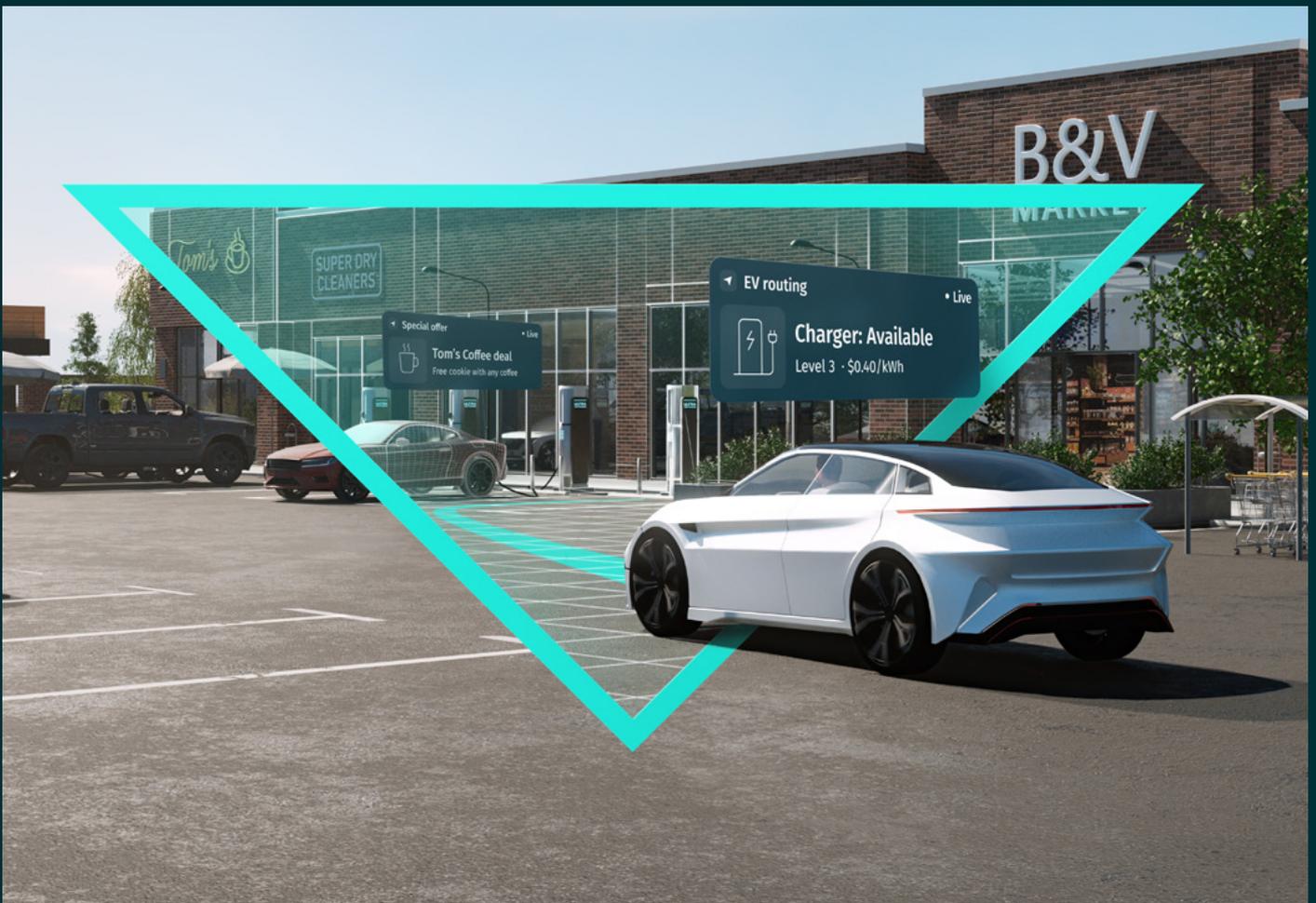


here

How HERE offers the most complete location platform





Introduction

Omdia's annual Location Platform Index is an ongoing independent assessment and ranking of major vendors in the location intelligence platform and services market, especially in mapping and navigation.

The index has placed HERE Technologies in the market-leading position for seven consecutive years, assessing it and its leading rivals – Google, TomTom and Mapbox – on the criteria of reach and completeness.

“In the location and navigation space, HERE remains the solid leader.”

Omdia Location Platform Index 2024

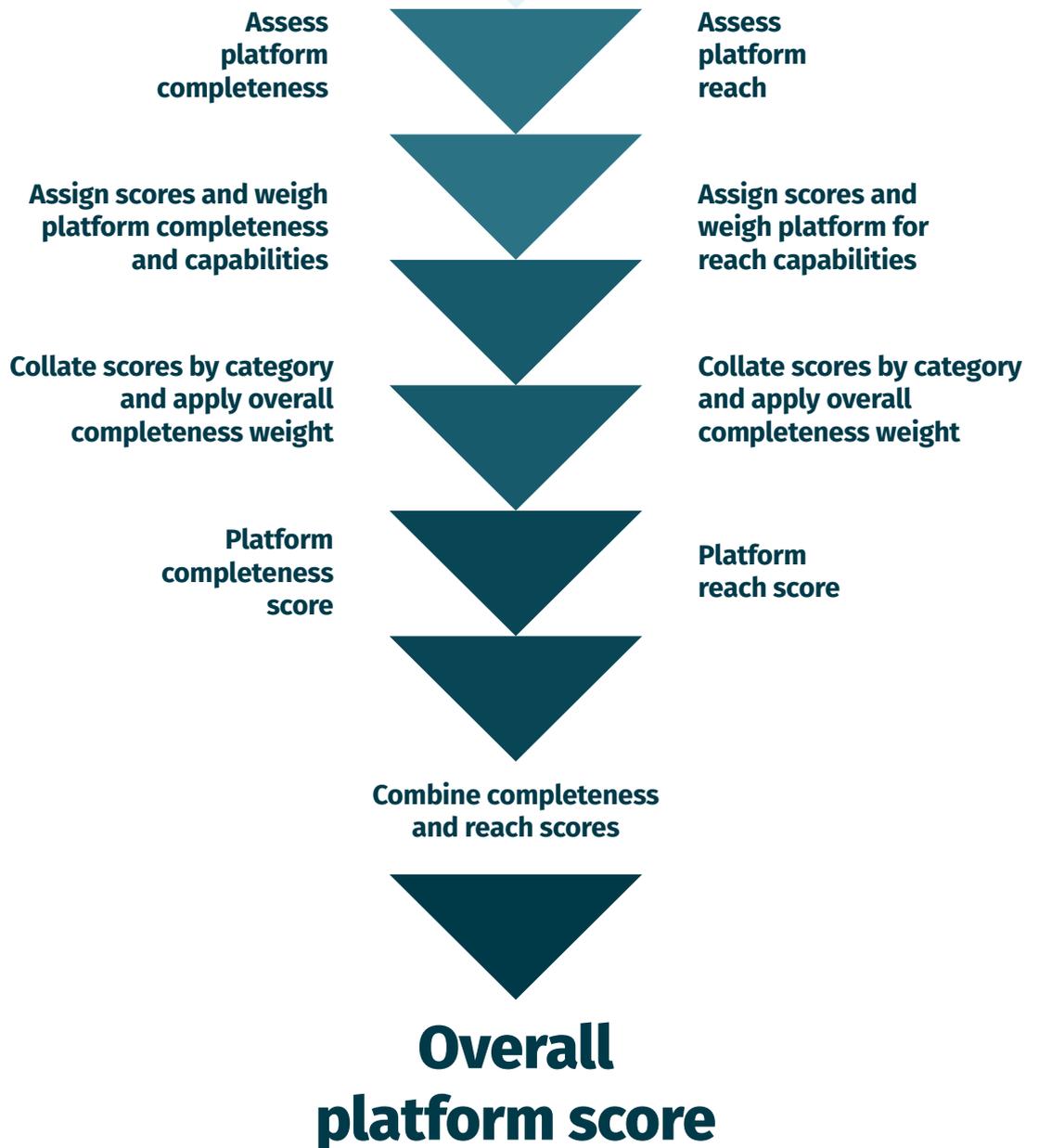
We discuss reach in a companion eBook but, in short, it considers factors such as the number of consumer and enterprise customers a vendor has, the size of the developer community that supports the platform and the number of automotive original equipment manufacturers (OEMs) that leverage the platform. Completeness, on the other hand, considers a platform's core data, mapping functions and services (provided directly or via partners). Completeness also considers a company's monetization strategy.

It is the attributes that combine to create HERE's completeness score that we will explore in this publication.

Measuring completeness

Each completeness attribute being considered is scored on a scale of one to five, depending on a vendor's capabilities. Each attribute also carries a weighting, which creates the total completeness score when combined with the actual score. Omdia divides completeness attributes into four key parameters:

- **Core data**
- **Mapping and platform capabilities**
- **Value-added services**
- **Monetization**



Core data

When analyzing the core data of location intelligence vendors, Omdia considers:

- If the company owns the core maps data and/or if partner core maps are used
- Capabilities in data analytics, including tools, functionality and other enhancements
- The number and nature of partnerships that enhance data capabilities, features and functionality (excluding partnerships for access to core map data or technology partnerships)
- Other core data capabilities or assets in this area
- The ability to exchange its own data, or participate in an exchange
- The level of support for crowdsourcing capabilities
- How effectively a vendor safeguards consumer and data sources, to comply with regulatory frameworks, such as the General Data Protection Regulation (GDPR) in the EU



HERE has been in the business of navigation and mapping for 40 years, during which time the company has built an unparalleled data ecosystem. As Omdia says: “HERE core map content... [from] over 200 countries uses a global fleet of more than 300 mapping systems, and an international community of map editors and developers that can provide local knowledge and expertise.”

As a guide to HERE’s data collection capabilities, Omdia points out that 35 billion basic probe points are ingested daily, adding up to thousands of terabytes of data from diverse sources.

The ownership of this extensive data store, along with the proprietary methods for creating and updating its maps, enables HERE to create flexible business and licensing models for its customers, such as different service level agreements and different product tiers.

The report also highlights that HERE scientifically generates traffic data, using the highest quality probe data from a range of versatile suppliers, with more than half of its sources being connected vehicles. It also notes that every year, HERE processes trillions of probes and provides continuously validated traffic-flow information, including for AI-driven closure and roadwork detection.

Mapping and platform capabilities

HERE's longstanding track record in supplying mapping and navigation, along with its continuing commitment to improving and refreshing its data, means that it also scores strongly in this category.

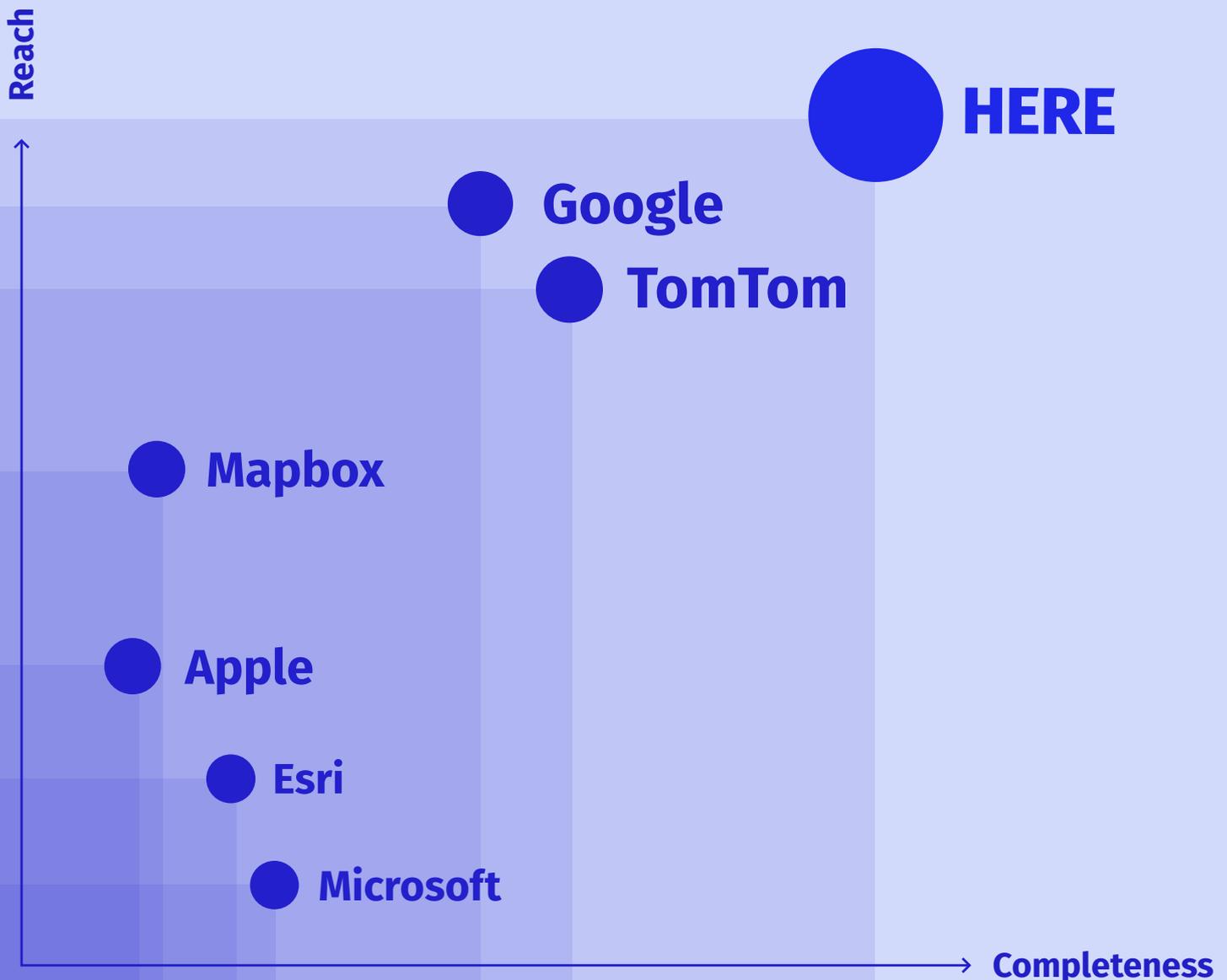
Factors considered by Omdia include:

- The depth and detail of map coverage (e.g., miles of roads mapped)
- Use of AI technology and capabilities to enhance the core platform
- Level of support for – and capabilities in – HD mapping

- The level of traffic information on the platform (e.g., support for real-time traffic updates, lane-level traffic information, or other features)
- The range and depth of points of interest (POI) information and business listings
- The extent to which a platform supports interactions with maps and related services via voice commands
- Solutions for OTA VAS and/or firmware delivery (the vendor's own or third party). This goes beyond standard OTA core mapping refresh/updates

HERE's ongoing focus on supplying the best, most accurate maps for its customers is especially important to its vision for software-defined vehicles (SDVs), which the automotive industry sees as the future.

As Omdia notes, HERE is forging ahead with its vision: "HERE, which is ultimately a software and data company, has entered the [SDV] discussion with a bold proposition – start with a unified map layer that can serve as a lynchpin for other systems and user experience. Not just any map, but a 'live' map that is automotive grade and enhanced with AI."



Omdia highlights how this unified map is a constantly updated central software layer, which means that other systems require less frequent updates. For example, the map layer can inform various advanced driver assistance systems (ADAS) and autonomous driving systems, routing and guidance, intelligent speed assist (ISA) – even adaptive cruise control and headlight adjustment. The report makes clear that for an OEM, the integration of all these systems with a map can reduce complexity, decrease time to market and improve customer experiences.

“HERE’s experience in aspects of integration and maintenance gives it greater credibility with OEMs when proposing new architectures for SDV.”

Omdia Location Platform Index 2024

As autonomous driving becomes a reality, Omdia thinks HERE’s approach can help OEMs eliminate the uncertainty and expense of purchasing multiple map licenses to support different vehicle functions. OEMs will also recognize that this form of system architecture complements vehicle sensors such as cameras, radar, GPS and LiDAR, incorporating benefits such as object detection, localization and proximity sensing, and vehicle health.

Launched in 2023, UniMap provides its customers with a rich, low-code tool kit, empowering them to combine their own data with HERE maps and data. UniMap also leverages the new technologies of artificial intelligence (AI) and machine learning (ML) to create even more efficient and refined maps. Indeed, Omdia explains in its report how mapping can be seen as creating a network effect, creating a feedback loop as it attracts more users and data. “UniMap can improve its algorithms, which improves HERE maps. In turn, these improvements make HERE maps more attractive to users.”

HERE map data is mostly generated by vehicle perception data, including probes, sensors, electronic control unit (ECU) data and video. These are sorted and then enhanced with AI to create greater accuracy and granularity than is possible with manual collection. Processing time also reduces from months to days.

Omdia's SWOT analysis of the HERE business

Strengths

HERE has a strong financial footing, including a healthy business booking, that will sustain the company for many years. This position allows it to take risks that other companies cannot.

HERE is laser-focused on mapping and location services. It selectively adopts and implements technologies like AI/ML to advance its capabilities in these areas.

It leads in HD Maps and ADAS Integration.

Weaknesses

HERE is not as diversified as some of its competitors, as its services are almost solely focused on automotive and enterprise. Its brand - a strong selling point for Android Auto and Apple CarPlay, which help entrench its maps - does not resonate with consumers.

Opportunities

HERE has a grand vision for how maps will become central to the vehicles' software architecture. If HERE can convince OEMs to embrace this vision and successfully implements its vision, the value of HERE's maps and services will increase exponentially.

Even if HERE cannot convince OEMs to adopt its vision, it still has a strong position to deliver HD Maps to a growing number of vehicles with more sophisticated ADAS.

Threats

Components suppliers promoting vehicle architectures that will likely compete against HERE's vision for software-defined cars. Qualcomm's announcements with Google are evidence of this. Other companies - such as NVIDIA, Intel, and Mobileye - also have visions for future vehicle architectures.

Google has broadened product offerings, including its map, which have been attractive to some OEMs.

Omdia suggests that while other suppliers will focus their research and development (R&D) on more modular solutions to the SDV question, "HERE has helped shape the direction of the conversation." The report adds that HERE's experience in maintaining data and mapping, and integrating them into OEM products, "gives it greater credibility with OEMs when proposing new architectures for SDV."

Value-added services

The third series of attributes that Omdia considers is the availability of services that add value for the customer, such as:

- Functions/services based on ADAS
- Capabilities, level of development and support for automated driving
- Integration with mobility services (ride-sharing, public transport)
- Integration of payment and related commercial services (offers or promotions)
- Ability to integrate with AI assistants such as Alexa
- Augmented reality (AR) features and services as part of the mapping proposition
- Business intelligence tools that blend and analyze enterprise and geographic data, to help customers optimize insights and enhance performance



In the field of driver assistance systems, Omdia highlights how HERE has already produced L2+ driving for three OEMs, while more than 44 million vehicles around the world are equipped with the company's ADAS. The company is in the process of increasing its customer base of OEMs by moving into the volume segment of the car market, as it supplies navigation products to the Duster and all-electric Spring models produced by the Renault-owned Dacia brand.

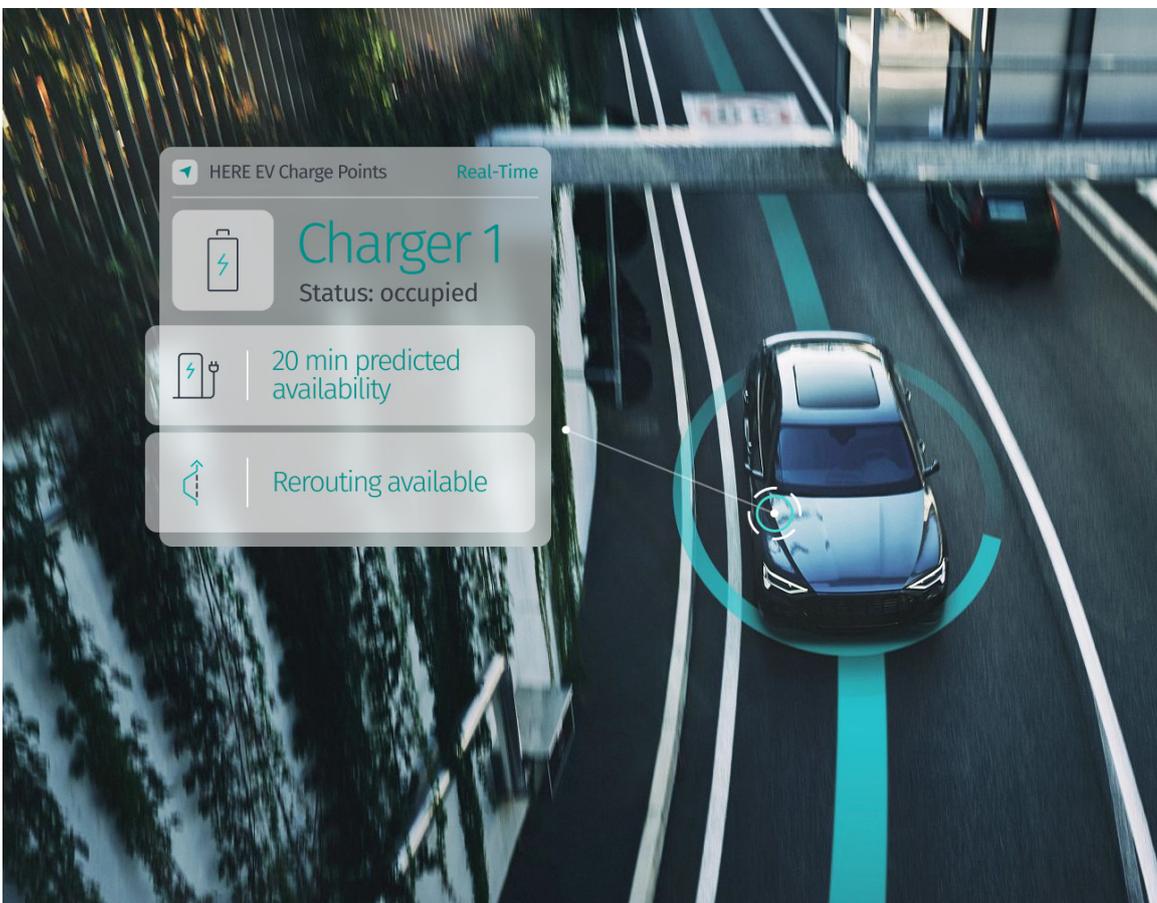
HERE is also identified as a successful supplier of "the most advanced commercially available autonomous driving systems," currently equipping flagship models produced by Mercedes-Benz and BMW. Omdia recognizes HERE's market-leading position in assisted and autonomous driving, based on an HD live map for highly automated driving, making it suitable for Level 3 autonomous driving systems. Admittedly, the volume of vehicles with L3 autonomous systems is currently relatively small, but the existence of just a few models equipped with HERE HD Live Map points to the quality of HERE maps.

As the report says: "HERE is clearly confident that its maps and capabilities are superior to competitors. It believes that if maps become more important to the overall architecture and function of the vehicle, then OEMs will be compelled to choose the supplier with the best maps, making them a clearer choice."

Omdia has also identified how HERE has created distance between itself and competitors by focusing on the electric vehicle (EV) market. HERE already works with more than 70 OEM brands, delivering map data, services, software development kits (SDKs) and applications. Five EV-only OEMs have also opted for either HERE SDK or HERE Navigation for their EV-specific driving needs. As Omdia says in the report: “HERE helps OEMs and their end users resolve key issues, such as range inaccuracy and anxiety, by incorporating data and insights regarding road slope, curvature, and friction. On top of traffic conditions, HERE uses other factors such as temperature, current and along the route, and wind resistance.”

HERE is also addressing the other side of the EV equation, says the report, with the HERE EV Charge Points product, which helps drivers anticipate charger availability in advance, thanks to data on more than 1.35 million EV connectors, including location, real-time availability, and technical specifications.

As the ride-hailing and on-demand delivery markets continue to expand, HERE is also making strides in supplying major companies operating in the sector. Omdia notes that these markets are particularly difficult to address, due to narrow financial margins and many companies operating at a loss, yet HERE has successfully established relationships with leading ride-hailing companies, such as Uber and Lyft.





“UniMap... provides enterprises with a rich, low-code tool kit with which they can combine their own data with HERE’s maps and data. HERE has implemented these technologies to create more efficient and better-refined maps.”

Omdia Location Platform Index 2024

Over four decades, HERE has established a strong presence across the navigation market, serving a wide range of industry segments with tailored product offerings. Among its clients identified by Omdia are Accenture, Alibaba, AT&T, AWS, Baidu, LG, Mitsubishi Corporation, Oracle, SAP, Samsung, Tencent, Verizon and Vodafone, all of whom have turned to HERE for maps and technology. Working with companies with different needs and integrations demonstrates how HERE has the flexible business model and in-house expertise to provide professional services.

“[HERE] believes that if maps become more important to the overall architecture and function of the vehicle, then OEMs will be compelled to choose the supplier with the best maps, making them a clearer choice.”

Omdia Location Platform Index 2024



Monetization

The last area that Omdia studies is the vendor’s business model, assessing whether it relies on licensing or has multiple revenue streams.

In the report, HERE’s strong cash position and double-digit EBITA growth are identified as enabling “increased spending on R&D and greater stability, while many companies in the tech sector are shedding jobs and taking defensive positions.” HERE currently has more than €4.4 billion (\$4.67 billion) in its order book, which Omdia suggests is a strong footing, especially in the context of some rivals facing destabilizing anti-trust litigation and, with public companies, investor demands.

Omdia also concludes that if HERE is successful with its unified mapping layer, “it will likely find itself at the table with OEMs much earlier in the supplier selection process.”

The report adds: “Earlier wins will not only drive greater financial stability, but also put HERE in a better position to sell more robust solutions.”



Conclusion

Omdia's independent research confirms HERE as the leading location platform vendor, with 2024 marking the seventh consecutive year the company has taken the accolade. When assessing HERE's core data, mapping technology, value-added services and monetization strategies, Omdia concluded: "HERE sets the benchmark in navigation and location-based services."

Omdia's Location Platform Index makes it clear that businesses looking to integrate high-quality mapping and navigation solutions should look to HERE, as it is the clear market leader.

