

HERE Continues to Lead the Location Platform Landscape



Executive Summary

Location is one of the most transformative technologies, enabling the growth of new on-demand services that are addressing the challenges brought by trends including urbanization, changes to mobility, environmental concerns, and new business models across multiple industry sectors.

Location-centric solutions depend on map data to help routing (points A to B), geocode (integrate points of interest) and integrate (sensor data), enabling key use-cases such as search, discovery, mobility as well as newer use cases such as data analysis and decision making.

In line with the rapidly changing environment, map providers have been transforming into location platforms. They are adding layers of intelligence, analytics, and tools to help enterprises fuse data with location to analyze, visualize, and derive actionable insights.

Location services will continue to power mobility experiences and, as the data gets richer, will also drive future autonomous transport systems, enabling greater safety, as well as new business models and applications.

And adding rich location context to the plethora of connected things/assets will shape new processes that manage sensor-intelligence and help improve businesses and lives.

In this report, we evaluate 25 emerging location platform players across more than 60 criteria, based on Counterpoint's **CORE** (**CO**mpetitive **R**anking and **E**valuation) proprietary analysis framework. These analyses are to help industry stakeholders understand the different offerings, capabilities, and growth areas so they can make informed decisions about who to partner with to build new, location-centric, experiences.

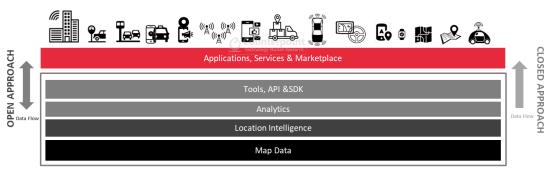


Future Growth Will Be Driven by Open and Scalable Platforms

The technology sector is undergoing a transformation as map and location intelligence providers are moving to a platform-centric approach beyond just selling map content and navigation solutions for use by automakers and device makers. New experiences are being enabled by combining location-centric intelligence and enterprise/consumer data.

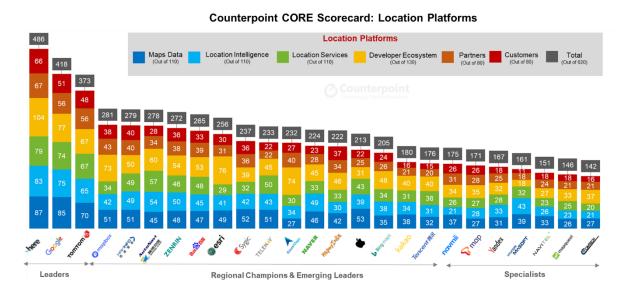
The platform approach helps location players to obtain wider use of their location data and services, together with advanced development tools and partnership models. In turn, this helps developers to build location-powered applications, services, and solutions.

Location platforms are becoming modular, with capabilities including rich maps data, location intelligence, analytics, development tools, and services. These can be accessed offline or via cloud infrastructure. And the different elements can be licensed as a whole or individually, according to the developer's needs.



HERE has been leading this trend. **HERE's Location Platform** approach is to enrich the platform with data flowing from its partners and customers openly and collaboratively. Developers can then leverage HERE's rich map data, location intelligence, services, and advanced tools to convert their data into a variety of information and services in a variety of formats. Further, via the HERE Marketplace these developers can buy and sell ready-made location-centric solutions, thereby increasing the platform's value.

This has helped HERE's platform remain both rich and up to date. And as it's a neutral offering with an open approach, HERE has been able to attract multiple investors, partners and customers over the last three years. Among other things, partners are contributing to HERE's data. They are also integrating several HERE services into their own solutions that their own data, location intelligence with HERE's tools. This unlocks significant monetization opportunities for HERE and helped it be the leading location platform player.



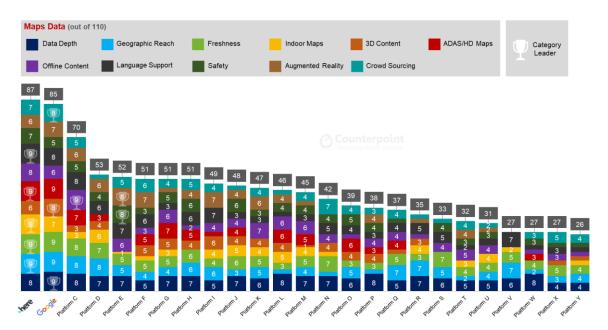


Counterpoint CORE Evaluation & Analysis: Location Platforms

Maps Data: HERE Leads the Global Location Platform Rankings

Counterpoint's CORE scorecard analyzed more than 60 capabilities across several categories that make up the location platform.

Maps Data is one of the first categories which is fundamental to building an up-to-date offering with advanced location data features. This category is a compilation of 11 capabilities that define modern map and location data sets.



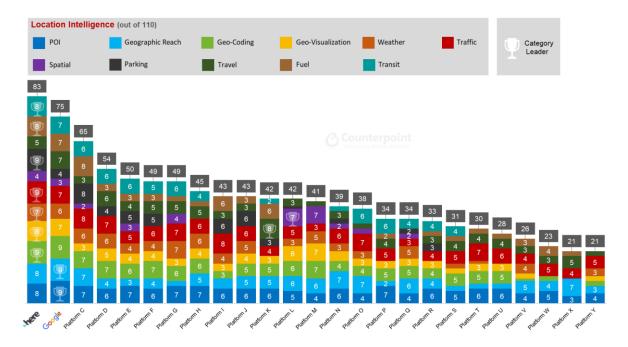
HERE topped the Maps Data category scoring highest on five out of eleven capabilities. HERE scored a total score of 83 out of a total possible score of 110.

- HERE leads with its **geographic reach** surpassing Google in the last couple of years, thanks to striking key partnerships in markets such as China, Japan, and S. Korea.
- Complementing its global reach, HERE also supports 90 languages, the highest among the platform competitors.
- HERE has also been at the forefront keeping its core maps data fresh by combining real-time changes from a multitude of sources. For example, HERE aggregates location data from more than 130 billion probes per month. HERE is performing close to two billion map changes per month and experiencing more than nine billion daily positioning requests.
- In terms of **data depth**, HERE has been slightly behind Google. Google has inched ahead in this capability due to the billions of active Google Maps users, a crowdsourcing community helping deliver more absolute detail, key for consumer-grade maps.
- HERE with its acquisition of Micello, HERE Venues has raced to become the world's leading provider of **indoor maps**. HERE has mapped more than 110,000 venues.
- HERE is also leading the HD Maps development by striking several partnerships with key players including Intel (MobileEye), NVIDIA, Hyundai MnSoft, Pioneer, and SK Telecom, among others.
- HERE has mapped more than three million km of roads with extended lanes and lane markings to enable HD maps for automated driving.
- HERE is also the second-ranked player in offline content availability, driver safety features, crowd-sourcing, and 3D maps.
- HERE needs to add more Augmented Reality capabilities within the maps, especially for consumer and IoT connected devices to leverage spatial intelligence.



Location Intelligence: HERE Leads the Global Location Platform Rankings

Location Intelligence is the second category that forms an important layer on top of the core maps data adding a variety of features and capabilities to help developers build location-centric experiences.



HERE topped the Location Intelligence category scoring highest on seven out of eleven capabilities. HERE scored a total score of 74 out of a total possible score of 110.

- HERE leads the location and maps industry with automotive-grade **navigation** capabilities. HERE offers navigation capabilities for more than 140 countries.
- HERE supports automotive-grade real-time traffic in more than 65 countries and traffic patterns in 90+ countries, enhancing the overall maps intelligence for driving and routing,
- HERE also offers extensive **transit** intelligence on a global scale with more than 1900 cities across more than 65 countries.
- HERE has also built a robust intelligence layer for weather, parking, and fuel services.
- HERE led in geocoding and geo-visualization capabilities. HERE is helping developers bake
 in high-precision location intelligence right into their solutions seamlessly via an API that
 supports geocoding, multi-reverse geocoding, and batch geocoding. With geo-visualization
 APIs addressing developers' needs to create data visualizations making the maps more
 interactive.
- HERE ranked second when it comes to POIs and search throughout the year but is inching
 close to Google now with more than 200 million POIs mapped. HERE's partnership with multiple
 location ecosystem players is helping it enrich the POIs coverage.
- HERE's **geographic reach** is second to Google when in the location intelligence category. However, with key partnerships in markets such as China, Japan, and S. Korea, HERE should be able to surpass Google on its intelligence capabilities scale moving forward.
- Travel is one area where HERE can improve its travel-related capabilities from trip planning and others compared to players like Google and Sygic.
- Another area where HERE has to build on its geo-visualization capabilities further is in the area
 of spatial intelligence which should open up a whole new set of applications and monetization
 opportunities to help developers build 3D visualizations, digital twins, etc.



Location Services: HERE Leads the Global Location Platform Rankings

Location Services is the third category that forms an important part of the location platform helping customers to integrate the location data and intelligence in scalable, as-a-service, offerings.



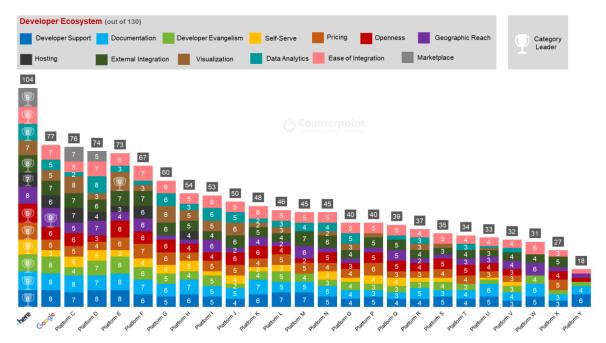
HERE topped the Location Services category scoring highest on six out of eleven capabilities. HERE scored a total score of 79 out of a total possible score of 110. HERE has built a broad and deep portfolio of services covering most of the applications that could use the power of location.

- Navigation, Navigation-on-Demand software-as-a-service and routing services from HERE are
 an industry-leading navigation suite for its OEM customers to help them offer their end-users
 always-fresh and connected navigation with a host of features, with better quality of service and
 accuracy compared to smartphone-based solutions inside the car. This is possible due to the
 robust HERE platform architecture based on scalable cloud infrastructure and developer tools.
- HERE is also extending its location intelligence capabilities such as **Public Transit** as a service
 to help developers seamlessly integrate into their applications. The key feature it differentiates
 is on dynamic transit routing powered by AI to offer a complete door-to-door mobility experience
 based on trip duration, tariff information, transit preferences, maximum walk, and other
 parameters.
- HERE also leads with Real-Time Traffic as a service based on one of the largest databases
 and coverage of automotive-grade traffic solutions which it offers to its customers to integrate
 and monetize. For example, HERE is providing Real-Time Traffic to Audi and Daimler vehicles
 in North America with dynamic guidance thereby reducing time on the road based on rich
 sensor-driven data from millions of cars.
- HERE also leads when it comes to offering Tracking & Positioning capabilities as a service being adopted by customers for efficient fleet management and across supply-chain optimization use-cases. HERE differentiates with a rich portfolio of cloud-based positioning, transport, and logistics services such as HERE Last Mile, Tour Planning API, HERE HD GNSS positioning, Network Positioning, etc.
- HERE is also excelling addressing the growing Mobility market catering to on-demand players
 from ride-hailing/sharing to e-bike sharing to O2O delivery services and so forth. HERE's
 business unit HERE Mobility has built a two-sided platform and services to cater to this growing
 segment.
- HERE needs to improve its platform play in **infotainment**, **EV-related** services, and **advertising** services compared to the competition which has focused heavily on these areas.



Developer Ecosystem: HERE Leads the Global Location Platform Rankings

Developer Ecosystem is the fourth category that is key to the success of a platform-based business model. Having an effective developer portal, evangelism strategy, ease of integration, documentation and monetization opportunities is vital.



HERE topped the Developer Ecosystem sub-category scoring highest in eleven out of thirteen parameters. HERE scored a total score of 104 out of a total possible score of 130.

- HERE leads in multiple parameters promoting developers, such as developer support, developer evangelism, pricing, and documentation. Over the last twelve months, the HERE Developer Relations program, launched in 2017, has revamped its developer portal, pricing models, discovery, and documentation to expand the platform's developer reach. The company has driven various initiatives (such as outreach activities on TechGig and Github) to educate, attract and grow its developer community.
- HERE also leads in platform openness, hosting and external integration. HERE has struck
 multiple partnerships with cloud providers, software vendors and expanded its presence across
 several developer communities highlighting its open platform approach.
- HERE has also adopted a self-serve model which is critical for any platform to ease developer engagements on its portal, improve discoverability with zero-touch support.

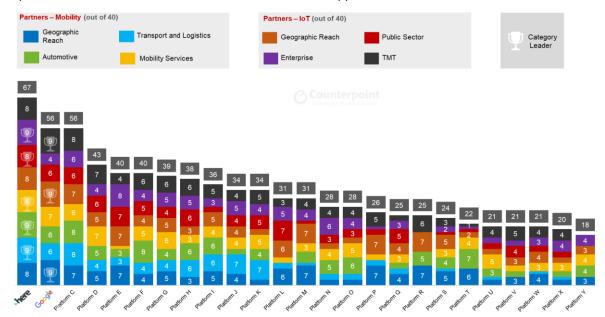


- HERE also leads in location platform data analytics due to myriad analytics capabilities built
 on top of its previous acquisitions.
- HERE leads in ease of integration as the ambient location intelligence integrations via partnerships with AWS, Salesforce, Azure, SAP have further driven the developer visibility everywhere.
- HERE leads in the marketplace parameter as it is one of the few providers adopting a
 marketplace model. The HERE Marketplace is designed to help developers and data providers
 to distribute their offerings, find new partners, attract customers to monetize and scale. This will
 be the key to increase developer traction and stickiness to HERE's offerings and the HERE
 Location platform.



Partnerships: HERE Lead the Global Location Platform Rankings

Partnerships are the fifth category and play a crucial role to help the platform build new datasets, capabilities, and services across different verticals and applications.



HERE topped the Partnerships category scoring highest in five out of eight parameters. HERE scored a total score of 67 out of a total possible score of 80.

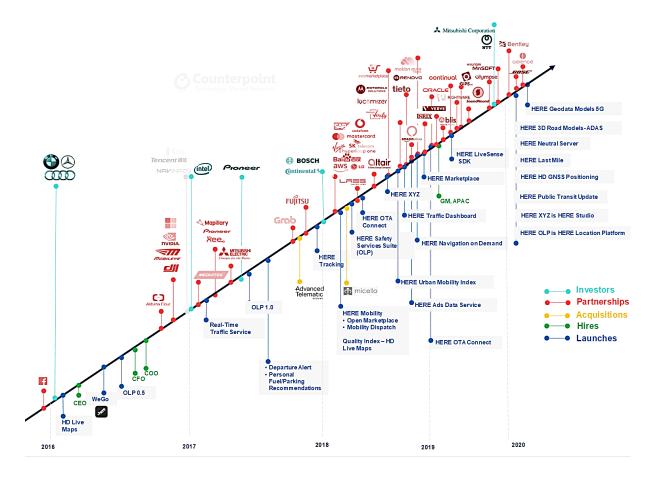
- HERE topped in mobility space leading in automotive, transport & logistics and mobility services parameters. In addition to having several partnerships in the mobility space, the company has formed recent partnerships with Rightware, SoundHound, Glympse, Hyundai MnSoft, Bentley Systems, Cerence, etc.
- The platform comes second to Google in terms of geographic reach. However, as the company looks to form new partnerships across geographies, HERE should be able to surpass Google.
- Rightware partnered with HERE to announce the availability of Kanzi Maps, the new map renderer from Rightware. The solution will use mapping data from HERE under a HERE Location Platform evaluation license and will be used by joint customers.
- The partnership with **SoundHound** provides Houndify developers with real-world location data from HERE to integrate into their applications.
- HERE and **Glympse** partnered to announce the availability of a jointly developed courtesy Shuttle Tracker.
- HERE and Hyundai MnSoft have collaborated on building dynamic HD maps. HERE will also develop its presence in South Korea by drawing on HYUNDAI MNSOFT's rich South Korean map and IVI software.
- HERE has collaborated with Bentley Systems and Geopath to provide location insights for enriching OOH (out-of-home) and DOOH (digital-out-of-home) campaigns across roadside digital media.
- **Cerence** and HERE teamed up to integrate HERE location intelligence with the Cerence Drive portfolio to bring advanced Al-powered mobility assistant offerings to the automotive industry.
- HERE topped in IoT space as well with scoring highest in the public sector and enterprise parameters. HERE has formed recent partnerships with Verve, Blis, GiPStech, and Bose.
- HERE has expanded its partnership with Oracle as HERE Location Suite is now fully integrated with the Oracle IoT Cloud.
- **Verve** partnered with HERE to amplify its mobile display advertising performance and open new digital out-of-home (OOH) and in-vehicle opportunities.
- **Blis** has partnered with HERE to enhance its ability to deliver premium, accurate, and scalable points of interest (POIs) across all its location-targeting insight capabilities and tools.
- HERE and GiPStech have collaborated to develop solutions for providing fast and accurate positioning globally, indoors, and outdoors.



 HERE and Bose have collaborated to jointly enable their respective developer communities to deploy augmented reality (AR) location applications and services.

The following chart depicts the timeline of HERE's product/offering launches, key partners, and investors acquisitions over the last four years.

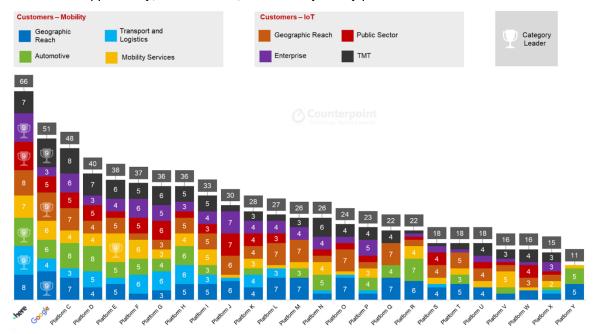
Most of the HERE investors – **Audi**, Daimler, **BMW**, **Intel**, Pioneer, **Bosch**, Continental, **NTT** and Mitsubishi Corporation are also HERE's key partners and customers. These technology giants are the leaders in their segments and now helping shape the HERE location platform with a wide spectrum of capabilities from mobility to enterprise verticals.





Customers: HERE Lead the Global Location Platform Rankings

Customers are the sixth and final category that determines the success of the location platform. Customers are the source of revenue for any platform and therefore one of the key factors that determine the applicability, effectiveness, and maturity of any platform.



HERE topped in **Customers** sub-category scoring highest in four out of eight parameters. HERE scored 66 out of a total possible score of 80.

- HERE leads in the mobility space leading in automotive and transport & logistics verticals.
 HERE boasts all the major automotive OEMs as its customers as the company provides
 solutions for several applications such as navigation, tracking, ride-sharing, mobility, ADAS,
 autonomous driving, etc.
- HERE topped the **transport and logistics** vertical, as the company provides solutions such as truck navigation, fleet planning, location analysis as well as advance functions such as demand planning, business intelligence, and big data analytics.
- HERE leads in the IoT sub-category in the public sector and enterprise verticals. Customers
 include multiple local governments to solve traffic and public safety problems, and infrastructure
 planning.
- Coming from a strong position in Western markets, HERE's APAC strategy and growth look very promising with a new executive team, developer evangelism, growing partnerships and customers in this important region. India, Japan, and Korea will be the key to HERE's platform and business growth over the next three years.





Key Takeaways

HERE has been leading the location ecosystem with an open, industry-neutral, and collaborative platform approach. The HERE Location Platform offers a strong foundation for the industry to integrate big data with location intelligence and transform it into actionable Big Information. The HERE Location Platform is the key to accelerate the deployment of intelligent IoT and smart mobility use-cases.

HERE has done well to integrate Al-powered "automation" processes across different data streams to drive accuracy, freshness, detail, and time-to-market for the maps and location intelligence, solving the big data problem and enabling real-time workloads and services. As a result, HERE, has scored well throughout Counterpoint's extensive CORE evaluation framework to emerge as the market leader.

The next two years should be the inflection point for HERE from a monetization perspective. This will be driven by its broad and deep portfolio of services and marketplace initiatives stemming from its advanced location platform which is attracting a wide range of customers and partners globally.



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The in-depth analysis on the top 25 platform players' product offerings, business model, key focus areas, capabilities, major development partnerships, customer wins, and other parameters are comprehensively captured in our report available for purchase at the Counterpoint Research's portal here.



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