

Cinemo Recognized for

2021

Technology Innovation Leadership

Global Automotive In-vehicle Multimedia Software Industry **Excellence in Best Practices**

Strategic Imperatives

Frost & Sullivan identifies three key strategic imperatives that impact the new mobility industry: industry convergence, innovative business models, and transformative Mega Trends. Every company that is competing in the new 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 Cinemo is a reflection of how well it is performing against the backdrop of these imperatives.

INNOVATIVE INDUSTRY <u>S</u> CONVERGENCE **BUSINESS MODELS** The mobility industry is diversifying offerings due to Congested cities will need to technological advancements, deal with transportation and and business models such as traffic issues. Due to this, the ride hailing, MaaS, bike mobility market is witnessing sharing, and DRT are strong growth in partnerships emerging. among original equipment Operators are realigning manufacturers (OEMs), market strategies and governments, and technology developing innovative players. solutions focused on Consolidation of key players to customer experience and achieve economies of scale, safety. Artificial intelligence widen global footprints, and (AI) will create humanimprove profitability will robotic collaborative become a key trend. applications and swarm analytics that can increase safety by 90%. As new mobility ecosystems emerge, the industry will Mobility technology providers are expected to see a postwitness greater activity in pandemic bump in growth. investments, mergers, and Significant advancements should acquisitions among the be made in fleet management various stakeholders in the and demand generation value chain in the next 5-7 platforms in the next 5-7 years.

- years.
- Cities and transport operators are becoming more proactive when it comes to dealing with transport challenges. Cities are partnering with technology companies to offer DRT/MaaS solutions in 2020.
- OEMs will have to partner with technology providers to develop shared mobility solutions before 2030.
- The MaaS market alone is expected to grow to \$212 billion in 2030, primarily driven by demand in Europe and North America, providing a large opportunity for revenue growth for new mobility players.
- Companies must act now to invest in technological advancements and take advantage of growing market segments.

TRANSFORMATIVE MEGA TRENDS

- The need to improve operational efficiency to deal with congestion and pollution will require the deployment of high-impact technologies. Shared mobility solutions will be key in addressing pollution and congestion as a direct result of gradual decline in private vehicles on the road.
- Partnership between OEMs, technology players, and shared mobility providers is essential for future mobility.
- The focus of new mobility is shifting towards cleaner, safer, intelligent, and more efficient means of transportation.
- Major competitors are already acquiring technology companies. For example, Intel's acquisition of Mobileye and Moovit. New mobility players must realize the importance of partnerships with value-added technology players in 2020.
- Shared mobility players will refocus on sustainable technology to drive the shift toward connected, autonomous, shared, and electric vehicles by 2030.

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 companies. Cinemo excels in many of the criteria in the automotive in-vehicle multimedia software space.

AWARD CRITERIA	
Technology Leverage	Business Impact
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Technology Incubation	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

Comprehensive Advanced Infotainment System Ignites the Automotive Space

Vehicle connectivity, higher digital usage, technology upgrades, increased smartphone and internet

"Cinemo's differentiating factor is that it always works and develops products years ahead of the competition. The company demonstrated its proactive approach in March 2021, which can be seen with the recent introduction of a rear-seat entertainment system, a first of its kind, a multi-seat system based on Fios, usable on any seat of the car, with its partners Voxx, Amazon, and FCA. This high-tech, robust, and innovative IVI product is a pioneer in the automotive industry and aims to inspire and produce a best-in-class invehicle user experience, both embedded and in the cloud."

- Anamika Risal, Best Practices Research Analyst penetration, and changing demographics raise the global automotive in-vehicle multimedia software industry. The transition from an offline mode of the infotainment system to cloud technologies is not easy; however, original equipment manufacturers (OEMs) are working relentlessly to adopt connected services, including premium multimedia units, to enhance customer experience. With the changing needs and upgraded technologies, customers are moving and shifting aggressively from multimedia consumption in a vehicle to cloud-based streaming services. As the industry is transitioning toward digital technologies, OEMs find it difficult to incorporate new technologies because of frequent development cycles or upgrades these technologies. It becomes a challenge in comparison to long vehicle development cycles. Technologies companies are assisting automakers to shorten the gap between infotainment technologies and consumer technologies to provide a similar experience.

One such software company, Cinemo, offers a multi-platform strategy consisting of a multi-operation system and a cloud-based secure operations center to decrease the development process duration and offers highly advanced automotive grade multimedia playback, including ultra-fast indexing, connectivity, and cloud middleware. Founded in 2008 and headquartered in Karlsruhe, Germany, Cinemo has successfully developed itself as a global leader in the automotive infotainment industry by offering its advanced innovative feature-reach multimedia solution to more than 36 major OEMs, 20 top Tier 1 suppliers, and sold more than 64 million licenses globally. The company not only deploys middleware technologies but also delivers infotainment expertise to its customers, helping them with their developments to become quicker with better functionality. Cinemo's leading-edge modular middleware software architecture works with all operating systems including Android, Android Automotive, Linux, QNX, GENIVI, and iOS.

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Additionally, the company differentiates itself from competitors by offering Cinemo Live service for streaming content. Content companies change their Web application programming interface (Web APIs) regularly, even in a year or two, creating an upgrade challenge in vehicles. Likewise, most of the cars on the road are more than ten years old, and therefore do not sync with advanced cloud technologies. Solving these challenges, Cinemo's Live service feature takes responsibility for updating cloud providers' Web APIs, pushing them into the car from the cloud, and offering compatible features with the online services. Cinemo's API is developed so that its base code is fixed regardless of the operating system it is paired with, making it easier for its customers to sync. These initiatives provide a more significant customer IVI experience that helps Cinemo fuel the automotive industry's demand.

For the past 12 years, Cinemo aspires to deliver user-friendly, robust, economical, ultra-fast, and reliable software solutions. Cinemo's central innovation center, including its highly advanced research labs, support this vision by designing, manufacturing, and developing pioneering top-notch solutions to address technology challenges afflicting the auto-tech industry. The continuous focus on innovation and

continual research and development (R&D) investment in product prototypes support Cinemo a substantial competitive edge in the in-vehicle multimedia software industry.

Operational Excellence with a Customer-centric Focus Driving Growth

Technological innovation is a crucial factor of Cinemo's business strategy, and this vision has led the company to innovate one of the best-in-class IVI solutions. Since 2019, the company significantly improved the number of major OEMs it works with from 27 to 36; likewise, it sold 64 million licenses till date up from 50 million in 2020. Cinemo partners with companies to improve and enhance customer IVI experience as its solutions are scalable across all the companies and their vehicle models. For example, in March 2021, the company announced its collaboration with iQIYI, a leading Chinese company of online entertainment services that provide premium video-on-demand multi-screen content for vehicles. With continuous innovation and the introduction of a new upgraded cutting-edge IVI software solution that offers features such as integrated connectivity, reliability, scalability, and portability, Cinemo has been creating a greater penetration through its successful commercialization strategy. In January 2021, Cinemo showcased in-vehicle premium video, music, and cloud gaming at a virtual CES® event and achieved massive appreciation for its solution.

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The automotive market is changing very rapidly with the massive demand for digitization. Cinemo's OS agnostic and cross-platform support has met the quality and cybersecurity requirements of the industry. The company's commitment as a one-stop media solution partner has enabled it to build trust and loyalty from its existing and new customers, thereby increasing a higher retention rate. Cinemo endlessly innovates with its current product to make it easier to use and affordable for its customers. It aims to ensure that customers can quickly adapt to

the new technologies and invest in the integration process. One such example is, Cinemo is currently working on its enterprise API, which allows its customers to have a real-time view of a project's status, including functionality details, embedded code delivery, and a fully automated end-to-end system, thereby providing consistent quality and improving customers' ownership experience.

Cinemo successfully standardizes processes across the organization to embed excellence and agility in every aspect of its operations to ensure the optimal quality, safety, reliability, and sustainability of its production. Digitization is bringing a considerable change in Cinemo's operational efficiency. The operational process is being transformed from manual to digitization, allowing employees and customers to have transparency on their projects. Likewise, it commissions the latest technologies at its facilities to ensure its solutions are on par with global standards. Despite the pandemic and slow economy automotive sales, Cinemo managed to acquire positive revenue growth for 2020. It holds an 18% market share for IVI in new cars globally. Moreover, Cinemo has favorably positioned itself to differentiate itself from the market competition and has built a strong customer base with OEMs and

Tier-1s, including Daimler, Audi, BMW, Bugatti, Porsche, TOYOTA, Panasonic, Bosch, Continental, Voxx, and Faurecia, amongst other leading names.

Cinemo, a one-stop solution provider with higher quality products and standardized service, creates value for automotive companies globally. The company regularly monitors market trends, innovates, adapts, and responds to market opportunities with new products, helping Cinemo remain at the forefront in the industry. The company's unique technology, backed by extensive solid R&D, successfully addresses critical challenges in the automotive infotainment software industry.

Conclusion

A longer development cycle and transition from offline to online mode have limited the in-vehicle infotainment (IVI) software industry's market growth. Unlike other competitors, Cinemo, a one-stop software solution, offers a modular approach to its customers by providing the best-in-class and technologically advanced IVI system. The company's extensive research and development focus results in its leadership in applied technology, market-led innovation, and technical services globally. Its enterprise application programming interface will help customers enhance their purchase experience by allowing them to add or remove new features and functionalities with any additional software and cost. Cinemo forecasts innovative trends in the industry and works with new ways to provide customer value and meet their requirements successfully through its superior and advanced solutions. With its industry-leading technology, excellent branding strategy, and reliable service, Cinemo established and magnified its customer base, becoming a global leader in providing an end-to-end advanced IVI system.

For its strong overall performance and contribution to the industry, Cinemo is recognized with Frost & Sullivan's 2021 Global Technology Innovation Leadership Award in the automotive in-vehicle multimedia software industry.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Award Analysis

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

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

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$. 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

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities PIELINE ENGINETM GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

The Innovation Generator™

Our six 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:

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

