AT&T Connected Car™

2025 MARKET LEADER

Building Customer Loyalty and Retention

RECOGNIZED FOR BEST PRACTICES IN THE GLOBAL PASSENGER VEHICLE CONNECTIVITY INDUSTRY

FROST & SULLIVAN

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Best Practices Criteria for World-class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. AT&T excels in many of the criteria in the passenger vehicle connectivity space.

The Transformation of the Passenger Vehicle Connectivity Industry

AT&T: Powering the Future of Connectivity and Connected Mobility

Founded in 1885 and headquartered in Dallas, Texas, AT&T is a leading American telecommunications company providing wireless, broadband, and enterprise solutions. As one of the largest mobile carriers in the US, it offers nationwide fifth-generation (5G) coverage and high-speed internet. AT&T also delivers the Internet of Things (IoT), cloud, and cybersecurity services to businesses across various industries. The company invests heavily in network infrastructure and innovation, supporting advancements in connected vehicles, smart cities, and 5G technology.

AT&T has a strong presence in the passenger vehicle connectivity space, focusing on telematics, global subscriber identity module (SIM) platforms, and partnerships with automakers. The company is actively developing and testing 5G standalone (SA) capabilities for cars, with 5G services already available in select vehicles. It has a strong market presence and has relationships with leading global car brands like Acura, BMW, Chevrolet, Chrysler, Ford, GMC, Honda, Jeep, Lexus, Lincoln, Mazda, Nissan, Subaru, and Toyota.

Strategic Realignment and Scalable Leadership in Connected Mobility

AT&T maintains a leadership position in the passenger vehicle connectivity and broader IoT markets, focusing on growth within North America while actively expanding its global reach. Market publications have placed AT&T's embedded connected automotive market share in the high 80% range, affirming its dominance in the sector.[1] The company has sustained momentum with 40 consecutive quarters of over

[1] Frost & Sullivan's Best Practices Research Interview of AT&T (May 2025)

one million newly connected vehicles.[2] This growth supports a wide variety of services, including over-the-air updates, in-vehicle Wi-Fi hotspots, infotainment, diagnostics, and emerging intelligent transportation features. Since 2014, the adoption of long-term evolution and 5G connectivity in vehicles has accelerated, and AT&T's infrastructure has evolved in parallel to meet these demands.

AT&T supports more than 60 publicly announced automotive brands under wholesale connectivity agreements[3]. These relationships encompass traditional telematics, safety, security, diagnostics, and consumer-focused services. The company also offers SIM solutions for multinational original equipment manufacturers (OEMs), enabling the deployment of a single SIM across global markets with flexible, bifurcated billing options. This capability allows manufacturers to pay for essential vehicle data services while end users or third parties can be billed separately for infotainment or data-heavy applications.

Adaptability and a customer-centric approach are central to AT&T's continued success. The company invests in reusable platforms while tailoring experiences to meet the unique connectivity strategies of each automotive partner. This ability to deliver scale and customization strengthens AT&T's position as a preferred provider in the rapidly evolving connected vehicle ecosystem.

AT&T's flexibility and customer-centric approach are central to its success. The company tailors connectivity models to align with OEMs' evolving needs and supports shared and unique services across its client base. Investments in scalable infrastructure allow all partners to benefit from shared capabilities while preserving brand-specific experiences.

AT&T attributes its success in the automotive connectivity space to its long-standing partnerships with OEMs, its deep domain expertise, and the strength of its personnel. Many team members bring extensive experience from within the automotive industry, including OEM telematics programs. This experience has enabled AT&T to evolve alongside its partners and proactively address historical and emerging industry challenges. The company continues to invest heavily in IoT and connected vehicle solutions, focusing on becoming the leading global partner for automotive connectivity.

AT&T's market leadership in automotive connectivity stems from sustained, large-scale investment. With over $20 billion annually committed to capital expenditures, among the highest in the US, the company continues to enhance its network capabilities and platforms, such as Control Center and the IoT Gateway.[4] The IoT Gateway provides an abstraction layer that allows rapid adaptation to evolving OEM requirements, increasing agility and customization.

AT&T supports a wide range of revenue models for connected vehicles, with a strong focus on flexibility to accommodate the diverse needs of both retail customers and automotive manufacturers. Data-as-a-service offerings and subscription-based models are becoming frequent with OEMs seeking to monetize connectivity features and deliver enhanced in-vehicle experiences. However, the adoption of these models varies significantly across manufacturers and vehicle lines within a single brand.

Some OEMs pursue a direct-to-consumer subscription strategy, packaging features such as infotainment access and telematics as recurring services. Others take a more collaborative approach, relying on AT&T

[2] Ibid.
[3] Ibid.
[4] Ibid.

to manage backend services and connectivity while maintaining a strong brand experience for the end customer. This business-to-business-to-consumer model allows OEMs to leverage AT&T's expertise in connectivity, billing, and security while tailoring the consumer experience to their brand identity.

As the telecom industry rapidly evolves and legacy technologies like third-generation (3G) and fourth-generation (4G) become obsolete, OEMs face increasing pressure to future-proof their vehicles with state-of-the-art connectivity that will remain viable over a 10–15-year lifecycle. AT&T plays an active advisory role in this transition. OEMs frequently seek AT&T's input on telematics control unit (TCU) architecture, SIM selection, and component vendors.

> *"AT&T solidifies its leadership in the passenger vehicle connectivity and broader IoT markets through unmatched network coverage that spans more roads than any other carrier, with 2.91 million square miles. This extensive coverage is crucial in renewal discussions with OEMs, who demand consistent, long-term connectivity throughout their vehicles' lifecycle, often exceeding a decade."*
>
> ***- Kamalesh Mohanarangam***
> ***Associate Director***

The company's broad exposure to leading suppliers and deep technical expertise allow it to provide informed recommendations tailored to long-term product roadmaps. This consultative engagement also reflects key megatrends shaping the automotive sector, such as software-defined vehicles, over-the-air (OTA) updates, and next-generation digital services. Paired with robust network and device management capabilities, this positions AT&T as a strategic partner in helping manufacturers design connected vehicles that are scalable, adaptable, and ready for the future.

Expansive Reach and Customization: AT&T's Differentiated Connectivity Solutions

AT&T solidifies its leadership in the passenger vehicle connectivity and broader IoT markets through unmatched network coverage that spans more roads than any other carrier, with 2.91 million square miles[5]. This extensive coverage is crucial in renewal discussions with OEMs, who demand consistent, long-term connectivity throughout their vehicles' lifecycle, often exceeding a decade. Automakers prioritize partners that deliver reliable service both in densely populated areas and remote locations. AT&T's ongoing investments in 5G expansion and its strategic long-term network roadmap align closely with these lifecycle requirements, playing a decisive role in winning and retaining automotive contracts.

The company supports a broad spectrum of vehicle connectivity services ranging from over-the-air updates and Wi-Fi hotspots to infotainment, vehicle-to-vehicle (V2V) communication, and intelligent transportation features. The passenger vehicle connectivity business has grown steadily since 2014, coinciding with manufacturers' shift to embedding 4G connectivity in vehicles.

AT&T operates with a dual-customer approach. Manufacturers often prefer to keep carrier partnerships unbranded to avoid alienating consumers who may use competing wireless services. AT&T supports these OEMs with traditional telematics, safety, and diagnostics capabilities, and increasingly with infotainment and retail connectivity features.

[5] https://about.att.com/story/2023/expands-5g-and-fiber.html

A key differentiator for AT&T is its global SIM solution, which allows multinational OEMs to install a single SIM in vehicles for worldwide deployment. The company also supports bifurcated billing, enabling OEMs to cover critical services like diagnostics and telematics, while allowing consumers, or third-party sponsors, to pay separately for non-essential entertainment data usage.

Beyond individual vehicles, AT&T is actively investing in intelligent transportation systems, particularly vehicle-to-infrastructure, V2V, and vehicle-to-pedestrian technologies. Collaborating with public sector stakeholders such as the US Department of Transportation and National Highway Traffic Safety Administration, the company aims to enhance road safety, traffic efficiency, and routing intelligence through data-driven insights. Applications include first responder prioritization, real-time road condition reporting, and traffic flow optimization.

AT&T offers solutions for small and medium-sized businesses and enterprise customers in its fleet segment. The Fleet Complete platform serves smaller operations, while a partnership with Geotab addresses the needs of large-scale fleets in sectors like logistics and public services. The industry shifted from basic telematics to more comprehensive video-based safety solutions, including driver monitoring and 360-degree vehicle cameras. Additionally, AT&T supports asset tracking solutions that monitor the location of goods and environmental factors like temperature and humidity during shipment.

Scalable Innovation and Secure Performance

With millions of connected devices on the network, AT&T has proven its ability to scale securely. The company's infrastructure has undergone extensive stress testing, which has helped build a reputation for reliable, secure connectivity at scale. Dedicated IoT teams with deep technical expertise, including team members with patents and publications, bring specialized knowledge in telematics, mobility, and automotive systems.

AT&T's flexibility in business models serves as a key differentiator. Whether an OEM requires white-labeled billing, third-party integrations, or custom monetization strategies, AT&T adapts to meet each partner's needs. If a solution doesn't exist off the shelf, the company builds it and often scales it across additional customers.

Innovation beyond connectivity plays a critical role in AT&T's automotive strategy. The company will soon launch its IoT Network Intelligence,, a powerful suite of tools that provides -businesses with - unparalleled -visibility into how their IoT-connected devices and the underlying network perform.. The initial rollout will deliver detailed insights into connectivity performance KPIs, with additional features such as anomaly detection and traffic classification scheduled for release next year. All capabilities will be accessible through a unified, intuitive dashboard, unlocking new opportunities to optimize business operations and enhance the customer experience.

One of the major challenges in the automotive connectivity landscape involves the transition from 4G to 5G SA networks. This process requires extensive validation, hardware compatibility testing, and close collaboration with TCU and SIM manufacturers. AT&T teams work directly with OEMs and hardware partners to resolve integration issues and ensure the seamless operation of 5G-connected vehicles. The goal is to match or exceed the performance and reliability of existing 4G-based systems from day one of deployment.

Security remains a core pillar of AT&T's automotive offering. The company emphasizes securing its network infrastructure and ensuring every handshake between the vehicle, cloud providers, and backend platforms adheres to the highest data protection standards. As vehicles become increasingly connected and software-driven, AT&T focuses on safeguarding data transmissions and maintaining best-in-class cybersecurity practices across the ecosystem.

AT&T also operates one of the most robust device certification programs in the wireless industry. This multi-tiered system includes certifications for network optimization, network readiness, and SIM-only integrations. Customers benefit from direct access to AT&T experts with deep knowledge of firmware, radio technologies, and device architecture. These teams maintain strong relationships with chipset vendors, module makers, and other component manufacturers, ensuring that devices meet AT&T's technical and security standards before going live on the network.

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- Marcos Ainchil
BPR Analyst

This extensive certification framework is vital to AT&T's leadership in connected mobility. In one instance, early internal testing uncovered a critical firmware dependency on the 3G network in a vehicle platform advertised as 4G-ready. Although the OEM had not detected the issue, AT&T identified and resolved it ahead of the 3G sunset, preventing potential service disruptions for thousands of vehicles. This level of proactive engagement highlights the company's commitment to reliability and its deep involvement in the entire device and connectivity lifecycle.

The volume and frequency of data transmission also differ by manufacturer. High-end brands often require constant data flows to support diagnostics, customer services, or immersive in-car features, whereas others may prioritize periodic data collection for basic operational insights. AT&T's platform architecture and operational model are designed to adapt to these varying requirements, enabling seamless integration across vehicle types and tiers, from luxury sedans to entry-level models.

In addition, artificial intelligence is emerging as a key driver of innovation in automotive connectivity. OEMs use video data and other rich media to train AI models for autonomy and in-vehicle services. These workloads present significant challenges in uplink bandwidth, compression, and real-time processing. AT&T's network teams actively invest in advanced techniques to optimize the transmission of large data volumes, particularly video, from vehicles to the cloud. The company's focus on efficient uplink performance in contrast to the more mature downlink ecosystem for consumer streaming reflects a growing need to support the future of intelligent, data-rich mobility solutions.

Electrification and software-defined vehicles are driving transformative change in the automotive industry. OEMs embed software capabilities into vehicle platforms to enable features such as heated seats or advanced infotainment services via subscription models, rather than traditional hardware switches. This shift underscores the growing importance of firmware and OTA updates as key enablers of monetization, customer engagement, and vehicle longevity.

Pushing large-scale OTA updates across millions of vehicles requires sophisticated network orchestration to manage peak traffic and regional congestion. AT&T's network teams invest heavily in optimizing update delivery, particularly during high-usage periods such as morning commutes. The company also supports OEMs by developing lightweight client applications, known as simplets, that can identify firmware versions and generate compliance reports. These tools help manufacturers ensure their fleets remain up to date, improving both customer satisfaction and network performance.

Adaptive Retail Connectivity and Billing Ecosystem

In addition to wholesale relationships, AT&T supports a growing retail business. For individual consumers purchasing connected vehicles, AT&T provides options for postpaid and prepaid connectivity. Customers can integrate vehicle data services into existing AT&T accounts or subscribe separately, using branded portals, web interfaces, or mobile applications. These platforms enable manufacturers to offer subscription management, profile control, and marketing tools under their branding, with AT&T handling payment processing and service delivery.

AT&T's retail model also supports manufacturers exploring direct-to-consumer strategies. As OEMs expand their subscription offerings, AT&T provides the backend capabilities to help them launch and manage these services efficiently. By offering scalable, flexible models for wholesale and retail customers, AT&T allows manufacturers to differentiate their brand experiences in a competitive market.

AT&T enables bifurcated billing through a dual access point name (APN) approach that separates different types of data usage on a single SIM and radio within the vehicle. This approach allows the company to allocate billing responsibilities based on the nature of the data. For example, traditional telematics and OEM-required services, such as over-the-air updates, infotainment apps, or high-definition mapping, can be billed directly to the manufacturer. In contrast, consumer-driven data consumption, such as streaming music or video and in-car Wi-Fi usage, is billed separately to the end customer.

This separation supports a flexible billing structure tailored to the specific business model of each OEM. Some manufacturers may choose to cover all vehicle connectivity costs for an initial trial period, ranging from three months to five years, and then shift to a model where only critical services remain OEM-funded, while other services transition to direct-to-consumer billing. AT&T facilitates this transition by managing SIM state changes through platforms like Control Center, which can trigger changes based on data thresholds (e.g., 10 gigabyte [GB] usage) or time limits (e.g., six months of service).

Retail billing is also adaptable. AT&T supports direct consumer payments post-trial via prepaid or postpaid options and integrates with platforms like PayPal, Amazon Pay, and major credit cards. The user experience can be fully branded on behalf of the OEM, such that the customer sees the vehicle manufacturer's logos and interface, while AT&T handles billing, payment processing, and marketing support in the background. Alternatively, some OEMs, such as General Motors with its OnStar service, manage the retail interaction entirely through their customer support systems.

In cases where the vehicle owner is already an AT&T wireless customer, the company offers a streamlined path to add vehicle connectivity to an existing mobile account. The system is designed to accommodate a broad range of manufacturer preferences, from fully OEM-controlled services to consumer-managed subscriptions, allowing each brand to deliver its desired connected vehicle experience.

AT&T enables OEMs and third-party service providers to share connectivity within a single vehicle using a dual APN architecture, allowing usage and billing to split across services. For example, manufacturers can absorb the cost of telematics or over-the-air updates while end users pay separately for bandwidth-heavy services such as music or video streaming. The system supports a variety of billing models, including prepaid and postpaid. It integrates with payment platforms like PayPal, Amazon Pay, and traditional credit card systems to provide a streamlined user experience.

This flexibility extends to the trial periods that OEMs offer with new vehicles. Trials may last from three months to five years and can include different service combinations such as Wi-Fi, infotainment, and telematics. AT&T accommodates these programs by dynamically managing SIM states, enabling seamless transitions from OEM-funded trials to customer-paid services. Usage thresholds (e.g., 10GB of data) or time-based limits can trigger transitions.

AT&T also supports multiple approaches to customer billing. Some manufacturers prefer AT&T to manage billing under a white-labeled experience that mirrors the OEM's branding, while others like General Motors route purchases through in-house platforms like OnStar. Alternatively, customers can integrate vehicle connectivity directly into their existing AT&T mobile plan. This model supports a broad spectrum of OEM preferences and use cases.

AT&T maintains a close working relationship with regulatory bodies such as the Federal Communications Commission, engaging in regular communication to ensure compliance and alignment with federal requirements. This collaboration supports AT&T's broader role as a connectivity provider and a key enabler in the national telecommunications infrastructure.

In the context of IoT and connected vehicles, AT&T is deeply integrated with state and federal agencies, responding to a wide range of requests. The company treats these interactions with high priority pertaining to consumer protection, public safety, and emerging policy requirements. The company actively supports regulatory transparency while also advocating for secure and scalable IoT deployment.

Conclusion

AT&T's leadership in connected mobility reflects its deep commitment to innovation, scale, and adaptability. By continuously investing in network infrastructure, flexible connectivity models, and secure platform architecture, the company supports original equipment manufacturers and end users across the full lifecycle of connected vehicles. Its consultative approach, advanced technology capabilities, and extensive partnerships enable automakers to bring differentiated, data-rich experiences to market while managing complexity and cost. As the industry transitions to software-defined, electrified, and artificial intelligence-enabled vehicles, AT&T remains a trusted partner, powering the next generation of connected automotive solutions through secure, scalable, and intelligent connectivity.

AT&T earns Frost & Sullivan's 2025 Global Market Leadership Recognition for its strong overall performance in the passenger vehicle connectivity industry.

What You Need to Know about the Market Leadership Recognition

Frost & Sullivan's Market Leadership Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Recognition Analysis

For the Market Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Growth Strategy Excellence: Company demonstrates an ability to consistently identify, prioritize, and pursue emerging growth opportunities

Implementation Excellence: Company processes support efficient and consistent implementation of tactics designed to support the strategy

Brand Strength: Company is respected, recognized, and remembered

Product Quality: Products or services receive high marks for performance, functionality, and reliability at every stage of the life cycle

Product Differentiation: Products or services address a market niche through a combination of price, quality, or uniqueness that other companies cannot easily replicate

Technology Leverage: Company is committed to incorporating leading-edge technologies into product offerings to enhance product performance and value

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Purchase experience quality assures customers that they are buying the optimal solution for their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

		VALUE IMPACT	
STEP		WHAT	WHY
1	**Opportunity Universe**	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	**Transformational Model**	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	**Ecosystem**	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	**Growth Generator**	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	**Growth Opportunities**	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	**Frost Radar**	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	**Best Practices**	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	**Companies to Action**	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

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The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

Learn more.

Key Impacts:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Megatrend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)