telematics technology in cars

Telematics Technology in Cars: Revolutionizing the Driving Experience

telematics technology in cars is rapidly transforming the way we drive, manage vehicles, and experience transportation. From enhancing safety features to optimizing fleet management, telematics combines telecommunications and informatics to provide real-time data and connectivity that were once unimaginable. As vehicles become increasingly connected, understanding telematics technology is essential for drivers, fleet operators, and automotive enthusiasts who want to stay ahead in this digital age.

What Is Telematics Technology in Cars?

At its core, telematics technology in cars refers to the integration of GPS systems, onboard diagnostics (OBD), wireless communication, and data analytics to monitor and manage vehicles remotely. This technology collects data on vehicle location, speed, fuel consumption, engine performance, and driver behavior, transmitting it to centralized systems for analysis. The result is smarter, safer, and more efficient driving experiences.

How Telematics Works

Telematics devices are typically installed within a vehicle's onboard systems or connected via OBD-II ports. These devices gather data and use cellular networks, satellite communication, or Wi-Fi to send information to cloud-based platforms. From there, fleet managers or individual users can access dashboards displaying insights such as route history, maintenance alerts, and driver scores.

Key Components of Vehicle Telematics

- **GPS Tracking:** Enables precise vehicle location monitoring and route optimization.
- **Onboard Diagnostics (OBD):** Provides real-time data on engine health and system faults.
- **Wireless Communication:** Facilitates data transmission through cellular or satellite networks.
- **Data Analytics Software:** Processes raw data into actionable insights for

users.

The Benefits of Telematics Technology in Cars

Telematics technology offers tremendous advantages for different users, from everyday drivers to large commercial fleets. Let’s explore some of these benefits:

Improved Safety and Accident Prevention

One of the most impactful benefits of telematics technology in cars is its role in enhancing safety. By monitoring driver behavior such as harsh braking, rapid acceleration, and sharp cornering, telematics systems can alert drivers to risky habits. Some setups even integrate with advanced driver assistance systems (ADAS) to provide lane departure warnings, collision alerts, and emergency braking assistance.

Enhanced Vehicle Maintenance

Telematics systems keep a constant eye on vehicle health, detecting engine trouble codes or maintenance needs before they escalate into costly repairs. Predictive maintenance powered by telematics helps extend vehicle lifespan and reduce downtime by scheduling timely servicing based on real data rather than guesswork.

Fuel Efficiency and Cost Savings

Monitoring fuel consumption and identifying inefficient driving patterns are key to reducing fuel expenses. By analyzing speed, idling time, and route selection, telematics technology guides drivers toward more economical driving styles and helps fleet operators manage fuel budgets effectively.

Optimized Fleet Management

For businesses managing multiple vehicles, telematics technology in cars is a game-changer. Fleet managers gain real-time visibility into vehicle locations, driver performance, and delivery timelines. This intelligence enables better route planning, quicker response to emergencies, and improved customer satisfaction.

Applications of Telematics Technology Beyond Personal Cars

While telematics is often associated with personal vehicles, its applications extend far beyond. Here’s where else telematics is making waves:

Commercial Trucking and Logistics

In the logistics industry, telematics technology streamlines operations by tracking cargo, monitoring driver hours, and ensuring compliance with regulations. This transparency helps prevent theft, reduces delays, and boosts operational efficiency.

Insurance Telematics

Many insurance companies now use telematics data to offer usage-based insurance (UBI) policies. By analyzing driving habits, insurers can tailor premiums to individual risk profiles, rewarding safe drivers with lower rates.

Smart Cities and Connected Infrastructure

Telematics data contributes to smarter traffic management by providing insights into traffic flow, congestion spots, and accident hotspots. Urban planners use this information to design better roads and implement smarter traffic signals, improving overall road safety and reducing commute times.

Challenges and Considerations with Telematics Technology in Cars

While the benefits of telematics are clear, there are some challenges and concerns that users and manufacturers must address.

Privacy and Data Security

The continuous collection and transmission of vehicle and driver data raise significant privacy questions. It’s crucial that telematics providers implement robust encryption and data protection measures to safeguard sensitive information from unauthorized access or misuse.

Cost of Implementation

Installing telematics systems can be expensive, especially for smaller businesses or individual users. However, the long-term cost savings and operational benefits often justify the initial investment.

Data Overload

With vast amounts of data generated, it can be overwhelming to extract meaningful insights. Effective data analytics tools and user-friendly dashboards are essential to make telematics data actionable and accessible.

The Future of Telematics Technology in Cars

As automotive technology advances, telematics is poised to become even more integral to mobility. The rise of electric vehicles (EVs), autonomous driving, and the Internet of Things (IoT) will further expand telematics capabilities.

Integration with Autonomous Vehicles

Autonomous cars rely heavily on sensor data and connectivity. Telematics technology will serve as the backbone for vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication, enabling safer and more efficient autonomous driving ecosystems.

Advanced Driver Behavior Analysis

Future telematics systems will harness artificial intelligence (AI) and machine learning to provide even deeper insights into driver habits and predict potential safety risks before they occur, offering proactive coaching and intervention.

Greater Customization and User Control

With growing awareness of data privacy, future telematics solutions will likely offer users greater control over what data is shared and how it is used, balancing convenience with personal security.

Tips for Choosing a Telematics System for Your Vehicle

If you’re considering adding telematics technology to your car or fleet, here are some practical tips to guide your decision:

1. **Identify Your Needs:** Determine whether you need basic GPS tracking or comprehensive fleet management tools.
2. **Check Compatibility:** Ensure the telematics device works seamlessly with your vehicle’s make and model.
3. **Evaluate Data Access:** Look for platforms that offer intuitive dashboards and real-time alerts.
4. **Consider Security Features:** Choose providers with strong encryption and privacy policies.
5. **Review Costs:** Factor in installation fees, subscription charges, and potential savings.

Telematics technology in cars is no longer a futuristic concept—it’s a present-day reality reshaping how we interact with our vehicles. Whether for personal safety, operational efficiency, or environmental benefits, telematics offers a wealth of opportunities to make driving smarter and more connected. As this technology continues to evolve, staying informed about its capabilities and implications will help drivers and businesses alike unlock its full potential.

Frequently Asked Questions

What is telematics technology in cars?

Telematics technology in cars refers to the integration of telecommunications and informatics to provide services such as navigation, vehicle tracking, emergency assistance, and remote diagnostics through wireless communication systems.

How does telematics improve vehicle safety?

Telematics improves vehicle safety by enabling real-time monitoring of driving behavior, automatic crash notification, emergency response services, and providing alerts for maintenance and potential vehicle issues.

What are the common features of telematics systems in modern vehicles?

Common features include GPS navigation, vehicle tracking, remote diagnostics, driver behavior monitoring, emergency call services, and integration with smartphone apps for enhanced connectivity.

How do telematics systems benefit fleet management?

Telematics systems help fleet management by providing real-time tracking, route optimization, fuel consumption monitoring, driver performance analysis, and maintenance scheduling, leading to increased efficiency and reduced operational costs.

Are there privacy concerns associated with telematics technology in cars?

Yes, telematics technology raises privacy concerns as it collects and transmits data about vehicle location, driver behavior, and usage patterns, which could potentially be accessed or misused if not properly protected.

How is telematics technology evolving with the rise of connected and autonomous vehicles?

Telematics technology is evolving to support advanced connectivity, vehicle-to-everything (V2X) communication, enhanced data analytics, and integration with autonomous driving systems to improve safety, efficiency, and user experience.

Can telematics technology help reduce insurance premiums for drivers?

Yes, many insurance companies offer usage-based insurance programs that use telematics data to monitor driving behavior, rewarding safe drivers with lower premiums based on their actual driving patterns.

Additional Resources

Telematics Technology in Cars: Revolutionizing Automotive Connectivity and Safety

telematics technology in cars has emerged as a pivotal innovation shaping the modern automotive landscape. By integrating telecommunications and informatics, telematics systems enable vehicles to communicate with external networks, enhancing safety, navigation, and overall driving experience. As the automotive industry accelerates toward greater connectivity and automation, understanding the nuances of telematics technology becomes essential for manufacturers, consumers, and policymakers alike.

Understanding Telematics Technology in Cars

At its core, telematics technology in cars involves the use of embedded devices that collect, transmit, and receive data related to vehicle performance, location, and driver behavior. These systems typically combine GPS navigation, onboard diagnostics (OBD), and wireless communications such as cellular networks or dedicated short-range communications (DSRC).

Unlike traditional car electronics, telematics bridges the gap between a vehicle and external data sources, allowing for real-time monitoring and control. This connectivity facilitates a wide spectrum of applications, from emergency assistance to fleet management.

Key Components and Features of Automotive Telematics

Telematics technology in cars relies on several integrated components to deliver its functionality:

- **GPS Module:** Provides accurate vehicle location tracking and navigation capabilities.
- **Onboard Diagnostics (OBD-II) Port:** Collects data on engine performance, fuel efficiency, and system health.
- **Communication Interface:** Cellular modems or Wi-Fi modules transmit data between the vehicle and external servers.
- **Data Processing Unit:** An embedded system that analyzes incoming data and triggers relevant actions.
- **User Interface:** Infotainment screens or mobile applications that display telematics data to drivers.

These components work in unison to support functionalities such as real-time traffic updates, remote vehicle diagnostics, stolen vehicle recovery, and driver behavior analysis.

The Role of Telematics in Enhancing Vehicle

Safety

One of the most significant impacts of telematics technology in cars is its contribution to safety enhancements. Modern telematics systems enable features that were previously unattainable through conventional automotive electronics.

Emergency Response and Accident Assistance

Many telematics-enabled vehicles incorporate automatic crash notification systems. When a collision occurs, sensors detect the impact and automatically alert emergency services with the vehicle’s precise location. This rapid response capability can reduce emergency response times significantly, potentially saving lives.

Driver Behavior Monitoring and Insurance Telematics

Insurance companies increasingly rely on telematics data to assess driving patterns, such as speed, acceleration, braking, and cornering. This practice, often called usage-based insurance (UBI), allows insurers to offer personalized premiums based on actual driving behavior rather than demographic assumptions. Consequently, safer drivers benefit from lower insurance costs, incentivizing responsible driving habits.

Telematics and Fleet Management

Beyond individual consumer vehicles, telematics technology in cars has found substantial application in commercial fleet management. Businesses leverage telematics solutions to optimize operations, reduce costs, and improve safety across their fleets.

Operational Efficiency Through Real-Time Tracking

Fleet operators use telematics to monitor vehicle locations, route adherence, and estimated arrival times. Real-time tracking enables dynamic route adjustments, reducing fuel consumption and delivery delays.

Maintenance and Diagnostics

Telematics systems can detect mechanical issues before they escalate, alerting fleet managers to schedule timely maintenance. Preventative care reduces downtime and extends vehicle lifespan, leading to cost savings.

Compliance and Regulatory Benefits

For industries subject to strict regulations—such as transportation and logistics—telematics facilitates compliance by recording hours of service, driver logs, and vehicle inspections automatically. This documentation streamlines reporting and reduces the risk of violations.

Challenges and Limitations of Telematics Technology in Cars

While telematics technology in cars presents numerous advantages, it also faces challenges that must be addressed to maximize its potential.

Data Privacy and Security Concerns

The extensive data collected by telematics systems include sensitive information such as location, driving habits, and vehicle status. Unauthorized access or misuse of this data raises privacy concerns. Manufacturers and service providers must implement robust cybersecurity measures to protect users against hacking and data breaches.

Infrastructure and Connectivity Limitations

Effective telematics operation depends heavily on reliable cellular or satellite connectivity. In remote or underserved regions, signal availability may be inconsistent, limiting real-time data transmission. This constraint affects the efficacy of safety features and fleet management applications.

Cost and Adoption Barriers

Installing telematics hardware and subscribing to data services entail additional costs that may deter some consumers and small businesses. Furthermore, concerns over surveillance and data ownership can impede widespread adoption.

The Future of Telematics Technology in Cars

The evolution of telematics technology in cars is tightly intertwined with advancements in 5G connectivity, artificial intelligence, and the proliferation of electric and autonomous vehicles.

Integration with Autonomous Driving Systems

Autonomous vehicles depend on robust telematics networks to communicate with other cars, infrastructure, and cloud-based services. This vehicle-to-everything (V2X) communication framework enables coordinated maneuvers, hazard detection, and traffic management.

Enhanced Predictive Analytics

AI-powered telematics platforms are beginning to analyze vast datasets to predict maintenance needs, optimize routes, and even anticipate hazardous road conditions. These predictive capabilities promise to further improve safety and operational efficiency.

Expansion of Connected Car Services

Telematics technology is also a foundation for expanding connected car services, including in-car entertainment, over-the-air software updates, and personalized user experiences. As vehicles become mobile data hubs, telematics will play a central role in the digital lifestyle of drivers.

Telematics technology in cars stands today as a transformative force within the automotive sector, bridging the gap between physical vehicles and digital ecosystems. Despite challenges related to privacy and infrastructure, its benefits in safety, efficiency, and connectivity are undeniable. As the technology continues to mature, telematics will remain crucial in driving innovation and shaping the future of mobility.

Telematics Technology In Cars

telematics technology in cars: Automotive Telematics Axel Fuchs, Motorola, 2002-08-23 This report discusses automotive telematics from a technical perspective, with reference to the business model and to the value for the user. The three main entities of the end-to-end system framework of telematics are discussed; in-vehicle system, infrastructure, and service center with its voice and data portal.

telematics technology in cars: Automotive Telematics Axel Fuchs, 2002 This book discusses automotive telematics from a technical perspective, with reference to the business model and to the value for the user. Automotive telematics is a concept that combines telecommunications and computing (informatics) technologies to connect vehicles to a communication infrastructure. This enables car manufacturers and service providers to provides services to consumers and commercial users by exchanging information among vehicle systems, attached consumer electronics devices, and telematics service centers.Contents: Chapter 1: Introduction; Chapter 2: Value Chain and Business Model; Chapter 3: Telematics System View - End-to-End System, In-Vehicle System, Back-End Infrastructure; Chapter 4: Enabling Technologies - Positioning and Location Technologies, Telematics Services Delivery Technologies, Networking and Protocols; Vehicle Communications; Audio and Speech Processing, Distributed Computing; Chapter 5: Services and Applications - Communications, Convenience, Floating Car Data (FCD), Customer Relationship Management (CRM), Product Feedback, Productivity-Asset Status Update, Infotainment; Safety and Security; Chapter 6: Telematics Products - Broadcast Systems, Two-Way Communications Systems, Safety and Security Systems; Fleet Management Systems, Connected Infotainment Systems; Chapter 7: Challenges and Future Research - Driver Distraction and Human-Machine Interface (HMI), Life Cycle Disparity, Communication Networks, Distributed Applications, Telematics-Assisted Safety Systems.

telematics technology in cars: Autonomous Vehicle Technology James M. Anderson, Nidhi Kalra, Karlyn D. Stanley, Paul Sorensen, Constantine Samaras, Oluwatobi A. Oluwatola, 2014-01-10 Autonomous vehicle technology has the potential to significantly improve social welfare. This report addresses the numerous legislative, regulatory, and liability issues this technology will raise.

telematics technology in cars: *Guide to Automotive Connectivity and Cybersecurity* Dietmar P.F. Möller, Roland E. Haas, 2019-04-03 This comprehensive text/reference presents an in-depth review of the state of the art of automotive connectivity and cybersecurity with regard to trends, technologies, innovations, and applications. The text describes the challenges of the global automotive market, clearly showing where the multitude of innovative activities fit within the overall effort of cutting-edge automotive innovations, and provides an ideal framework for understanding the complexity of automotive connectivity and cybersecurity. Topics and features: discusses the automotive market, automotive research and development, and automotive electrical/electronic and software technology; examines connected cars and autonomous vehicles, and methodological approaches to cybersecurity to avoid cyber-attacks against vehicles; provides an overview on the automotive industry that introduces the trends driving the automotive industry towards smart mobility and autonomous driving; reviews automotive research and development, offering background on the complexity involved in developing new vehicle models; describes the technologies essential for the evolution of connected cars, such as cyber-physical systems and the Internet of Things; presents case studies on Car2Go and car sharing, car hailing and ridesharing, connected parking, and advanced driver assistance systems; includes review questions and exercises at the end of each chapter. The insights offered by this practical guide will be of great value to graduate students, academic researchers and professionals in industry seeking to learn about the advanced methodologies in automotive connectivity and cybersecurity.

telematics technology in cars: *Communication Technology Update and Fundamentals* August E. Grant, Jennifer H. Meadows, 2016-11-03 Communication Technology Update and Fundamentals has set the standard as the single best resource for students and professionals looking to brush up on how communication technologies have developed, grown, and converged, as well as what’s in store for the future. The 15th edition is completely updated, reflecting the changes that have swept the communication industries. The first five chapters offer the communication technology fundamentals, including the ecosystem, the history, and structure—then delves into each of about two dozen technologies, including mass media, computers, consumer electronics, and networking technologies. Each chapter is written by experts who provide snapshots of the state of each individual field. Together, these updates provide a broad overview of these industries, as well as the role communication technologies play in our everyday lives. In addition to substantial updates to each chapter, the 15th edition includes: First-ever chapters on Big Data and the Internet of Things Updated user data in every chapter Projections of what each technology will become by 2031 Suggestions on how to get a job working with the technologies discussed The companion website, www.tfi.com/ctu, offers updated information on the technologies covered in this text, as well as links to other resources

telematics technology in cars: Smart Cars: AI and IoT Edge Computing in RealTime Signal Processing Jatin Soni, Karthikeyan Palanichamy, Aravind Ravi, Vishwanadham Mandala, ...

telematics technology in cars: Cars of the Future,Seventeenth Report of Session Great Britain. Parliament. House of Commons. Transport Committee, 2004 The Committee's report examines a range of safety and environmental issues regarding technological developments in the design of motor vehicles under the following headings: industrial advantage and vehicle technology; the environment and the car of the future, carbon emissions and European standards; future fuels and technologies; incentives for low carbon and alternative fuel cars; vehicle safety technology; telematics for intelligent transport systems and law enforcement, including satellite location technology and in-vehicle technology for crime prevention; consumer awareness, safety and environmental information, and the car maintenance sector.

telematics technology in cars: China's Electric Vehicle Industry Yingqi Liu, 2025-09-01 Innovation and Development of China's New Energy Vehicles Industry provides comprehensive insights into the role of new energy vehicles in facilitating the global energy transition. The book aims to foster an understanding of how these vehicles contribute to the shift towards green energy. Drawing from extensive data collected from over 20 cities, 40 companies, and more than 500 questionnaires, the book offers practical information for policymakers and industry stakeholders. Beyond the technological aspects such as battery technology, electric drive systems, and charging infrastructure, the book also discusses policy support mechanisms, financial subsidies, tax incentives, and regulatory frameworks.It includes international case studies from the USA and UK, aiding readers in grasping the global dynamics and fostering international cooperation. The book is essential for understanding the interplay between new energy vehicles and energy transition, providing actionable insights for industry professionals, researchers, and policymakers. - Presents comprehensive insights into the current Chinese approach to the new energy vehicle industry - Highlights technological innovation as the core driving factor in business model innovation, aligning with the rapidly evolving nature of new energy vehicles and their reliance on technological breakthroughs in battery systems, energy storage, and charging infrastructure - Includes case study comparisons to new energy vehicle industry development in other countries, and in global policy development

telematics technology in cars: Ubiquitous Intelligence and Computing Ching-Hsien Hsu, Laurence T. Yang, Jianhua Ma, Chunsheng Zhu, 2011-08-23 This book constitutes the refereed proceedings of the 8th International Conference on Ubiquitous Intelligence and Computing, UIC 2010, held in Banff, Canada, September 2011. The 44 papers presented together with two keynote speeches were carefully reviewed and selected from numerous submissions. The papers address all current issues in smart systems and services, smart objects and environments, cloud and services computing, security, privacy and trustworthy, P2P, WSN and ad hoc networks, and ubiquitous intelligent algorithms and applications.

telematics technology in cars: *Information Science and Applications (ICISA) 2016* Kuinam J.

Kim, Nikolai Joukov, 2016-02-15 This book contains selected papers from the 7th International Conference on Information Science and Applications (ICISA 2016) and provides a snapshot of the latest issues encountered in technical convergence and convergences of security technology. It explores how information science is core to most current research, industrial and commercial activities and consists of contributions covering topics including Ubiquitous Computing, Networks and Information Systems, Multimedia and Visualization, Middleware and Operating Systems, Security and Privacy, Data Mining and Artificial Intelligence, Software Engineering, and Web Technology. The contributions describe the most recent developments in information technology and ideas, applications and problems related to technology convergence, illustrated through case studies, and reviews converging existing security techniques. Through this volume, readers will gain an understanding of the current state-of-the-art information strategies and technologies of convergence security. The intended readers are researchers in academia, industry and other research institutes focusing on information science and technology.

telematics technology in cars: Cars of the Future Great Britain: Parliament: House of Commons: Transport Committee, 2004 Cars of the Future : Seventeenth report of session 2003-04, Vol. 2: Oral and written Evidence

telematics technology in cars: *Utility, Usability and Complexity of E-Information Systems* François Bodart, 2003 Jusqu'il y a peu l 'informatique se cantonnait à améliorer le fonctionnement des organisations, supportant à la fois ses activités opérationnelles, de gestion et de décision. Aujourd'hui l'apparition des e-systèmes (e-Business, e-administration, e-learning, ...) nous plonge dans une réalité beaucoup plus complexe. Cette complexité tient à la fois aux alliances technologiques qui supportent ces e-systèmes : technologies mobiles, informatique, multimédia, biométrie, ... Mais elle tient surtout à la variété des utilisateurs visés par ces nouveaux systèmes et à l'intégration entre sphère privée et sphère professionnelle qu'ils augurent. Pour nous aider à comprendre ces e-systèmes, des spécialistes d'envergure internationale, réunis autour du Professeur François Bodart, présentent dans cet ouvrage leurs regards croisés sur l'utilité et l'utilisabilité de ces nouveaux systèmes. Un ouvrage incontournable pour tous ceux qui s'intéressent aux enjeux technologiques, organisationnels et de Société de notre futur informatique.

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telematics technology in cars: Network World , 2002-09-09 For more than 20 years, Network World has been the premier provider of information, intelligence and insight for network and IT executives responsible for the digital nervous systems of large organizations. Readers are responsible for designing, implementing and managing the voice, data and video systems their companies use to support everything from business critical applications to employee collaboration and electronic commerce.

telematics technology in cars: Cemeterians Jack W. Plunkett, 2008 Franklin, Jack, Marla, Thadius, and Caitlin... this unlikely group of assorted misfits are the Cemetarians, a group that will take on any job - no, really, we mean any bloody job (money's a bit tight right now)! Trudge through disgusting sewers to battle manatee-massacring mermaids and soggy cultists, creep through creepy, fog-littered cemeteries straight out of an ancient Hammer Film soundstage, confront undead lecherous lodgers and other assorted beasties, creepies, and ghoulies. It all comes down to whether an adolescent giant Automaton, a truly mad, Mad Scientist, a surly Necromancer, a Banshee's granddaughter, and a reluctant furry monster straight from under your little sister's bed can manage not to kill each other - or, at least, quit fighting over the tele-privilege-schedule long enough to get the job done! Not likely.

telematics technology in cars: Intelligent Vehicular Networks and Communications Anand Paul, Naveen Chilamkurti, Alfred Daniel, Seungmin Rho, 2016-09-02 Intelligent Vehicular Network and Communications: Fundamentals, Architectures and Solutions begins with discussions on how the transportation system has transformed into today's Intelligent Transportation System (ITS). It explores the design goals, challenges, and frameworks for modeling an ITS network, discussing vehicular network model technologies, mobility management architectures, and routing mechanisms and protocols. It looks at the Internet of Vehicles, the vehicular cloud, and vehicular network security and privacy issues. The book investigates cooperative vehicular systems, a promising solution for addressing current and future traffic safety needs, also exploring cooperative cognitive intelligence, with special attention to spectral efficiency, spectral scarcity, and high mobility. In addition, users will find a thorough examination of experimental work in such areas as Controller Area Network protocol and working function of On Board Unit, as well as working principles of roadside unit and other infrastructural nodes. Finally, the book examines big data in vehicular networks, exploring various business models, application scenarios, and real-time analytics, concluding with a look at autonomous vehicles. - Proposes cooperative, cognitive, intelligent vehicular networks - Examines how intelligent transportation systems make more efficient transportation in urban environments - Outlines next generation vehicular networks technology

telematics technology in cars: Computerworld , 2001-03-12 For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

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