



IHS Markit™

Automotive Offerings

Insight, analytics, expertise, and solutions—driving better decisions and better business results.



Welcome to IHS Markit!



Joe Lafeir

Senior Vice President,
Automotive
IHS Markit

The automotive industry is one of the world's largest drivers of economic growth and cultural change and a catalyst for exciting new technologies. For decades, automotive manufacturers, suppliers, and dealers along with their financial and agency partners have relied on IHS Markit as a trusted source of critical information and insight.

This trust is built on a history of providing industry leaders with comprehensive, timely, and actionable insight that has shaped better business decisions and driven better business outcomes. Today, our data, analysis, and forecasts fuel a broad range of "cloud-based" solutions that support long-term decisions and everyday execution from product strategy and planning to engineering, manufacturing, supply chain, marketing, sales, and the aftermarket.

In an increasingly competitive and interconnected business environment, actionable insight—delivered where and when you need it—can be the difference between market leadership and market parity. Like no other, IHS Markit delivers the breadth and depth of automotive insight that will help you gain and retain the lead in your market.

For more information or to speak to an IHS Markit expert, please contact us at www.ihs.com/automotive.

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Evaluate options, mitigate risk, optimize investments, and improve performance, today and tomorrow





Light Vehicle Sales Forecasts

The Light Vehicle Sales Forecast delivers insight on market demand, segment growth, and competitive dynamics.

Light Vehicle Sales Forecast and Optional Add-on Modules

Base Light Vehicle Sales Forecast 7-year forecast 10+ years history
Contingency Forecast
Import Sourcing
Cycle Plan Charting
Body Type
12-year Extension
Forecast Simulation Tool
Monthly Volumes

■ Base Product ■ Optional Add-on Modules

Base Forecast (7-Year)

Updated twice per quarter and backed by 10 years of historical data, our Light Vehicle Sales Forecast provides an in-depth, rolling 7-year view into:

- Regional and country economics, sales, regional and global vehicle segmentation, OEMs, product cycles, market-entry timing, sales strategies, and more
- Comprehensive geographic coverage of 70+ countries across 11 regions, representing more than 97% of global light vehicle sales volume
- Extensive field coverage

Add-on Modules

Contingency Forecasts

Provides two alternative model-level forecasts with the same detailed fields as our base sales forecast.

Import Sourcing

Delivering additional depth and breadth for strategic sourcing & procurement, our sourcing module offers forecasts and analysis by manufacturer and manufacturer group of vehicle; production region, market, country, and plant of vehicle; design creator of vehicle; platform engineering group; and production brand and nameplate.

Cycle Plans

Providing start/end-of-sales date fields for each vehicle/body type combination per sales country for 70+ countries; global product portfolio timing charts and midcycle enhancements (facelifts) for major global OEMs (or top-20 OEMs), OEMs' portfolio timing charts, and in-segment timing charts for all competitive offerings across each of the 30 countries.

Body Type

Extends vehicle-level forecasts and analysis to include vehicle body type, regional subsegment, and regional price class.

12-Year Extension

Extends our 7-year forecast volumes to include years 8–12.

Forecast Simulation

Our Forecast Simulation tool brings a powerful planning and decision-making capability that enables OEMs and National Sales Companies (NSCs) to build, run, and evaluate “what-if” scenarios based on a variety of forecast assumptions.

Monthly Volumes

View Sales and Body Type Forecasts in monthly data buckets for the current year plus two forecast years. History can be viewed in monthly buckets from 2007.



Light Vehicle Sales: China Province Forecast

IHS Markit is the only company that provides a vehicle sales forecast for the 31 China provinces. Based on registration actuals, we have a unique ability to forecast macroeconomic data at the province level and for major metropolitan areas to produce critical planning insights.

The forecast includes:

- Passenger vehicle demand forecast for 31 provinces
- Three years of history and forecasts for the current year plus 12
- Full brand, nameplate, body type-level detail forecast per province
- Key macroeconomic drivers per province and datapoints on various vehicles-in-operation and province growth indicators
- Extensive analysis in PDF and Tableau, with executive summaries, description of the methodological approach, and forecast rationale for 31 individual provinces
- Full brand coverage including foreign import brands, foreign joint-venture brands, and Chinese domestic brands

In addition to the China Province Forecast, IHS Markit provides a host of optional add-on services to expand and enhance the insight.

- City-level forecasts: Vehicles sales forecasts for 340+ cities at the body-type level
- On-site presentations
- Custom forecast scenarios
- Additional custom segmentation
- Dealer network development studies
- Forecast simulation tool

Light Vehicle Sales: Sub-Saharan Africa Forecast

With the world's fastest-growing middle class, sub-Saharan Africa is a region showing pronounced promise. However, availability of new vehicle demand data is patchy, not even mentioning forecasting future demand.

The Sub-Saharan Africa Light Vehicle Sales Forecast provides market demand for 50 countries. Only IHS Markit is able to provide this holistic view, combining intelligence feeds of its market-leading economic and consumer data forecast services into a single vehicle demand forecast.

- Current year forecast, plus 12-year forecasts for 50 countries for total industry vehicle volume
- Country profiles, including market conditions and forecast drivers, for 20 of the most important markets
- Current year forecast, plus 7-year model and body-type forecasts for nine sub-Saharan countries
- Semiannual updates

Sales Operation Forecast

How are the latest monthly registrations impacting this year's volume planning? What effect will this have in coming years and future vehicle generations? The Sales Operations Forecast provides answers and an independent third-party view to these critical inputs. Published within days following the release of latest actuals and updated monthly, the Light Vehicle Sales Operations Forecast greatly enhances your short- to midterm planning.



Light Vehicle Production Forecasts

Light Vehicle Production Forecasts offer an in-depth view across 50 countries, 600 plants, and 2,300 models giving OEMs and suppliers the ability to identify new opportunities, defend against competitors, and optimize current programs, capacity, and business performance.

Light Vehicle Production Forecast and Optional Add-on Modules

Base Light Vehicle Production Forecast	
7-year forecast 10+ years history	
Contingency Forecasts	Optional Add-on Modules
Capacity Utilization	Optional Add-on Modules
Export Destination	Optional Add-on Modules
12-year Extension	Optional Add-on Modules
Bodystyle	Optional Add-on Modules

- Base Product
- Optional Add-on Modules

Base Forecast (7 year)

Updated monthly and backed by 10 years of historical data, our Light Vehicle Production Forecast provides detailed analysis on regional economics, sales, production, competitive segmentation, product cycles, and manufacturing strategies. Geographic coverage of 50+ production countries across seven regions represents 99% of global light vehicle production. Field coverage of 30+ attributes are reported consistently for all light vehicles produced.

Add-on Modules

Contingency Forecasts

Provides two alternative model-level forecasts using the same 30+ detailed fields as the base production forecast.

Plant Capacity Utilization

Provides analysis for each light vehicle assembly facility (plant) including production structure setup, and global analysis for total capacity/utilization by OEM and region.

Export Destination

Provided for each vehicle and plant, this module covers sales regions, markets, and countries; currencies of both production countries and sales countries; and sales nameplate.

12-Year Extension

Extends our 7-year forecast volumes to include years 8–12.

Body Style

Extends forecast coverage to 30 body styles and includes vehicle silhouette and the number of apertures/doors.



Light Vehicle Powertrain Forecasts

Our Light Vehicle Powertrain Forecasts deliver industry-leading analysis for currently available powertrains and future propulsion technologies. Armed with these insights, business, product, and marketing strategists can make better planning and investment decisions.

Transmission Forecast 7-year forecast 10+ years history	Engine Forecast 7-year forecast 10+ years history	Alternative Propulsion Stand-alone Forecast 7-year forecast 10+ years history	Vehicle Performance and Compliance: CO2/Fuel Economy 7-year forecast 2 years history	Automotive Long-term Planning and Scenarios
Driveline Module	Alternative Propulsion Module	12-Year Extension Module	Vehicle Performance	See page 14
Alternative Propulsion Module	12-Year Extension Module		Vehicle Compliance	
12-Year Extension Module			12-Year Extension Module	

■ Base Product ■ Optional Add-on Modules

Base 7-Year Transmission and Engine Forecasts

Providing complete technical and geographic coverage, Light Vehicle Engine and Transmission Forecasts enable greater insight into production by platform, model, plant, and vehicle installation.

Add-on Modules

Driveline

Includes standard forecast spanning an 8-year horizon (current year plus 7) across 50+ countries, with detailed installation forecast by vehicle, engine, and transmission.

Alternative Propulsion (available as a “Stand Alone”)

Covers 30+ attributes across all alternative-propulsion-powered light vehicles produced.

12-Year Extension

Provides calendar-year forecast volumes for years 8–12.

Alternative Propulsion

Covers 30-plus attributes consistently across all alternative-propulsion-powered light vehicles produced, including the following fields:

- Electric motor power (hp and kW)
- Electric motor torque (lb.ft and N.m)
- Engine fuel type
- Engine layout, model, and platform
- Plug-in capability
- System voltage
- Transmission design, forward speeds, and platform
- Manufacturer
- Alternative propulsion system design, design parent, subdesign, and subdesign architecture
- Battery type
- Battery capacity
- Transmission drive type



Vehicle Performance and Compliance Monitor (VPaC)

Powered by Novation Analytics, VPaC provides critical insight into the single greatest area of research and development (R&D) in automotive. Starting with a view into OEM fleets and competitive CO₂ performance, VPaC identifies who will strike the best balance between performance and emissions (by brand, segment, or model line) and which OEM may face financial penalties. VPaC offers a one-stop shop for vehicle performance and compliance insight. The three core modules include:

CO₂/Fuel Economy (Base forecast)

Integrates sales-based powertrain forecasts with fuel consumption and fuel economy & CO₂ regulation parameters.

Vehicle Performance (Add-on module)

Enables insight into competitive position on the important trade-offs between vehicle performance and efficiency.

Vehicle Compliance (Add-on module)

Provides an unbiased, physics-based independent outlook on potential OEM compliance gaps.

12-Year Extension (Add-on module)

Adds 5 additional years to the forecast horizon.



Medium & Heavy Commercial Vehicle Forecasts

Covering more than 95% of the global truck market, our Medium & Heavy Commercial Vehicle forecast subscription provides sales and production insight by region, country, manufacturer, segment, and plant.

Our MHCV subscriptions include:

Medium & Heavy Commercial Vehicle Industry Forecast

Providing production and new registration truck sales in more than 75 countries, the MHCV industry forecast offers a consistent 12-year view by weight segment that can be tailored by country, manufacturer, and medium and heavy gross vehicle weight segments for rigid and articulated trucks greater than six tons.

Medium & Heavy Commercial Vehicle Model Production Forecast

Provides model and platform-level production forecasts (assembly plant and capacity), analysis, and cycle plans of medium- and heavy-duty trucks and buses globally. Developed in partnership with Power Systems Research (PSR), the forecasts leverage 10 years of historical data to present a 7-year (current plus 6 years) view of uniform and consistent weight segmentation for vehicles over six tons.

Medium & Heavy Commercial Vehicle Engine Production Forecast

Providing the most comprehensive technical and geographic coverage of current and future medium/heavy engines, the MHCV Engine Production forecast is based on 10 years of historical data covering 20+ technical engine attributes for vehicles greater than six tons. Developed in partnership with PSR and updated quarterly, it provides a 7-year view (current plus 6 years) into engine production by platform, model, and plant, and engine installation.

Medium & Heavy Commercial Vehicle North American Weight Segment Forecast

Provides monthly truck retail sales and production forecasts by individual gross-vehicle-weight class and manufacturer, supporting a multitude of short- and midterm planning workflows. Includes forecasts of individual gross vehicle weight classes 4–8, which also include some light truck data.

Medium & Heavy Commercial Vehicle Africa Sales Forecast

The report provides forecasts and insight into developments in the truck and bus industry in 11 of the most important markets in Africa. The service includes:

- Current-year forecast plus 12 for buses, medium trucks (6–15 ton/class 4–7), and heavy trucks (>15 tons/class 8) on the group and brand levels
- Country profiles including market conditions and forecast drivers
- Annual updates



Global Vehicles-in-Operation Forecast

Plan for the future based on the most accurate VIO forecast

For more than 30 years, the automotive industry has counted now IHS Markit for reliable vehicle forecasts. Aftermarket professionals now have another tool to guide their production planning, inventory management, and investment decisions. Building from the most credible, VIN-based historical registration data available, IHS Markit offers a 5-year VIO forecast across the United States and a 15-year forecast for the rest of the world.

You will no longer struggle to develop a VIO forecast internally. You can rely on our forecasting experience and expertise to guide your product lifecycle planning and provide accurate insights into strategic market shifts. The VIO Forecast includes both vehicles currently on the road and those set to launch within the forecast horizon.

Vehicles-in-Operation Forecast can help you:

- Plan for the future population of Vehicles-in-Operation: Understand which vehicles will be on the road at the segment, model year, make, and model level to guide parts production decisions. The VIO Forecast includes a registration forecast for all new model introductions.
- Build a detailed parts-level forecast: Utilize the industry's only Aftermarket Catalog Enhanced Standard (ACES)/VIO forecast to help you see the trends affecting your catalog.
- Predict vehicle replacement parts' "sweet spots": Plan market entrance and exit strategies based on knowledge of vehicle "sweet spots" (when demand for replacement parts for specific vehicles is highest because the vehicle is out-of-warranty but still young enough for the owner to make significant investments in repairs).
- Identify key life-cycle events: Benefit from having visibility to future new vehicle registrations and vehicle product lifecycle events and volumes.

Credible insights for the entire aftermarket industry

The VIO Forecast benefits professionals across the aftermarket industry, including:

- Replacement Part Manufacturers: Understand the projected demand for replacement parts so you can make fact-based decisions about production volumes and timing. You'll know when to ramp up and terminate production of specific components based on accurate and detailed VIO forecasts. Identify new vehicle introductions so you may begin production of replacement parts sooner and expedite product market entry.
- Retailers: Make business decisions based on a solid understanding of aftermarket industry trends. Optimize inventory levels based on a national-level VIO forecast.
- Wholesale Distributors: Gain insights to guide inventory management and business decisions.
- OEMs: Help your dealer network understand the service opportunities for particular vehicles. Understand future scrappage rates and timing for specific makes and models.



Vehicle Components and Technologies: SupplierInsight

Staying abreast of automotive sector/topic-specific developments, trends, and competitive activity can be time-consuming. With many sources available, it is often difficult to find critical and reliable market information that stakeholders of the automotive industry need. Conducting business analysis, product, or market strategy assessments without validated market data is risky. SupplierInsight provides the ability to access the wealth of recognized thought leadership, data, and analysis from IHS Markit on a broad spectrum of industry topics and sectors.

This new intelligence includes:

- News and Analysis
Get analysis of industry news and gain our unique perspective on the latest developments
- Sector Reports
Access regional supplier and sectorial reports that provide statistics, forecasts, and trend analysis, all fueled by IHS Markit component and technology analysts' thought leadership
- Supplier Profiles
Access key information on suppliers' current business as well as a list of current contracts gathered through IHS Markit proprietary surveys of the supply base. More than 1,000 supplier profiles are available globally.
- Component and technology forecasts (separate subscription required, see next page)
Identify specific new business opportunities through a six-year forecast calendar of new programs, analyze technology deployment on a program level, and monitor OEM sourcing strategies for specific components.

Services includes:

- Autonomous Driving
- Chassis
- E-Mobility
- Electric/Electronics
- Infotainment
- Interior Comfort and Passive Safety
- Lighting
- Materials and Light Weighting
- OEM Strategy
- Powertrain Components and Technologies
- Services, Apps, and Software (SAS)
- Thermal Management
- User Interface and Experience (UI/UX)



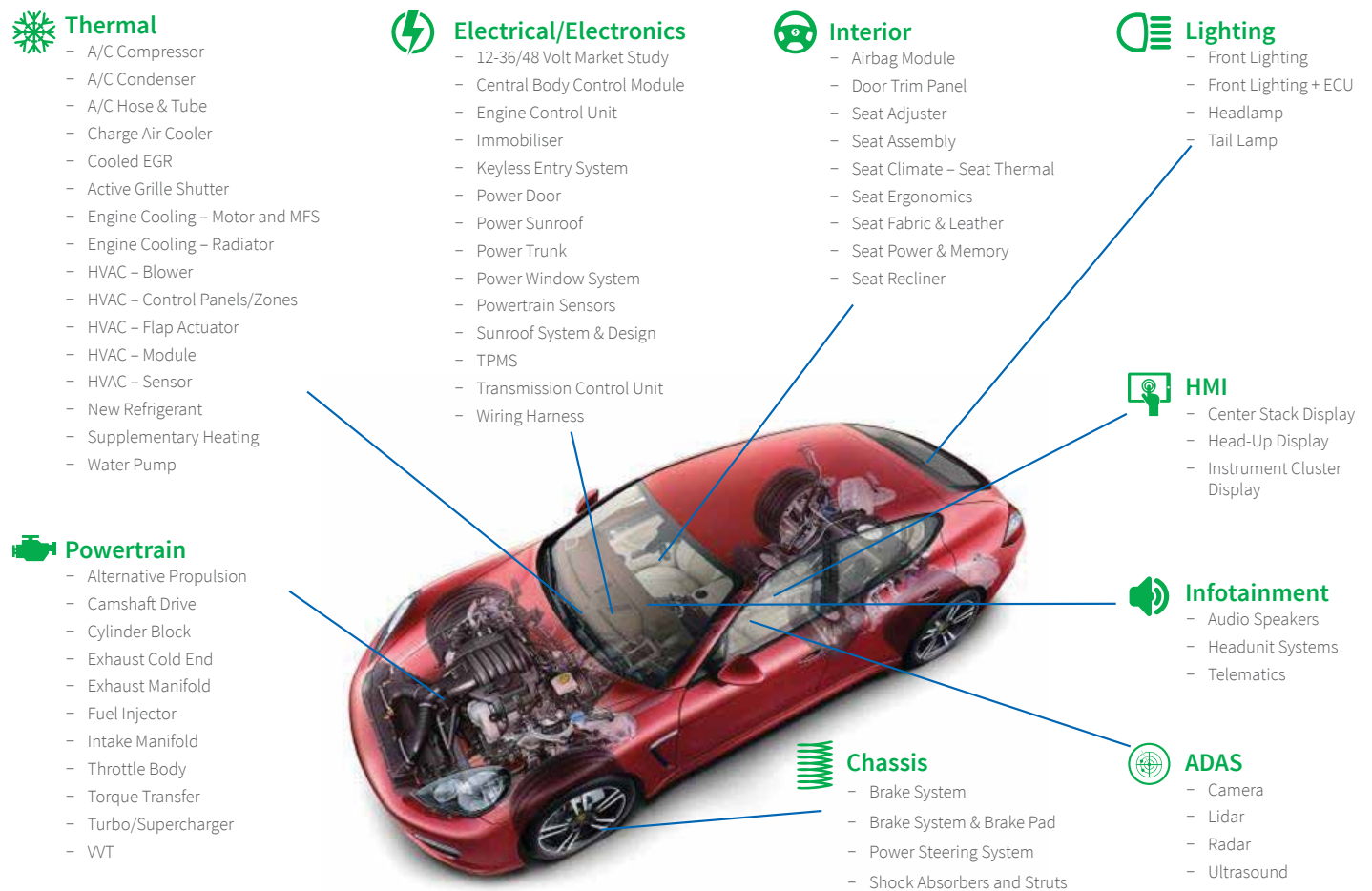
Component Forecast Analytics

Defending against competition or growing market share requires smart business planning, meticulous cost control, and aggressive competitive strategies. Component Forecast Analytics, an optional add-on to SupplierInsight, provides automotive suppliers with in-depth, comprehensive, and timely component market insights to drive better business decisions and better business results.

Features include:

- Gain transparency into competitors' books of business
- Assess supplier plant locations and capacities
- Source new opportunities through a six-year forecast calendar of new programs
- Understand customers' purchasing strategies
- Measure a supplier's market power in relation to its partnerships with an OEM

100 Component Databases, including (but not limited to):

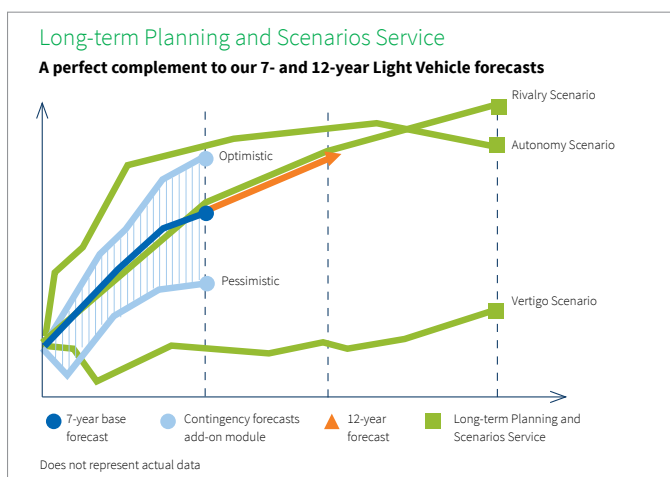




Long-Term Planning & Mobility Trends

Long-Term Planning and Scenarios Service

Provides a long-term planning outlook and two alternative scenarios. Together, these three views of the future help clients understand the uncertainties the industry faces. The planning-case outlook, titled Rivalry, extends to 2035, providing a general macroeconomic context with automotive detail. The alternative scenarios, Autonomy and Vertigo, alter the planning case by considering different global economic and geopolitical outlooks. Available for both light and medium/heavy vehicles.



New Urban Mobility Special Study

Many analysts feel we are in the early stages of a massive shift in how people are mobile. Half of the world's population lives in urban areas and cities are becoming more and more congested. So congested, in fact, that city planners are making it more difficult to own a car within city limits. This study assesses current behavior in eight types of model cities, develops foresight into future consumer behavior, and links to metrics that project the impact of changing behavior on motorization and total vehicle demand in the global market through 2035.

This study helps long-term planners:

- Understand how motorization may move away from personally owned motor vehicles to other alternatives in major markets
- Size the future market for passenger cars sold to individuals and to car-sharing fleets
- Assess the impact of change on the future business model of the automotive industry
- Identify the signposts that are indicative of a given city or region moving away from private car ownership

Automotive Industry Headlines & Analysis

With daily alerts for automotive events and trends — including mergers and acquisitions and new legislation — and weekly and monthly newsletters containing supplier strategies and OEM profiles IHS Markit will keep you abreast of the latest developments affecting the industry and tell you what it means for you.

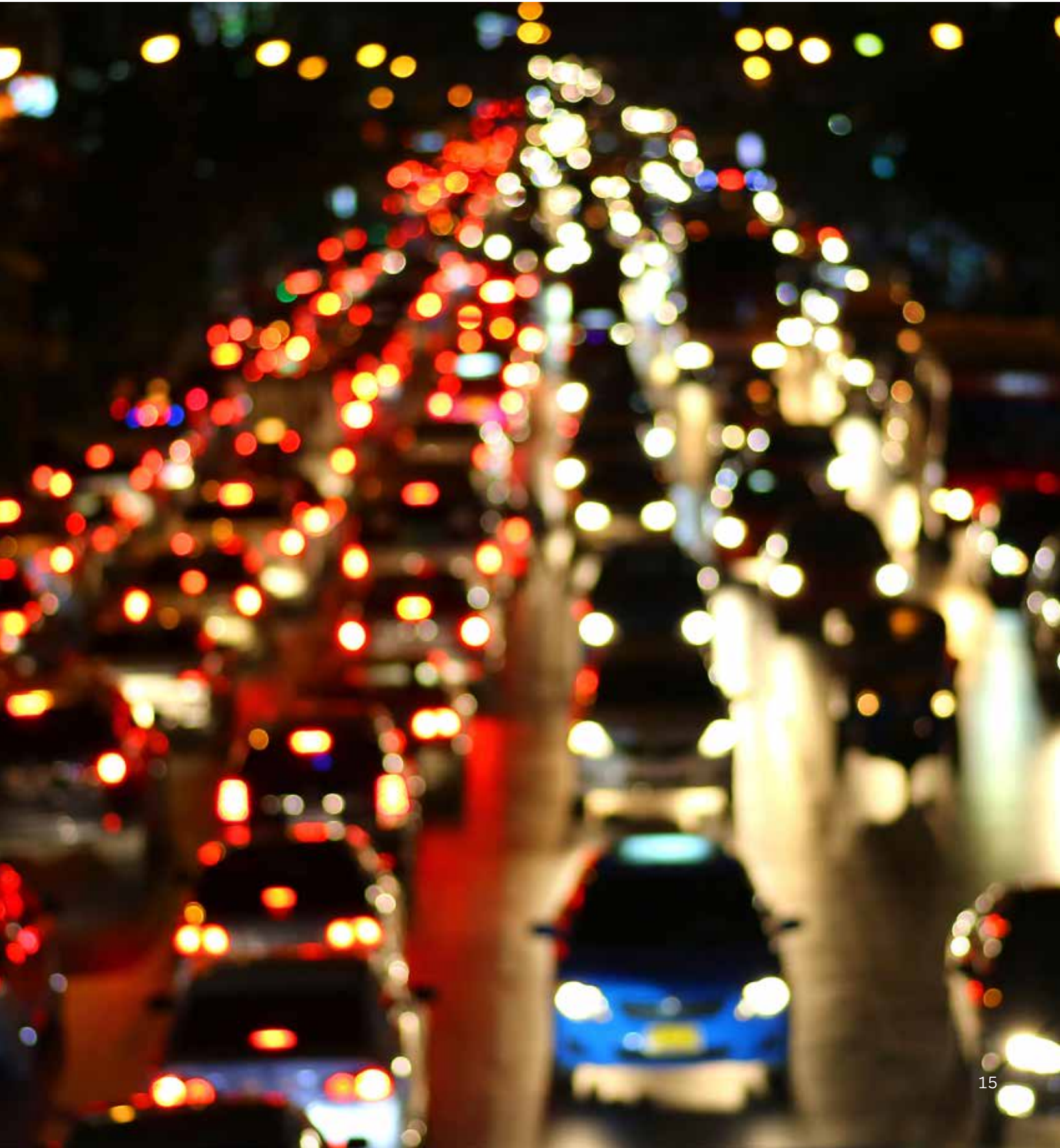
World Markets Automotive

IHS Markit provides the world's most sophisticated automotive intelligence service to help you understand how current industry events and topical issues may impact your company's business. World Markets Automotive provides:

- Same-Day Analysis
Going beyond the headlines, we analyze the world's automotive-related news, events, and trends and provide clients with a concise summary of the significance, implications, and outlook.
- Country Intelligence
Monitors 50+ countries, covering 96% of global vehicles sales and 99% of production.
- Competitor Intelligence
In-depth reports on all the major players within the global automotive industry.



Analyze new registrations and vehicles that are on the road





Registrations & Sales Analysis

Analyze and interpret the automotive industry

Our powerful online system blends IHS Markit's exclusive databases — New, Used, Vehicles-In-Operation (VIO), and owner demographics — into one dynamic source that gives you a complete picture of your local and national markets! Built from hundreds of millions of automotive transactions, IHS Markit provides information in a clear, easy-to-use, and customizable format. And it's all available, at your fingertips, 24 hours a day.

One source for:

- Analyzing and interpreting automotive data more effectively
- Understanding selling patterns for different brands and dealers
- Determining appropriate parts inventory
- Spotting key trends over time
- Acting quickly on trends to maximize marketplace opportunities
- Developing targeted marketing strategies

You'll have access to the power of instantaneous querying, extensive data analysis, on-demand graphing and mapping, as well as the ability to act quickly on trends so you can maximize your opportunities in the marketplace.

Speed/First to know

- Alerts on what matters to you
- Instantaneous querying
- Sales reporting information available sooner, meeting more business needs
- Quick access to large-scale data
- Answers the question behind the question

Most complete view

- Extensive data analysis
- Ability to integrate your own data and objectives
- Ability to create your own view of the market
- One place for registrations, sales, VIO—all the data you need
- Breadth and depth including sales, vehicle, and geographic details

Easily be the expert

- Easy access to what you need to know
- Do your job better
- Consume in apps you use every day
- Visualize data more powerfully
- Enable more people to answer more questions

Benefits

- Analyze and interpret automotive data more effectively
- Understand selling patterns for different brands and dealers
- Determine appropriate parts inventory
- Spot key trends over time
- Develop targeted marketing strategies

VIO and Registration data are available via two platforms: Catalyst for Insight in the USA; MarketInsight for rest-of-world.



Commercial Vehicles-in-Operation and Registration Data for the US and Canada (TIPNet)

To truly understand how you're doing against your competition in the industry, you need to have a clear view of the market. TIP*Net is a web-based interactive system designed to give you insight into the entire commercial vehicle industry. The system provides VIO (Vehicles-In-Operation) and New Truck Registration information on light/medium/heavy commercial trucks and new commercial trailers. TIP*Net will assist in identifying your best areas of opportunity and provide actionable information to help drive your business.

TIP*Net allows you to segment your prospects by geography or market. Whether at a macro (US or Canada) or micro (ZIP Code/Postal Code) level, you'll have the ability to gain valuable insight into what vehicles make up your market:

- Geographic area
- Vehicle - make/series/model/type
- Engine - make/model/type/liter size/cylinders/CID
- Model year
- Cab configuration
- Wheels
- GVW
- Front/rear axle
- Fuel type
- Registration - name/address/vocation/carrier type/
local and national fleet size

Rolling Sales Actuals

Keeping abreast of the latest global automotive industry sales data is crucial. You need the data for critical competitive and internal analysis, but tracking and gathering the information as it is released can be time-consuming and frustrating.

The Light Vehicle Rolling Sales Actuals does all the data tracking, aggregating, and codifying for you, so you can focus on using it to conduct timely and accurate analysis of your market performance, the effectiveness of incentive programs, market share fluctuations, and more.

Our data delivery powers your analysis. Let Light Vehicle Rolling Sales Actuals do the work for you.

Only IHS Markit has the global reach to stay on top of automotive industry data. Our Light Vehicle Rolling Sales Actuals product provides:

- Immediate access to month-end sales actuals at the model level "as reported" by country
- Updates across the top-42 light vehicle sales volume countries in consistent single rolling data file format
- Date-stamped country updates for ongoing version recognition and control rolling

Rolling Sales Actuals are constantly updated on a rolling basis as supplied monthly by reporting countries. Data are delivered in monthly buckets.



Vehicle-in-Operation: WorldView

Today's aftermarket industry is more global than ever before. That's why IHS Markit has created the first complete, integrated, and truly global solution for the worldwide automotive aftermarket. WorldView is a "one-stop solution" for aftermarket professionals looking for credible, third-party data to guide product planning, production, distribution, inventory management, cataloging, and other critical business decisions.

No longer will you have to access multiple systems to get the data you need. Now, a single sign-on puts the full range of IHS Markit's aftermarket solutions—Global Vehicles in Operation (VIO), forecasting, parts catalog integration, original equipment research, and more—at your fingertips. With WorldView, you can access a broad range of available data via custom queries that return the results you need to make smart business decisions, quickly and easily.

Integration of proven tools with innovative features

For more than 30 years, the automotive aftermarket industry has considered IHS Markit the leading provider of automotive forecast and VIO information. WorldView builds from this proven expertise and integrates a number of reporting and analysis modules into one seamless solution containing:

- Vehicles-in-operation data: Access current and historical VIO data for over 60 countries. WorldView integrates two of our time-tested aftermarket solutions: NVPP (for the US, Canada, and Puerto Rico) and PARC (elsewhere in the world). Accurate VIO data help you build, order, and stock appropriate parts to meet customer demand.
- Global OE parts research: Access our extensive research (OE part numbers, specifications, and vehicle fitment details) for 22 European markets mapped to TecDoc codes and VIO population counts so you can identify meaningful gaps in catalog coverage.
- VIO trends & forecast: Understand projected US and global vehicle counts for a five-year time period to make solid production planning, inventory management, and investment decisions based on knowledge of future demand for your parts. The VIO Forecast includes ACES and TecDoc coding for precise data on market demand for

specific parts.

- Global vehicle equivalent identification: Gain insights into parts compatibility on vehicles in disparate global markets. This innovative feature, not available elsewhere, helps bridge ACES to TecDoc codes as a starting point for determining the common parts needed on vehicles produced and sold in markets around the world.

Benefits

- Understand the global market potential for replacement parts and other aftermarket products
- Make informed decisions about which parts to manufacture, order, and stock
- Understand the impact of increasing globalization of OEM platforms
- Gain insights into trends in global parts demand over time
- Access the entire scope of our aftermarket solutions through an integrated solution



VIN Decoding & Information

Benefit from the best VIN data available

Auto manufacturers, insurance companies, and government departments use VIN information for a variety of applications. IHS Markit takes the guesswork out of interpreting VINs so that you can apply the data. Whether you're an automotive manufacturer faced with a vehicle recall; an insurance company trying to set accurate premiums; an OEM that requires an accurate way of identifying branded titles; or a government agency trying to track down consumers with unpaid fines, you can rely on IHS Markit's VIN data.

Benefit from the most comprehensive vehicle registration database combined with in-depth auto industry knowledge and excellent customer service. Take advantage of our years of expertise helping the automotive world turn VIN data into actionable solutions. Work smarter and faster using industry-leading data and solutions.

We can help you:

- Reduce legal liability and PR issues associated with vehicle recalls
- Decode vehicle VINs to set accurate fees and premiums
- Increase the speed and efficiency of the auto insurance sales process
- Minimize warranty repair costs and legal liability through identification of branded titles
- Track down vehicle owners with unpaid fees and fines

Solutions include

- Recall: Quickly and accurately contact owners of recalled vehicles to mitigate the negative legal and PR impact.
- Vehicle Verification Systems (VVS): Solve business issues within the insurance, government, legal, and law enforcement industries with this real-time portal.
- VIN Decoding: Quickly decode VINs to understand manufacturer, model, year, engine details, and other vehicle characteristics so you can use this information to make smart business decisions.



Enhance your marketing campaigns and increase customer loyalty





Audience Analysis

Loyalty/Conquest Analytics

Build, measure and improve loyalty

There is no greater measure, of a brand's stability than owner loyalty. A loyal owner is more than a repeat buyer — he or she is a walking evangelist for your brand, and is invaluable to your future success. And, a loyal advocate is a key source of future sales and service opportunities.

IHS Markit helps our clients build, measure, and improve owner loyalty. We are dedicated to helping the industry retain customers. Our passion for owner loyalty shines through in our seminars, published work, and the yearly Automotive Loyalty Awards, which recognize manufacturers for superior performance in customer retention.

In addition, we can help improve your conquering efforts through in-depth audience analyses including household composition, garage composition, household loyalty type, demographics, ethnicity, lifestyle, and other data characteristics. We can also provide insights into the top conquests by make, model, and segment.

We can help you:

- Increase sales by improving conquering strategies
- Develop geography-specific marketing strategies to maximize sales opportunities
- Understand competitive sales sources
- Assess the risk and reasons for customer defection and recognize competitive threats
- Track dealer performance and compare dealer loyalty, conquests, and defections at the area, regional, and national levels
- Set up dealer loyalty incentive programs and coach field and retail staff on ways to create and maintain loyalty
- Establish corporate loyalty targets
- Create owner conquest and retention strategies at the corporate, regional, dealer, and model levels
- Improve profitability through the development and retention of a solid customer base

Diversity Market Data

Tap into the purchasing power of specific ethnic and demographic consumer groups

IHS Markit arms you with the critical information you need to engage diverse ethnic and demographic markets within the United States. Our data, combined with our automotive expertise, enable you to target growing, lucrative ethnic and gender markets for new/used vehicles, parts and service, and other automotive-related promotions. With Diversity Market Data, discover:

- What's selling? (Make, model, engine size, etc.)
- Who's buying? (Ethnicity, gender, age, income)
- Where to reach them? (State, MSA, ZIP code, etc.)

Our range of offerings include:

- Market Analysis
- Target Marketing
- DMA Share Comparison
- Multicultural Loyalty
- Conquest/Defection Analysis
- Share of Garage Analysis
- Gender Analysis
- Lesbian, Gay, Bisexual, and Transgender Data



Audience Targeting

Maximize the ROI on your marketing spend

In today's competitive automotive market, every marketing dollar counts. You can't afford marketing initiatives that don't resonate with today's savvy consumers, who expect relevant, tailored messages. Through our acquisition of R. L. Polk, IHS Markit can help you maximize the return-on-investment (ROI) on your marketing activities through a focus on the "four rights" — the right audience at the right time with the right message via the right channel.

Whether your goal is to acquire new customers, retain existing ones, build brand awareness, or increase revenue, we offer the automotive intelligence and solutions that support your success. We know your audience — which vehicles they drive, which they might consider, and when they are ready to buy. And, we can help you reach specific consumer segments with highly targeted campaigns delivered across email, direct mail, and web channels.

Benefit from our in-depth, industry-leading consumer and vehicle-related data. Target your campaigns to reach the right audience with the right message at the right time. Take advantage of 90 years of experience and expertise building targeted, multichannel solutions that help automotive organizations maximize the ROI and success of their marketing efforts.

We can help you:

- Reach consumers who are ready to buy
- Identify in-market consumers who are mostly likely to buy your brand
- Tailor messages and mediums to ensure that your communication reaches targeted markets
- Increase customer touch points by using a combination of email, direct mail, and web channels
- Maximize the return on marketing investment
- Measure the performance of your marketing campaigns through actual vehicle sales results

Target Marketing: Predictive Modeling

Promote new and used vehicles, parts and service, year-end clearance, vehicle launches, and prospecting/conquesting campaigns with our total market predictors (TMP):

- TMP Garage Predictor
 - Target households likely to own your brand or a competitive make
- TMP Loyalty Predictor
 - Identifies households that are super loyal, loyal, nomads, or unspecified
- TMP Purchase Predictor
 - Identify households likely to purchase within the next six months by vehicle segment
- TMP Vehicle Budget Predictors
 - Identify prospects based on the likely purchase price for their next vehicle brand
- Auxiliary Automotive Data
 - Pinpoint prospects by make, model, and year based on information provided by prospects
- Target Score Predictor
 - Reach high-quality prospects with the greatest profit potential
- Winback Garage Predictors
 - Identify former owners of your brand who are likely to be back in-market within the next six months
- Do-It-For-Me (DIFM)/Do-It-Yourself (DIY)
 - Identify service preference models and target the best parts and service prospects in your market
- Lost Soul Garage Predictors
 - Supplement your database with used-vehicle owners not identified by a manufacturer or dealership
- Custom Affinity Models
 - Identify top conquest audiences for specific vehicle launches and automotive events. Excellent for vehicle launches or a defense strategy to ward off your competition
- Custom Predictive Models
 - Let IHS build a custom/proprietary model based on your campaign objectives
- Territory Pro System/Field Pro System
 - Improve sales and fixed operations with data on dealer territory dynamics, which can also be used to create lists for new vehicle, used vehicle, and service marketing campaigns



Market Database Services (e.g.: CRM Append and Data Enhancements)

Your customer database is undeniably one of your company's greatest assets. It is the foundation for every customer communication, but even the strongest foundation requires periodic maintenance. In addition, the more you know about your customers, the better you can communicate with them and the more likely they are to respond to your message.

IHS Markit, renowned for its data quality, accuracy, and depth, can assist you in making sure your data and lists are the most up-to-date and enhanced with information that can strengthen your target marketing efforts and increase your return on investment.

IHS Markit offers marketing database services that enable automotive, motorcycle, and power-sports manufacturers to effectively manage communication, analytical, and marketing strategies through accurate vehicle ownership verification. Building your lists with better data allows you to:

- Improve deliverability and contact rate
- Target prospects with more relevant messages
- Design promotions tailored to your customers
- Improve response rates
- Discover hidden markets within your database

Lead Scoring

Our Lead Scoring solution is the industry's most comprehensive, accurate, and flexible method for determining which leads are most likely to purchase a vehicle, purchase soon, and provide ongoing profits to the OEM, dealer group, and dealership.

Lead Scoring is the industry standard because it is calculated using the most expansive, sophisticated, and proven automotive intelligence and predictive analytics available. OEM dealer groups and dealerships employing the Lead Scoring solution will sell significantly more cars and trucks than their competitors without increasing marketing spend or changing dealership processes. Implementing Lead Scoring will ensure an OEM's dealer groups and dealerships understand, leverage, and ultimately optimize their sizeable and growing online marketing spend.

IHS Markit provides marketers an automated service and solution to score, prioritize, segment, and measure leads, so marketers can optimize, address, and communicate to their most responsive leads and drive greater showroom traffic and increase close rates. Lead Scoring allows marketers to:

- Get to the best prospects faster than the competition
- Apply appropriate resources to all leads
- Differentiate marketing treatments
- Assess lead sources, lead generation marketing, and strategic competitive market activity
- Integrate into current and evolving CRM and Lead Management processes with maximum flexibility and transparency



Incentive Verification

The Incentive Verification Service gives customers a tool to stop dealer fraud by providing incentive and owner eligibility verification. Based on inputs provided by the customer (VIN, Owner Name, Owner Address), IHS Markit provides a match code and pass/fail for every input record processed (based on business rules determined at the time of service build). This verifies the name on the input record is the current registered owner of the vehicle at the time the transaction was submitted. It is available in the form of a batch process, as well as a web service, providing flexibility for customers.

Customer Experience Impact Dataset

The Impact Dataset is the only connected Customer Experience Impact Dataset available in the industry. Developed by IHS Markit, the leading provider of loyalty information based on new vehicle registrations, and Strategic Vision, the leader in understanding the “why” in customer behavior and decision-making, this dataset analyzes the customer experience with subsequent purchase behavior to identify which attributes and images have the greatest lift on loyalty.

Based on respondent data collected in the United States between 2005 and 2014, the dataset enables automakers to:

- Create successful communications featuring the attributes and features that matter most to consumers
- Know if their product is building brand equity and future loyalty
- Focus their efforts on vehicle attributes that impact loyalty rather than deficits
- Present the best offers and understand the key points that will motivate customers to buy
- Create a truly customer-focused strategy, rather than one focusing on your competitors



Campaign Activation

Precision activation at scale for traditional (direct mail), email, and digital media (web, social, mobile) channels.

Direct

We assemble highly deliverable CASS-certified audiences for direct mail services. We work closely with agencies and fulfillment houses to deliver audience files in a way that is compatible with the fulfillment house's operations. We also offer database marketing solutions that enhance data and make them compliant with USPS requirements. In addition, we can close the loop by measuring actual sales activity thus enabling you to optimize campaigns.

Benefits:

- Lower your mailing costs
- Reduce undeliverables and returned mail
- Enable optimization of campaigns

Email

Email is highly cost effective for automotive marketing and provides you with the most direct line of communication for conversion to sales. IHS Markit solutions include:

- Prospecting Email Solutions
Getting into an established customer's email inbox can be challenging, and finding automotive prospects that are receptive to your offer is even harder — until now! IHS Markit's prospecting email solutions enable you to target the right inbox at the right time to optimize your email marketing dollars and positively impact your bottom line.

Target consumers based on what is likely parked in their garages and their likelihood to be in market. Access to our proprietary automotive predictive models, Garage Predictors® and Purchase Predictors®, ensures that your message is reaching the right inboxes. Your targeted list may be further refined by choosing from over 100 different lifestyle and demographic qualifiers.

- Prospect Email License*
Get a highly targeted permission-based automotive prospecting email address file. This file enables you to deploy and reach your most receptive automotive prospects up to three times within 60 days using various media channels including email, digital, and social.
- Prospect Email Deployment*
IHS Markit will create a custom automotive prospecting list and deploy your email campaign. We create a targeted list using IHS Markit's proprietary automotive predictive models based on your campaign objectives. This list and the creative assets we collect from you are used when we deploy your email campaign.

Digital

Through our partnership with ODC/DLX (Oracle Data Cloud/ Datalogix), we supply the audiences and measure and optimize campaign performance. Digital channels include:

- Display Advertising (Banner Ads)
- Social Media
- Mobile (ie: Smartphone)

In addition, through our newest acquisition, Dataium, IHS Markit is now the world's largest compiler of online automotive shopping behavior. Every month Dataium observes over 20 million automotive shoppers across over 10,000 automotive websites and then aggregates, indexes, and summarizes these data into intelligent insights. Consumer behavioral data collection is one of the most accurate leading indicators of future consumer intent, thus providing new insight into industry trends, effectiveness of marketing campaigns, and unbroken attribution for media channels.

*Some restrictions apply



Campaign Measurement

Did your last campaign measure up?
Is there room for improvement?

Evaluation serves as your true gauge of performance. A timely, unbiased measurement of your campaign's success enables you to quantitatively prove its worth and allows you to refine your future strategy for continuous marketing improvement.

IHS Markit's Campaign Evaluation Report enables you to view your campaign sales results so that you can optimize your future marketing dollars. Easy-to-read tables and charts help you discover:

- Overall purchase activity from your campaign
- Number of leads bought from you and bought from your competitors by purchase type (new/used)
- Weekly sales activity
- Top new and used registrations by make
- Top new and used registrations by model

Benefits

- Assess list performance
- Identify which offer worked best
- Determine return-on-investment
- Recognize lost sales opportunities to competitors

Measurement the way you need it

From multichannel measurement, to lead provider, to list criteria — we can measure it. IHSMarkit can measure a multitude of facets of your marketing and the level of detail you want within the time periods you desire.

- Standard Dealer Sales Match Report – Our Dealer Sales Match Report offers a detailed summary of new and used vehicle sales to broaden your understanding of what happened during your campaign period.
- Automotive Manufacturer Make-level Sales Match Report – Discover the impact your marketing efforts had on new and used vehicle sales at a brand level.

- Automotive Manufacturer Model-level Sales Match Report – Our Automotive Manufacturer Model-level Sales Match Report dives deeper and enables you to assess your campaign performance down to a model level against your competition.
- Lead Provider Analysis Report – Assess lead performance for new and used vehicle registrations by make, source, and dealer.
- Lost Opportunity Report – This report enables dealers, dealer groups, OEMs, and resellers to view market activity and identify lost new and used vehicle sales opportunities at a dealer level within the past three months.
- Custom Sales Match Report – Our custom sales match reports enable you to analyze performance from the perspective, time intervals, and level of detail you want.
- Garage Analysis – We provide you with the ability to identify the top most recently owned vehicles (current and disposed) to better understand garage composition and uncover additional opportunities or modify future marketing strategies.

Buyer vs. nonbuyer profiling

Our Buyer vs. Nonbuyer profiles offer further on-demand campaign measurement and insight. In addition to garage composition and top conquests by make, model, and segment, gain insights on household composition, demographics, ethnicity, lifestyles, and other data characteristics.

Report views include:

- Target Buyer
- Target Competitive Buyer
- Target Noncompetitive Buyer
- Target Nonbuyer
- Nontarget Buyer



Commercial Vehicle Direct Marketing List

Commercial Vehicle Account File

Reach commercial businesses with your direct marketing message

The fleet market undeniably yields greater sales and service opportunities per lead than the automotive retail market. A single business can mean more to your potential bottom line than an entire group of consumers. IHS Markit's exclusive Commercial Account File enables you to effectively reach the hottest fleet prospects.

The Commercial Account File is an impressive accumulation of a rolling 18 months' worth of fleet vehicle data from all nonrestricted states. These fact-based, current commercial vehicle data is used in conjunction with industry-leading business data to generate the strongest commercial fleet lists in the industry—enabling you to target commercial prospects that currently own and/or operate specific vehicles within their fleet.

IHS Markit's Commercial Account File features:

- An extensive collection of data elements that include current fleet vehicle data along with business demographics obtained from all nonrestricted states so you'll be able to quickly pinpoint your best prospects
- A stable fulfillment system that makes your selection process easy, flexible, and allows for quick turnaround time
- An advanced List Hygiene Enhancement process ensures that your information is fresh and deliverable
- The ability to track companies by fleet size new, fleet size used, total cars, total trucks, and fleet size within vehicle group, along with extensive vocational and vehicle information, as well as DMA®, state, counties, and other geographies

IHS Markit can help you reach your best business-to-business prospects and successfully compete in today's marketplace.



Post-Sales Marketing Solutions

Aftersales Marketing (Catalyst for Aftersales)

Understand your customers, increase sales

In the aftersales world, existing customers are your best source for future business, and your service departments play a major role in customer retention. In fact, there's a direct correlation between service loyalty and future vehicle sales, which lead to long-term loyalty to the dealer, the brand, and the manufacturer.

The Catalyst for Aftersales solution uses key customer and prospect data, as well as relevant market intelligence to provide insights to maintain customer retention and loyalty, to avoid customer defections, to grow parts and service revenue, and to increase overall profitability. Catalyst of Aftersales helps our customers to manage key touchpoints during the vehicle ownership life cycle, to help our customers meet their overall business goals.

Beyond building loyalty, you likely face the challenge of reducing repair costs. IHS Markit can help in a critical area: identifying vehicles with branded titles so that you don't pay unnecessary repair costs. Through our acquisition of R. L. Polk, we are now able to provide you with industry-specific solutions to help you increase sales, reduce costs, and build a loyal customer base.

We can help you:

- Increase customer-paid labor revenue
- Identify active, inactive, and prospective service and parts customers and reach them with targeted communication
- Enhance brand awareness and strengthen customer relationships
- Track and trend dealer aftersales performance by dealership and region
- Reduce unnecessary warranty repair costs and legal liability by identifying vehicles with branded titles (including those with "washed" titles) through accurate VIN decoding

Recall Services

The trusted leader in vehicle recalls

When a motor vehicle or item of motor vehicle equipment (including tires) does not comply with a Federal Motor Vehicle Safety Standard or when there is a safety-related defect present in the vehicle or equipment, the manufacturer must perform a recall. When a vehicle recall is necessary, you need to act quickly and with confidence to notify the maximum number of registered owners involved, in order to maintain customer loyalty and limit legal liability. IHS Markit's strong association with the Department of Transportation (DOT) and the National Highway Traffic Safety Administration (NHTSA) has afforded us an in-depth awareness and understanding of the necessary action steps to complete a successful recall campaign.

IHS Markit's recall database includes over one billion records of automotive, truck, trailer, bus, recreational vehicle, and motorcycle owner information by VIN and undergoes daily updates of state data, data cleansing, and lease enhancement to produce the most comprehensive vehicle data repository available. Our Recall Services provide manufacturers with the most accurate and trusted owner information for each motor vehicle affected by a recall. We work with our customers to review the detailed status of the data, explain the results of each recall, and assist in answering legal questions.

Benefits

- React quickly to a vehicle recall
- Navigate through the recall process with confidence
- Minimize legal liability



Measure performance and find the optimal locations for showrooms





Territory Performance (Territory Pro)

Be the pro in your territory

In less than five minutes, you will know what's happening in your territory and what to do next.

IHS Markit's Territory Pro™ Report is more than automotive intelligence; it's actionable automotive intelligence. It provides OEM field organizations an efficient and effective way to quickly understand the dynamics of a dealer's area and the actions to take to improve that dealer's sales and fixed operations. Built by the industry's data and marketing solutions leader, this dealer performance report enables you to gain instant credibility with even the most seasoned of dealers.

It's simple and smart

No more sifting through pages of data in an attempt to determine what's going on in a dealer's market. A report's thickness doesn't equate to greater insight. Territory Pro is comprehensive yet concise, serving up only the important information you need to be truly consultative with your dealers.

Every report comes with an executive summary that yields key findings and an action plan for both the front and back end of a dealership. The pages that follow contain easy-to-read graphical displays that are supported by "smart bullets" that not only answer questions that matter, but go beyond the obvious to provide the impact behind the data.

Benefits

- Know what's happening in your market in less than 5 minutes
- Identify key opportunities to improve performance across new, used, and fixed operations
- Find potential future customers
- Understand detail behind what's driving current market trends

Field Performance (Field Pro)

Boost your field organization's sales

Need to grasp auto dealer territory dynamics? Identify gaps in performance?

IHS Markit offers its intuitive web portal, Field Pro, which identifies auto dealer performance deficiencies and helps national sales companies (NSC), regional managers, and dealers align on corporate priorities and key performance indicators (KPIs). Measures and communicates sales effectiveness, market share, and sales opportunities, helping you:

- Identify marketing opportunities
- Share the same metrics at all levels
- Rank performance
- Easily address identified market opportunities
- Evaluate campaign success

Field Pro is an interactive web portal that:

- Presents a brand's priorities and key performance indicators (KPIs)
- Identifies gaps to desired performance at national, regional, and dealer levels
- Proposes targeted marketing programs to address opportunities



Dealer Network Solutions

Our Dealer Network Solutions enable national sales companies and automotive service providers to determine the best location and configuration of their retail networks. From adjusting the size and shape of dealers' territories, to determining the best location for a new dealership, we are here to help. Our comprehensive Dealer Network Development customized studies and NetworkInsight simulation tool will help you:

- Determine whether you have the correct number of retail locations to meet your objectives
- Evaluate whether these dealerships are in the optimal location
- Simulate the impact of a new, relocated, or discontinued retail location
- Identify new market opportunities
- Assess competitors' location and market share

IHS Markit can help you optimize the market performance of your retail network with critical insight into market volume, customer drive time, and dealer distribution, location, and density. Our Dealer Network Solutions include:

Dealer Network Development (DND) studies

IHS Markit's customized DND studies help determine network gaps and evaluate existing dealerships regarding location and potential. The analysis provides:

- Ideal network simulation
- Network/dealer gap assessments—providing insight into your network's "distance" from the "ideal"
- The impact of "bridging the gap"—moving from status quo to the ideal

NetworkInsight

NetworkInsight is a web-based simulation tool that complements and drives DND analysis and updates. NetworkInsight offers users the ability to:

- Interact with DND analysis via a mapping tool
- Perform "what if" analysis and measure the impact of different scenarios (add, close, relocate)
- Calculate new potential for all points including cannibalization impact
- Perform site potential simulations
- Access monthly reporting data and dealer performance reports

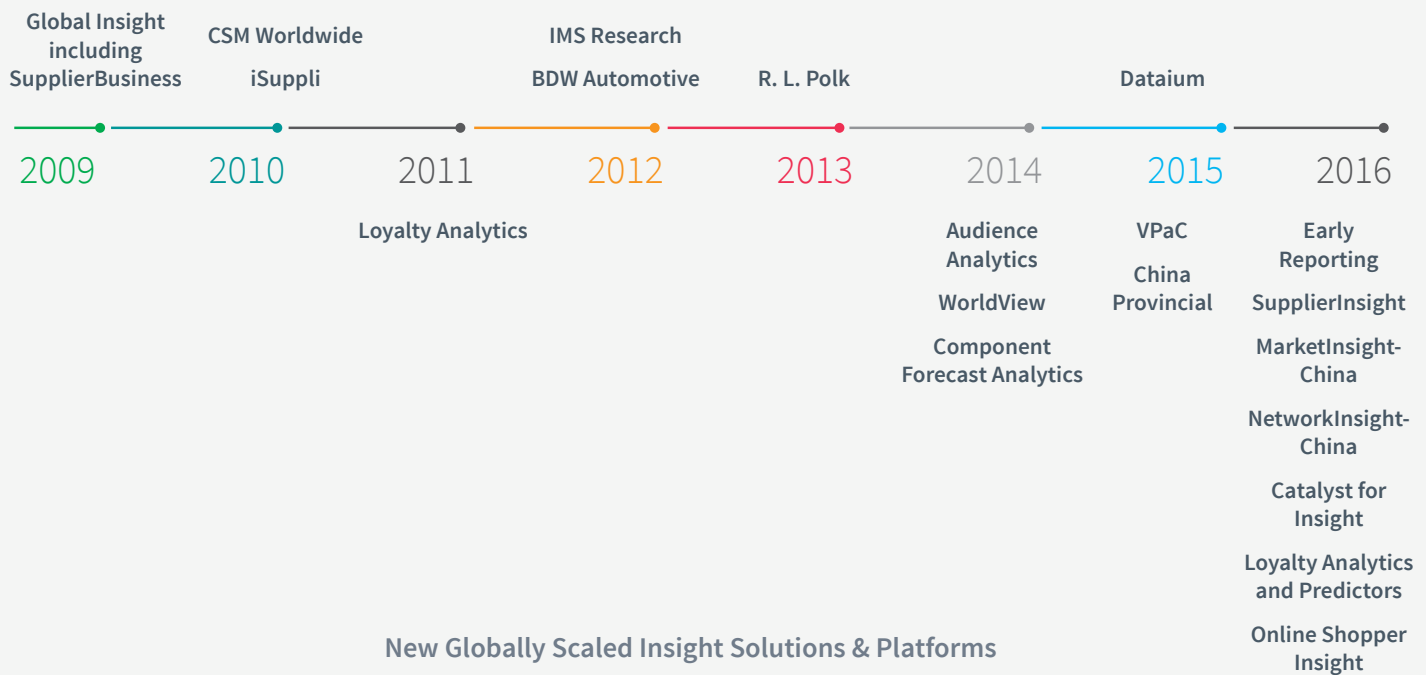
Automotive

IHS Markit (NASDAQ: INFO) is the automotive industry's leading source for market-wide insight, expertise and advanced planning solutions. With a reputation of enabling better decisions and better results for nearly a century, the world's leading OEMs, suppliers and their transportation partners rely on IHS Markit to power growth, improve efficiency, and drive a sustainable competitive advantage.

Our automotive offerings and expertise span every major market and the entire automotive value chain—from product planning to marketing, sales, and the aftermarket. Headquartered in London, our automotive team is part of IHS Markit's information and analytics powerhouse that includes more than 15,000 colleagues in 150 countries, covering energy, chemical, aerospace & defense, maritime, financial, technology, and media & telecommunications.

Our Commitment to Industry Growth

Recent Strategic Partnerships & Acquisitions



For more information

www.ihs.com/automotive

automotive@ihsmarkit.com

