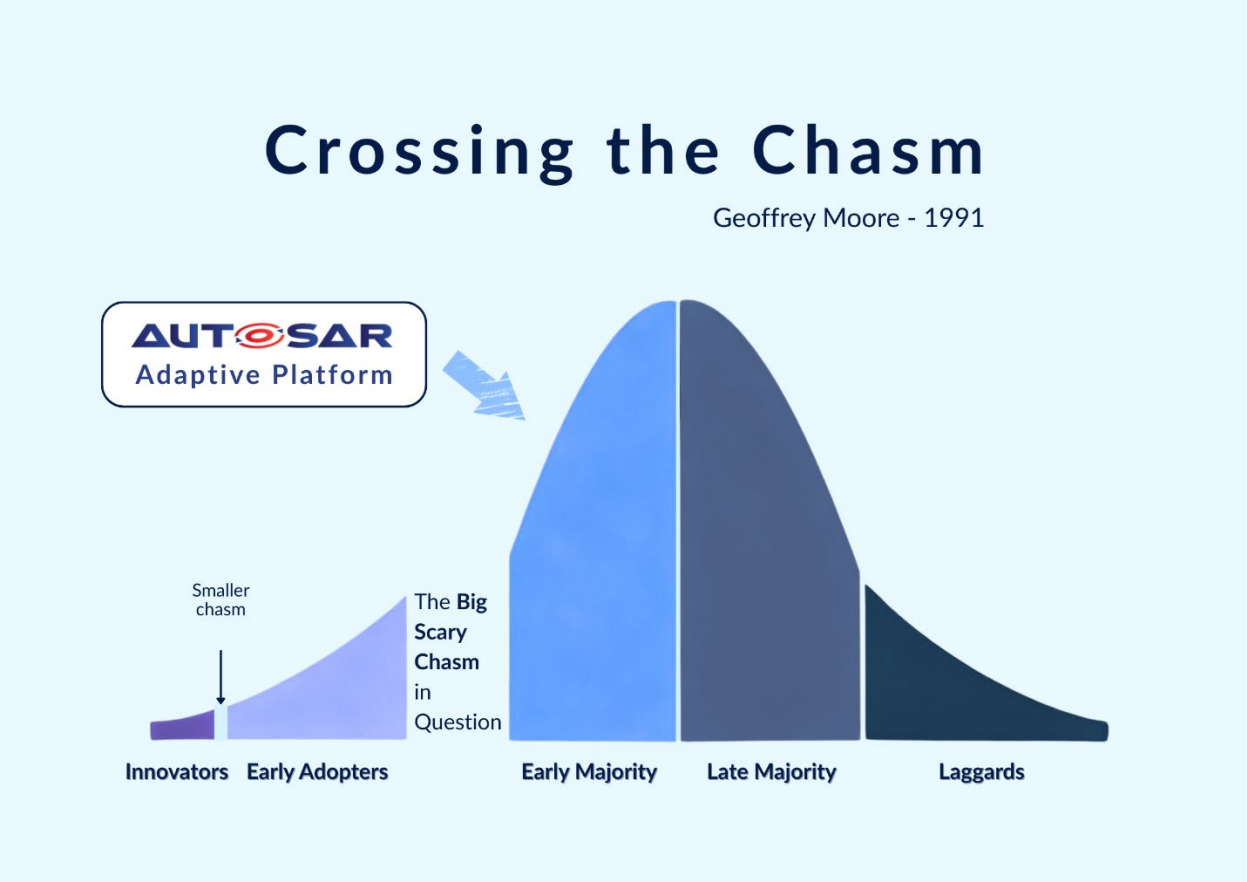
Crossing the Chasm: AUTOSAR AP Has Entered the Early Majority Adoption Phase

— Findings from the 2025 AUTOSAR AP Application Survey Unveiled

By: AUTOSAR

Dear partners in the automotive industry, the "**AUTOSAR Adaptive Platform (AP) Application Survey**" initiated by the AUTOSAR China Hub has been successfully concluded! This survey attracted technical colleagues from various types of enterprises, including OEMs, Tier-1 suppliers, chip manufacturers, and software/service providers. We have collected a wealth of firsthand practical experience and industry insights from software engineers, system architects, and technical managers. Today, we will unveil the core findings of this survey, exploring together the development context and future direction of AUTOSAR AP in the era of software-defined vehicles.



I. Survey Background: Why Focus on AUTOSAR AP?

In the transformative wave of "software-defined vehicles," new systems such as autonomous driving, intelligent cockpits, and central computing impose higher demands on the **flexibility and openness** of software architectures. AUTOSAR Adaptive Platform (AP), as a key technology supporting automotive intelligent transformation, is being explored and applied by an increasing number of enterprises: some have achieved mass production deployment of AP in domain controllers, some are exploring the integration of domestic OS with AP, and others are attempting to build new middleware architectures...

To comprehensively understand the industry's true status regarding AP technology selection, development processes, and toolchain usage, the **AUTOSAR China Hub** initiated this survey, aiming to pool frontline experience and promote collaborative industry development.

II. Core Finding: AUTOSAR AP Has Achieved "Crossing the Chasm"

"Crossing the Chasm" is a classic theory widely applied in high-tech marketing, created by Silicon Valley innovation marketing master Geoffrey A. Moore. This framework is applicable to many technological innovation fields, including software architecture technologies like AUTOSAR. His "Technology Adoption Life Cycle Law" categorizes users according to their acceptance timeline as "Innovators," "Early Adopters," "Early Majority," "Late Majority," and finally "Laggards." There are "gaps" between each pair of user categories, with the widest gap lying between the "Early Adopters" and the "Early Majority"—the "chasm." This is often the watershed between success and failure.

According to the survey results, **the application and development of AUTOSAR AP in the industry is rapid, having already "crossed the chasm" and entered the "Early Majority" adoption phase.**

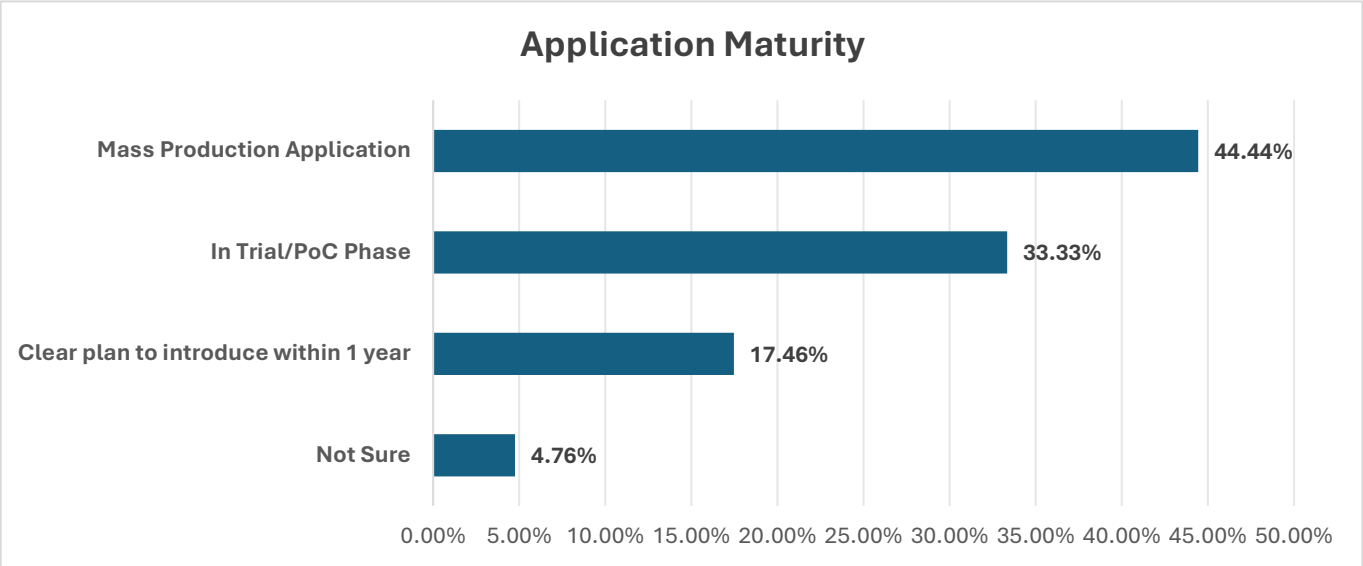
1. Application Status: From "Exploration" to "Scenario-Based Implementation"

The application of AP in the automotive industry has progressed from "Proof of Concept" to **"Scenario-Based Mass Production"**:

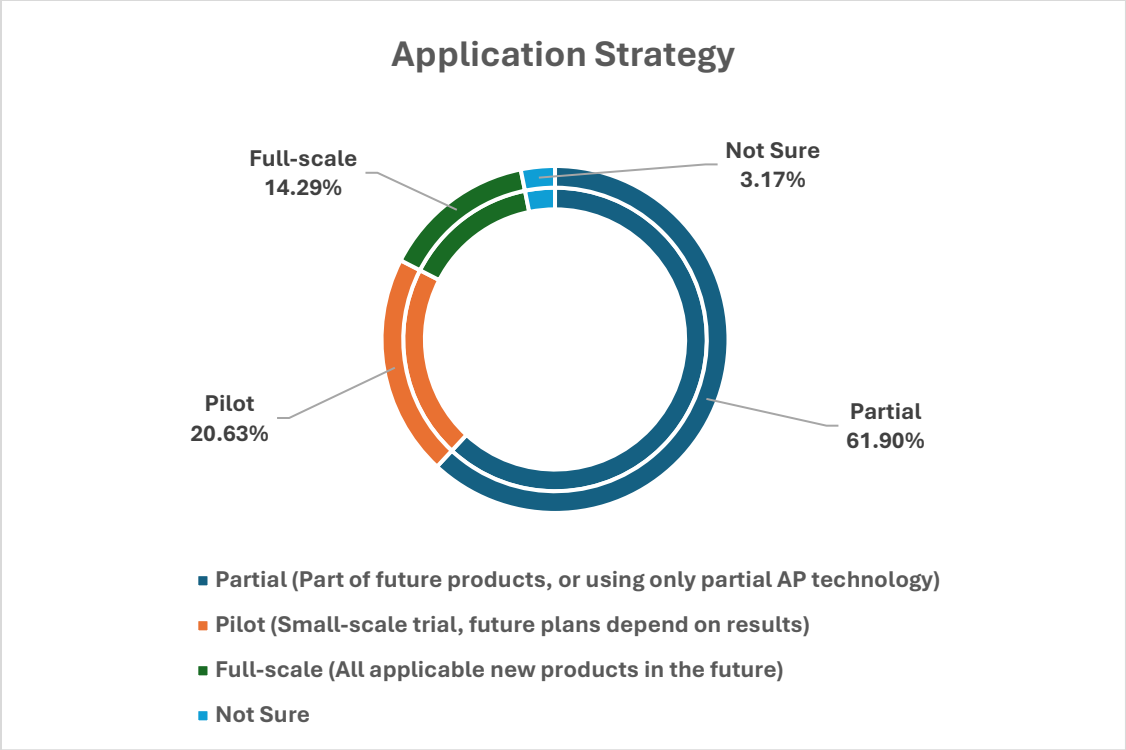
• **Mass Production Breakthrough:** Some OEMs and Tier-1s have achieved mass production deployment of AP in **intelligent driving domain and cockpit domain controllers**, verifying the stability and applicability of AP in complex scenarios.

• **Innovation Pioneering:** Enterprises are actively exploring the technical path of AUTOSAR AP, first familiarizing themselves with the technology through trial use and Proof of Concept (PoC), then gradually increasing its application in products.

• **Rapid Growth:** The fact that 17.46% of surveyed enterprises "have clear plans to introduce AUTOSAR AP within 1 year" indicates that AP application is in a period of rapid growth. This well explains why there isn't yet a particularly intuitive widespread sense of AP's extensive use in the market. Through this survey, we have gained insights into this market trend and are sharing it with you.

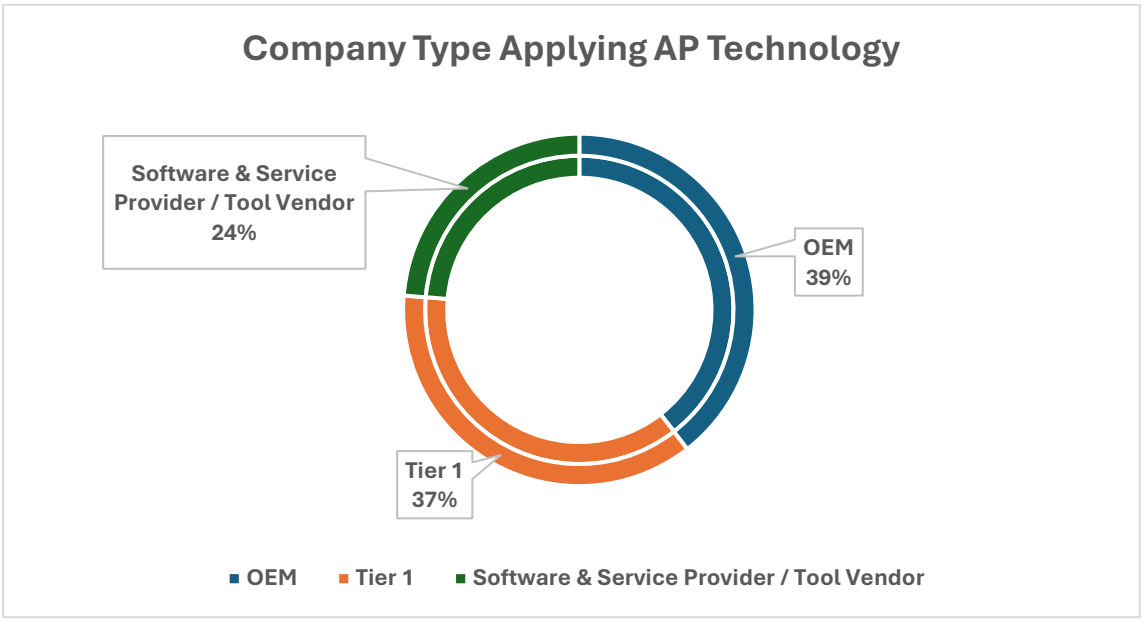


• **Phased Introduction:** Most AP application strategies are in the "partial application" stage, meaning applying it in some products or using only part of the AP technology. If we review the adoption history of AUTOSAR CP technology, we find a very similar pattern. The open AUTOSAR standard system allows each manufacturer to partially apply it according to their own situation, gradually increasing the adoption of new technologies step by step. Notably, the proportion of comprehensive AP application has also reached 14.29%. These enterprises choose to fully adopt AP in all new products where the technology can be used.

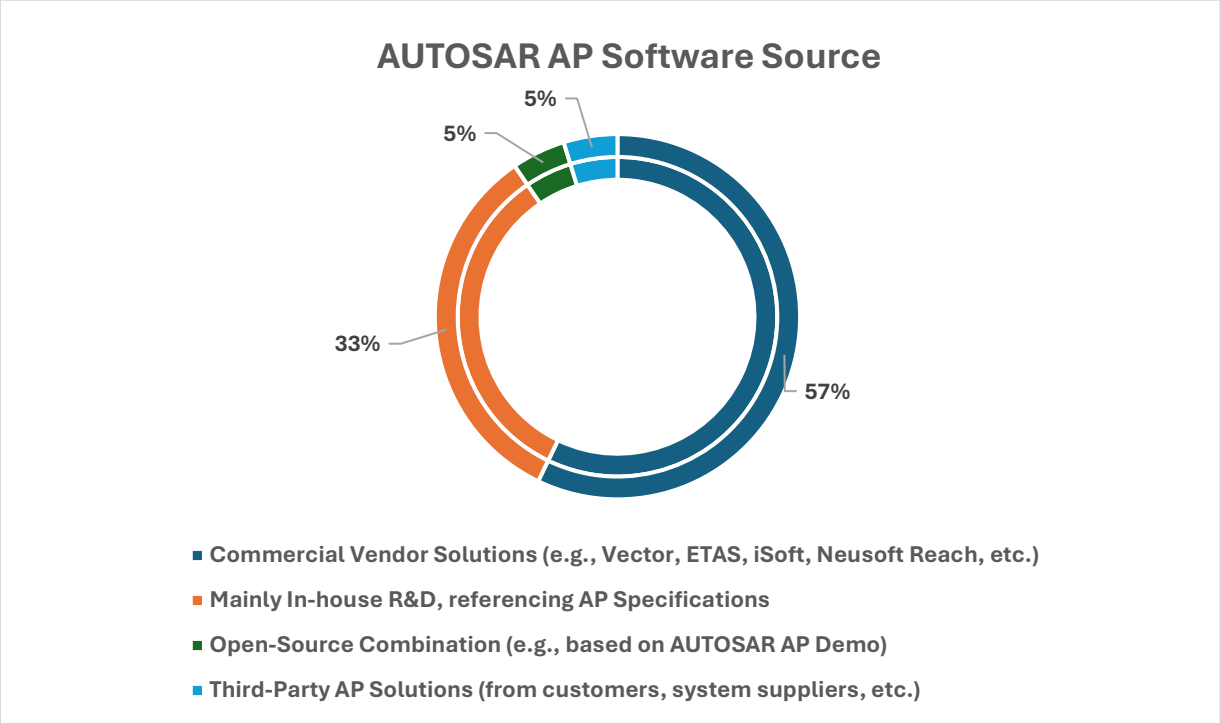


2. Business Logic: Commercial and Self-Developed Code Paths Develop Simultaneously

• **Healthy Ecosystem:** The survey shows that the application of AP technology is led by OEMs, followed by Tier-1 suppliers, and supported by software, service, and tool providers. This is a healthy pattern for mass production technology adoption. The list of OEMs includes numerous highly influential domestic and international manufacturers, fully matching the profile of the "Early Majority."

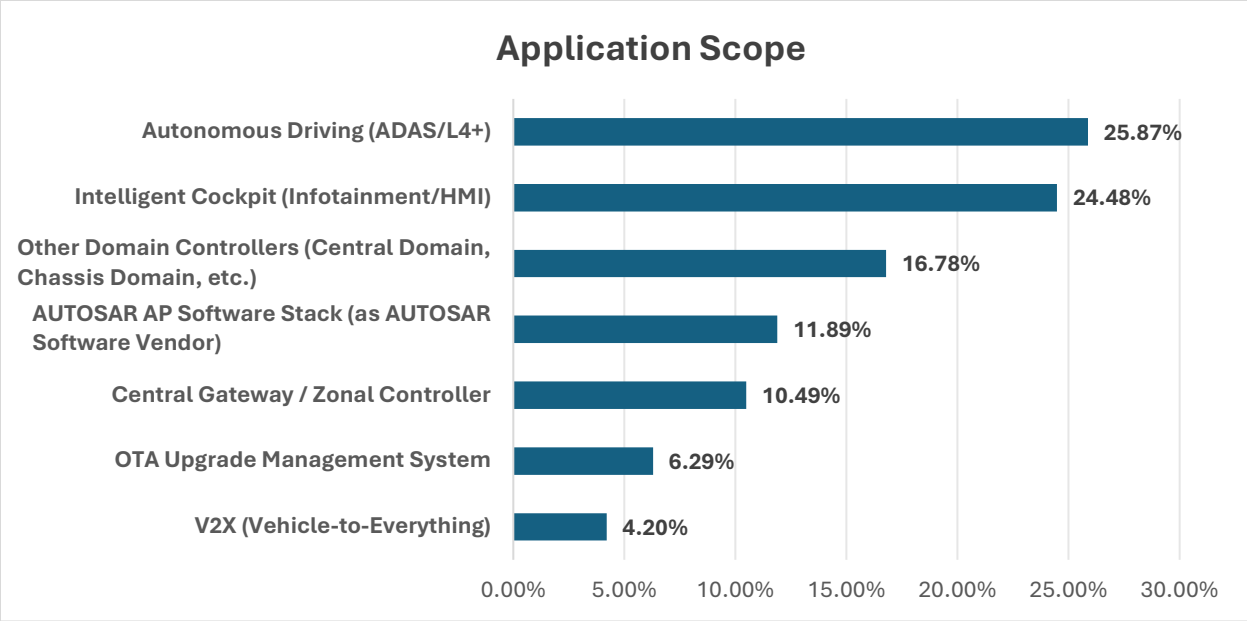


• **Diversified Development:** Regarding the choice of software stack source, commercial suppliers account for over half. Self-developed code based on AUTOSAR standards also accounts for one-third. Notably, a small portion also uses open-source code like the AUTOSAR AP Demonstration code for combination and integration. This fully demonstrates that under the unified AUTOSAR standard system, multiple software code sources coexist, providing flexible choices for users.

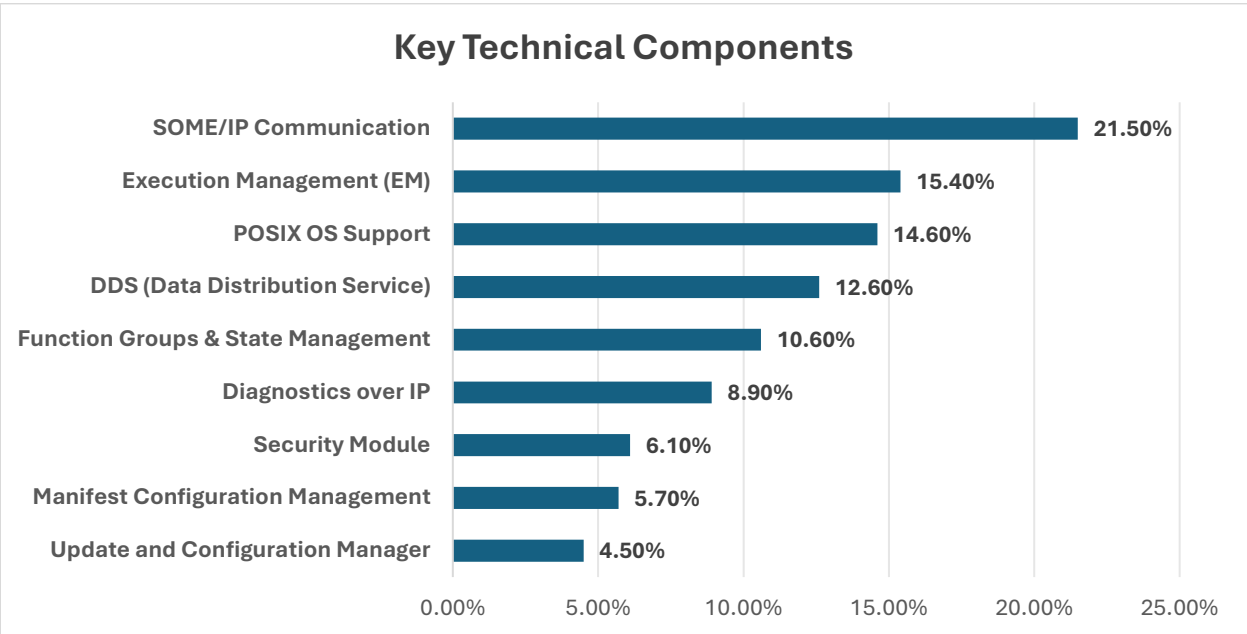


3. Application Scope: Comprehensive Coverage with Key Highlights

• **Key Areas First:** From the perspective of application scope, there are application examples in basically all control equipment capable of adopting AUTOSAR AP technology (equipped with microprocessors). Several "brains" of the centralized E/E architecture are, unsurprisingly, key application targets for AP.



• **Prioritizing Key Technologies:** Among the adopted AP technical components, communication and core OS functionalities are the key application modules. Reviewing the development history of AUTOSAR CP, initial applications by many enterprises were also focused on AUTOSAR OS and Com Stack, aiming to achieve the most critical basic functions with minimal investment. Later, the application of AUTOSAR software components gradually increased as software development maturity improved.



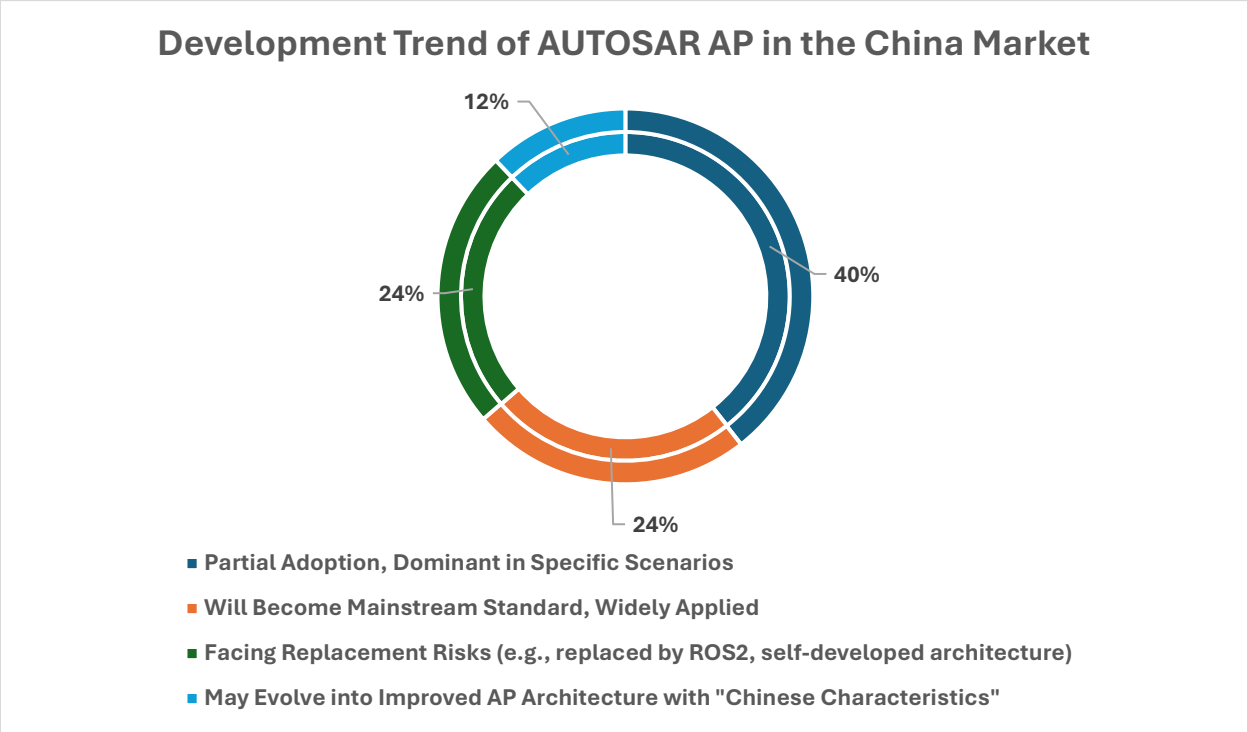
4. Prospects and Challenges: Positive Outlook, Challenges Not to Be Ignored

Regarding AP's development over the next three years, industry views present **diversified characteristics**:

• **Selected Advantage:** 39.4% of participants believe AP will show sustained advantages in **selected use and specific scenarios**.

• **Becoming Mainstream**: 24.2% of participants believe AP will become an industry mainstream, achieving widespread application.

• **Wait-and-See and Exploration:** 24.2% of participants expressed concerns about AP's future, believing that alternative solutions (like ROS2, self-developed architectures) might affect the broader application of AUTOSAR AP.

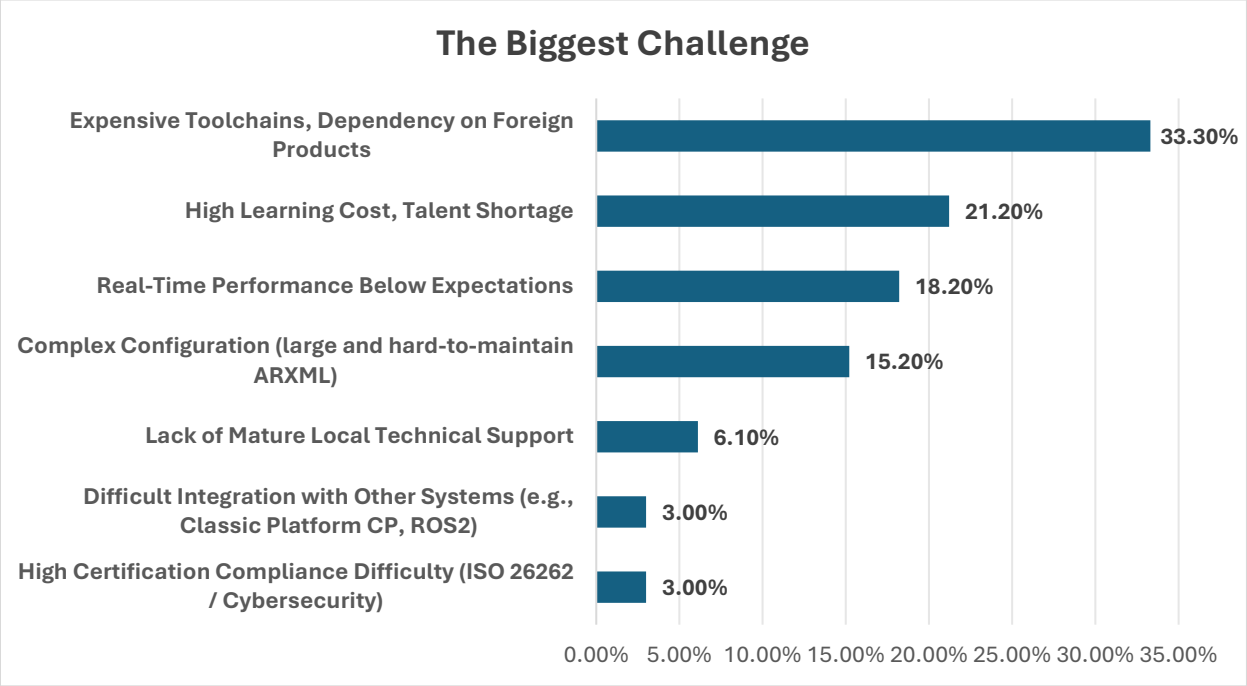


When asked about the biggest challenge facing AUTOSAR AP in a single-choice question, technical colleagues reported the relative importance of the main difficulties (sorted by level of concern):

• **Toolchain cost** and **software product performance** are the biggest challenges for expanding application.

• **The scale and complexity** of the AUTOSAR standard, requiring **higher learning costs** and **high-level talent**, are also significant concerns not to be ignored.

• **Easy integration** with other systems and **convenient compliance** for functional safety and cyber-security certifications demonstrate the advantages of AUTOSAR AP.



III. Conclusion: Witnessing Transformation, Leading the Future

From "technology followership" to "ecosystem co-creation," China's automotive software industry is accelerating on the track of AUTOSAR AP. The results of this survey are both a "report card" of industry practice and a "roadmap" for future development.

We look forward to more enterprises joining the AUTOSAR China community, co-building knowledge bases, sharing practical experience, and jointly promoting "Chinese Innovation" in the global automotive software ecosystem!