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Insights on robo-taxi technology and collaboration — Interview with Horizon Robotics

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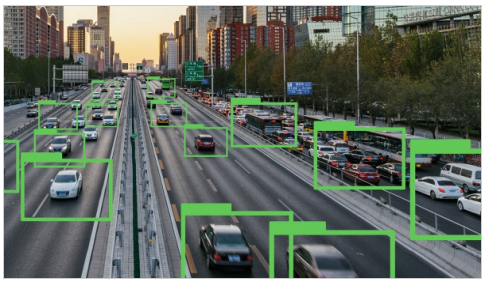
Q&A with Horizon Robotics



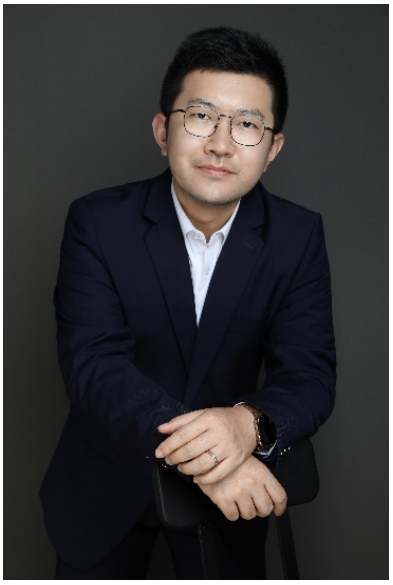
The rise of robo-taxis marks a clear shift in the mobility sector, with the industry favoring a gradual, step-by-step approach to autonomy. This method allows for real-world testing of advanced capabilities, making robo-taxis a practical extension of existing automotive technology.

Collaboration across the robo-taxi ecosystem is essential. Partnerships with technology providers, operators and regulators help build the platforms needed to improve efficiency and support future growth. At the same time, market-specific strategies are crucial: regions such as mainland China focus on advanced autonomous features, while Europe places more emphasis on the robust performance of advanced driver assistance systems (ADAS), reflecting local regulations and customer expectations.

Localization ensures that systems meet regional standards and integrate seamlessly into local environments, enabling companies to deliver solutions that can scale across diverse markets. The increasing attention on robo-taxis also highlights the close connection between autonomous driving and robotics.

By developing flexible platforms that can adapt to various uses, companies can leverage their strengths while exploring broader opportunities in mobility. As regulations and market conditions evolve, a steadfast focus on safety and quality will continue to guide our development efforts.

To learn more, Owen Chen, senior principal analyst at S&P Global, spoke to Lei Wang, acting CFO and head of Capital Market at Horizon Robotics.



Key takeaways:

- **Gradual approach to autonomy**: Horizon adopts a pragmatic path toward higher levels of autonomy, building on proven Level 2 and Level 2+ solutions to validate advanced capabilities in real traffic, viewing robo-taxis as a testing ground for future technologies.
- **Collaborative ecosystem**: The company promotes an open approach to the robo-taxi ecosystem, partnering with various stakeholders to provide foundational platforms, ensuring

efficient development and scalability while maintaining flexibility in collaboration with original equipment manufacturers and suppliers.

- **Market-specific strategies**: Horizon tailors its strategies for different markets, prioritizing advanced driving features in mainland China while focusing on robust ADAS capabilities in Europe, adapting to local regulations and consumer expectations.
- **Localized development**: Horizon emphasizes localization by collaborating with European tier 1 suppliers to ensure compliance with local standards and vehicle architectures, allowing for customized technology solutions that are both globally scalable and locally relevant.

The following is an edited transcript of the conversation:

S&P Global Mobility: We noticed Horizon's recent partnership with Hello to enter the robo-taxi market. Could you share your overall view on the technology road map for robo-taxis? How do you balance pure vision versus lidar solutions?

Lei Wang: Our philosophy is to take a gradual and pragmatic path toward higher levels of autonomy. Instead of jumping directly to Level 4, we build on proven Level 2 and Level 2+ mass-production solutions and continuously strengthen our technology. Robo-taxi is a natural extension of this journey, as it provides a valuable testing ground to validate advanced capabilities in real traffic and at scale.

When it comes to sensors, we believe there is no single "right" answer. Vision-first approaches bring efficiency and scalability, while other sensors can complement specific scenarios, making the solution more robust. What matters most is finding the balance that delivers safety, reliability, and cost-effectiveness so that robo-taxi services can be truly deployable and sustainable.

Horizon promotes a "technology platform company + operator" model. Would you consider collaborating with OEMs in the future?

Horizon believes in an open and collaborative approach to the robo-taxi ecosystem. By working with a wide range of partners, we provide the foundational platform and infrastructure that enable robo-taxi solutions to develop efficiently and at scale.

Our platform, including the HSD [High-Speed Data] solution and the Journey 6 series, is designed to be flexible, allowing it to be delivered as a complete package to operators or utilized by solution providers to develop their own offerings. For example, in our collaboration with Hello, Horizon provides the core technology systems, while Hello contributes its extensive user base, operational experience and service network. Together, we complement each other's strengths to accelerate the practical deployment of robo-taxi services.

Regarding our collaboration with OEMs on Level 4/robo-taxi projects, we remain open to opportunities where they make sense. Our priority is to build on the know-how and experience from Level 2 and Level 2+, progressively advancing to Level 4, enabling any collaboration to produce tangible, implementable solutions.

Regarding international markets, does Horizon plan to expand robo-taxi or robo-bus services in Europe or other countries?

Our focus today is on building solid, scalable technology and proving it in real operations, primarily in mainland China, where the adoption pace is swift. However, the challenges facing robo-taxi and robo-bus services, namely safety, reliability and affordability, are shared globally. We are open to partnerships in Europe and other regions, but our entry will always be collaborative, respecting local

ecosystems, regulations and customer needs. For us, the key is not to expand everywhere at once, but to make sure wherever we participate, we bring genuine value to local partners and end-users.

In Europe, software-defined vehicles (SDVs) focus more on foundational software capabilities, such as the Eclipse S-CORE project. In contrast, in mainland China, the focus is more on upper-layer applications, including AD [Autonomous Driving] and intelligent cockpits. As a leading Chinese autonomous driving company, how does Horizon empower the SDV ecosystem in Europe?

At Horizon, our vision has always been to grow as a trusted participant in global ecosystems rather than as a disruptor. Europe, especially Germany, has deep roots in automotive culture, world-class engineering talent and some of the most rigorous standards for safety and quality. We fully respect this environment and see it as an opportunity to learn as well as to contribute.

Our strategy in Europe is pragmatic and collaborative in nature. We work flexibly with both OEMs, tier 1 partners and other software solution providers, focusing on building open ecosystems rather than pursuing a one-size-fits-all approach. By combining our experience with Europe's strong foundation in software standards and compliance, we aim to co-develop solutions that are both robust and practical for local needs.

Are there differences in autonomous driving processing hardware requirements between the mainland Chinese and European markets? For instance, China may focus more on mid-to-high computing power, while Europe might emphasize low-to-mid computing power applications.

Every market has its own priorities shaped by driving conditions, regulations and consumer expectations. Mainland China tends to be more open and adaptive, with consumers showing strong enthusiasm for new features and a higher tolerance for innovation and risk. However, Europe places greater emphasis on safety and risk control, while also closely observing mainland China's rapid progress in assisted driving and learning from those experiences.

For Horizon, this means tailoring our strategies to each market. In mainland China, we prioritize solutions that meet the fast-growing demand for advanced driving features. In Europe, we may focus first on robust ADAS capabilities as an entry point, gradually expanding functionality in line with local adoption patterns and regulatory frameworks. This way, our products remain aligned with the unique pace and expectations of each market.

Instead of focusing on "high" or "low" requirements, our focus is on adaptability — delivering solutions that can scale to meet different needs, from entry-level systems to more advanced configurations, always under the same philosophy of safety and quality first.

Will Horizon introduce customized processing hardware or perform localized optimizations for the European market?

Localization is not just a plan for us; it is already part of how we work in Europe. We are collaborating with leading European tier 1 suppliers to ensure our platforms integrate seamlessly with local standards, vehicle architectures and compliance requirements.

Rather than offering one-size-fits-all products, we adapt our technology through joint development with partners, whether that means optimizing performance for specific OEM needs or aligning with European safety and software frameworks. This partnership-driven approach allows us to deliver solutions that are both globally scalable and locally relevant.

In the fields of autonomous driving and robotics, will the company focus more on in-vehicle applications or continue to expand capabilities in general-purpose robotics and computing platforms? Strategically, how does the company balance these two development paths?

Our strategic focus is on building practical platforms that support the evolution of smart driving. While our primary emphasis is on passenger vehicles, we recognize the interconnectedness of autonomous driving and robotics. The technologies and systems we develop for smart driving often have complementary applications in robotics, particularly in areas such as perception, decision-making and control.

We approach this by maintaining a flexible and open platform that can be adapted for various use cases, which allows us to leverage our strengths in smart driving while exploring the broader potential of robotics applications.

Strategically, we balance these development paths by ensuring that our advancements in smart driving create a solid foundation for exploring robotics applications. This approach enables us to remain focused on our core competencies while remaining open to opportunities that align with our vision of creating practical and scalable solutions.

When expanding autonomous driving in Europe, what are the biggest challenges? What technological, regulatory or ecosystem differences need to be addressed compared with mainland China?

Europe presents both opportunities and challenges for autonomous driving. It is the birthplace of the modern automobile, with world-class engineering and a strong culture of safety and quality. However, the regulatory framework is highly complex, with strict standards across different countries, and deeply established players shape the ecosystem.

For Horizon, the challenge is not just technical, but also about building trust, ensuring compliance and adapting to local expectations. That is why we collaborate closely with tier 1 suppliers and OEM partners, aligning our solutions with European standards from the very beginning. While this path can be demanding, we see it as a positive — Europe's high regulatory bar is not a barrier, but a safeguard that, once met, becomes a long-term competitive advantage.

Horizon has already proven its technology and ecosystem in mainland China. How do you plan to develop ecosystem partners in Europe?

We are proud to be the leading smart driving tech company in the mainland China market. We have teamed up with over 40 major OEMs — that includes all of mainland China's top 10 — and our technology is now in more than 400 vehicle models. Over 10 million units of our Journey series have already shipped, and our next-generation HSD solutions are entering mass production, marking a significant step forward in bringing large-scale smart driving to mainland China.

Our goal in Europe is to integrate in the local ecosystem. By working with OEMs, tier 1 and other automotive companies, and respecting Europe's rules and culture, we aim to build long-term partnerships that combine our deployment experience with local strengths. We are not starting from zero — we already work with a number of leading international OEMs and tier 1 suppliers, including several that originated from Europe, such as Bosch, Continental (Aumovio) and ZF.

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