



Xperi Recognized as the

2021

Company of the Year

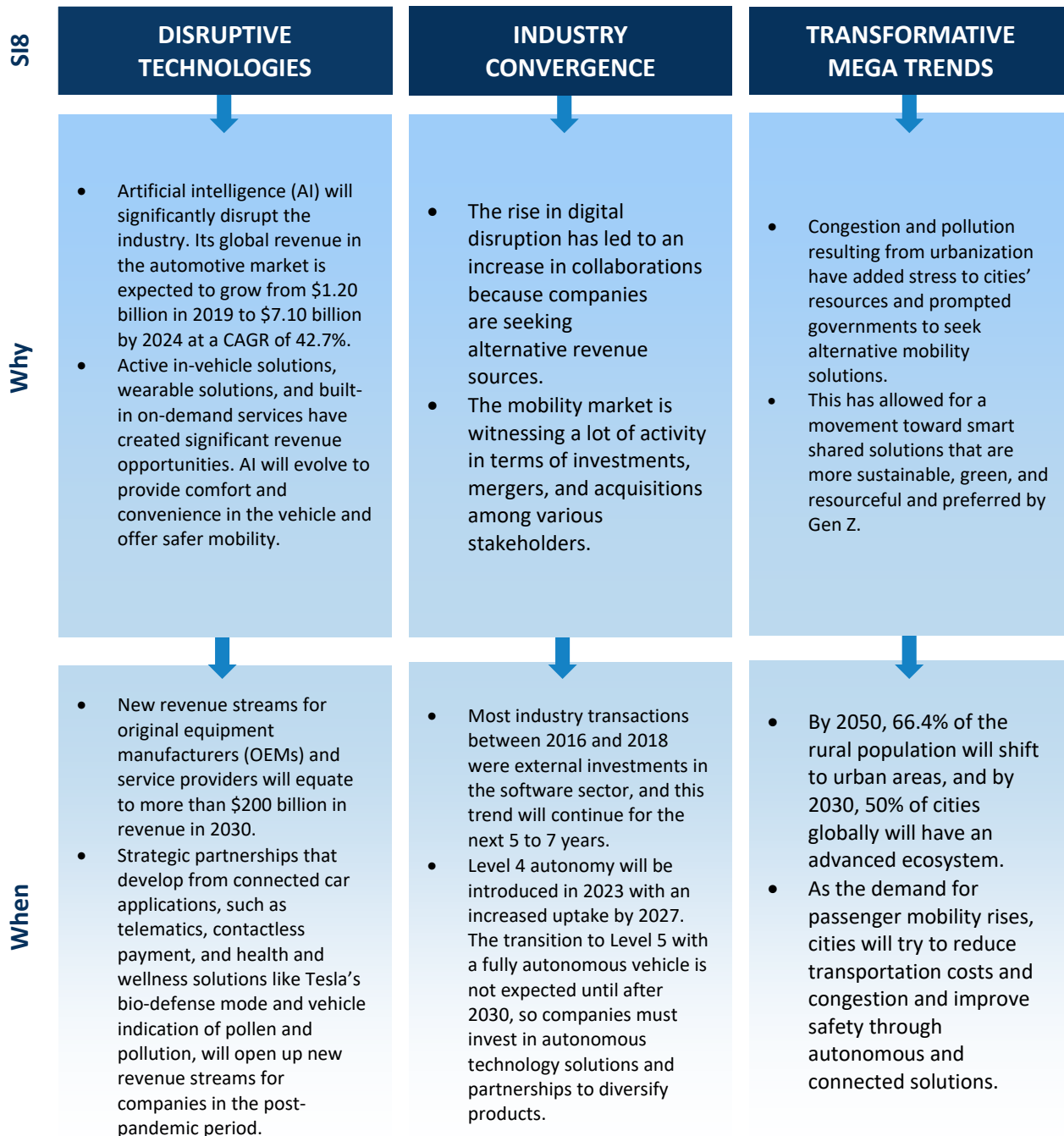
North American

Connected Car Media Industry

Excellence in Best Practices

Strategic Imperatives

Frost & Sullivan identifies three key strategic imperatives that impact the autonomous driving and connected mobility industry: disruptive technologies, industry convergence, and transformative Mega Trends. Every company that is competing in the autonomous driving and connected mobility space is obligated to address these imperatives proactively; failing to do so will almost certainly lead to stagnation or decline. Successful companies overcome the challenges posed by these imperatives and leverage them to drive innovation and growth. Frost & Sullivan’s recognition of Xperi is a reflection of how well it is performing against the backdrop of these imperatives.



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Xperi excels in many of the criteria in the connected media space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Xperi Holding Corporation is a technology company headquartered in San Jose, California and has 35+ years of cumulative entertainment experience across its brands - DTS, HD Radio, IMAX Enhanced, and TiVo. Xperi’s role in the connected radio industry is that of a Tier I service provider and Tier II software provider, and it partners with both premium and volume automakers.

Addressing Unmet Needs

The advent of the Internet of Things and artificial intelligence (AI) in vehicles will alter the automotive industry. Specifically, autonomous vehicles (AVs) will change the way people travel. Frost & Sullivan notes that while the change might not be instantaneous, once it begins, it will continue until the current operating model is replaced. The advent of AVs is prompting many automobile manufacturers to make inroads into connected technologies. Moreover, consumers expect a rich and engaging content experience, especially on mobile devices. Long before its other competitors, Xperi aligned itself with industry Mega Trends, rebranding to emphasize its commitment to extraordinary consumer experiences (“Xperi”).

Xperi’s innovative DTS Connected Radio platform, recently rebranded as DTS AutoStage™, redefines in-cabin media consumption by seamlessly combining terrestrial radio with internet-delivered metadata and audio content in a single, multimedia, discovery experience. The metadata includes information about on-air radio shows, talent, albums, stations, and song-related content (e.g., lyrics, related activities, events, and podcasts).

It is customized to create a unique and interactive listening experience in markets globally. DTS AutoStage is available in 48 countries and features content compiled from more than 78,000 radio stations, 40 million songs, 4 million singles, and 1 million artist biographies. Content is carefully selected to provide the most comprehensive and relevant in-vehicle radio listening experience possible.

Frost & Sullivan notes that DTS AutoStage is quite versatile and built for global reach. It features a stable and scalable network and privacy compliant platform that is both simple and customizable, spurring original equipment manufacturer (OEM) adoption. Furthermore, the connected radio ecosystem enables OEMs and Tier I companies to build a feature-rich, scalable human-machine interface design that can work with vehicles' limited data and computer resources. It works for analogue AM/FM in addition to global digital radio formats (such as DAB, DAB+, and HD Radio™). Even when the car is out of broadcast range, DTS AutoStage provides a smooth transition for listeners, supporting formats from broadcasts to Internet streams. Frost & Sullivan analysts appreciate how Xperi focuses on the highest levels of innovation and is deeply committed to engaging customers with exciting new experiences through data and technology.

Visionary Scenarios through Mega Trends

Unlike other competitors, Xperi has a dedicated, corporate-level market research team that tracks Mega Trends and actively finds opportunities for mergers and acquisitions.

A few key trends that both the company and Frost & Sullivan have identified are:

1. Changing consumer needs, including the transition from consuming legacy radio to digital media content
2. The deployment of high-speed Internet, enabling automakers to offer data-rich services
3. The adoption of AVs increasing consumers' media consumption
4. Increase in OEM adoption of Android Automotive

Xperi's large team designs and embeds software for audio system chipsets, thus supporting radio applications. The company has gained enormous experience over the years, allowing it to intelligently manage content and connections from home to car to anywhere in between. The company's technology is used in billions of semiconductors, electronic devices, and broadcast networks worldwide. Xperi's technology allows it to compete with big tech companies by enabling automakers to provide differentiated in-vehicle entertainment. Xperi is also currently leading a global and industry-wide effort via NAB Pilot to ensure Android Automotive supports global radio standards.

Xperi's connected car media business models are built around DTS AutoStage. The next-gen infotainment platform combines the only global hybrid radio solution providing premium content with TiVo's entertainment metadata, enabling a personalized content experience. Such an approach opens up new prospects for Xperi in the future, particularly as 5G allows users to access video streaming in their AVs.

Financial Performance and Price/Performance Value

A recent collaboration with Japan's radiko and Germany's SWR are the most recent examples of Xperi's global expansion. These partnerships allow DTS AutoStage to combine metadata and content from Japan and Germany's largest radio broadcasters, resulting in a compelling in-vehicle radio experience for vehicle owners in those countries. Such an approach ensures that all radio station and broadcaster metadata on the radiko and SWR broadcast networks are transmitted reliably and seamlessly in the DTS AutoStage ecosystem.

In 2019, Xperi and TiVo announced their merger in an all-stock deal with a total enterprise value of approximately \$3 billion USD. The transaction created a massive consumer and entertainment technology firm, a diverse entertainment portfolio, and one of the industry's largest intellectual property (IP) licensing platforms, including semiconductor IP.

Frost & Sullivan notes that the merger brought together two technology pioneers whose inventions are featured in billions of devices globally, thereby impacting how millions of customers access and experience entertainment content. With revenue of over \$1 billion USD on a combined company basis, Xperi holds a significant market share and expects solid growth over the long term. The company identifies its fully immersive connected media platform and driver and occupant monitoring solutions as future growth drivers. In contrast to its other rivals, Xperi provides 100% web-based software, infused live data streaming, and a content and user interface that is refreshed on a regular basis.

Customer Service Experience

As automation levels in vehicles rise, it is critical that vehicles have the capability to recognize any risk (e.g., distracted or impaired driving or pets and children left behind in a hot car) to the driver and occupants. Frost & Sullivan notes that in the United States, there were 53 confirmed hot car child fatalities and several hundred pet deaths in 2018 - while distracted driving claimed 2,628 lives that same year.

Xperi's in-cabin sensing systems ensure protection at all levels. DTS AutoSense in-cabin monitoring solutions will bring to market the world's first Occupancy Monitoring Solution (OMS) for passenger vehicles, expected to be on the road by the end of 2021. The DTS AutoSense OMS is committed to saving vehicle passengers' and drivers' lives while improving the in-cabin experience. The solution can detect occupants, children, child seats, pets, objects and emotions, and can even perform passenger authentication. Furthermore, DTS AutoSense offers a Driver Monitoring Solution (DMS) and its combined DMS + OMS solutions provide insights into activity inside the vehicle, which includes the driver, passengers, pets, and objects.

DTS AutoSense's OMS capitalizes on the company's deep expertise in image processing and AI. The OMS can detect passengers and objects left in the car using advanced computer vision, machine learning (ML), and a single camera. The technology can also personalize infotainment recommendations such as playlists, material, music volume, and radio station choices in addition to any other setting that can be tailored to user preferences (e.g., in-cabin temperature changes).

DTS AutoSense does not require cloud access and is designed to operate on the edge, keeping only the

minimum required data to operate within the vehicle. The offering's AI-powered features are based on proprietary neural networks developed, trained, and tested by the company's team of more than 100 AI/ML engineers, artists, scientists, and problem-solvers. DTS AutoSense is also platform-independent and built to operate under severe driving conditions. This capability allows automakers to provide a solution to specific hazards. Frost & Sullivan analysts expect that advanced occupant sensing technology, as nicely embodied by DTS AutoSense, to be a requirement for AV development. Aside from safety-oriented software, Xperi's in-cabin solution is also experience-oriented, enabling capabilities such as media content personalization within the vehicle. Overall, Xperi prioritizes content quality and understands that the consumer experience within a vehicle is highly differentiated from that of a desktop experience. Most other competitors struggle to understand such factors and thus provide sub-optimal offerings.

Frost & Sullivan commends Xperi for providing cutting-edge technology to support safety and comfort services that can be customized to suit customers' needs.

Brand Equity

Xperi is a market leader in the connected media industry and has opened up a new market space in connected audio services, generating massive demand. Xperi designs, develops, and delivers technologies and services to growing markets such as India, the Philippines, the Caribbean, Latin America, and Eastern Europe. An example of Xperi's first-mover advantage is its collaboration with All India Radio. The company recently completed testing of its HD Radio FM broadcast technology in New Delhi in support of the country's Digital India initiative. The HD Radio solution enables opportunities to increase consumer access to multi-language digital radio broadcasts across India.

In North America, Xperi's HD Radio outperforms the competition, with close to 55% OEM penetration in new vehicle sales. HD Radio's in-band, on-channel technology is the only digital terrestrial broadcast system licensed by the Federal Communications Commission for AM/FM radio and hence remains the only digital radio option in the United States.

Frost & Sullivan analysts appreciate how Xperi is taking the necessary steps to retain its competitive edge in newer markets by demonstrating its technical prowess in the regions where it operates. The company also developed the world's first in-cabin monitoring technologies powered by Prophesee Metavision® sensors. With the help of raw feed from the Metavision® sensor, the DTS AutoSense team can monitor details including driver gaze, head pose, and even eyelid opening. Overall, the company enables extraordinary experiences for customers via its brands (e.g., DTS, HD Radio, IMAX Enhanced, Invensas, and TiVo), making entertainment more entertaining and smart devices smarter.

Conclusion

Xperi's extensive experience in the connected media industry makes it ideally suited to provide superior in-car entertainment. Its HD Radio® and DTS® technology can be installed across devices and features in more than 100 million vehicles manufactured by 44 major automakers. Moreover, Xperi's merger with TiVo, in addition to its other brands, set it apart through best-in-class smart solutions. Whether offering IMAX Enhanced's signature sound or DTS' innovative home-connected wireless audio, Xperi assures an outstanding customer experience - both at home and on the go.

With its exceptional performance, product value, and outstanding customer support, Xperi earns the 2021 Frost & Sullivan Company of the Year Award.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends:

Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first to market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

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

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing 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

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

