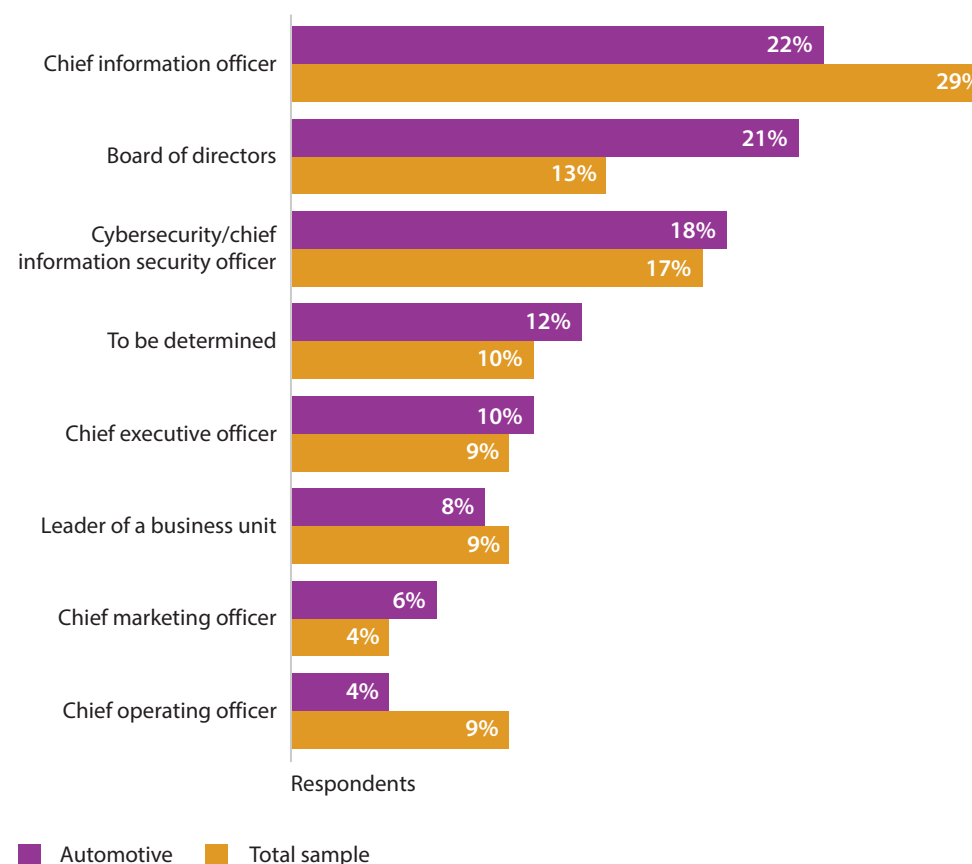| *Note: Percentage numbers do not add up to 100% because of rounding.*

Primary sponsor of generative AI initiatives

Board of director and CIOs primarily sponsor generative AI at automotive companies

CIOs often sponsor automotive companies' generative AI initiatives — 22% of automotive companies have chief information officers (CIOs) sponsoring generative AI initiatives. However, this is less than the overall trend (29%).

However, more automotive companies have the board of directors as the primary sponsor than the overall trend.

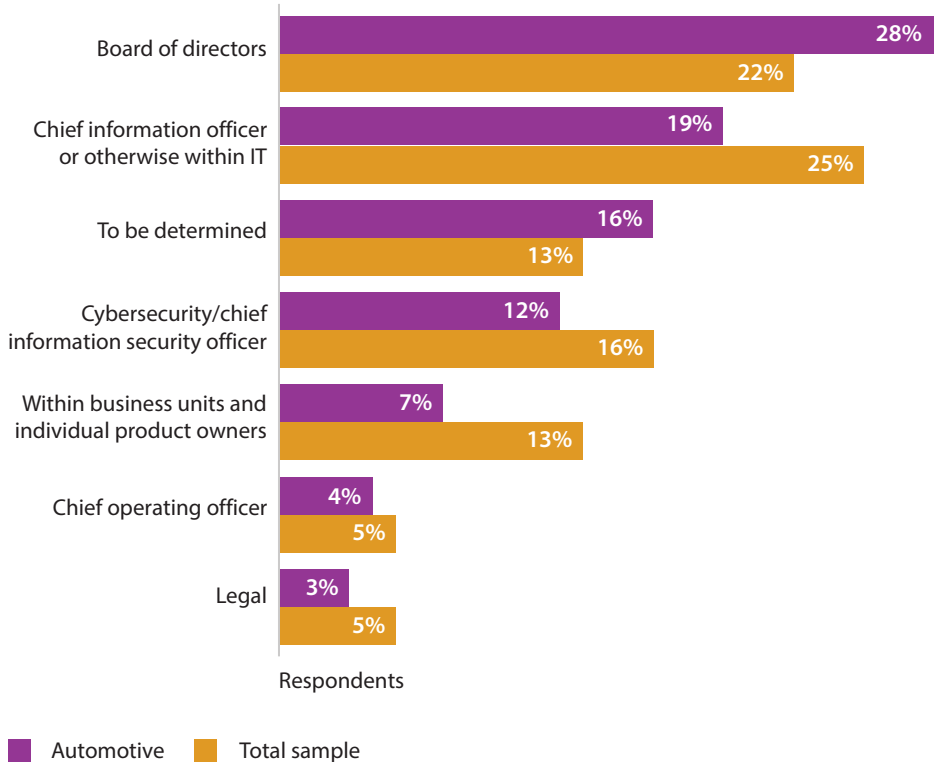Primary sponsor of generative AI initiatives by proportion of respondents

Role	Automotive	Total sample
Chief information officer	22%	29%
Board of directors	21%	13%
Cybersecurity/chief information security officer	18%	17%
To be determined	12%	10%
Chief executive officer	10%	9%
Leader of a business unit	8%	9%
Chief marketing officer	6%	4%
Chief operating officer	4%	9%

Respondents

■ Automotive ■ Total sample

Note: Percentage numbers do not add up to 100% because of rounding.

Primary generative AI policymaker

Policy comes from on high in the automotive industry

Boards of directors are leading on AI policy — 28% of automotive companies report the board of directors is the primary policymaker, significantly more than the overall trend (22%).

Primary generative AI policymaker by proportion of respondents

Role	Automotive	Total sample
Board of directors	28%	22%
Chief information officer or otherwise within IT	19%	25%
To be determined	16%	13%
Cybersecurity/chief information security officer	12%	16%
Within business units and individual product owners	7%	13%
Chief operating officer	4%	5%
Legal	3%	5%

Respondents

■ Automotive ■ Total sample

| Note: Percentage numbers do not add up to 100% because of rounding.

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