



# FROM AUTOMAKER TO PLATFORM INNOVATOR

INVESTOR EVENT: OCTOBER 6-7, 2021



# FORWARD-LOOKING STATEMENTS

This presentation and related remarks by management may include “forward-looking statements” within the meaning of the U.S. federal securities laws. Forward-looking statements are any statements other than statements of historical fact. Forward-looking statements represent our current judgment about possible future events and are often identified by words like “aim,” “anticipate,” “appears,” “approximately,” “believe,” “continue,” “could,” “designed,” “effect,” “estimate,” “evaluate,” “expect,” “forecast,” “goal,” “initiative,” “intend,” “may,” “objective,” “outlook,” “plan,” “potential,” “priorities,” “project,” “pursue,” “seek,” “should,” “target,” “when,” “will,” “would,” or the negative of any of those words or similar expressions, as well as by charts presenting aspects of our long term plan and other projections of future performance. In making these statements, we rely on assumptions and analysis based on our experience and perception of historical trends, current conditions and expected future developments as well as other factors we consider appropriate under the circumstances. We believe these judgments and assumptions are reasonable, but these statements are not guarantees of any future events or financial results, and our actual results may differ materially due to a variety of important factors, many of which are beyond our control. These factors, which may be revised or supplemented in subsequent reports we file with the U.S. Securities and Exchange Commission (“SEC”), include, among others, the following: (1) our ability to deliver new products, services and customer experiences in response to increased competition and changing consumer preferences in the automotive industry; (2) our ability to timely fund and introduce new and improved vehicle models, including electric vehicles, that are able to attract a sufficient number of consumers; (3) the success of our crossovers, SUVs and full-size pickup trucks; (4) our highly competitive industry, which is characterized by excess manufacturing capacity and the use of incentives, and the introduction of new and improved vehicle models by our competitors; (5) our ability to deliver a broad portfolio of electric vehicles and drive increased consumer adoption; (6) the unique technological, operational, regulatory and competitive risks related to the timing and commercialization of autonomous vehicles; (7) the ongoing COVID-19 pandemic; (8) global automobile market sales volume, which can be volatile; (9) our significant business in China, which is subject to unique operational, competitive, regulatory and economic risks; (10) our joint ventures, which we cannot operate solely for our benefit and over which we may have limited control; (11) the international scale and footprint of our operations, which exposes us to a variety of unique political, economic, competitive and regulatory risks, including the risk of changes in government leadership and laws (including labor, tax and other laws), political instability and economic tensions between governments and changes in international trade policies, new barriers to entry and changes to or withdrawals from free trade agreements, public health crises, including the occurrence of a contagious disease or illness, such as the COVID-19 pandemic, changes in foreign exchange rates and interest rates, economic downturns in the countries in which we operate, differing local product preferences and product requirements, changes to and compliance with U.S. and foreign countries' export controls and economic sanctions, differing labor regulations, requirements and union relationships, differing dealer and franchise regulations and relationships, and difficulties in obtaining financing in foreign countries; (12) any significant disruption, including any work stoppages, at any of our manufacturing facilities; (13) the ability of our suppliers to deliver parts, systems and components without disruption and at such times to allow us to meet production schedules; (14) prices of raw materials used by us and our suppliers; (15) our ability to successfully and cost-effectively restructure our operations in the U.S. and various other countries and initiate additional cost reduction actions with minimal disruption; (16) the possibility that competitors may independently develop products and services similar to ours, or that our intellectual property rights are not sufficient to prevent competitors from developing or selling those products or services; (17) our ability to manage risks related to security breaches and other disruptions to our information technology systems and networked products, including connected vehicles and in-vehicle systems; (18) our ability to comply with increasingly complex, restrictive and punitive regulations relating to our enterprise data practices, including the collection, use, sharing and security of the Personal Identifiable Information of our customers, employees, or suppliers; (19) our ability to comply with extensive laws, regulations and policies applicable to our operations and products, including those relating to fuel economy and emissions and autonomous vehicles; (20) costs and risks associated with litigation and government investigations; (21) the costs and effect on our reputation of product safety recalls and alleged defects in products and services; (22) any additional tax expense or exposure; (23) our continued ability to develop captive financing capability through GM Financial; and (24) any significant increase in our pension funding requirements. A further list and description of these risks, uncertainties and other factors can be found in our 2020 Form 10-K and our subsequent filings with the SEC.

We caution readers not to place undue reliance on forward-looking statements. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information, future events or other factors, except where we are expressly required to do so by law.



# PRODUCT DISCLOSURE

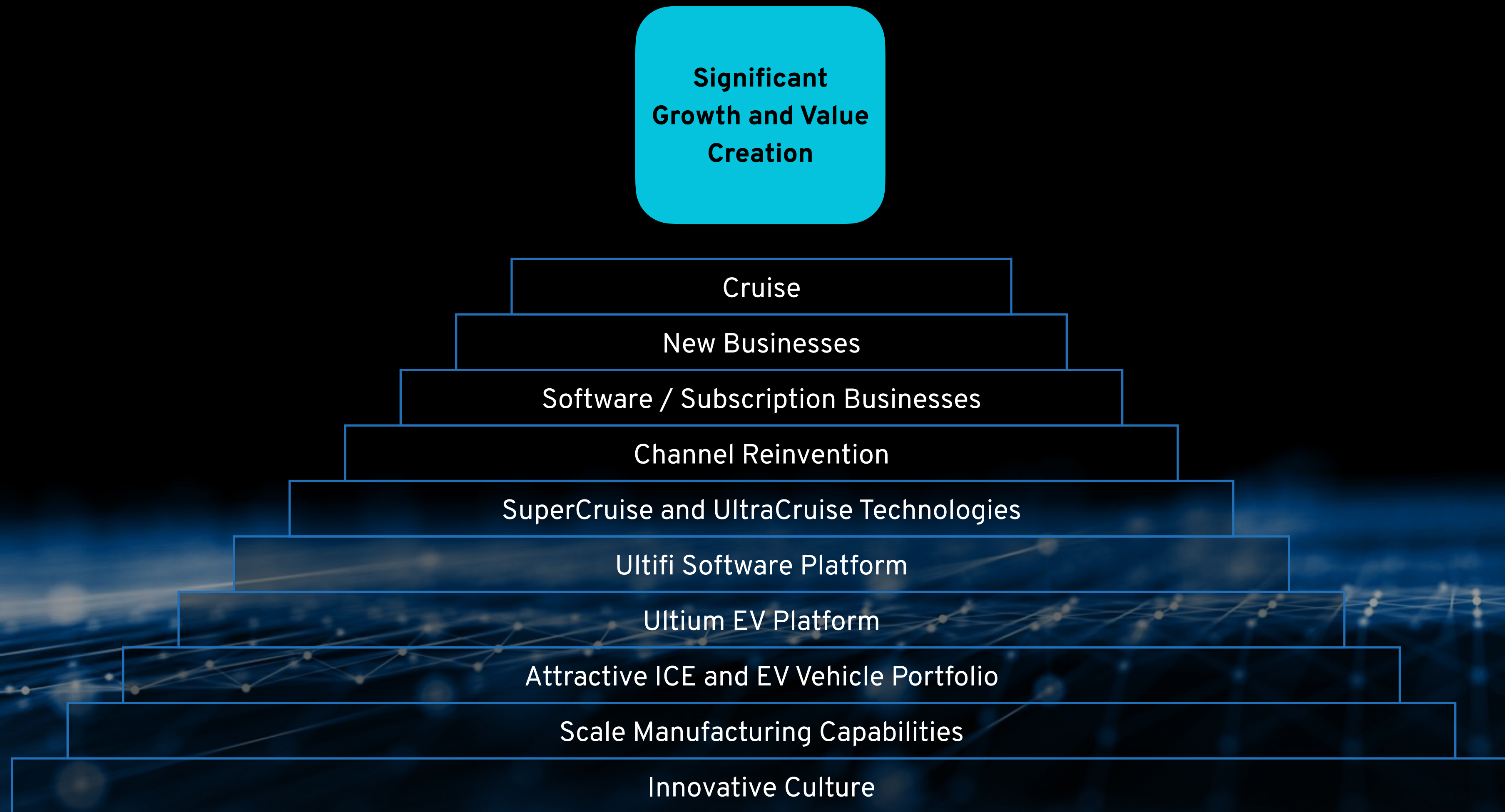
Depicted vehicles and features shown throughout may be simulated or in a preproduction state and subject to change. Products may not be currently available and subject to limited availability. Certain vehicle performance and other specs, including acceleration, torque and range are based on GM testing. EPA estimates not currently available for all products shown. Actual vehicle range will vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance. For important feature information and details relating to advanced safety and driver assistance features, including use and limitations, consult the vehicle's Owner's Manual and brand's website. These materials are intended for informational purposes only and not intended for further distribution.

# NON-GAAP FINANCIAL MEASURES

See our 2020 Form 10-K and our subsequent filings with the SEC for a description of certain non-GAAP measures referenced in this presentation and remarks made by management, including EBIT-adjusted, ROIC-adjusted and adjusted automotive free cash flow, along with a description of various uses for such measures. Our calculation of these non-GAAP measures are set forth within these reports and may not be comparable to similarly titled measures of other companies due to potential differences between companies in the method of calculation. As a result, the use of these non-GAAP measures has limitations and should not be considered superior to, in isolation from, or as a substitute for, related U.S. GAAP measures.



# GROWTH UNLOCKED BY CORE AUTOMOTIVE LEADERSHIP





# ESG AT THE CORE OF OUR BUSINESS

## ACCELERATED

Carbon neutral in global products and operations by 2040; eliminating light duty emissions by 2035

## VALIDATED

SBTI approved scope 1, 2 and 3 emissions targets

## INVESTED

\$25 million climate equity fund

## COMMITTED

Source 100% renewable energy to power U.S. facilities advanced to 2025

GM VISION: ZERO CRASHES, ZERO EMISSIONS, ZERO CONGESTION



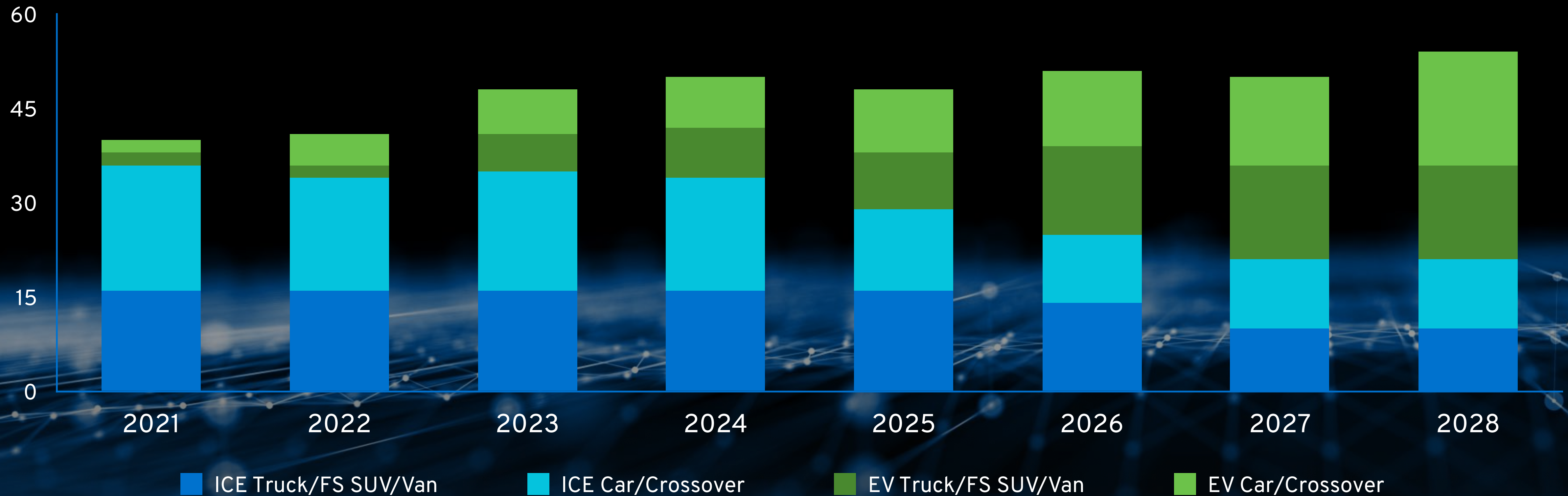


# Transformation Strategy and Roadmap



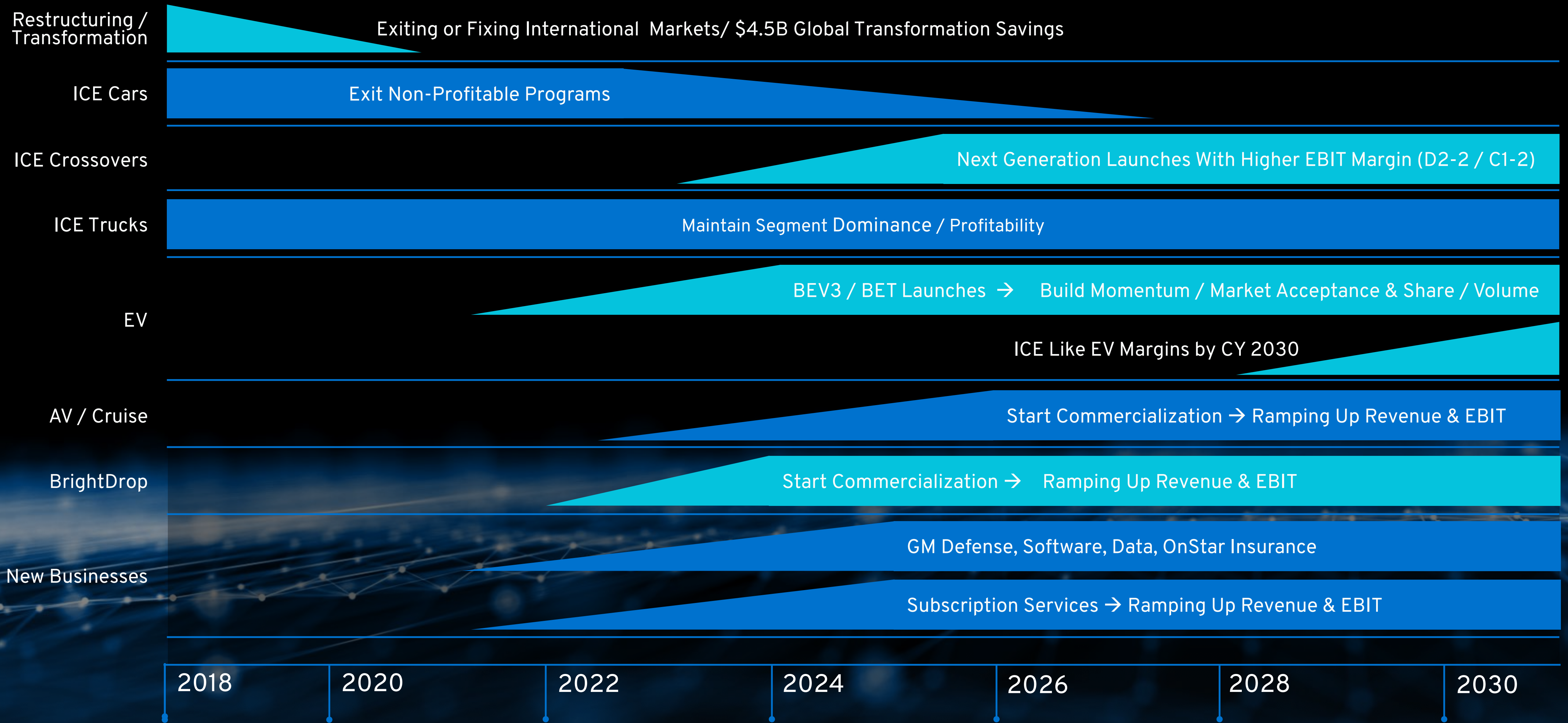
# PORTFOLIO GROWTH WITH NEW EVs WHILE MAINTAINING CORE ENTRIES IN HIGH VOLUME, HIGH PROFIT ICE SEGMENTS

U.S. ENTRIES THROUGH 2028





# TRANSFORMATION ROADMAP







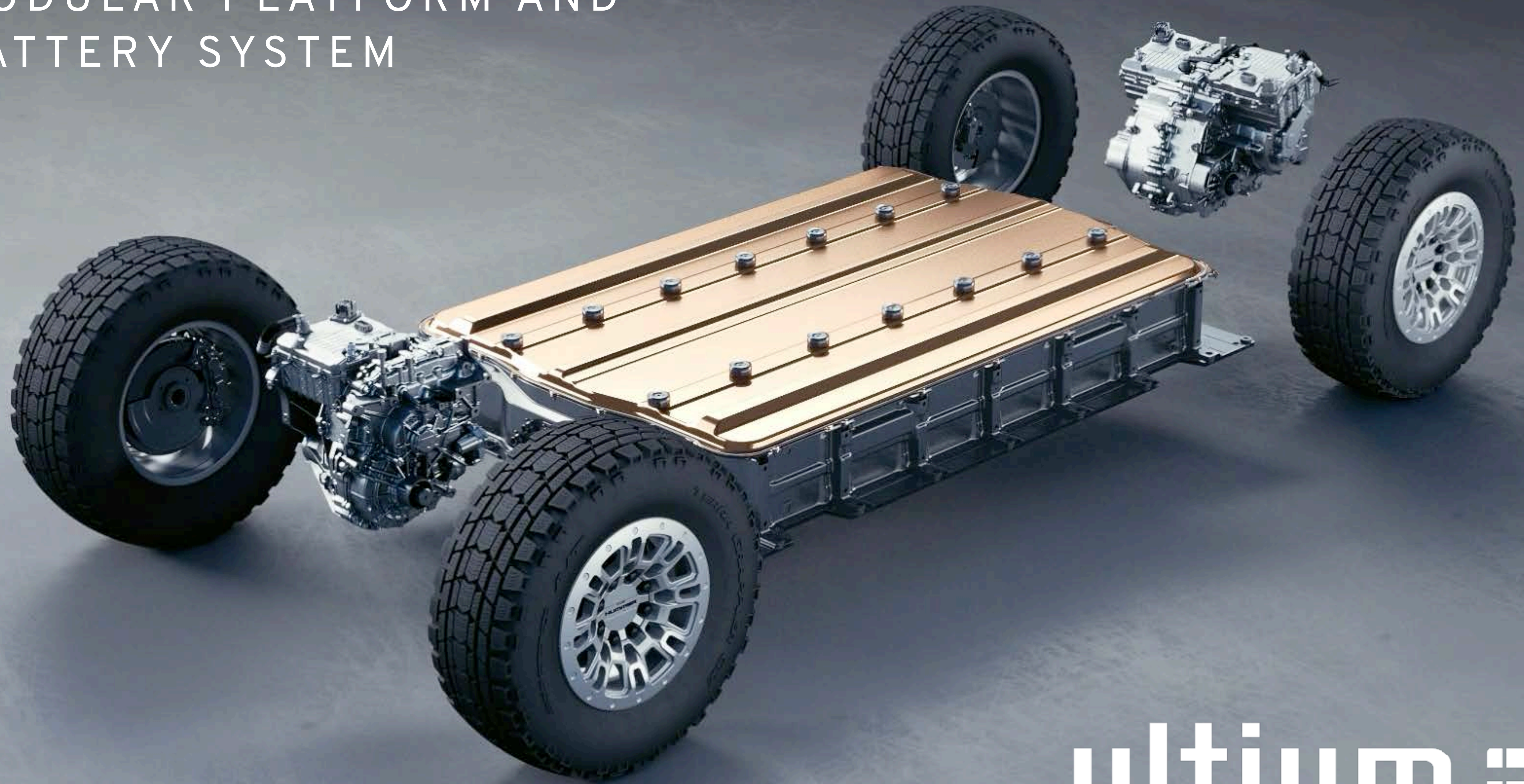
# Dual Platform Advantage



ultium  ultifi

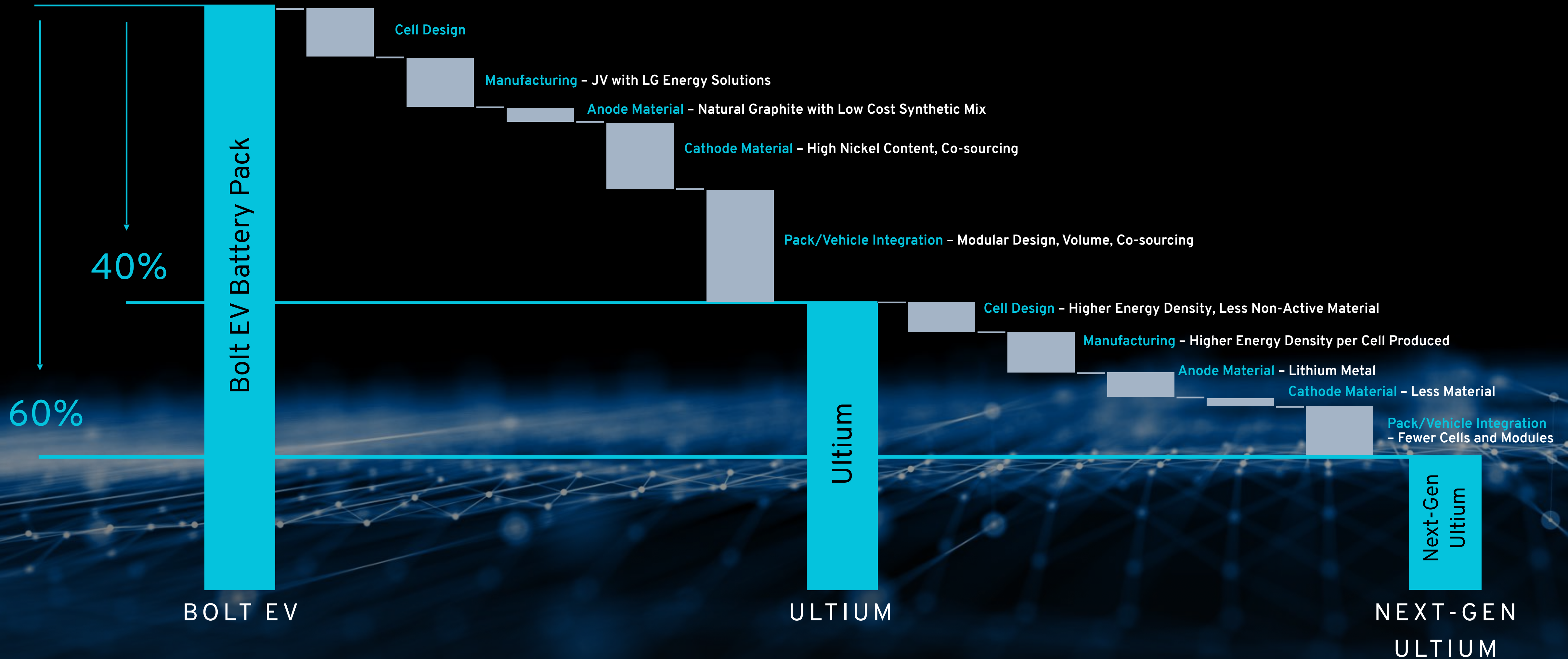


# MODULAR PLATFORM AND BATTERY SYSTEM





# 60% GM PACK LEVEL COST REDUCTION - BOLT EV TO NEXT-GEN ULTIUM





# ULTIUM AND HYDROTEC TECHNOLOGY ACROSS TRANSPORTATION AND INDUSTRY

## NAVISTAR



## Wabtec CORPORATION



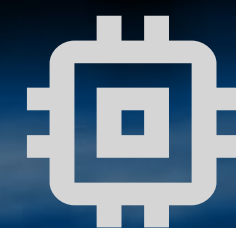
## LIEBHERR



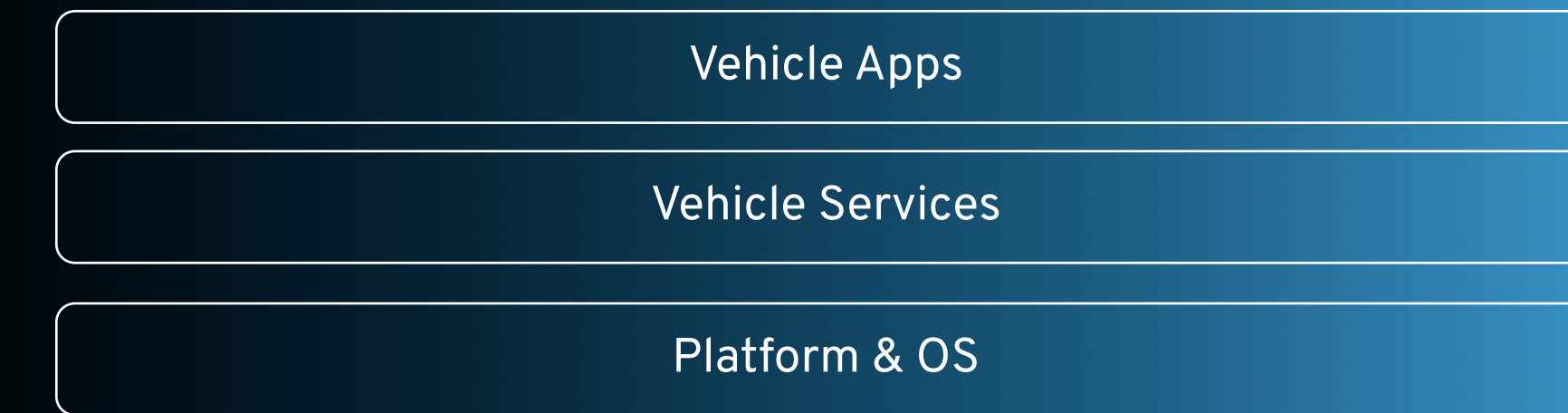


# ULTIFI

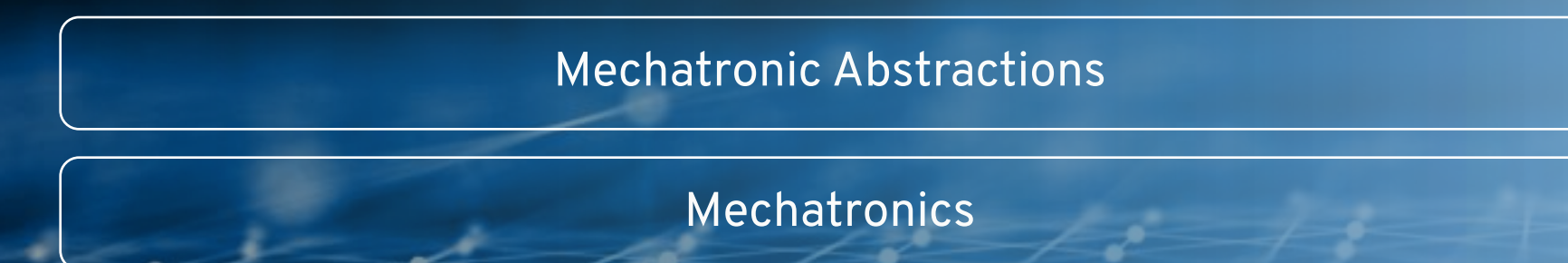
End-to-End Software Platform to  
Seamlessly Deliver Software-Defined  
Features, Apps and Services Over-the-Air



GM Cloud



Platform and OS



VIP Mechatronics  
and Software

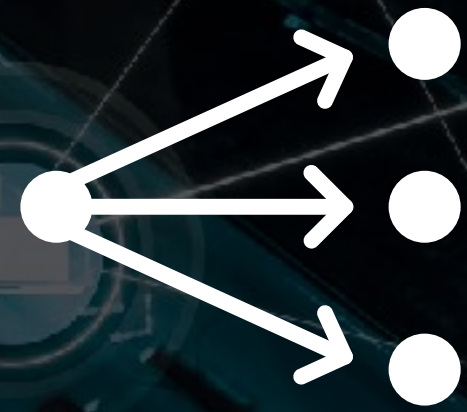


# ULTIFI IS ARCHITECTED FOR RAPID AND CONTINUOUS OVER-THE-AIR SOFTWARE UPDATES





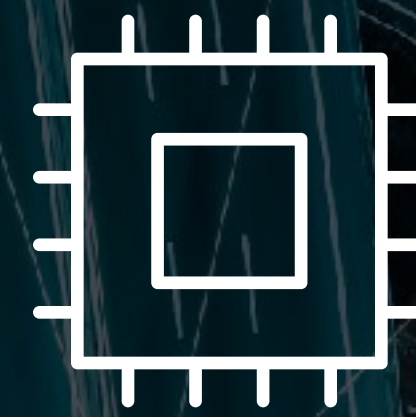
# VEHICLE IS NOW A TRUE CONNECTED DEVICE



FRICITIONLESS  
DATA FLOW



CLOUD-BASED  
SERVICES



EDGE PROCESSING  
AND COMPUTING



ROBUST NETWORK  
INTEGRATION





# Software and Connected Services



# CONNECTED SERVICES

**25** YEARS OF CONNECTED SERVICES EXPERIENCE

**16M** CONNECTED VEHICLES

**4.2M** PAYING CUSTOMERS FOR OUR SUBSCRIPTION SERVICES

**~\$2BN** SUBSCRIPTION SERVICE REVENUE (CY 2021E)

**>70%** GLOBAL EBIT MARGIN



# CUSTOMER ECOSYSTEM AND MONETIZATION

**Customer Offerings:**

**Physical Products for ICE & EV**

*Vehicles, eCrate, Parts/Accessories*

**Software & Services**

*On the Vehicle & Adjacent to the Vehicle | Beyond the Vehicle*

**Channels:**

**In Dealer**

**Digital (Apps / Web / ICS / Advisor)**

**Digital Commerce Platforms:**

**Digital Retail Platform**

Cloud based EV solution ranging from in-dealer to 100% online purchase

**Omni-Channel Shopping Platform**

Customer centric integrated digital and physical eCommerce

**Subscription Services Platform**

Proven revenue model as the springboard for growth

**Single Customer Centric GM ID**

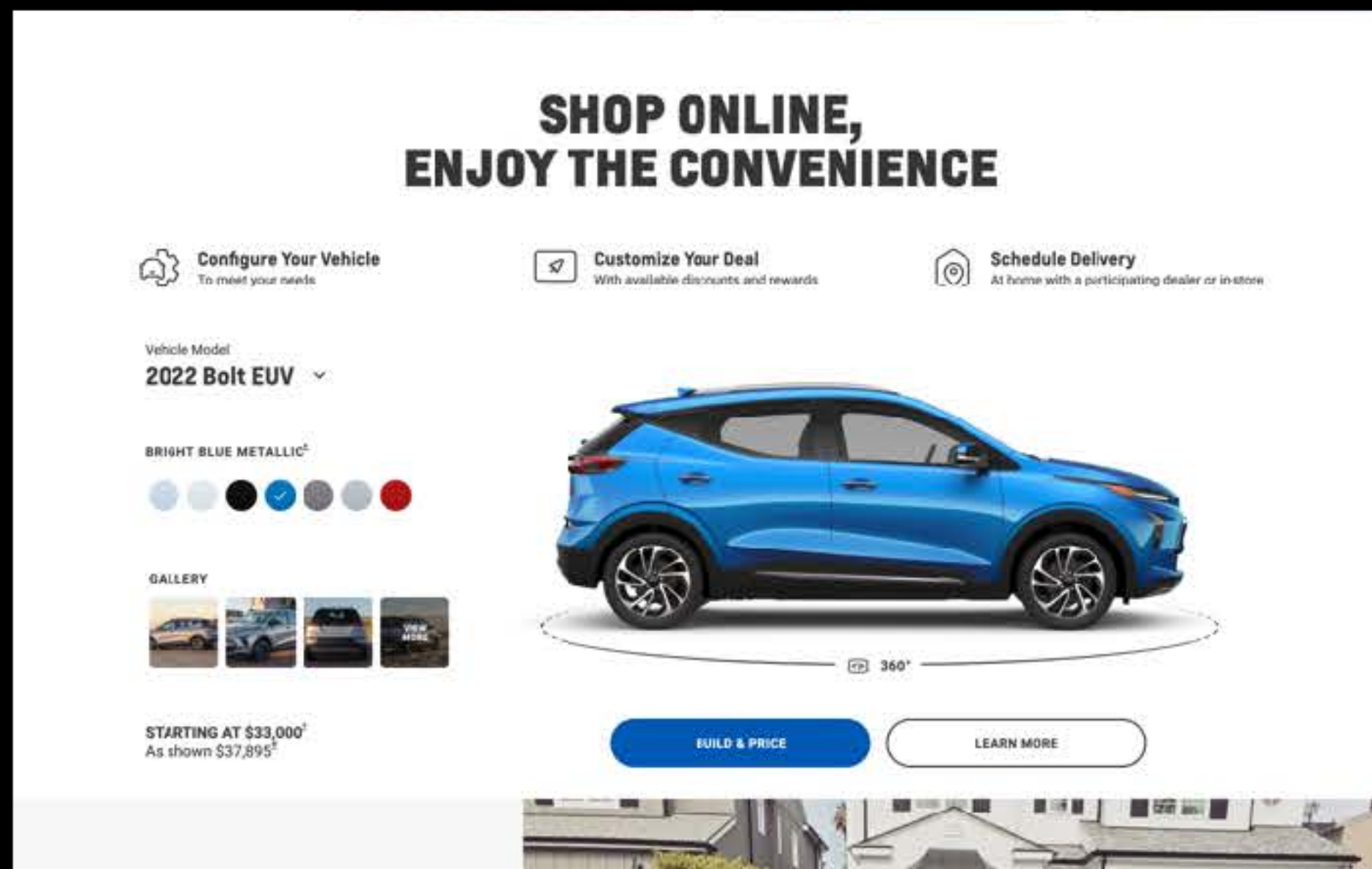
**Modern Back-Office:**

**Integrated Transactional Payment Solution**

**Embedded AI / Data Management Architecture**



# UNIFYING OUR APPROACH TO DIGITAL RETAILING



## GM DIGITAL RETAIL PLATFORM



# REALIZING OUR DIGITAL OPPORTUNITY

DIGITAL  
LINES OF  
BUSINESS

PRODUCT  
MANAGEMENT

CUSTOMER  
EXPERIENCE

SOFTWARE  
DEVELOPMENT



# PIPELINE OF SERVICES TO COME

Safety & Security in and Outside of the Vehicle

Performance Upgrades

Connected Cameras

Audio Enhancements

Personalization

Advanced Driver Assistance Systems

In-Vehicle Apps





# New Businesses



# SIGNIFICANT OPPORTUNITY FOR NEW BUSINESSES

Global Innovation  
includes

**20**  
startups

**\$3BN**

TAM for  
the smallest

**\$500BN**

TAM for the largest  
- aerial mobility



# WE ARE WORKING TO ENTER NEW MARKETS, ATTRACT NEW CUSTOMERS AND GROW NEW REVENUE STREAMS







FUTURE ROADS

ONSTAR  
GUARDIAN



AERIAL MOBILITY







**\$6BN+**

revenue opportunity by 2030

**GM's Strong Right-To-Win**

**Customer Access**

**Superior Data**

**GM Ecosystem**





BRIGHTDROP RECURRING REVENUE  
OPPORTUNITY FROM VEHICLE AND  
EPALLET SERVICES

**\$10BN+** IN REVENUE  
AT LOW 20% MARGINS IN 2030





# DEFENSE

TAM  
\$25BN+

GM's Strong Right-To-Win

Integrated Vehicles

Power and Propulsion

Mobility and Autonomy





# Driver-Assist Technologies and Cruise



# SUPER CRUISE

Available in 22 Vehicles by 2023

After having Super Cruise, more than 85% of Cadillac CT6 customers either “would only consider” or “would prefer” having Super Cruise in their next vehicle.



# ULTRA CRUISE

Significant Next Step in GM's Advanced Driver-Assist Technology

DESIGNED TO HANDLE 95%  
OF ALL DRIVING SCENARIOS

5 NANOMETER COMPUTE

CAMERAS, RADAR, LIDAR

AI PERCEPTION VIA  
SENSOR FUSION

WILL BE INDUSTRY STANDARD  
FOR CAPABILITY AND SAFETY

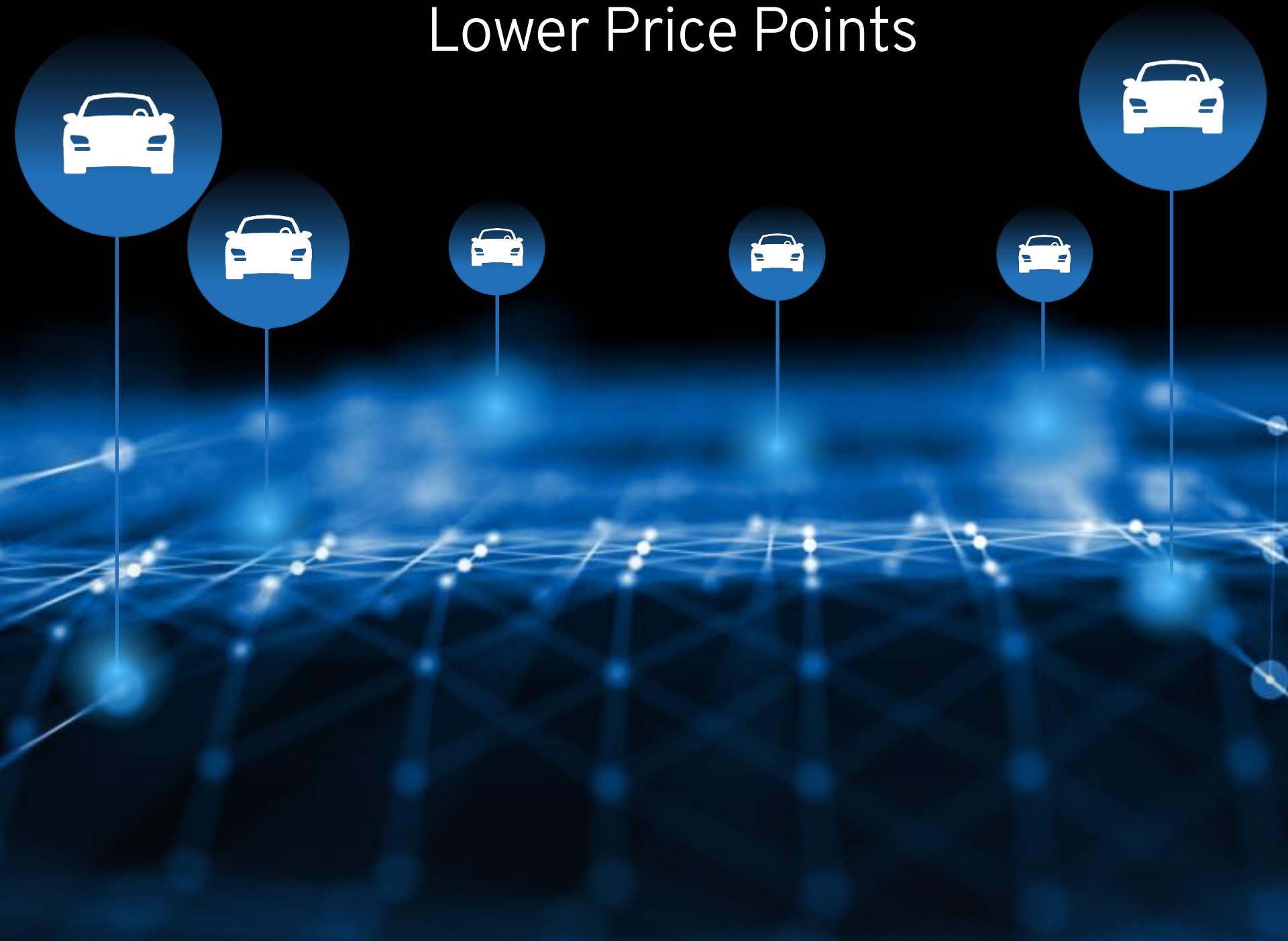


# GROWTH OPPORTUNITIES ACROSS ALL SEGMENTS

***ultra cruise***  
Higher Price Points



***super cruise***  
Lower Price Points







*super cruise*   *ultra cruise*

TECHNOLOGY

SCALE

EXPERTISE

**cruise**



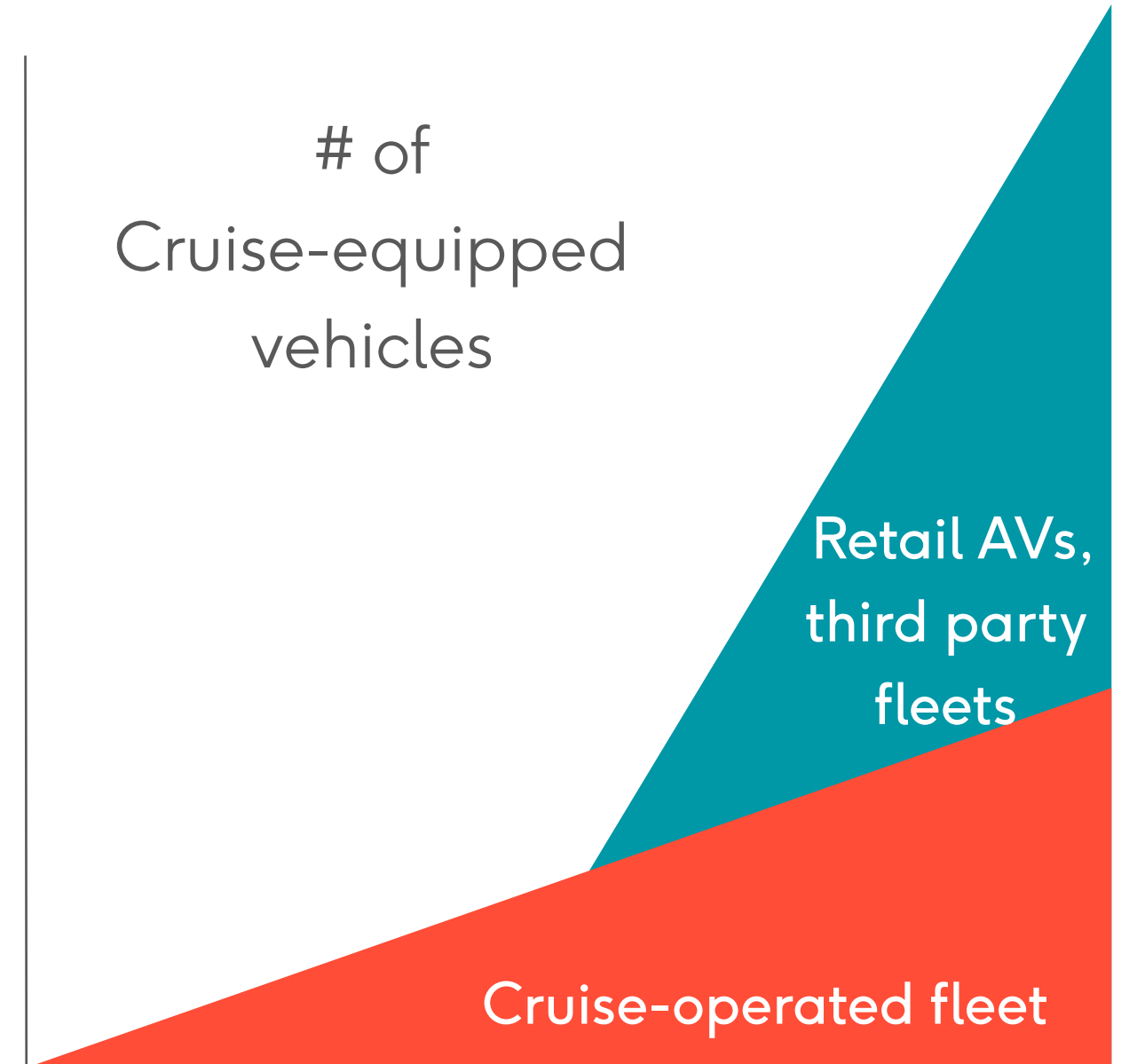
# Unlocking L4 Cost and Scale Together with GM

Beta

Game Changer #1

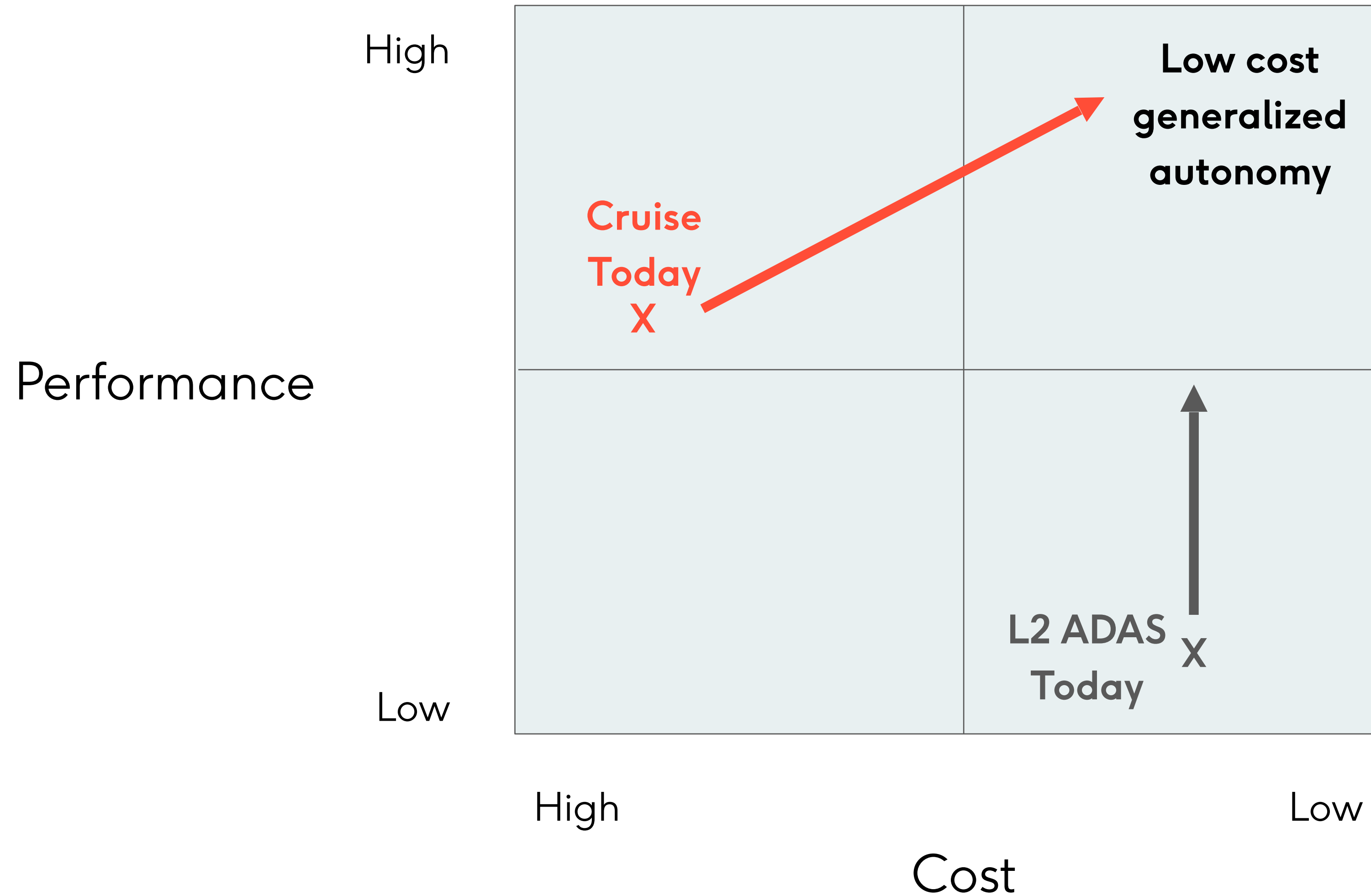
Game Changer #2

60-70%  
lower cost per mile



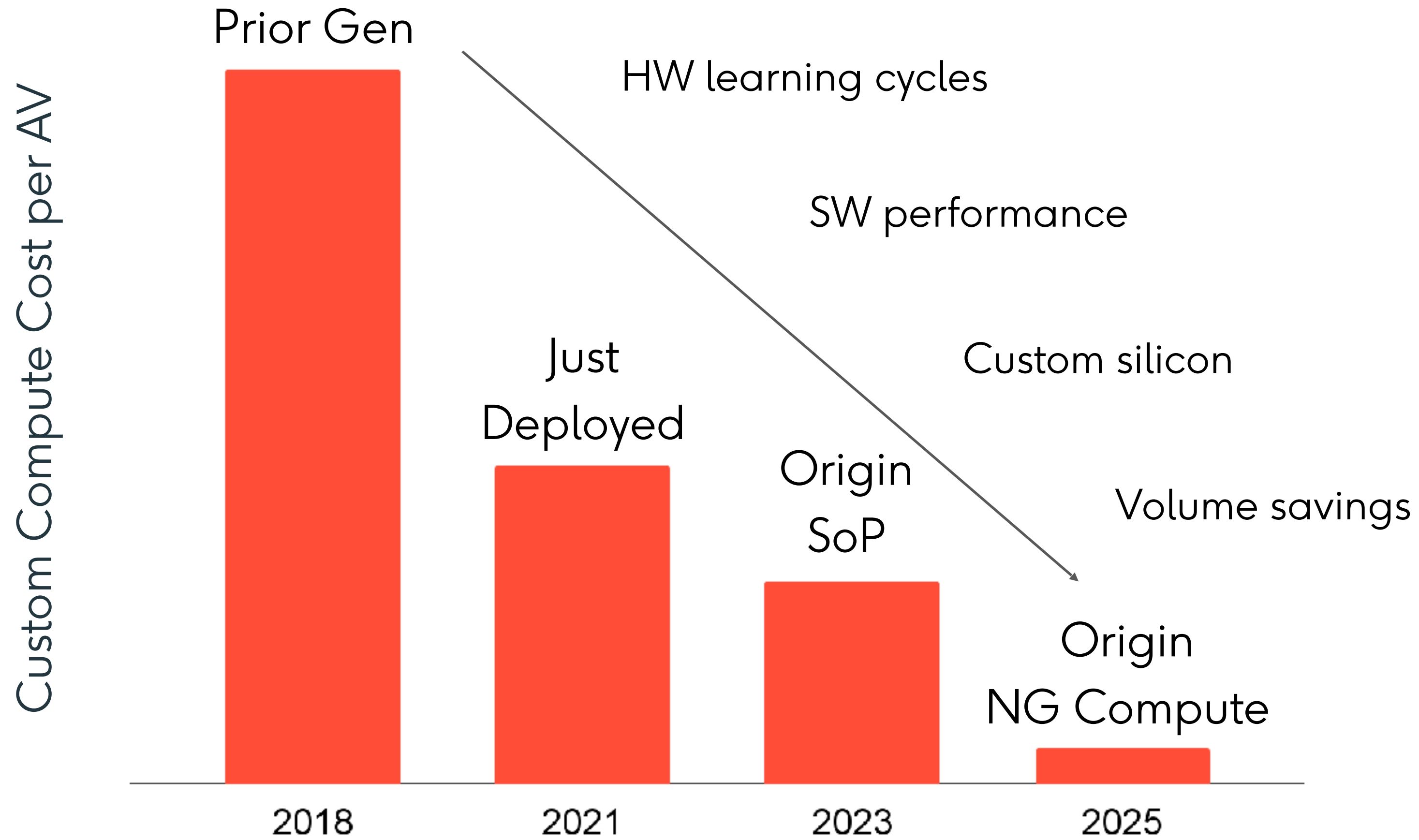


# Orders-of-Magnitude Lead in Performance Beats % Lead in Cost



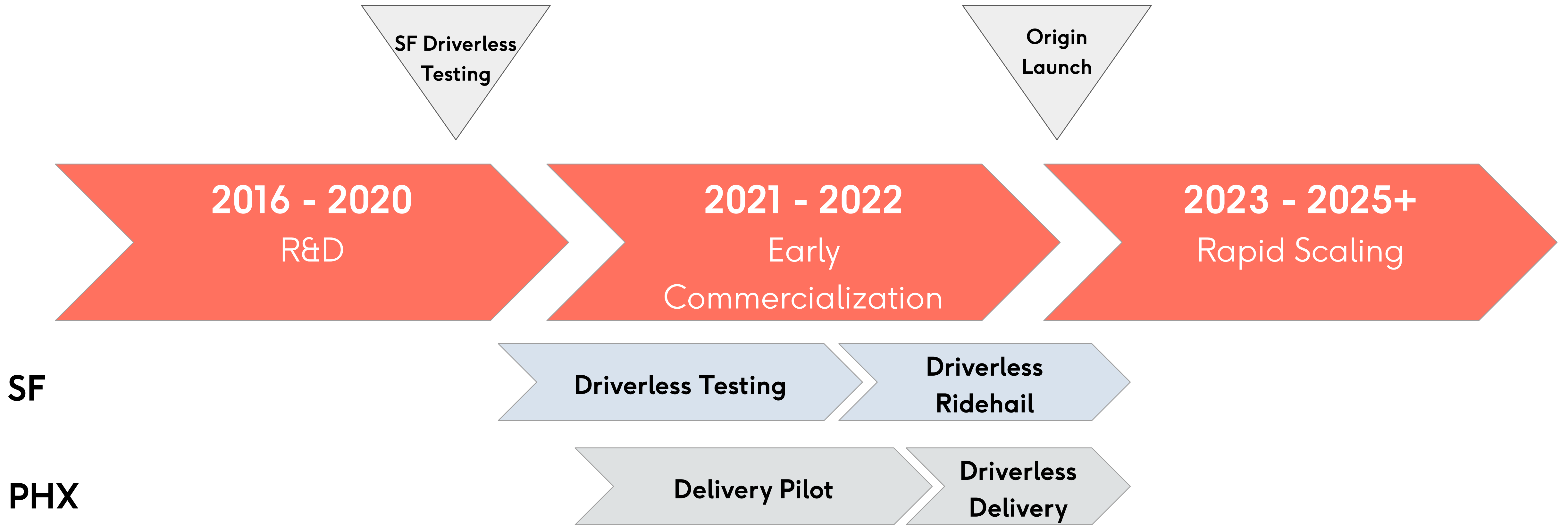


# >90% Reduction in Compute Cost Over 4 Generations



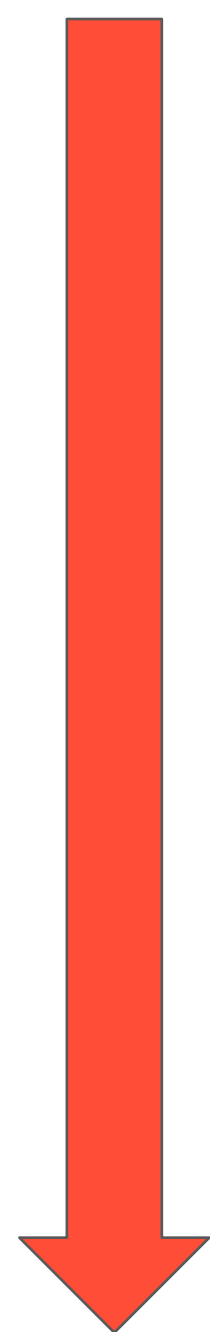


# What's Happening Now?





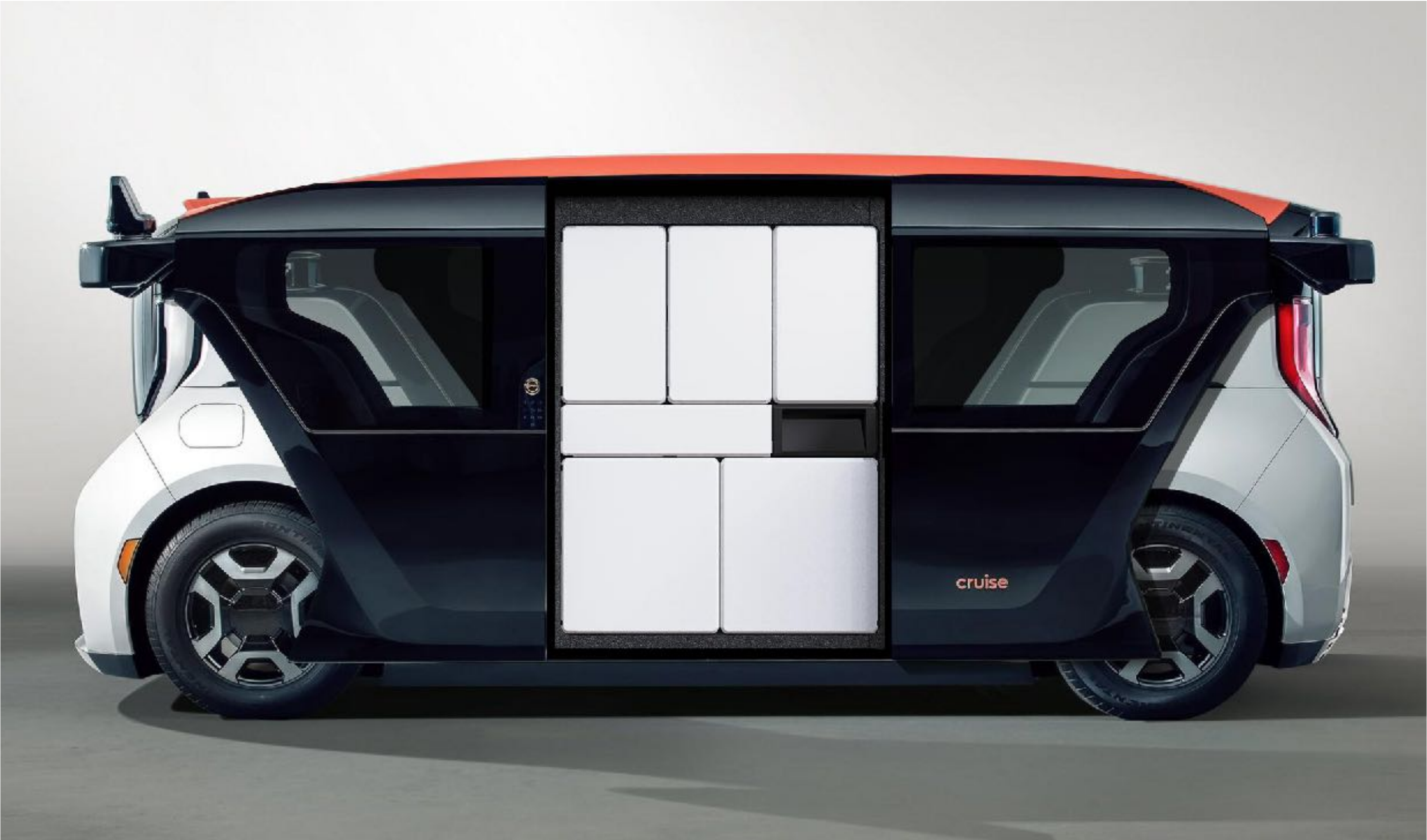
# Regulatory Progress Towards SF Driverless Ridehail Launch



Received	Date	Permit	Permits Issued
✓	Jun 2015	DMV Drivered Test	>50
✓	Feb 2020	CPUC Drivered Test (unpaid)	9
✓	Oct 2020	DMV Driverless Test (unpaid)	8
✓	Jun 2021	CPUC Driverless Test (unpaid)	1
✓	Sep 2021	DMV Driverless Deployment (paid)	3*
-	To Come	CPUC Driverless Deployment (paid)	-



# Origin Delivery

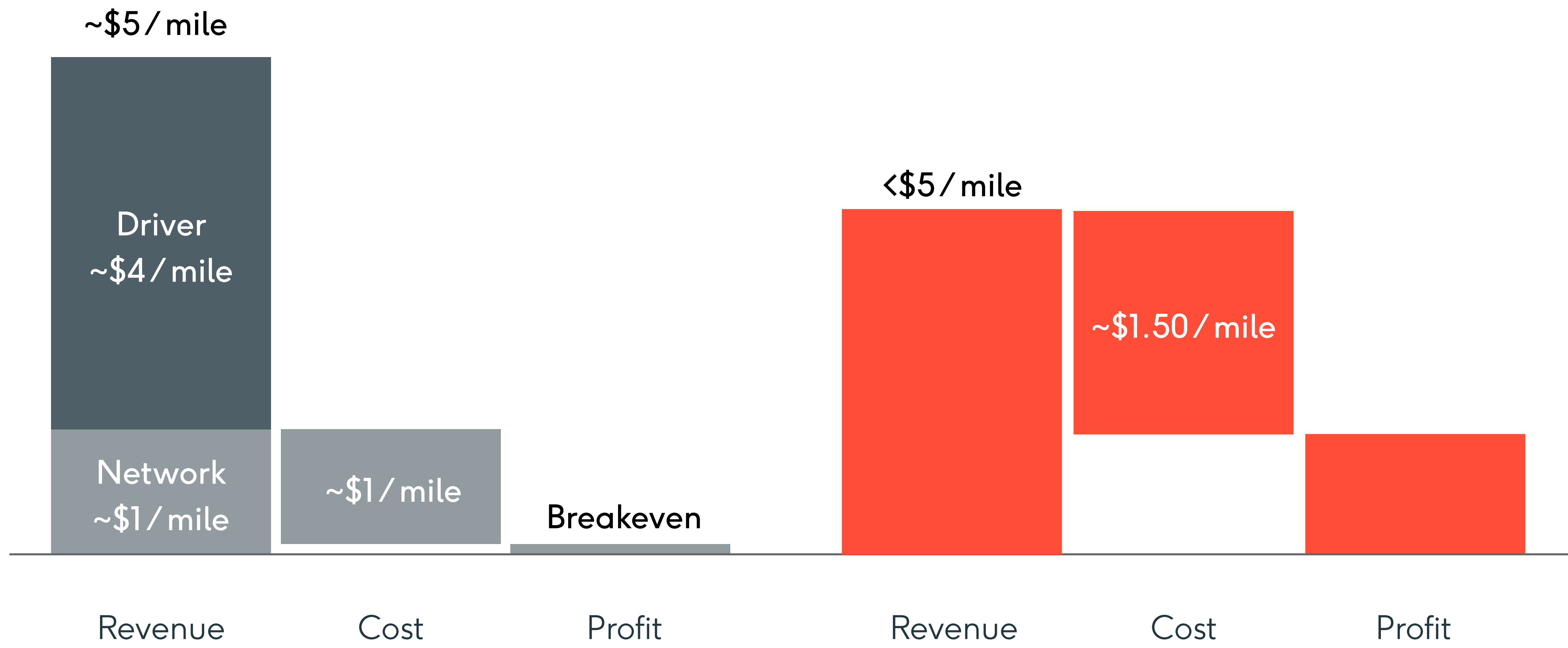




# Profitability at Scale

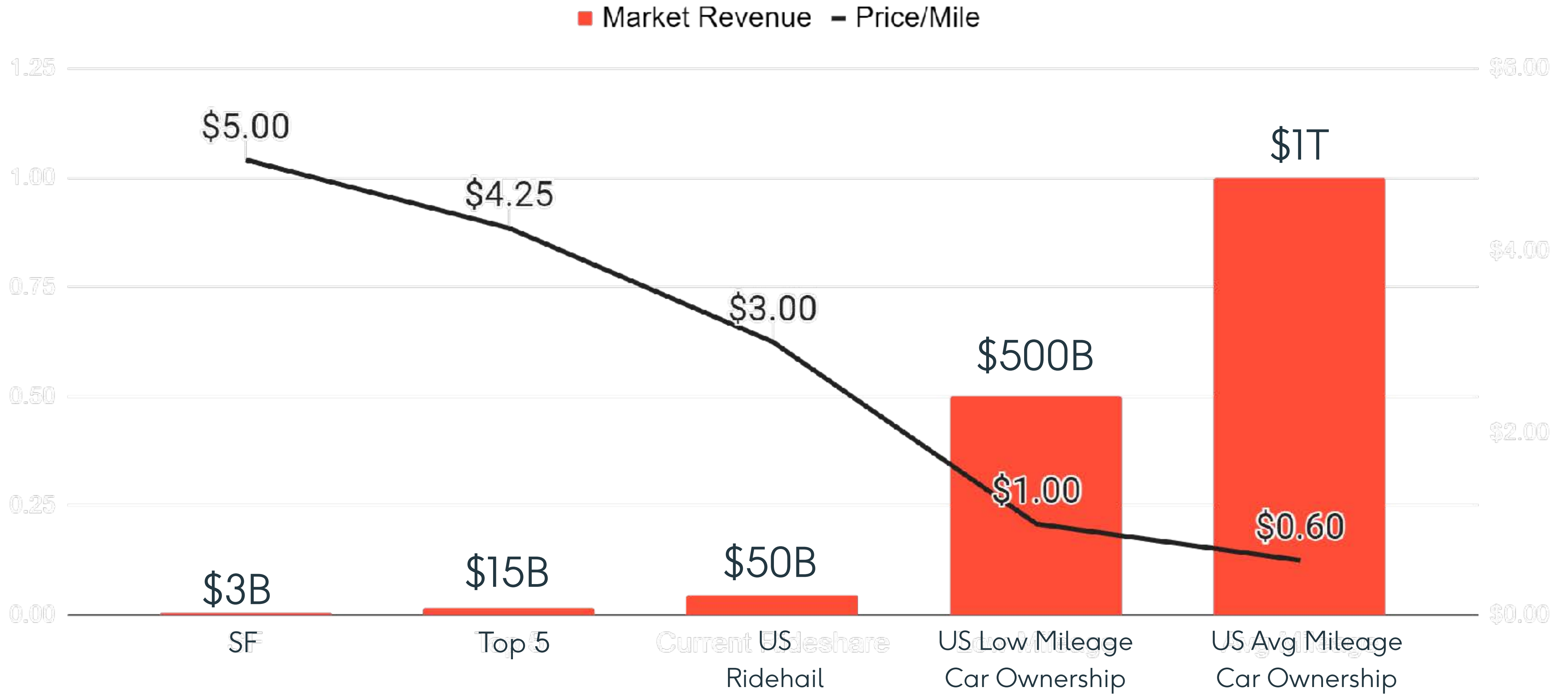
SF Human-Driven Network

Cruise Origin at Early Scale





# Cost Down Unlocks TAM - Example U.S. Rides





# When you Bring a Breakthrough Product to a Very Large Market

Revenue/Gross Bookings (\$ billions)

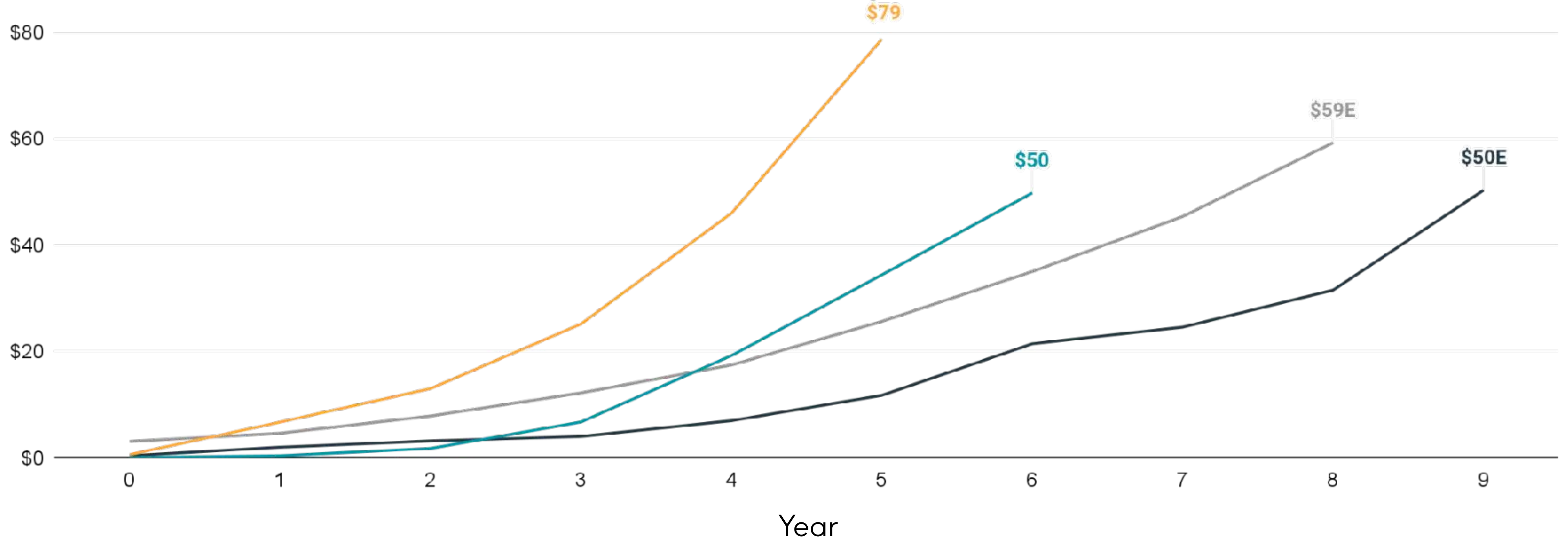
iPhone

Uber

(gross bookings)

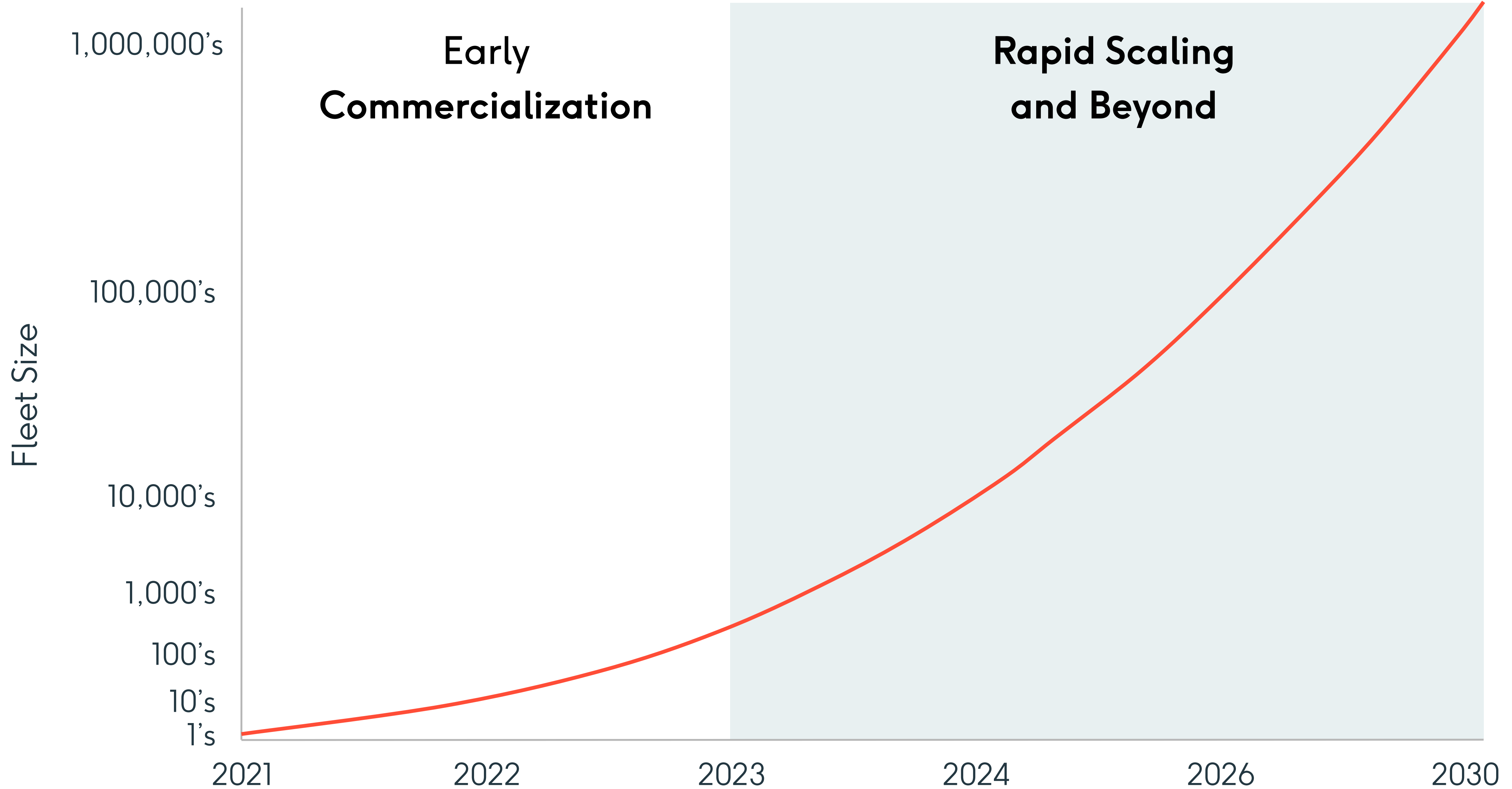
AWS

Tesla



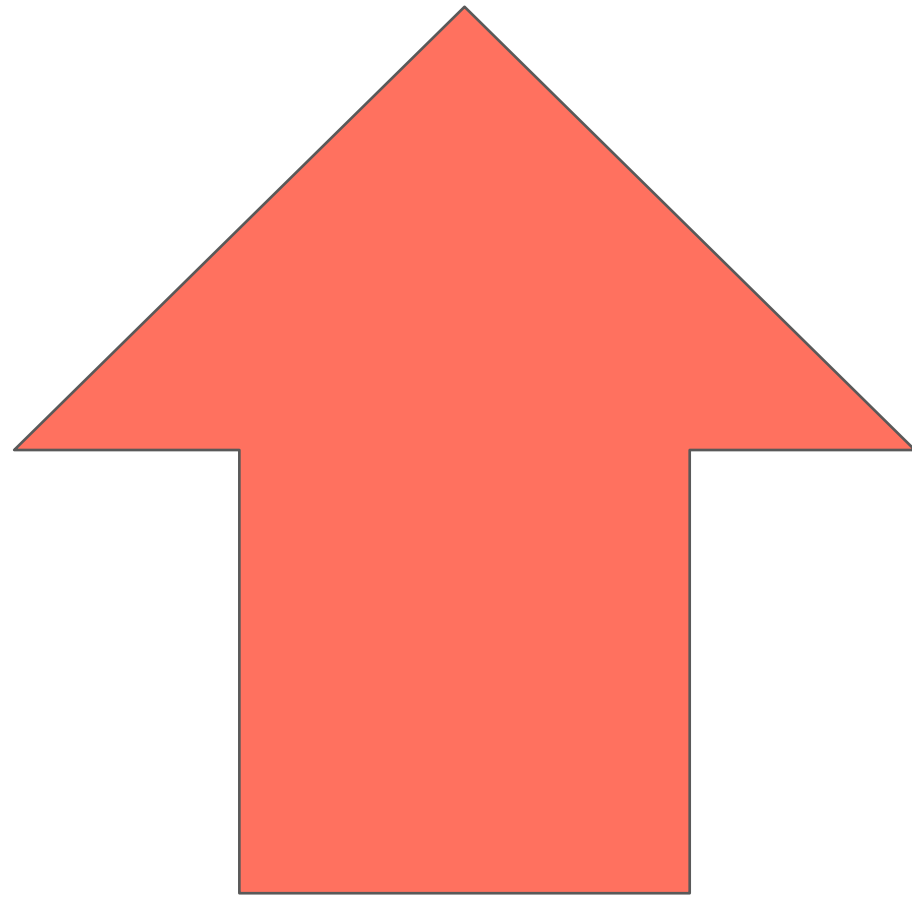


# Exponential Cruise Fleet Ramp

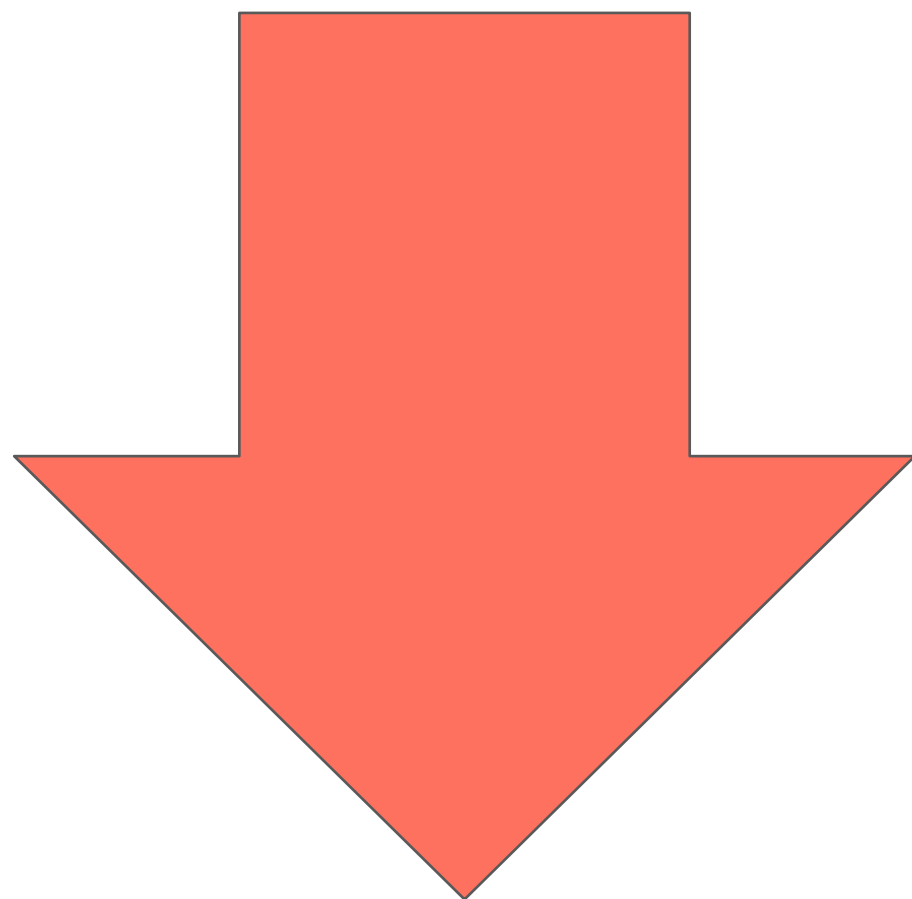




# Tech Roadmap to Enable Exponential Scaling



- Core SW performance
- ODD capability
- Flex to other vehicle form factors



- Sensor count
- Map dependence
- Remote assistance
- Cost





# Manufacturing Advantage



# MANUFACTURING ROADMAP

1 OUR FACTORIES

2 OUR SPEED

3 OUR SCALE  
AND FLEXIBILITY

4 OUR PEOPLE

5 OUR SUSTAINABILITY



# MANUFACTURING ADVANTAGE

## NA EV CAPACITY

**20%** of Footprint EV Capable by 2025

**>50%** of Footprint EV Capable by 2030

## SPEED

Announced Plan for Factory ZERO in January 2020 and Started Pre-Production Within 20 Months

Reduced Vehicle Launch Schedule in the Manufacturing Build Process Nearly in Half,  
From Two Years to Less Than One Year



# MANUFACTURING FINANCIAL ADVANTAGE

**\$1-1.5BN** CapEx Reduction Per Plant by Leveraging Established Assets

**\$10-15BN** in CapEx Cost Avoidance by 2030

**\$20-30BN** in CapEx Cost Avoidance at 100% Transition



# RECYCLING STATISTICS FOR FACTORY ZERO CONSTRUCTION



CONCRETE	63,208	TONS
STEEL	3,282	TONS
WOOD	13	TONS
SOIL	126,416	TONS
ASPHALT	4,804	TONS





# Driving Superior Shareholder Value



# DECISIVE ACTIONS HAVE POSITIONED GM FOR SUCCESS

## Optimizing ICE Business

Refocused GMNA Portfolio to the Most Profitable Segments and Exited Unprofitable ICE Regions

Identified and Realized \$4.5 Billion in Cost Savings Initiatives

## Transforming the Environment

Acquired Cruise With the Goal of Leading the Industry in AV Technology

Streamlined the Product Development Organization To Design/Build Vehicles Faster

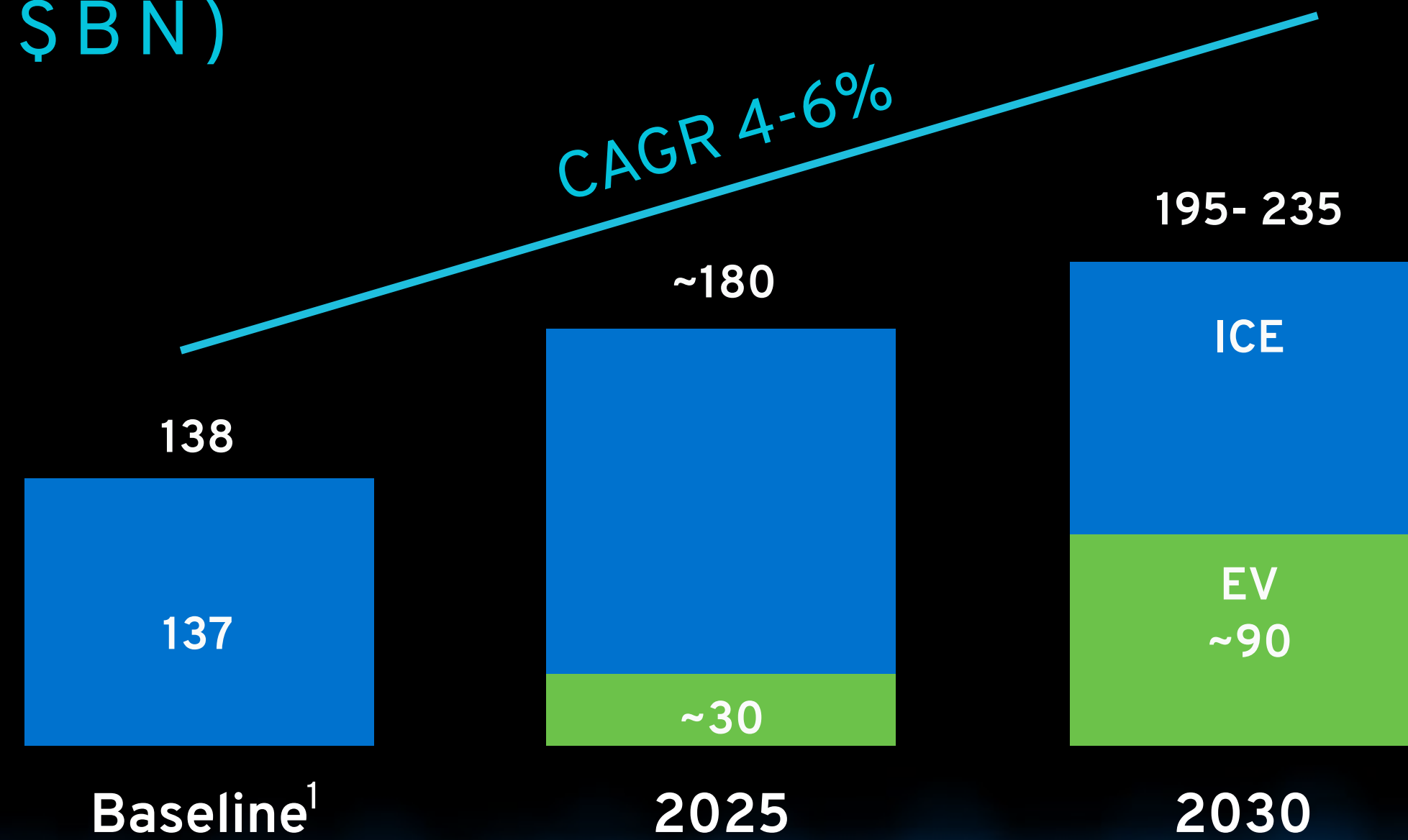
Built Innovation and Growth Organization to Foster and Cultivate New Ideas

Demonstrated Agility Through the Pandemic and Supply Chain Disruptions While Accelerating Investments

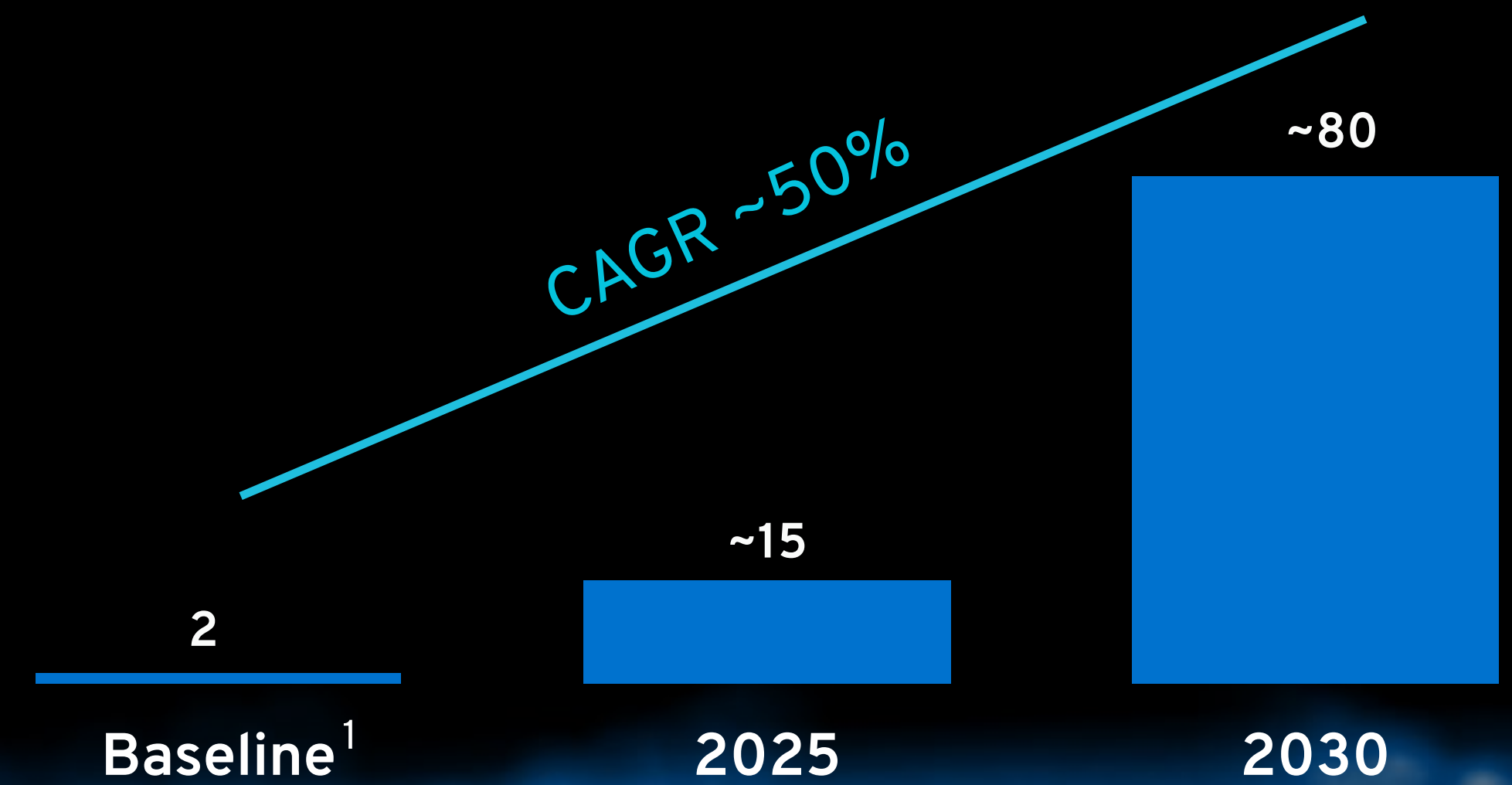


# SUBSTANTIAL REVENUE GROWTH OPPORTUNITY

## AUTO SALES AND FINANCING (\$BN)



## SOFTWARE AND NEW BUSINESSES (\$BN)



ICE includes traditional businesses such as Customer Care and Aftersales and GM Financial

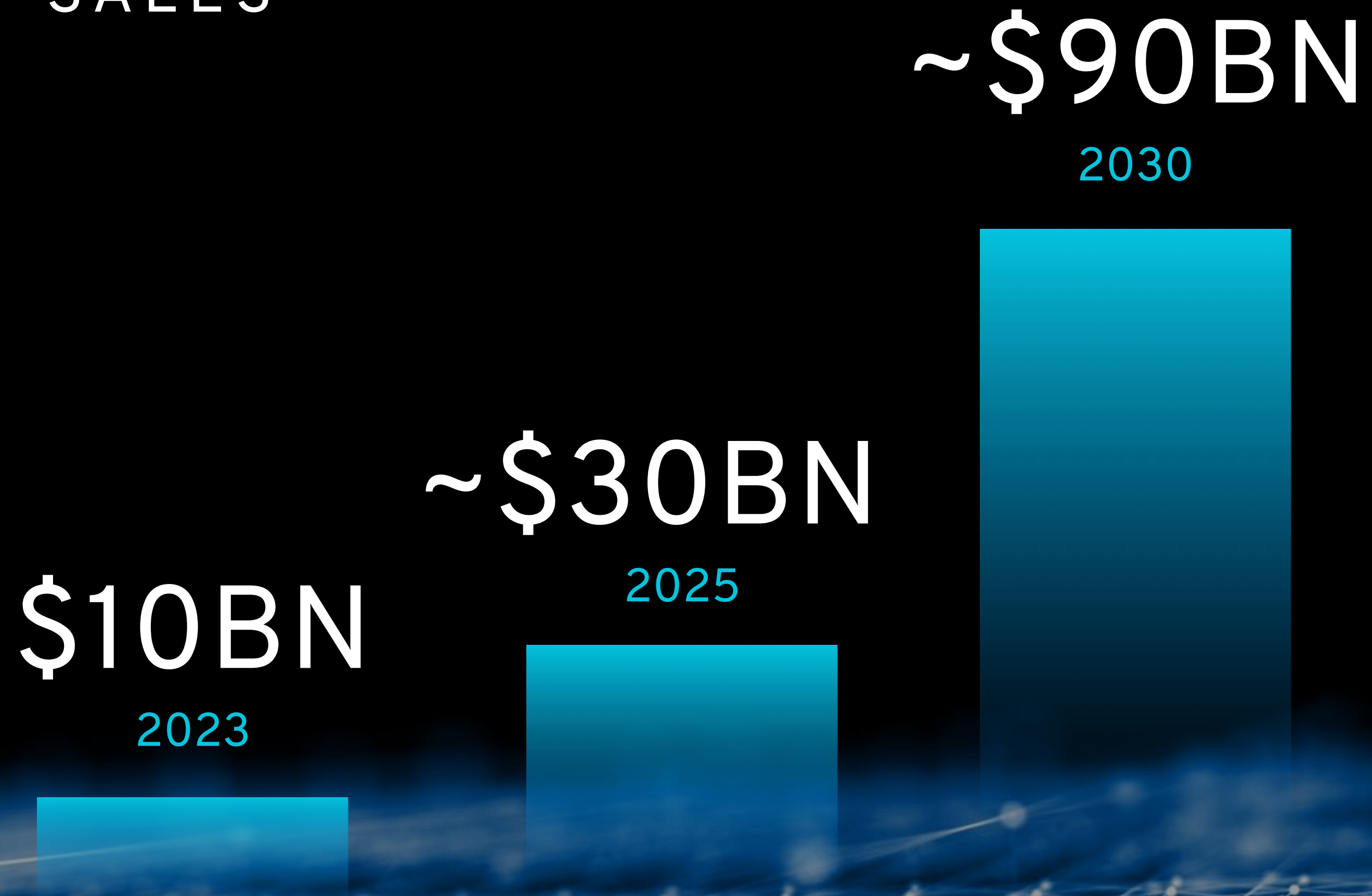
EVs @15% of U.S. industry by 2025 and 40-50% by 2030

New Growth includes Cruise, BrightDrop, SES (software-enabled services), Defense and Insurance

<sup>1</sup> Based on historical average (2016-2020)



# PROJECTED EV SALES





~\$10BN

Battery and  
Propulsion R&D  
and Battery  
Plants

~\$6BN

Cruise

~\$20BN

Capital and  
Engineering  
Related To EV  
Programs

\$35BN EV/AV INVESTMENT



ANNUAL CAPITAL INVESTMENT

**\$9-10BN**

THROUGH MEDIUM-TERM

Includes Investments in our Ultium JVs



# CAPITAL ALLOCATION FRAMEWORK

1

INVESTING IN THE BUSINESS

2

MAINTAINING A STRONG INVESTMENT-GRADE  
BALANCE SHEET

3

RETURNING CASH TO OUR SHAREHOLDERS



# INVESTMENT THESIS

## COMPELLING REVENUE GROWTH

Software and new businesses growing at ~50% CAGR through 2030

Strong core auto business driving 4-6% growth

EV revenues growing to 40-50% of auto sales by 2030

## COMPELLING PLATFORMS

Emerging leader in Electric Vehicles with Ultium platform

More than 30 EVs in our portfolio by 2025

Expanding to other industries

30M connected vehicles on the road by 2030 generating \$20-25BN in annual revenues leveraging Ultifi platform

Leader in race to fully autonomous vehicle commercialization through Cruise, with \$50BN annual revenue potential by the end of the decade

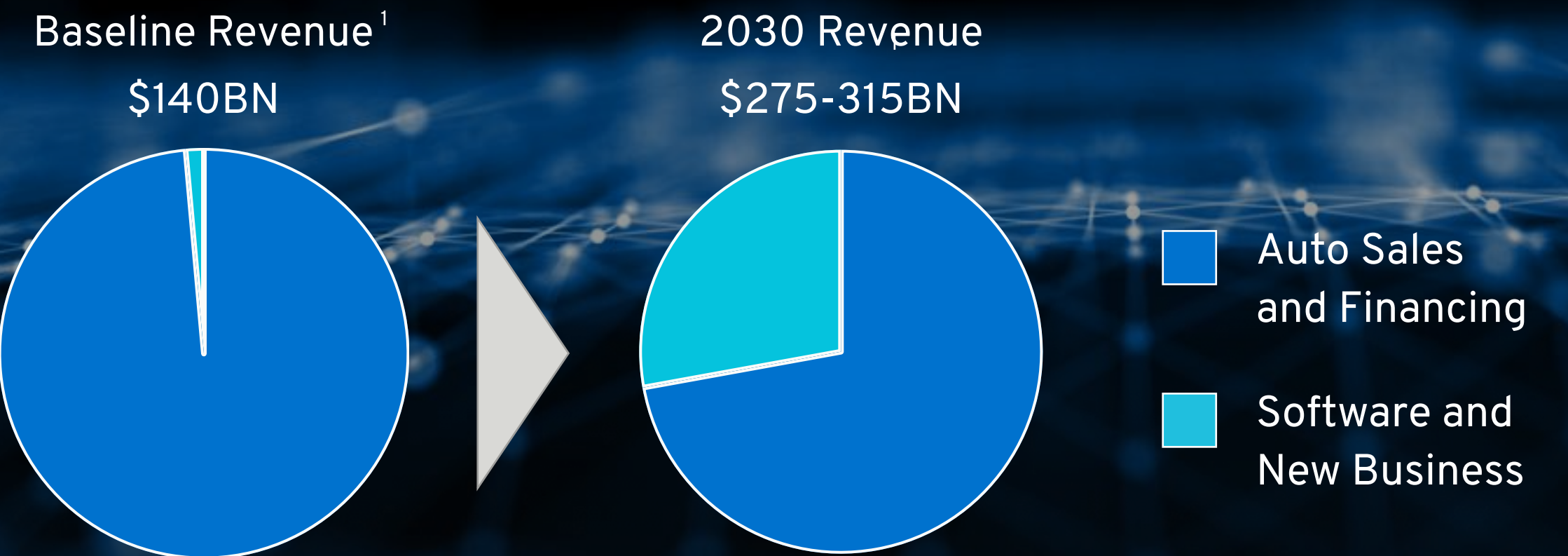
## SIGNIFICANT MARGIN EXPANSION

Margins expected to grow to 12-14% by 2030

Core auto business margins expanding as EVs scale and battery costs decline

New business portfolio expected to generate margins in excess of 20%

## IMPROVED REVENUE DIVERSIFICATION



<sup>1</sup> Based on historical average (2016-2020)





# FROM AUTOMAKER TO PLATFORM INNOVATOR

INVESTOR EVENT: OCTOBER 6-7, 2021