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2024 Automaker's Smart Cockpit Scorecard Sample

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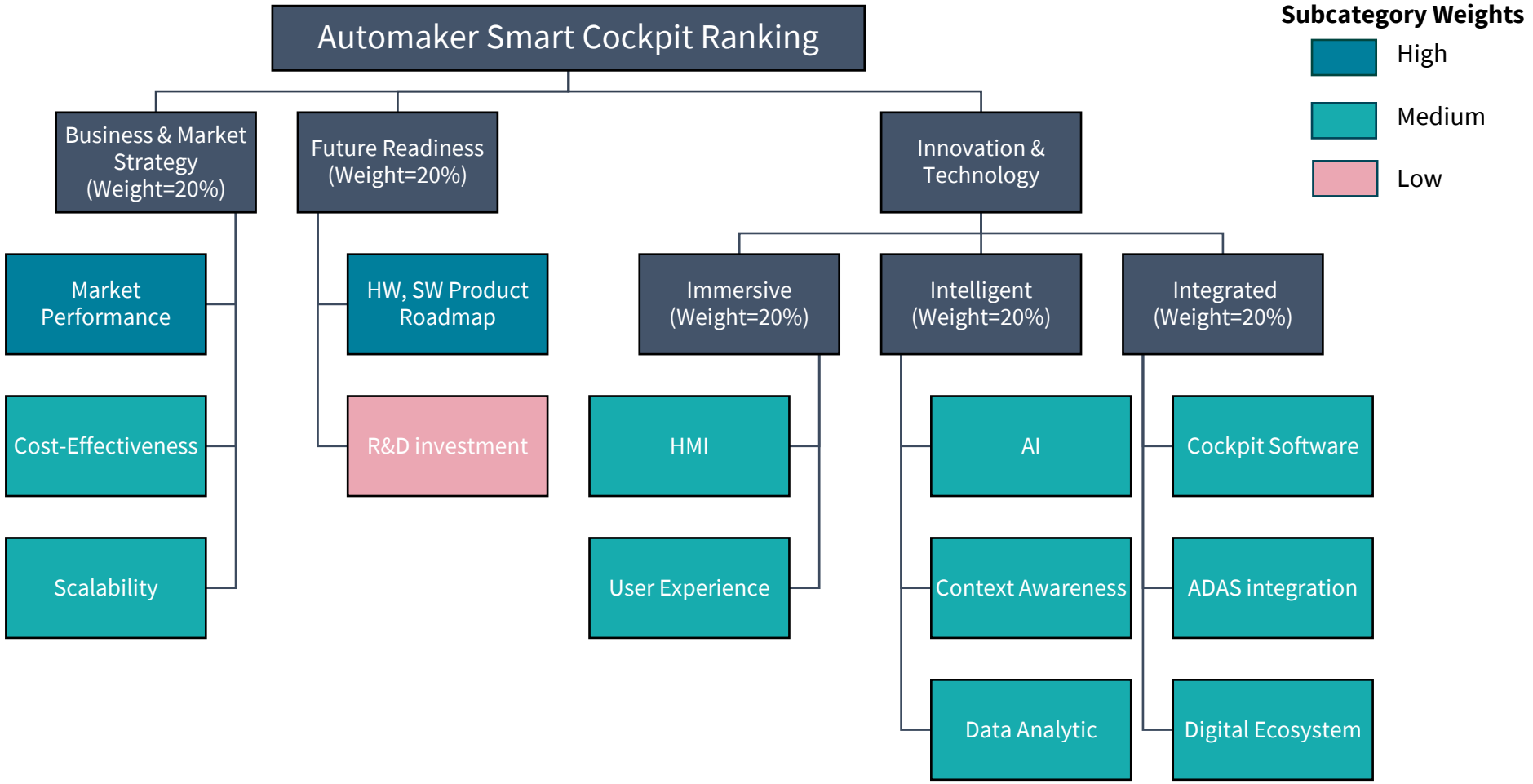
Aims of this study

- **Benchmarking Innovation:** Gain insights into OEM's latest smart cockpit technologies in terms of innovation, usability, and technological integration
- **Strategic Market Positioning:** Offer data-driven assessments of market performance and business strategy, enabling OEMs to understand their position in the smart cockpit landscape.
- **Cost-Effectiveness & Scalability**: The analysis of scalability will provide insights into how well OEMs are managing to deploy these features across vehicle models.
- **Future-Readiness Assessment**: By assessing future technology roadmaps, partnerships, and the ability to upgrade cockpit systems, the study will highlight how OEMs are preparing for emerging trends, aligning their R&D investments with future technologies.

Automaker Smart Cockpit Scorecard Categories

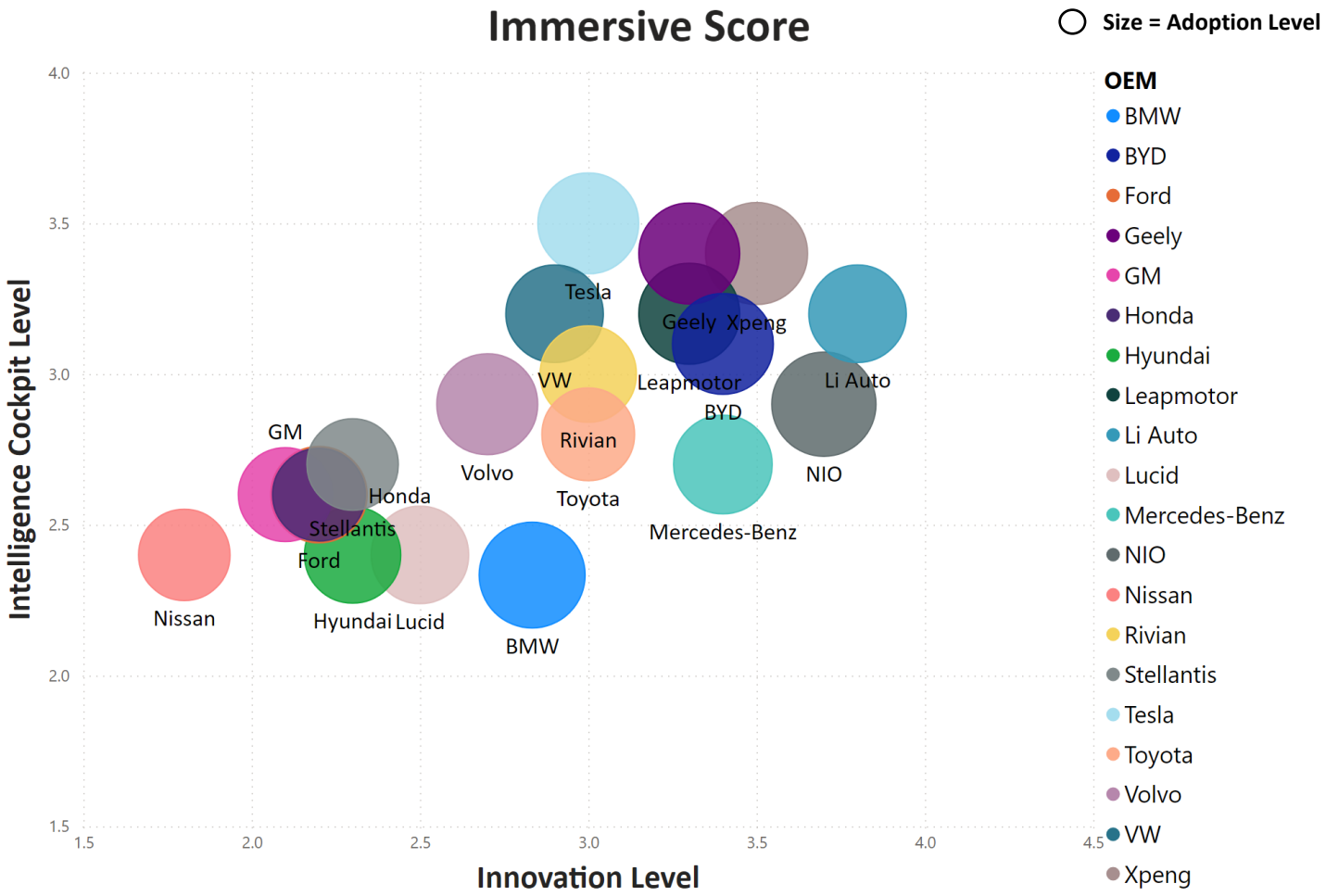


Immersive

This category includes technologies focus on creating an engaging and interactive in-vehicle experience for both drivers and passengers, advanced HMI and UX to enhance the sensory experience through visual, auditory and tactile technologies.

Key Technologies/Components:

- ***Displays and Holographic Interfaces:*** Creates an engaging visual experience
- ***Interaction modalities:*** Provides information through touchscreens, voice and gesture controls
- ***Augmented Reality (AR)/Virtual Reality (VR):*** Enhances navigation, situational awareness and design/development processes
- ***Personalization and Customization:*** Allows users to tailor or automates the in-vehicle environment to user's preferences, including seat settings, climate control and infotainment options
- ***Ease of Use:*** Ensures that technologies are user-friendly and intuitive, making it easy for users to interact with and control while preventing driver distraction

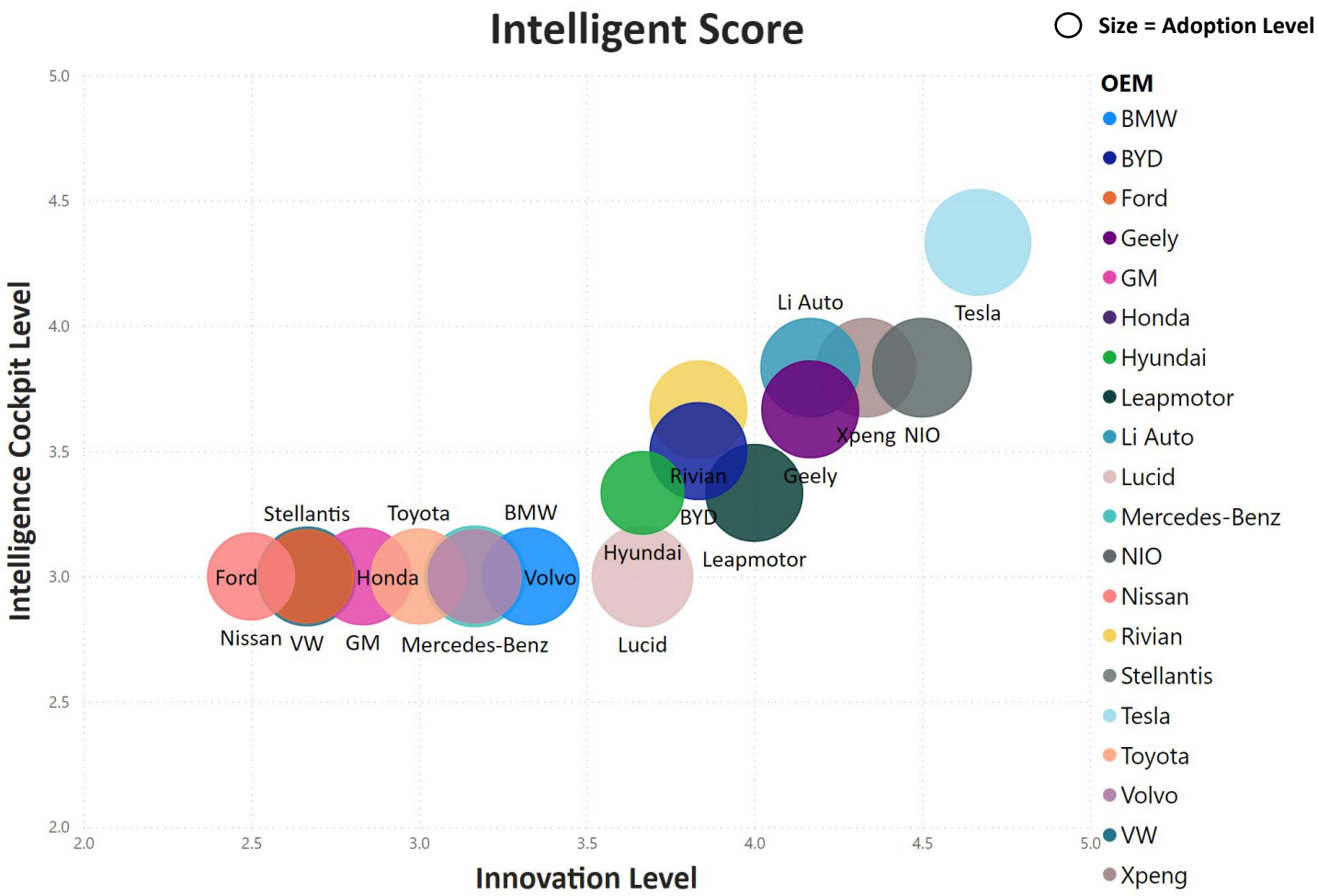


Intelligent

This category emphasizes the integration of artificial intelligence and machine learning to create a smart, adaptive environment within the vehicle. The focus is technologies that enhance safety, convenience, and personalization.

Key Technologies/Components:

- ***Artificial Intelligence (AI):*** Generative AI, natural language processing that powers voice assistants and predictive systems
- ***Context Awareness:*** Sensors and systems that tracks in-cabin occupants' status and behaviors, and enables personalized settings
- ***Data analytics:*** Collects data to a cloud data hub and computing center, where it is used for training models and developing new functions based on data insights

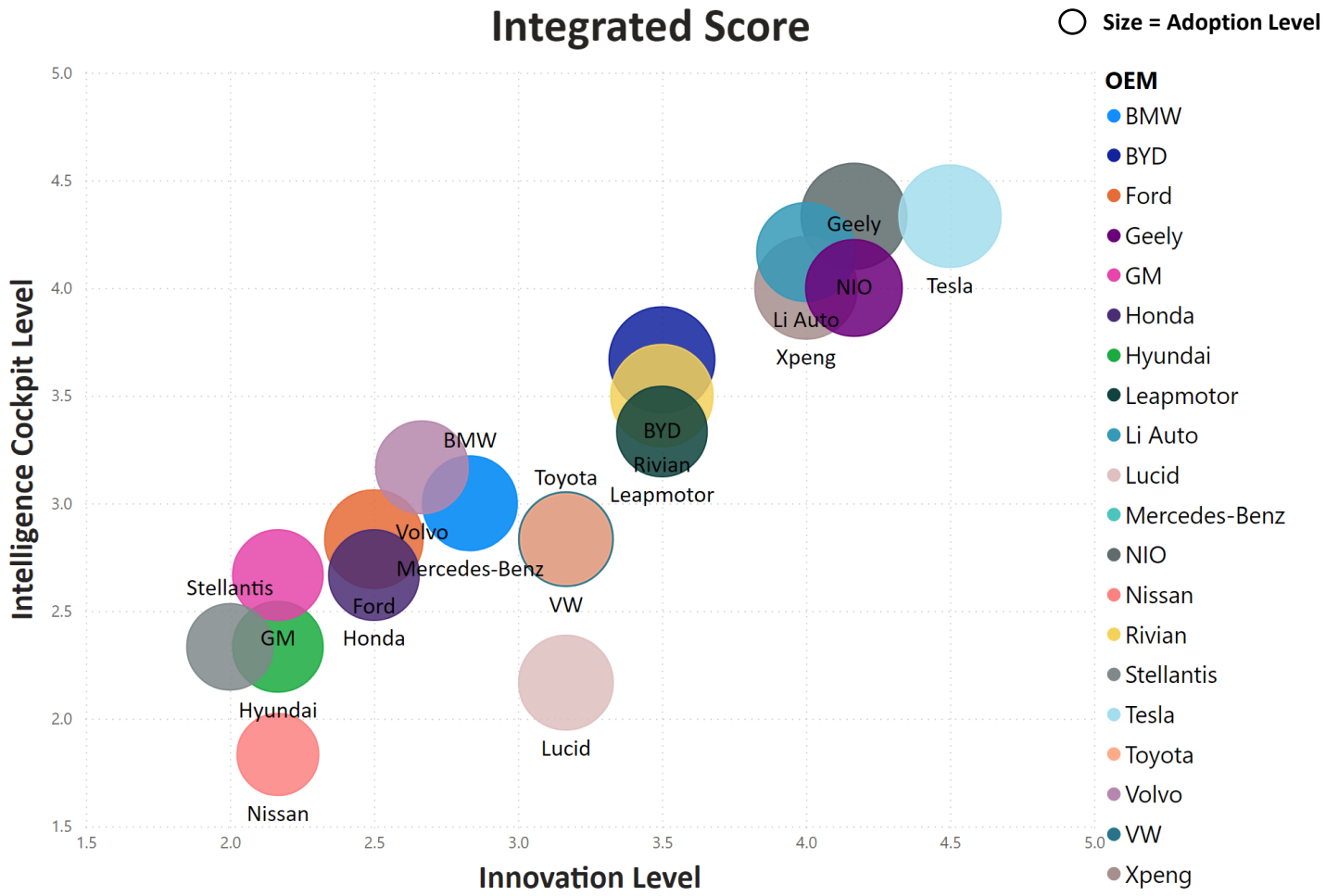


Integrated

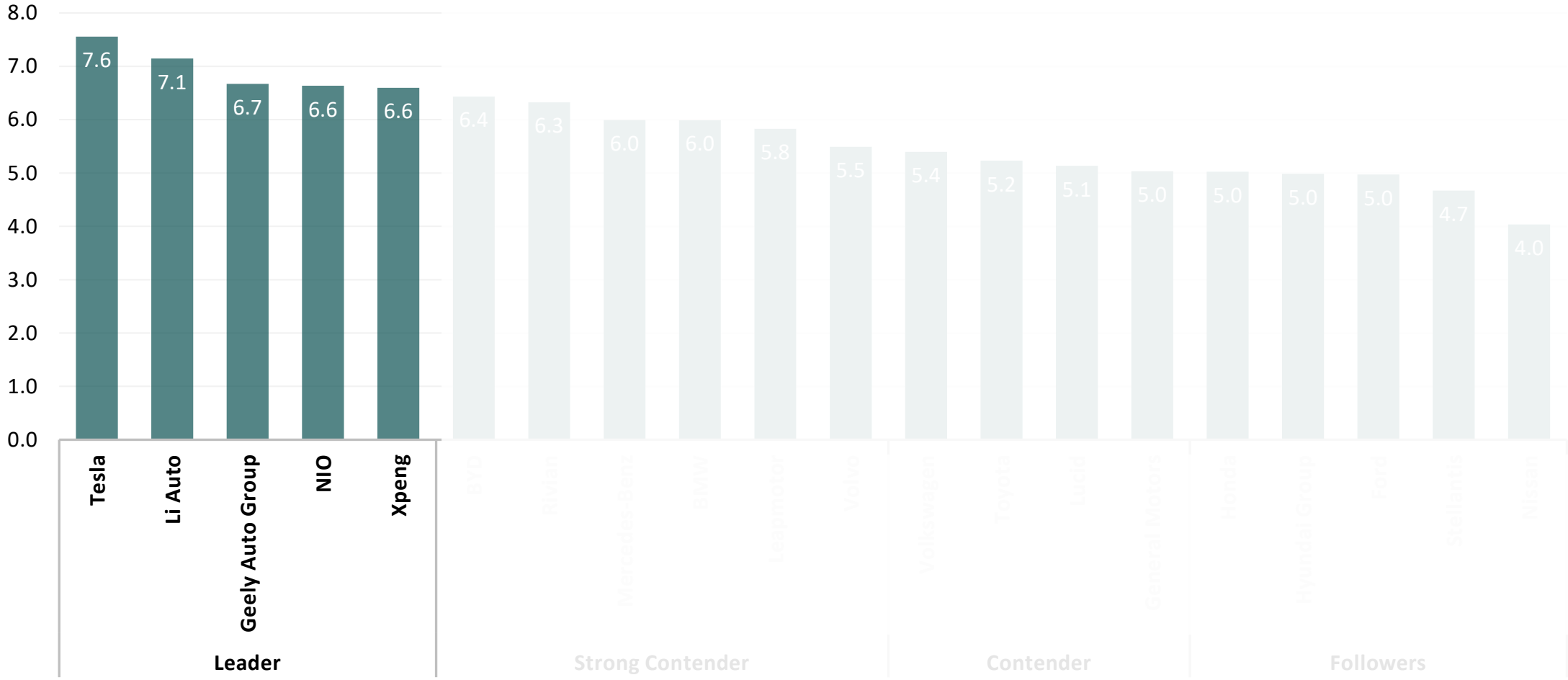
This category focuses on the seamless integration of various systems and technologies to create a cohesive and efficient smart cockpit.

Key Technologies/Components:

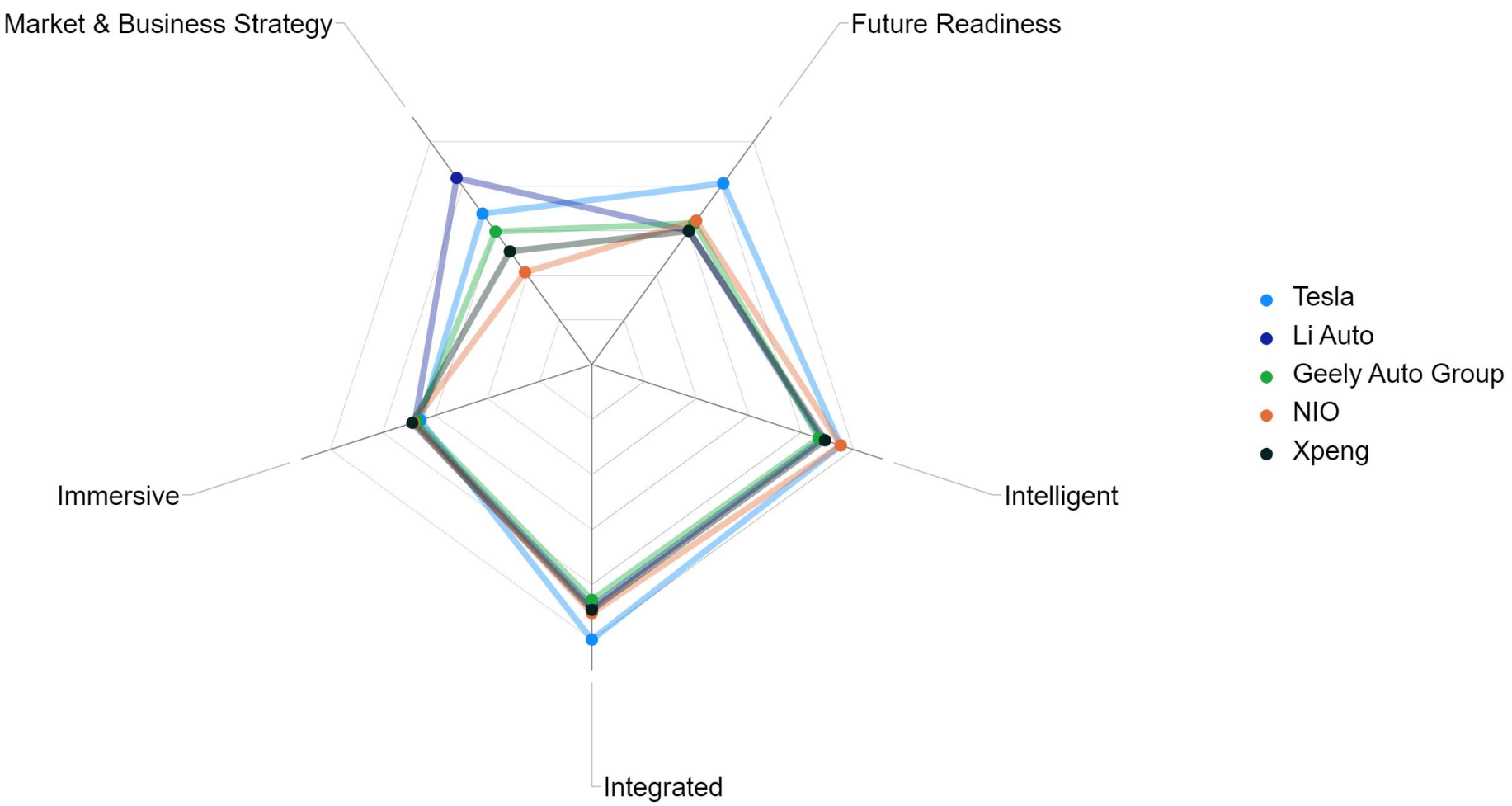
- ***Software:*** Involves the integration of In-Vehicle Infotainment (IVI) Operating Systems (OS) and whole vehicle OS, ensuring deployment of various software applications and services
- ***ADAS Functions:*** Incorporates advanced driver assistance systems into cockpit, enhancing safety and convenience
- ***Computing Platforms:*** Centralized or domain computing to manage and process data efficiently within the edge or extending to the cloud
- ***Digital Ecosystem Integration:*** Connects the vehicle with external IoT devices, streaming services, and other digital ecosystems, enabling seamless interaction between the car and the outside world



Smart Cockpit Scorecard – Overall Ranking



Leaders: Performance Across Key Categories



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