FROST & SULLIVAN

CIRCULOR

2022 TECHNOLOGY INNOVATION LEADER

EUROPEAN
AUTOMOTIVE SUPPLY
CHAIN MANAGEMENT INDUSTRY



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. Circulor excels in many of the criteria in the automotive supply chain management space.

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

A Sustainable and Responsible Digital Supply Chain Management Platform

Founded in 2017 and headquartered in London, England, Circulor is the leading provider of supply chain traceability for complex industrial supply chains. Circulor has extensive experience tracking minerals and materials for the automotive, extractive minerals and materials, plastics recycling, and construction industries. The company's platform delivers visibility of the material flow, as well as sustainable and responsible sourcing information of an entire supply chain, from raw material to final product, and gives companies data-driven proof to build more resilient, secure, and responsible supply chains.

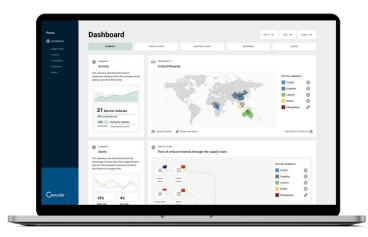
Meaningful Innovation

Circulor recognizes the complex economic and geopolitical tensions that strain supply chains, causing material and commodity shortages and bringing uncertainty to enterprises. Additionally, the growing sustainability demand is pushing organizations to explore solutions that enable them to meet sustainability goals and comply with regulations. Thus, Circulor leverages continuous client engagement and its growing number of supply chain participants who utilize the platform to illuminate complex industrial supply chains, offering innovative solutions that are unmatched by competitors.

Circulor's proven and trusted supply chain traceability software enables businesses to fully track, analyze, and manage their supply chains, to improve the security, resilience, and sustainability of supply chains. Using blockchain technology, machine learning, and business logic, the software-as-a-service solution creates a reliable chain of custody of the physical flow of a material, and attaches environmental, social,

and governance data to the material it can be shared with customers in its final product. Further, the data enables enterprises to reduce risks and improve resiliency by making supply chain deviations visible. The company's solution empowers enterprises with a robust supply chain picture, allowing more informed and better business decisions.

Circulor Dashboard



Source: Circulor

Circulor's growing global team, with experts in London, Berlin, Singapore, Rwanda, South Africa, Luxembourg, Ireland, Australia, and the United States – united around its collective mission to make positive change for people and the planet – bring diverse ideas, perspectives, and product innovation, continuously supporting its global customers.

A Proven Track Record

Since its founding, Circulor's client base ranges from large global original equipment manufacturers and multinational trading organizations to small sustainable mining companies and midstream supply chain

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- Elizabeth Whynott, Best Practices Research Analyst participants. Since 2019, Circulor has supported Volvo Cars in pioneering electric vehicle (EV) supply chain transparency. Volvo Cars is the first automaker to use technology to trace cobalt, and has since expanded to lithium, nickel, and mica, continuously tracking the flow and transformation of materials. Additionally, for the past few years, Circulor has supported Polestar to achieve its ambition to create a climate neutral car by 2030. Traceability is the key to this, and the work started with Circulor to track cobalt for the Polestar 2, before expanding to mica, lithium, and nickel.

Today, Circulor's technology is available globally. The company coordinates sales through direct

channels and consultancy firms, with teams in North America, Asia Pacific, Europe, Middle East, and Africa.

Frost & Sullivan anticipates rapid, widespread technology adoption. The company's first-mover status and proven software solution being delivered at scale with global brands strengthens its position on emerging opportunities.

Strategic Practices Positioning Circulor for Future Success

Circulor demonstrates high-growth potential. The company positions itself in the market, with an industry-leading product that provides tremendous value in high-demand sectors. As global sustainability requirements become increasingly stringent, clients continue to explore resources to help them achieve their sustainability initiatives, turning to Circulor to overcome challenges. With its customer-led strategy, the company consistently brings to market best-in-class capabilities for sourcing and tracing various materials, expanding the platform's functionalities to meet industry demand.

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- Elizabeth Whynott, Best Practices Research Analyst Circulor incorporates client feedback into its product roadmap to continuously innovate whilst maximizing short-term growth opportunities that provide a path to future revenues. The company boasts high customer satisfaction, resulting in zero client turnover. It reports 110% revenue growth since the end of 2021 and with the global drive for sustainability, projects its growth to reach 140% to 150% by the end of 2022 and 300% by the end of 2023. Additionally, Circulor recently raised \$25 million in a Series B funding round and plans to use the funds to continue to expand its product development team to continuously improve platform capabilities and deepen engagement in new industry opportunities.

This latest round also helps the company to expand its presence in the North American market.

Given today's landscape, Frost & Sullivan believes the company is in a prime position to increase its market share in this highly competitive supply chain management space.

Operational Efficiency and Serving Multiple Applications

Circulor strives to achieve operational efficiency with its dynamic customer lead and product teams. Customer-facing teams continuously engage with clients to assess their unique requirements for their industry's challenges, including evolving global Regulations. Additionally, product development teams maintain a keen eye on emerging technology and market trends to ensure the company brings cutting-edge solutions to its clients.

Clients leverage the Circulor platform and supply chain data across various business verticals, achieving broader organizational objectives. Whilst its vast expertise lies in tracking battery materials back to source, for both EVs and consumer electronics, it is seeing growth in tracking recycling supply chains as well as other renewal energy products. Circulor's solution is comprehensive in its supply chain applications given it delivers visibility into material flows, sustainable and responsible sourcing, and embedded carbon emissions, while also supporting compliance with global Regulatory requirements.

Frost & Sullivan finds Circulor is well-positioned to drive sustainability across industry verticals with its robust digital supply chain traceability platform.

Conclusion

Technology is a critical success factor for automotive supply chain management. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its digital supply chain traceability platform, Circulor delivers visibility of the material flow, sustainable and responsible sourcing of an entire supply chain, from raw material to final product, providing companies data-driven proof to build more resilient, secure, and responsible supply chains. The company's software-as-a-service solution creates a reliable chain of custody and attaches environmental, social, and governance data to the materials for advanced transparency that can be shared with customers in its final product. Circulor stands out from competitors based on its commitment to innovation and creativity while achieving commercial success. The company has global customers, ranging from large global original equipment manufacturers and multinational trading organizations to small sustainable mining companies and midstream supply chain participants. For example, Volvo Cars and Polestar. As global sustainability requirements increase and industries explore resources to achieve sustainability initiatives, the company is well positioned in the market with an industry-leading product that provides tremendous value in high-demand sectors.

For its strong overall performance, Circulor is recognized with Frost & Sullivan's 2022 European Technology Innovation Leadership Award in the automotive supply chain management industry.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership 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 ongoing 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

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:

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



