



Executive
Perspectives

Unlocking the Value of GenAI in Automotive

Automotive

October 2025

Introduction

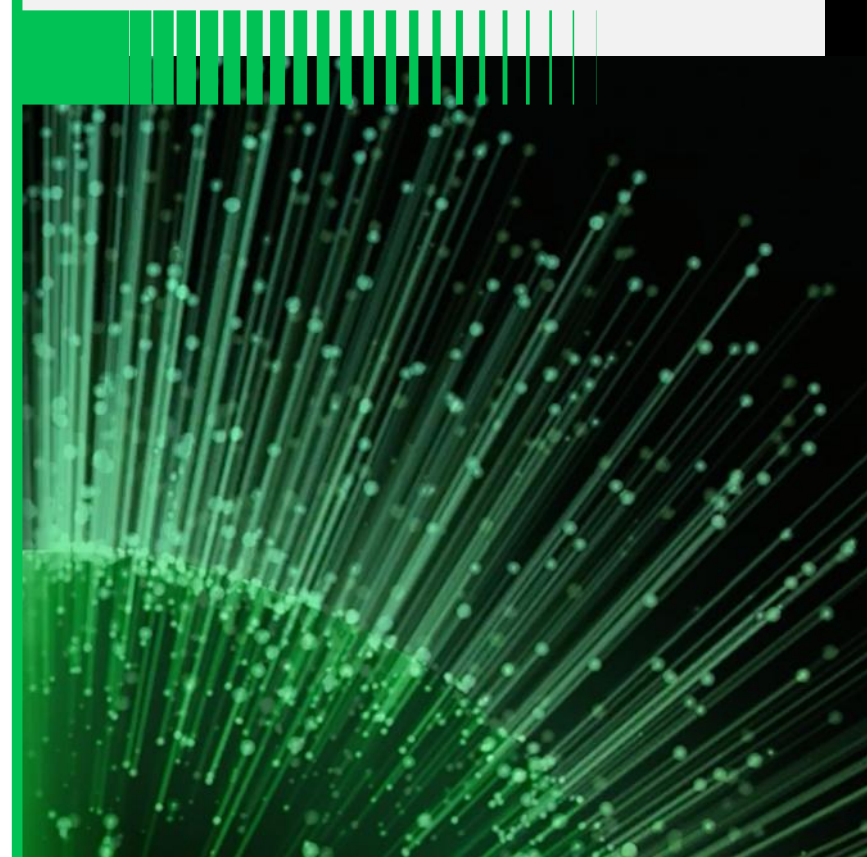
GenAI is introducing rapid change across industries. After working with over **2,000 clients in the past 2+ years, we are sharing our most critical learning** in a new series designed to help leaders navigate the opportunities and challenges associated with GenAI.

In this edition, we zoom in on how GenAI is transforming the automotive industry, particularly the sales journey – from discovery to purchase. We explore key questions currently shaping executive agendas in the industry:

- What are the biggest value drivers of AI along the automotive value chain?
- What will the GenAI-powered car-buying experience look like?
- Where and how can OEMs capture a potential 2–3pp EBIT uplift from GenAI-driven marketing and sales?
- What steps must key automotive stakeholders take to compete and win in a GenAI-first world?

This document is a guide for automotive executives to cut through the hype, understand the true impact of GenAI on the sales model, and define what action is required.

In this BCG Executive Perspective, we discuss the impact and value of GenAI in the automotive industry



Executive summary | Unlocking the value of GenAI in automotive

WHY

GenAI in automotive has huge potential for EBIT uplift

- Structural disruption of global automotive industry drives **urgency to innovate**, with **GenAI as the biggest hope**
- Most OEMs fail to make money with GenAI – **unlocking full EBIT potential requires an E2E transformation along the full value chain**
- **Marketing and sales offer high potential for GenAI transformation** based on mature data, fast ROI potential, and large P&L impact
- A **full end-to-end GenAI transformation** of marketing and sales can generate an additional **2-3 percentage points in EBIT uplift**

WHAT

GenAI is redefining the automotive sales model

- Cooler, smarter, faster – **GenAI will revolutionize marketing and sales** by reshaping interactions and boosting internal performance
- In automotive sales, **today's customer journey is overly complex**, disconnected, and fails to meet customer expectations
- 50% of recent car buyers are **not satisfied** with their **purchasing experience**
- GenAI disrupts journeys; customers expect unbiased "**product advisors**" and actionable "**deal finders**" to support purchase decisions

HOW

Act on three strategic plays to transform into a GenAI-first OEM

- Automotive OEMs, dealers, and platforms must act across **three strategic plays** to capture GenAI's full value in marketing and sales
 - 1) **Deploy: Be visible in third-party GenAI assistants** to optimize product presence and differentiation in GenAI-driven search
 - 2) **Reshape: Partner with multibrand marketplaces** to combine reach with trust and empower new GenAI-enabled journeys
 - 3) **Invent: Build branded assistants** to own the journey, boost conversion, and unlock deep personalization with CRM and vehicle data

Structural disruption of global automotive industry drives urgency to innovate, with GenAI as the biggest hope



Plateaued demand intensifies competition

~90-100M annual registrations, growth is limited – forcing OEMs into fierce share competition



New entrants disrupt industry dynamics

20-30 new OEMs – mainly Chinese – raise the bar through innovation and competitive pricing



Structural overcapacity undermines profitability

Global overcapacity suppresses margins and increases pressure on pricing and cost control



EV shift narrows differentiation

OEMs need new levers beyond powertrain to stay differentiated



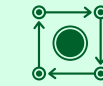
Geopolitical landscape increases uncertainty

CO₂ targets, EV mandates, and trade tensions drive ambiguity and planning risk

Traditional toolbox is not enough



Cost cutting and org redesigns no longer differentiate



Operating-model tweaks lead to diminishing returns



Incremental optimization has hit a ceiling

But GenAI reinvents the game



Accelerates design and development



Rethinks production performance



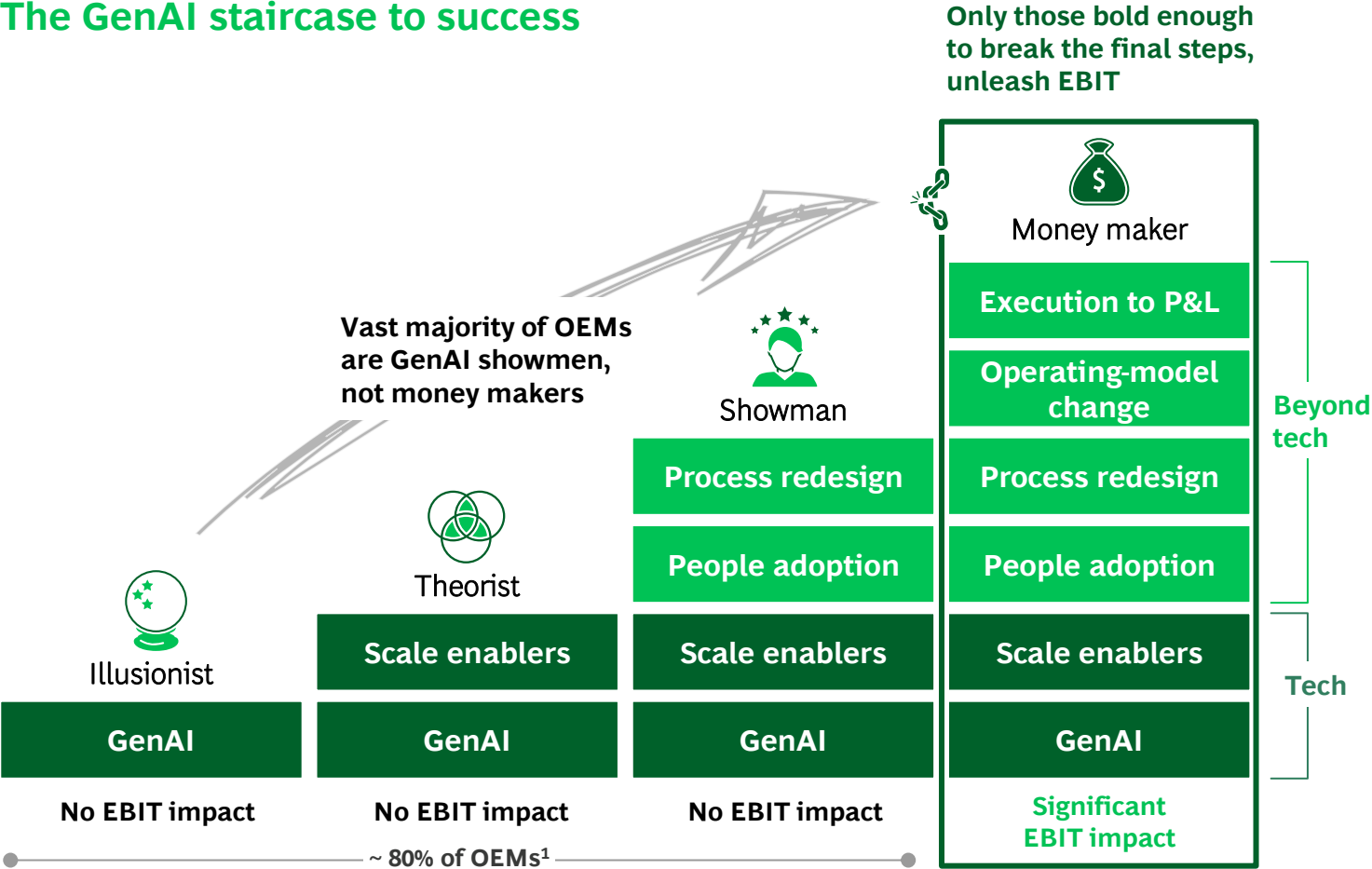
Reinvents customer interaction and sales



Reshapes product strategy

GenAI is the game-changer of the industry, yet most OEMs fail to make money, remaining half-heartedly engaged “showmen”

The GenAI staircase to success



Most OEMs remain **stuck as “showmen”** – achieving visibility but not financial impact



True EBIT value only emerges when companies move **beyond tech**

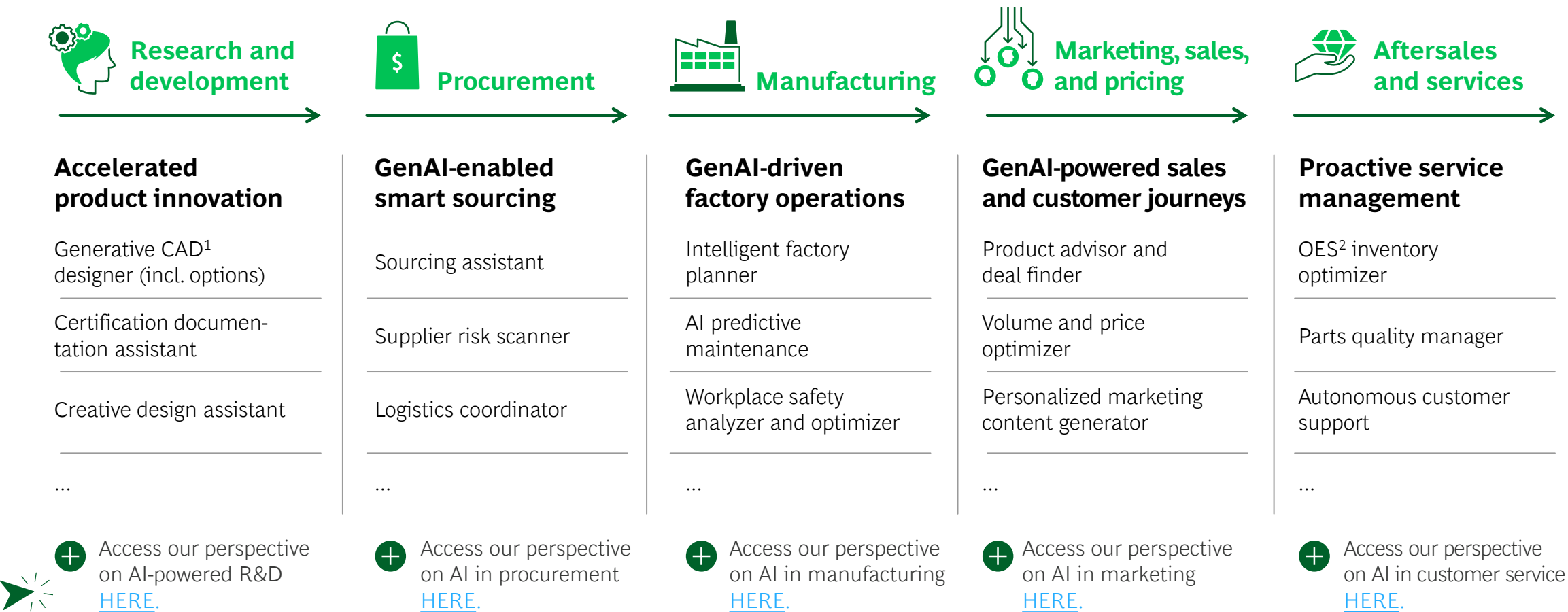


Only bold adopters who climb the full staircase **unlock full EBIT potential**

1. MIT’s *State of AI in Business 2025* report finds that 95% of companies aren’t seeing returns on GenAI investments
Source: BCG analysis

Unlocking full EBIT potential requires a GenAI E2E transformation in each step of the value chain

Significant GenAI potential can be found along each step of the value chain

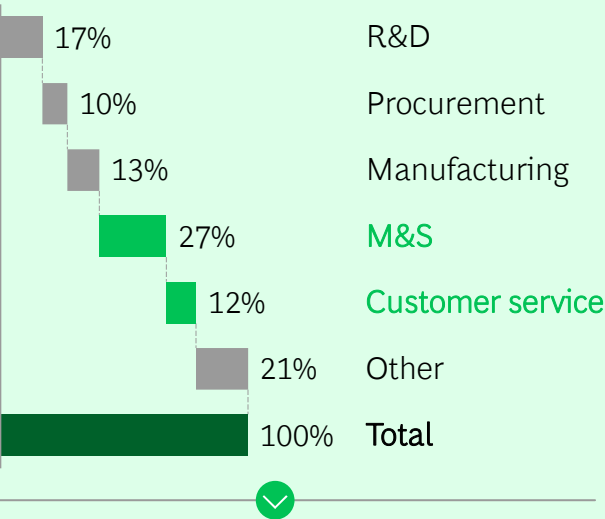


1. CAD = computer-aided design 2. OES = original equipment supplier

Marketing and sales are a strong starting point for a GenAI transformation based on highest AI value potential across functions

AI value potential across functions

Distribution of AI value potential in terms of top-line growth and cost reduction



Customer-centric workflows account for ~40% of the perceived benefits from AI

Source: BCG Build for the Future 2025 Global Study (n=1,250; n=67 for automotive and mobility; board members, C-level, executives, and function leaders)

To reach the money-maker level, OEMs must focus on GenAI projects that are significant in size and fast in time-to-impact



High technical maturity and data availability – Marketing and sales rely on structured data and established tools, creating ideal conditions for quick GenAI enablement



Fast realization of business value – With all levers in one function, ROI can be delivered quickly from lead generation to conversion and upselling



Largest lever on the P&L – As the biggest share of profit and loss, marketing and sales provide the strongest potential for EBIT impact across the value chain



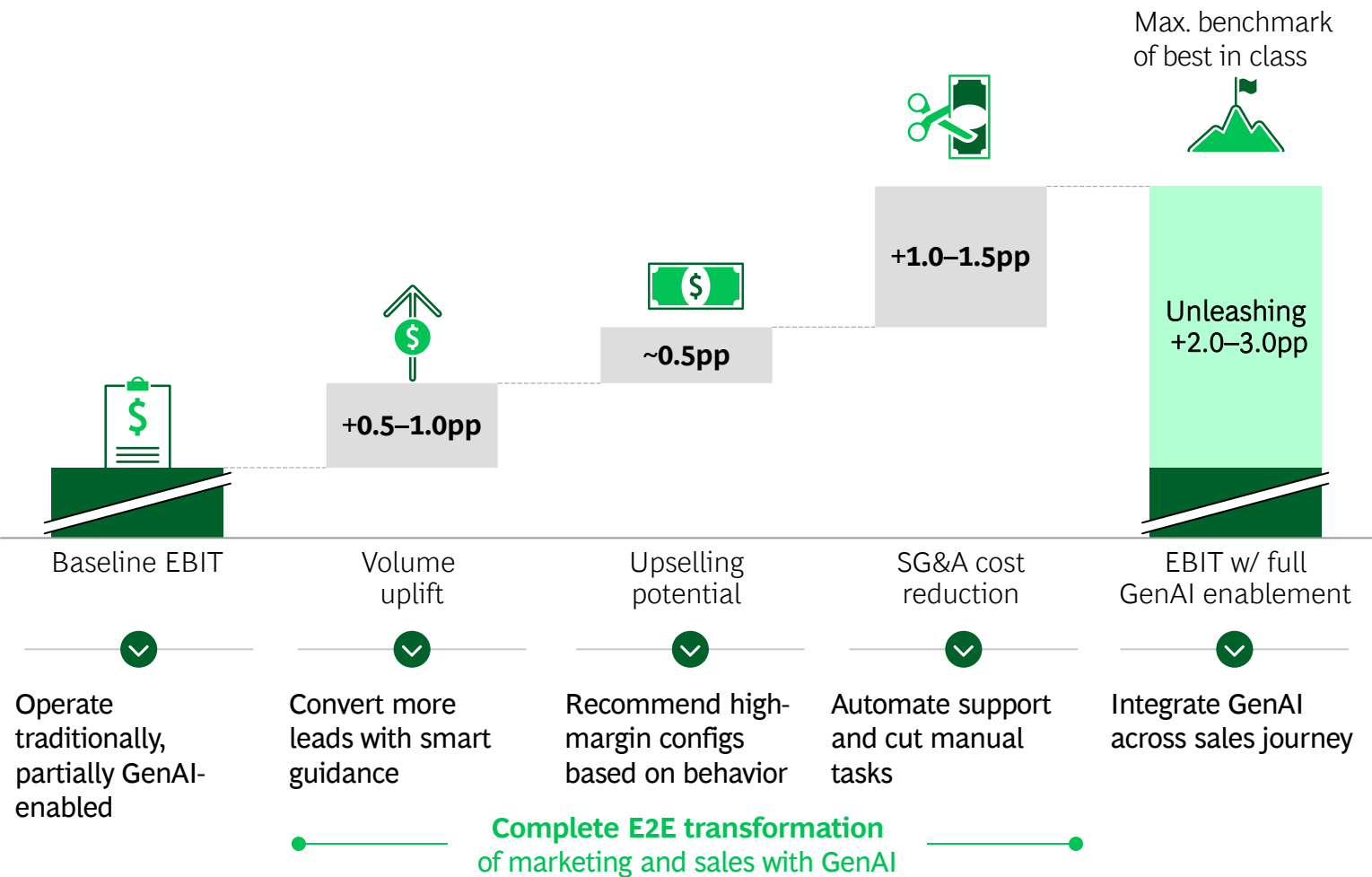
Broad and proven set of use cases – From branding to personalized upselling, marketing and sales offer the richest field for GenAI with measurable results



High threat of doing nothing – Without GenAI-driven engagement, others will dominate customer journeys and marginalize OEMs as mere hardware providers

GenAI has potential to unlock 2-3pp EBIT uplift in marketing and sales

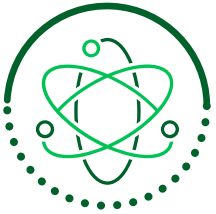
Unleashing 2-3pp EBIT potential across marketing and sales



Fully leveraging GenAI in marketing and sales will have...

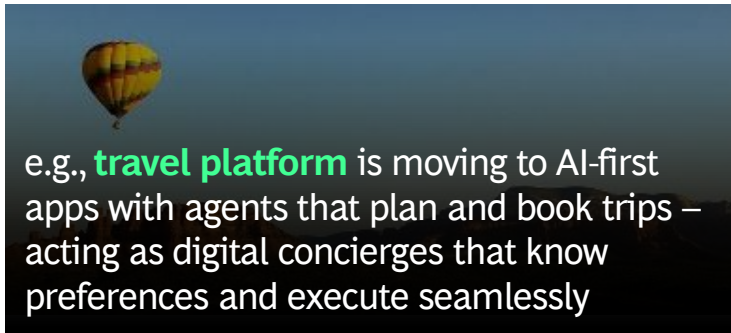
- ... the potential to unleash 2-3pp of EBIT
- ... clear winners and losers – don't risk becoming irrelevant
- ... the risk of losing 1-2pp EBIT if not committing fully

Cooler, smarter, faster – GenAI is set to revolutionize marketing and sales, reshaping customer interactions and boosting internal performance

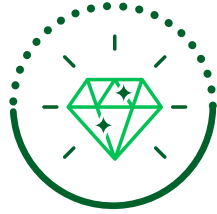


Cooler: Reinventing the customer journey

Personal, engaging, seamless interactions

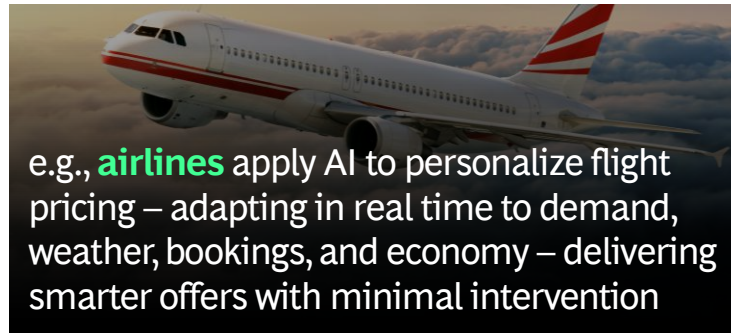


e.g., **travel platform** is moving to AI-first apps with agents that plan and book trips – acting as digital concierges that know preferences and execute seamlessly



Smarter: Optimizing commercial excellence

Data-driven offers, pricing, stocking, and volume steering

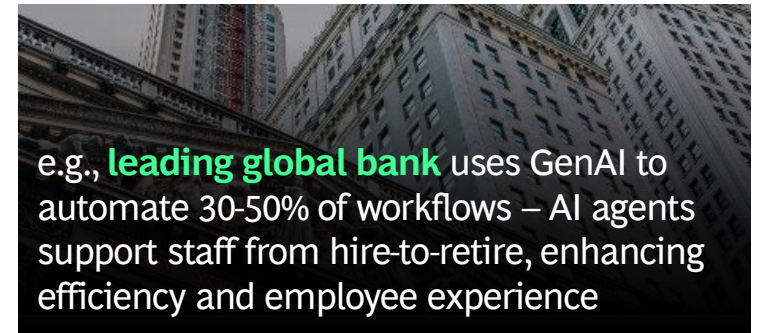


e.g., **airlines** apply AI to personalize flight pricing – adapting in real time to demand, weather, bookings, and economy – delivering smarter offers with minimal intervention



Faster: Driving organizational efficiency

Automated, adaptive, lean operations



e.g., **leading global bank** uses GenAI to automate 30-50% of workflows – AI agents support staff from hire-to-retire, enhancing efficiency and employee experience



In the following: How to innovate the customer journey in automotive with GenAI?

One in two consumers is dissatisfied with today's car-purchasing experience

50%

of recent car buyers are
not satisfied with their
purchasing experience

Today's customer journey is overly complex, is disconnected, and fails to meet customer expectations

Customers feel that they...



... **do not get the best deal** because they are forced to negotiate – and negotiating is highly uncomfortable



... **do not have enough choice** because dealers are often biased and promote only selected brands



... **are not presented with customized options** that are tailored to their personal preferences and usage patterns



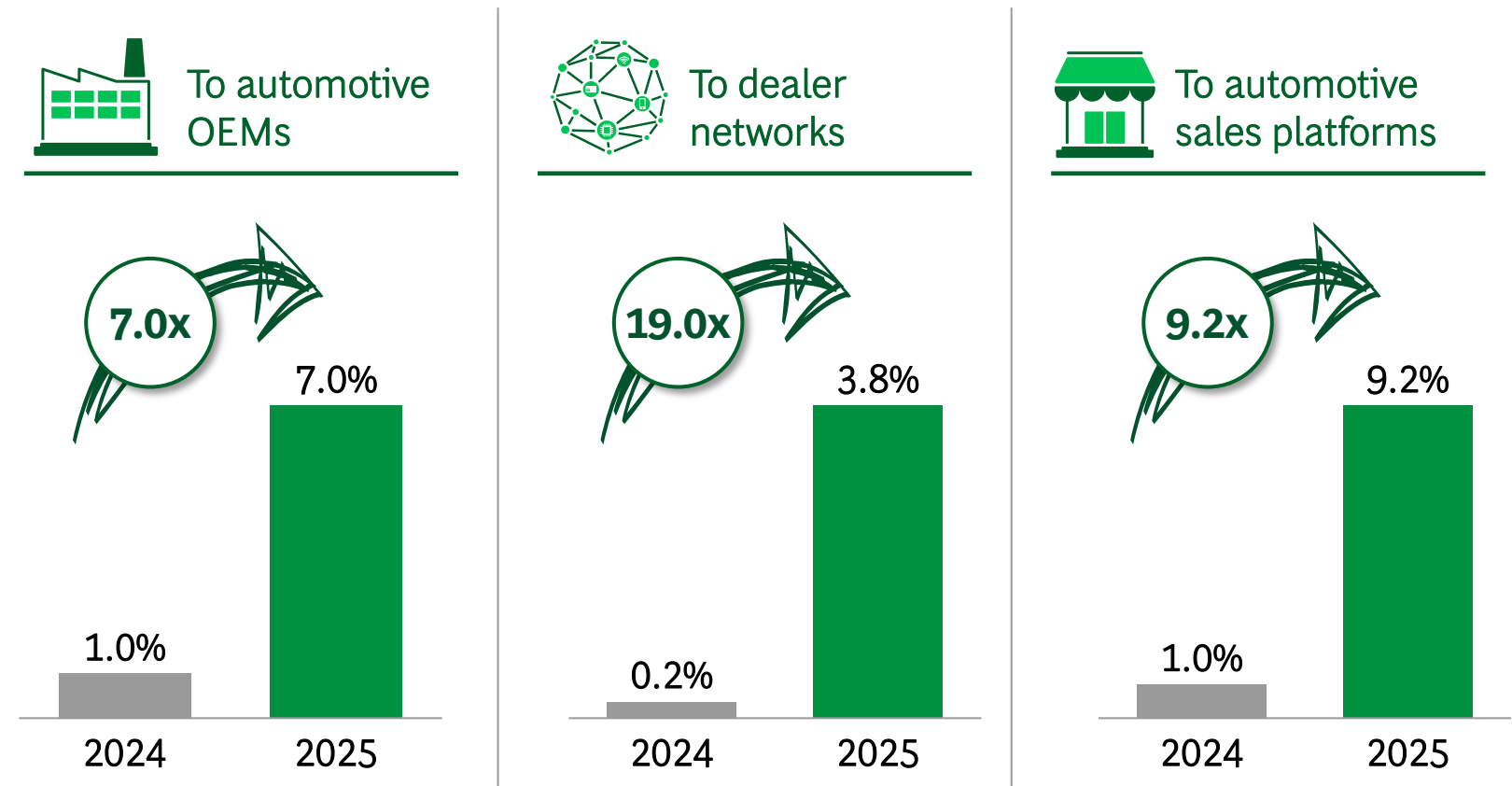
... **do not have enough time to research**, compare, and understand all relevant options and offers in a meaningful way



... **do not understand the product landscape** well enough to confidently compare EVs, hybrids, new models, or unfamiliar brands

The customer journey is undergoing a tectonic disruption: GenAI is becoming the lead advisor for product research

Shifts in incoming external traffic share from LLMs



Evolution of customer behavior



New entry point: Customers increasingly start their journey in LLMs before moving on to other touch points



Trusted advisor: Customers increasingly lean on LLMs for credible guidance that builds loyalty and drives sales



Urgent adaptation: Automotive marketing and sales must radically reimagine the customer journey as behaviors shift at scale

Note: Considers global traffic (global URLs) and domestic traffic (domestic URLs); 2025 values based on last 6 months as of August 2025; considers all major global OEMs, dealer networks, and platforms Source: SimilarWeb, BCG analysis

Customers expect unbiased “product advisor” and actionable “deal finder” along the customer journey



Customers expect **unbiased, personalized, immediate, and actionable** advice

In essence, customers desire **two functionalities**:

- A** Product advisor
- B** Deal finder

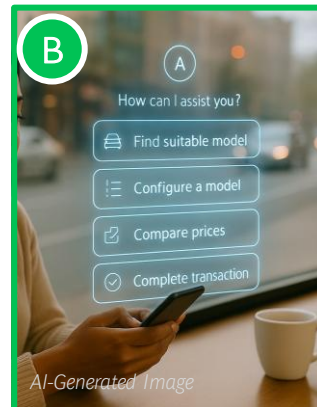
A



PRODUCT ADVISOR

- **Personalizes content** for advice on products
- **Finds brands and models** that fit your needs
- **Explores car features** that matter to you
- **Configures cars** according to your budget

B



DEAL FINDER

- **Finds the best prices** for a car configuration
- Identifies **best financing deals** for your needs
- **Targets communication** for better conversion
- **Purchases a vehicle** right in the GenAI tool

LLMs along the customer journey



Awareness



Consideration



Intent



Purchase

Product advisor configures the right car based on prior knowledge and interaction, deal finder secures the best path to purchase

A PRODUCT ADVISOR

= LLM 5 >



Hi, I'm starting to look for a new car. I've got two kids, a dog, and we just moved out of the city. I do a mix of short commutes and weekend trips, and we installed a wallbox at home.

Thanks for the context! Based on your lifestyle, I'd recommend the new VIREON Altuva Y3 HybridDrive – it balances city efficiency with extra space and AWD for family outings.



Interesting. I'm used to compact cars – is the Y3 too big to handle comfortably?

Not at all. The adaptive steering and compact turning radius make it nimble in tight spots. And it comes with smart parking assist if you'd like.



Okay, I'm curious. Can we go through the configuration together?

- **Recommends brands, models, and trims** based on needs and budget
- **Translates preferences** into tailored configurations
- Offers **unbiased, brand-agnostic advice** across full market in real time

B DEAL FINDER

= LLM 5 >



Can you help me get the best deal for the Altuva Y3 we talked about? I'd prefer leasing, with a \$5k downpayment and monthly under \$500.

Absolutely. I'm checking current offers in your area. There's a VIREON Direct lease for \$489/month with loyalty bonus and winter package included.



Nice. What about trade-in for my 2017 Cera 320?

Local dealers estimate \$7,200 based on condition and mileage. I can prefill the paperwork and secure a final quote after inspection.



Perfect. Let's lock that in – I want to have it by end of the month.

- **Compares** leasing, financing, and purchase options for configurations
- **Identifies optimal purchase** time and channel by inventory and incentives
- **Acts on behalf of customers** by contacting dealers and prefilling offers

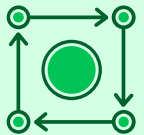
OEMs must deploy, reshape, and invent to unlock full potential of GenAI



Deploy

Enhance presence in third-party GenAI assistants

Be present in GenAI chatbots to reach a broad audience quickly and position your brand where the customer journey begins



Reshape

Partner with multibrand car marketplaces

Team up with multibrand marketplaces to combine reach with trusted, GenAI-powered customer journeys tailored to tomorrow's car-buying experience



Invent

Build your own branded assistant

Create a branded assistant that offers a fully personalized, end-to-end experience and unlock full control over customer interaction, data, and conversion

Deploy | Enhance presence in third-party AI assistants – visibility in LLMs and answer engine optimization will be key



Customer journey example

≡ LLM 5 >



I'm 33, live in Secaucus, New Jersey, and need an affordable, compact family car under \$30k for city driving. I could charge my car at work during the day. I love listening to music.



Customers expect quick, objective, and contextual answers



Strategic implications for OEMs

- I To stay relevant and visible, **answer engine optimization (AEO)** becomes critical
- II **Brand and product differentiation** will gain new importance
- III **Brand safety** is a critical concern – OEMs need to **monitor** GenAI responses



How to get found by GenAI

Answer engine optimization



Build content for AI retrieval

Use structured, factual content like Q&As and explainers. Focus on clarity and relevance for GenAI prompts



Structure for machine readability

Apply schema markup and clean HTML. Make data easily accessible and scannable by GenAI models



Feed the knowledge ecosystem

Keep data updated on platforms like Wikipedia. Support with content on trusted forums and social media



Enable agent access via interfaces

Provide APIs for configurations, pricing, and stock. Let GenAI tools act (e.g., compare offers or book test drives)



Track GenAI visibility, not just clicks

Measure GenAI citation share and answer presence. Build visibility dashboards beyond classic web metrics

Reshape | Partner with multibrand car marketplaces – combine reach with trusted, GenAI-powered customer journeys



Customer journey example

LLM 5 >



I'm upgrading from my 2022 EV in Guangzhou. My dealer offered me a new model for ¥174,300, but I want a better deal. What's the best lease offer nearby, with incentives and fast delivery?



Customers expect real-time, objective deal comparisons



Strategic implications for OEMs

- I OEMs should **invest in strategic partnerships** with multibrand marketplaces
- II **Data interfaces** will be required to share product, price, and other information
- III Multibrand marketplaces and OEMs must **jointly navigate** to win **customer trust**



How to win in GenAI-powered multibrand car marketplaces



Secure data interfaces

Share structured product, pricing, and availability data with marketplaces to ensure accurate GenAI recommendations



Balance visibility and trust

Support brand placement while preserving the platform's credibility as an independent, multibrand advisor



Co-design the customer journey

Collaborate to shape GenAI-powered buying flows that combine marketplace reach with OEM depth



Prioritize strategic segments

Target partnerships by market, brand tier, or use case (e.g., EVs or urban buyers) for tailored impact



Monitor marketplace performance

Track share of voice, recommendation rates, and conversion in GenAI-driven flows to refine engagement

Invent | Build your own branded assistant – leverage CRM data to offer hyper-personalized, predictive guidance to customers



Customer journey example

≡ LLM 5 >



My lease ends soon, and I want to upgrade. Should I go hybrid or full electric? Look at my past driving behavior and my use of car features, suggest useful features, and make sure I get it before skiing season



Customers expect hyper-personalized, predictive guidance



Strategic implications for OEMs

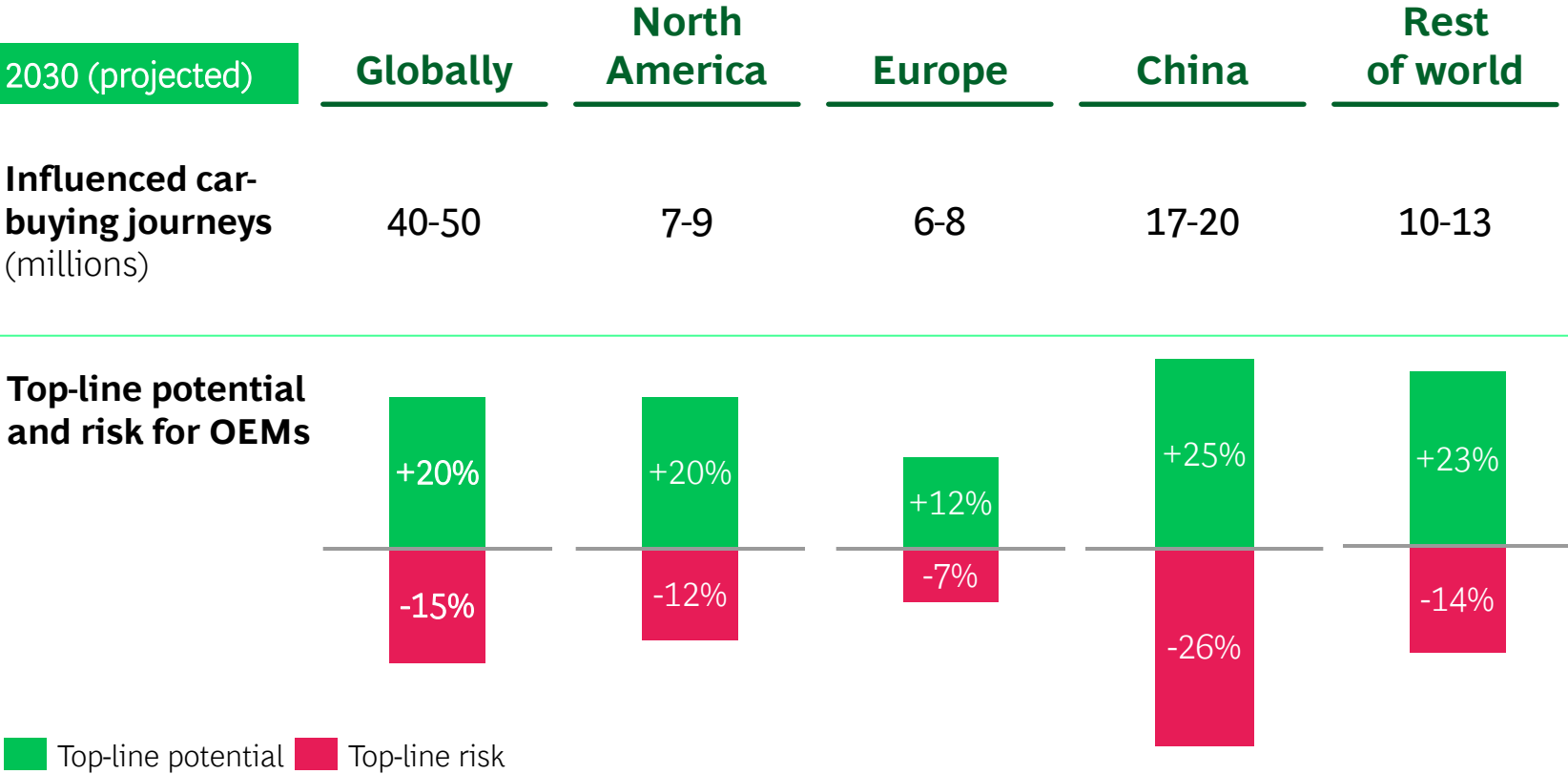
- I OEM-branded GenAI assistants are **more than nice add-on features** – they are a must
- II OEMs that miss out on this opportunity may **find themselves outpaced**
- III Requires building and orchestrating **integrated GenAI stack and data ecosystem**

What it will take to build an own-branded GenAI buying assistant

- 1  Define a clear vision
- 2  Invest in tech talent
- 3  Make the data AI-ready
- 4  Orchestrate the tech stack
- 5  Design for flexibility
- 6  Build feedback loops
- 7  Establish strong governance
- 8  Enable end-to-end journey

Full GenAI activation along entire journey can drive +20% growth globally

Illustrative example



Key implications



+20% revenue upside for OEMs that move early and embed GenAI end-to-end



Up to **-15% downside risk** for laggards facing **churn and price erosion**



Winners **capture share** from **slower peers** through better customer targeting



Regional spread is wide – esp. in China, where **adoption is faster and loyalty lower**

Source: Comprehensive BCG model incorporating new and young used-car (< 3 years) private customer registrations, GenAI adoption trends from other industries, and BCG industry expertise

To win the future of car sales and beyond, these moves matter now



Automotive OEMs

Be fast, be decisive,
be holistic

GenAI is reshaping automotive sales – early movers win

- Show up in third-party GenAI assistants
- Partner with multibrand car marketplaces
- Build branded assistants to own customer interface and data



Automotive dealers

Capture leads, adapt entry points, think partnerships

Entry points shift to AI – lead generation is core

- Ensure dealership offers surface in AI assistants
- Align with AI-driven discovery and marketplaces
- Explore group-owned assistants for differentiation



Sales platforms

Scale trust, orchestrate journeys, build data foundations

Platforms must own the orchestration role

- Integrate into AI ecosystems to capture intent
- Position as trusted, GenAI-powered shopping hubs
- Build platform assistants with inventory, finance, service



To explore how GenAI can unlock opportunities beyond automotive sales, access our latest thinking [HERE](#).



Learn more | Access the full report from BCG X & OpenAI

For further insights:

BCG X & OpenAI report on automotive sales



Scan the QR code



Or access on

<https://www.bcg.com/publications/2025/will-ai-become-best-car-sales-advisor>

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