Harris Poll AutoTECHCAST

Executive Summary

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Methodology

Harris Poll AutoTECHCAST is an annual multi-client study platform to collect and analyze consumer insights on advanced automotive technologies and features. The 2023 full study includes 40 technologies.

STUDY DETAILS

10,421 US Consumers  30 Minutes (average survey length)

In order to qualify for the survey, respondents met the following criteria:

• US resident
• Ages 18-80 years old
• Have a valid driver’s license
• Have at least one household vehicle
• The vehicle is among the pre-determined list of North American models with model year of 2017 or newer
• Must be at least 50% involved in the decision to buy the next vehicle
• Intends to purchase or lease a new vehicle in the future

Data collected between April 3, 2023 and May 10, 2023.

Data weighted by demographics and a propensity score to ensure that respondents are representative of the total in-market vehicle buying population.

Standard set of metrics on each of the 40 techs, plus customized “deep dive” questions specific to the individual techs to provide info on preferred functionality, reasons for interest/non-interest, etc.
What AutoTECHCAST Covers

Automotive manufacturers and suppliers need to innovate and differentiate to capture new business and build brand equity. Selecting and integrating the right advanced technologies—those that drive business performance, product differentiation and customer loyalty—is essential.

The annual Harris Poll US AutoTECHCAST (ATC) reflects the perspectives of over 10,000 current vehicle owners and provides an in-depth assessment of a wide assortment of emerging automotive technologies in the areas of:
2023 AutoTECHCAST Technology List

STUDY DETAILS

2023 Harris Poll AutoTECHCAST™

2023 AutoTECHCAST Technology List

COMFORT & CONVENIENCE

COMFORT
- Active Noise Cancellation
- Advanced Cabin Air Filter
- Automatic Window Tinting
- Interior/Exterior Air Quality Display
- Noise Canceling Tires ★

CONNECTIVITY
- Front Passenger Screen
- In-Car Payment System
- Interactive Gaming
- Over-the-Air Updates
- Smartphone As Key
- Smartphone Linked Media/Navigation
- Streaming Media
- Vehicle Internet Connectivity

CONVENIENCE
- Auxiliary Power Generator
- Driver Recognition System
- EV/Fuel Route Planning Systems
- Smart Home Ecosystem Integration
- Touchless Door Opening/Closing
- Wireless Mobile Device Charging System

SAFETY

DRIVE MONITORING & ALERTS
- Driver Monitoring System
- Vehicle-to-Vehicle Communication
- Health Monitoring Sensor ★

DRIVER ASSISTANCE
- Enhanced Collision Mitigation System
- Low-Speed Collision Avoidance System

VEHICLE MONITORING & SECURITY
- Remote Camera Monitoring
- Remote Vehicle Diagnostics
- Vehicle Cybersecurity Solution

VISIBILITY
- Augmented Reality Head-Up Display
- Camera Monitoring System (E-Outside Mirror)
- Full Digital Display Rear View Mirror
- Safe Exit
- Surround View Camera System

FUEL EFFICIENCY

FUEL SAVING & ALTERNATE FUEL
- Battery Electric Engine
- Fuel Cell Engine
- Hybrid Electric Engine

AUTONOMOUS VEHICLES

AUTONOMOUS & SEMI-AUTONOMOUS
- Automatic Parking System
- Traffic Jam Assist
- Fully Self-Driving
- City and Highway Assisted Self-Driving
- Highway Assisted Self-Driving

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★ New Technologies Measured in 2023

Levels of Autonomy Explored

PLUS DEEP DIVE SECTIONS ON:
- Autonomous Vehicles
- Connected Car
- Electric Vehicles
Study Scope And Flow

Technology attributes included in AutoTECHCAST

- Likelihood to Purchase (Pre-Pricing)
- Familiarity
- Price Sensitivity
- “Build Your Own” Tech Bundle Exercise
- Tech Appeal and Production Differentiation
- Interest at Market Price
- Tech Deep Dives

Unique Insights from AutoTECHCAST
AutoTECHCAST Deliverables

**Summary Report**

**Online Interactive Dashboard**

**Option Packaging Tool**

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**Battery Electric Vehicle Deep Dive**

Other Technology Highlights:

- If you owned a Battery Electric Vehicle, how many miles would you expect to get out of a full charge?

- Used your most recent fuel purchase for savings from discard fuel costs to cover the additional cost of $8,000 for a Battery Electric Vehicle?

- Year of test: 2023

- Test Market: 100% Electric Vehicles

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- Harris Poll AutoTECHCAST

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**STUDY DETAILS**

2023 Harris Poll AutoTECHCAST™
STUDY DETAILS

AutoTECHCAST Deliverables

KANO Analysis

Full Data Set by mTab Software

Optional AutoTECHCAST Feature Optimization Platform

Leveraging the AutoTECHCAST Platform to Provide Quick-Turn Insights

2023 Harris Poll AutoTECHCAST
Active Headed Technology Measurement for Client
Example Questions the Study Helps Answer

- How are attitudes toward in-vehicle technology changing?
- Which features are gaining/losing momentum in terms of interest?
- How much are consumers willing to pay for a feature?
- What are the price/volume trade-offs of a feature?
- Which features are most important to attracting Millennials?
- How does interest in a technology or package of features vary by segment?
- What features do my brand owners/intenders prefer?
- Which features are most used, seldom used?
- Which features of a package drive the most interest?
- What is the optimal price point to generate the maximum demand?
- How much autonomy is the consumer willing to accept?
- What will convert drivers with gas engines to electric vehicles?
Example Analysis
Accident Avoidance, Smartphone Integration, and Visibility Techs Continue To Provide Broad Appeal

In-vehicle entertainment and payment systems along with fuel cell engine and full driving automation have the least appeal to consumers.

The annual AutoTECHCASTSM measured consumer interest in 40 advanced technologies.
Momentum Just “Fair” For Most Features in 2023

Stable year-over-year momentum is an indication that consumers are more discerning.

Only Streaming Media has ‘good’ consideration and “good” momentum.

Five features had poor momentum in 2023 relative to AutoTECHCAST norms; Automatic Window Tinting, Driver Monitoring System, Vehicle Cybersecurity Solution, Smartphone as Key, and Augmented Reality Head-up Display.
Safety Technologies Remain Top Differentiators For Vehicles

Consumers are more likely than not to purchase a vehicle that offered Surround View Camera System, Low-Speed Collision Avoidance System, and Enhanced Collision Mitigation System.

Automatic Parking System now ranks among the top 10 differentiators – up 4 points since 2022 and 8 points since 2018.

Differentiation definition:
How likely am I to purchase a vehicle with this technology versus one without it? (Extremely Likely and Very Likely)

<table>
<thead>
<tr>
<th>DIFFERENTIATION</th>
<th>Top 10 Technologies by Category</th>
<th>% Extremely/Very Likely (YOY)</th>
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<tbody>
<tr>
<td><strong>GOOD</strong></td>
<td></td>
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<tr>
<td>Surround View Camera System</td>
<td>69% (+3%)</td>
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<tr>
<td>Low-Speed Collision Avoidance System</td>
<td>67% (+1%)</td>
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<tr>
<td>Enhanced Collision Mitigation System</td>
<td>62% (+0%)</td>
<td></td>
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<tr>
<td>Smartphone Media/Navigation Functionality</td>
<td>60% (+4%)</td>
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<tr>
<td>Hybrid Electric Engine</td>
<td>59% (+2%)</td>
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<tr>
<td>Automatic Window Tinting</td>
<td>59% (-1%)</td>
<td></td>
</tr>
<tr>
<td>Wireless Mobile Device Charging System</td>
<td>58% (+3%)</td>
<td></td>
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<tr>
<td>Remote Vehicle Diagnostics</td>
<td>57% (+2%)</td>
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<tr>
<td>Automatic Parking System</td>
<td>56% (+4%)</td>
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<tr>
<td>Active Noise Cancellation</td>
<td>55% (+7%)</td>
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<tr>
<td><strong>FAIR</strong></td>
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Key Study Deliverables
Included in AutoTECHCAST for the first time in 2021, KANO analysis further guides prioritization of advanced automotive features based on their likelihood to satisfy customers.

**Technology Classification**

- **Attractive Techs**: These technologies will increase a vehicle’s competitive edge and go above and beyond expectations. Consumers would be excited when these technologies are included but not dissatisfied if not included.

- **Performance Techs**: The technologies don’t necessarily come with the expected offering but rather add appeal (e.g., gas mileage, audio sound quality).

- **Indifferent Techs**: These technologies do not have a strong effect on satisfaction or dissatisfaction. This does not necessarily mean that consumers don’t care about them; rather it means that consumers do not necessarily need them.

- **Must-Be Techs**: These technologies are necessary. Consumers expect vehicles to offer these technologies. These technologies don’t impress consumers but can cause dissatisfaction if they’re not provided (e.g., air conditioning, power steering).

**KANO Analysis Output Provides Two Different Approaches To Analyze Results**

- **Continuous Analysis**: (Combined Overview of Technology Classification)
  - Non-Fulfillment
  - More Appeal (Functional)
  - Performance

- **Discrete Analysis**: Individual Technology Classification (% of Consumers By Category)
  - Reverse: These are technologies that Consumers dislike for their vehicle.
  - Questionable: Responses with conflicting answers.
AutoTECHCAST includes a ‘Build Your Own Technology Bundle’ exercise aimed at providing deeper insights into price sensitivity for desired technologies.

Through advanced modeling, we are able to provide an interactive tool - the Option Packaging Tool or OPT - that allows a user to estimate predicted share of preference (or demand) at various price points for each technology or technology bundle.
AutoTECHCAST Option Packaging Tool - Output

A variety of analyses are provided for you to review the desired technology package.

See how each technology contributes to the overall preference for the package.

Review package price and market preference.

Review the package’s Price Elasticity.

You can create a simulated forecast from the results.

Review package by another segment or reconfigure your package.
Harris Insights has designed a custom feature testing platform leveraging AutoTechCast that addresses key feature performance metrics and questions of interest on additional features and technologies in a time-sensitive, agile, and cost-efficient fashion.

**Feature**

**AutoTechCast® Platform**

**Quick Dashboard Reporting**

Client provides feature stimuli and price point to Harris

Harris tests feature using the AutoTechCast Platform

Feature results are provided through standardized scorecards for efficiency
Thank you!
For More Information Contact:

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