accenture

RETHINK, REINVENT, REALIZE.

How to successfully scale digital innovation to drive growth

AUTOMOTIVE – OES

INTO THE NEW

THE IDEA:
FIND INDUSTRY X.0 BEST PRACTICES!

OUR PREMISE AND RESEARCH QUESTION

When it comes to digital transformation, scaling innovation pilots is critical.

Yet many clients tell us that they are struggling with this very step – and feel that they might get stuck with “piecemeal projects” that don’t deliver significant value.

Can we find key best practices that could help them overcome their challenges, and drive real change, for real new growth?

GLOBAL SURVEY AT-A-GLANCE

n=1,350 responses from companies with 1bn+ in revenue

60% C-suite respondents

13 industries and **17** countries

AUTOMOTIVE – OES AT-A-GLANCE

n=108 responses from companies with 1bn+ in revenue

57% C-suite respondents

13 countries

Source: Accenture 2019 Industry X.0 Survey

THE RESULT:
IT'S ALL A MATTER OF MANAGEMENT!

OUR KEY FINDINGS

Companies are scaling more than 60 percent of all digital PoCs, but less than two out of ten companies are doing it successfully.

A SURPRISE!
(we didn't expect to find that many companies trying to scale!)

What's the difference? **The leading 15 percent manage their scaling efforts differently**.

Following the **four best practices** of these "Champions" is a recipe to **succeed at innovating for digital transformation.**

THE REASON TO READ!
(these best practices are what readers will come for)

Source: Accenture 2019 Industry X.0 Survey

Q:

WHAT’S THE CURRENT STATUS IN SCALING DIGITAL INNOVATION?

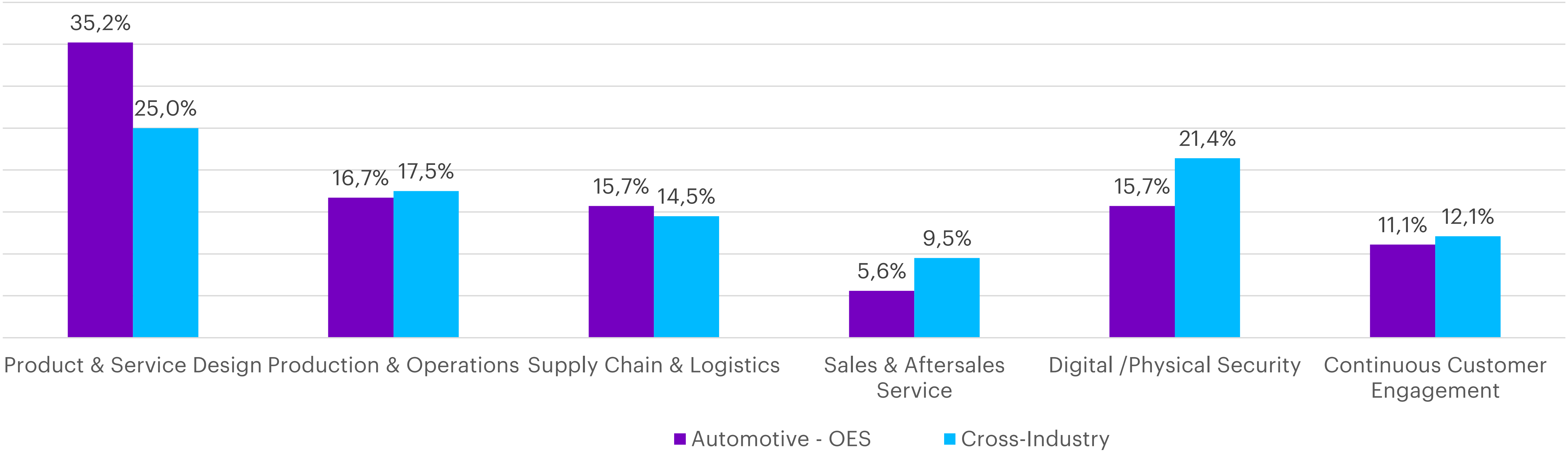
A:

THINGS ARE SPEEDING UP – IN SURPRISING WAYS.

DESIGN AND PRODUCTION AND OPERATIONS ARE INNOVATION PRIORITIES FOR AUTO–OES COMPANIES

Design is an obvious innovation priority as they focus deeply on product quality and features. Production & Operations is a close second due to the emphasis on streamlined manufacturing operations and rapid turnaround.

INNOVATION PRIORITY*



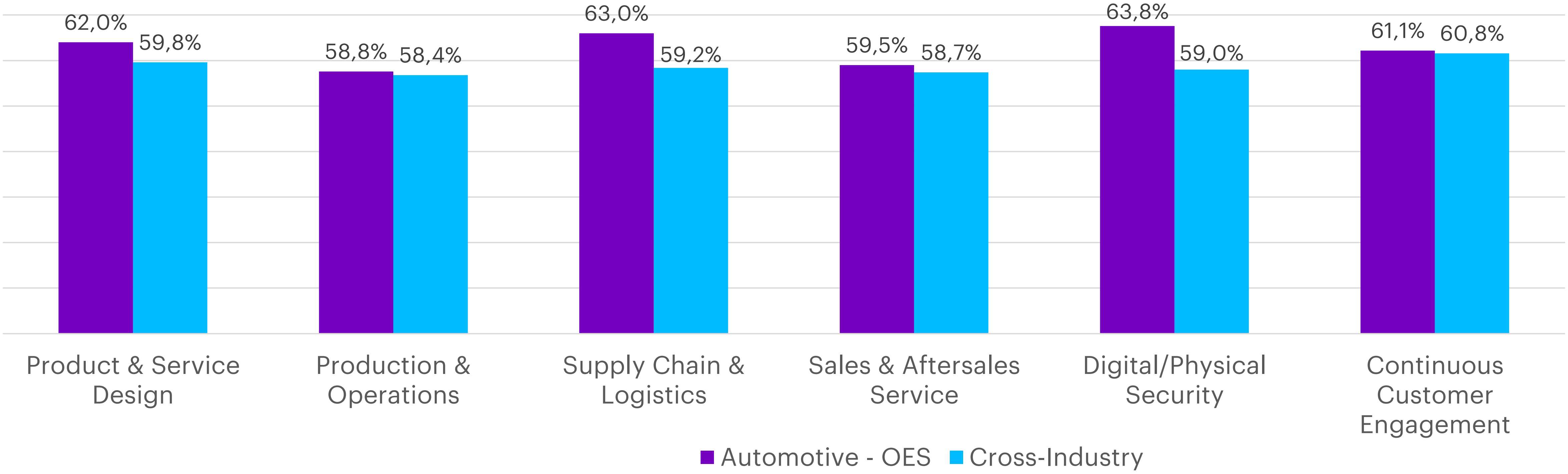
* "innovation priority" = percentage of respondents who are prioritizing digital innovation in these business areas

Source: Accenture 2019 Industry X.0 Survey

AUTOMOTIVE – OES COMPANIES ARE SCALING DIGITAL POCs ACROSS BUSINESS FUNCTIONS

Automotive – OES manufacturers are almost evenly scaling digital POCs across key business areas

SCALING INTENSITY*



* "scaling intensity" = ratio of avg. number of proof of concepts scaled to avg. number initiated in each business function, across discrete and process industries.

Source: Accenture 2019 Industry X.0 Survey

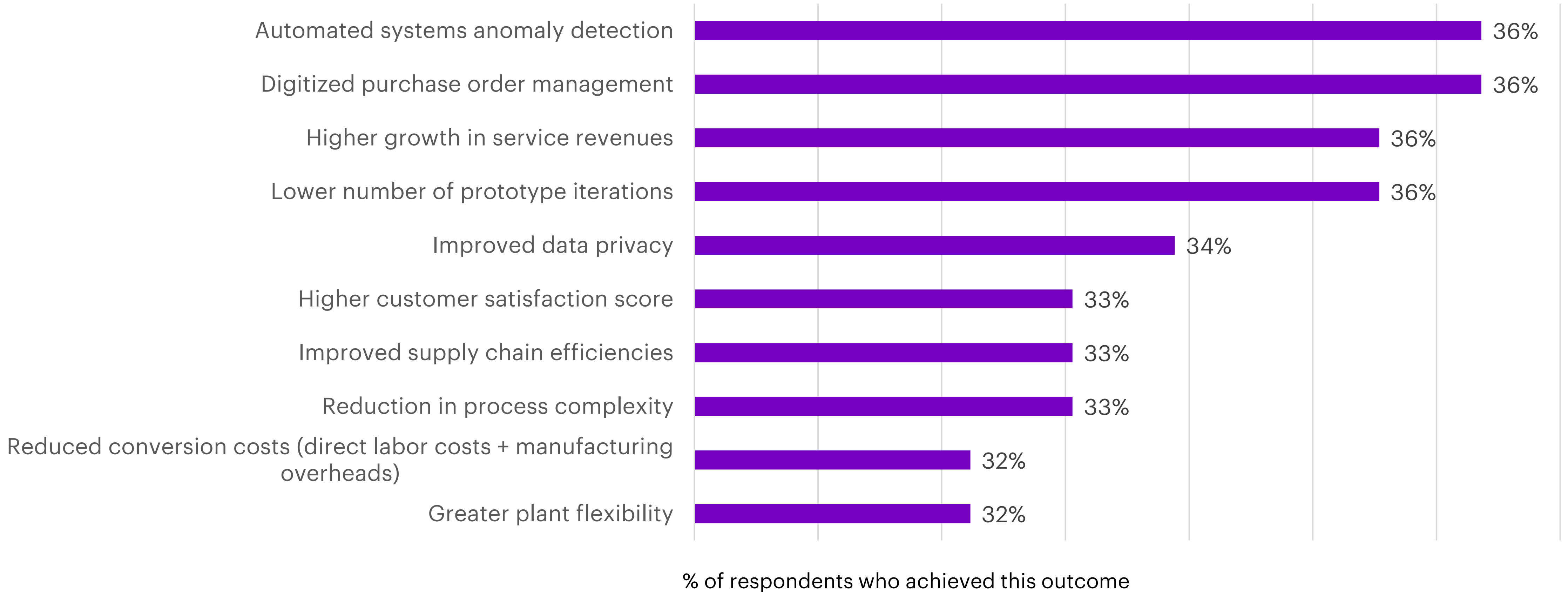
AUTOMOTIVE – OES COMPANIES RECOGNIZE THE NEED FOR INNOVATING AT SCALE TO:

Operate at speed with an **innovative and robust supply chain,** and

Continuously **deliver reliable and connected products to the customers.**

ANOMALY DETECTION AND PURCHASE ORDER MANAGEMENT ARE KEY OUTCOMES…

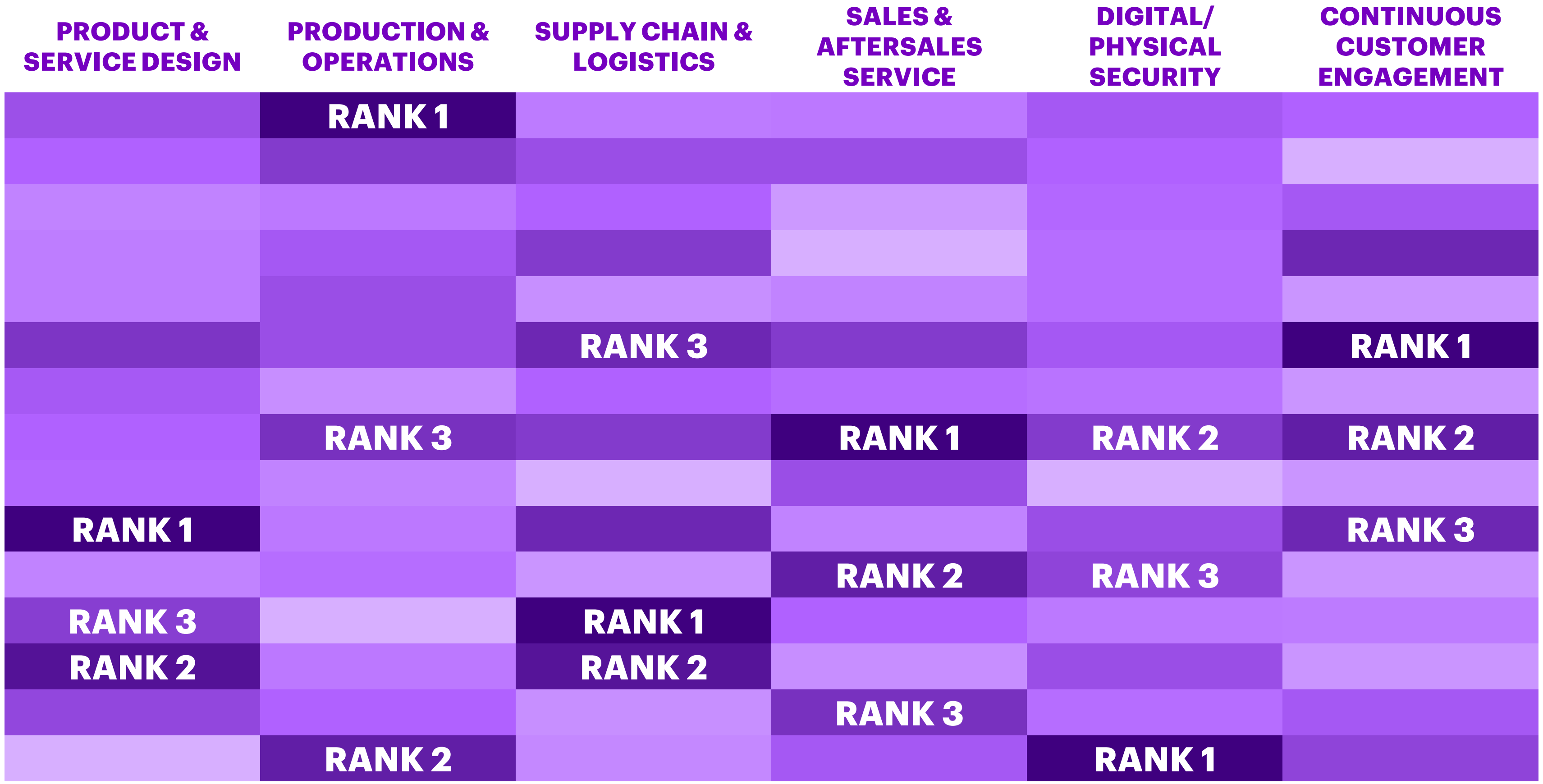
Top 10 outcomes targeted by Automotive – OES companies through scaling of digital PoCs



Source: Accenture 2019 Industry X.0 Survey

...AND THEY ARE CHOOSING BIG DATA ANALYTICS, AR/VR & CLOUD TO DRIVE THESE OUTCOMES

Top 3 technologies leveraged to facilitate scaling, by function



	PRODUCT & SERVICE DESIGN	PRODUCTION & OPERATIONS	SUPPLY CHAIN & LOGISTICS	SALES & AFTERSALES SERVICE	DIGITAL/ PHYSICAL SECURITY	CONTINUOUS CUSTOMER ENGAGEMENT
AI/AI-powered Automation		RANK 1				
AI Assistants						
3D printing						
Mobility						
IIOT Sensors & Transmitters						
Immersive Experience			RANK 3			RANK 1
Industrial Robotics						
Big Data Analytics		RANK 3		RANK 1	RANK 2	RANK 2
Digital Twin						
Cloud	RANK 1					RANK 3
Blockchain				RANK 2	RANK 3	
Autonomous Vehicles	RANK 3		RANK 1			
Machine Learning/Deep Learning	RANK 2		RANK 2			
Quantum Computing				RANK 3		
Cyber Security Protocols		RANK 2			RANK 1	

Source: Accenture 2019 Industry X.0 Survey

Q:

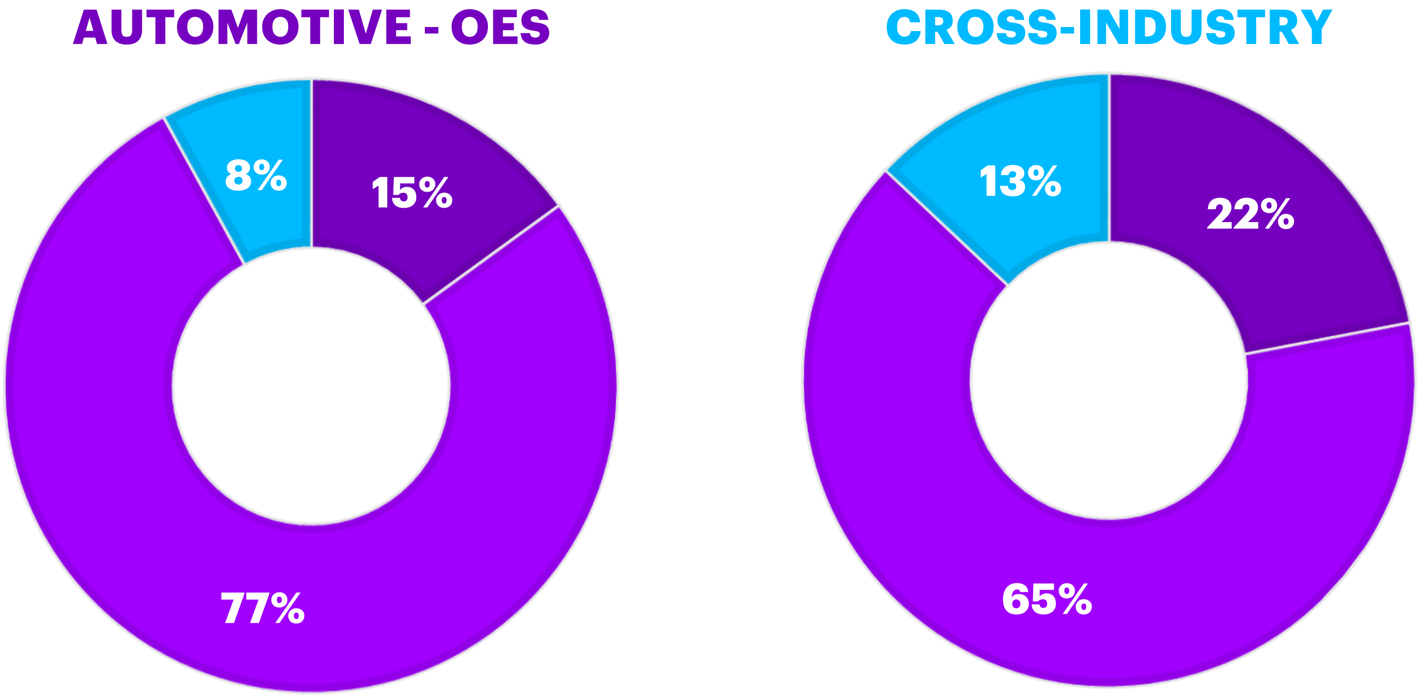
WHAT ABOUT SCALING SUCCESS – DOES EVERYONE SEE IT?

A:

NO. SOME COMPANIES RACE AHEAD, OTHERS STRUGGLE.

SO, WHO'S SCALING THE BEST?

The Automotive – OES industry has a lower percentage of Champions compared to the global average



CHAMPIONS
Earn RODI higher than industry ROIC and industry RODI; scale more than 50% of their digital Proof-of-Concepts

CONTENDERS
Earn RODI lower than industry ROIC and lower than industry RODI; scale more than 50% of their PoCs

CADETS
Earn RODI lower than industry ROIC and lower than industry RODI; scale less than 50% of their PoCs

*Percentage of champions in each geography = 100 x (The number of champions in a particular geography)/(Total number of companies surveyed in that particular geography)

**Percentage of champions in each industry = 100 x (The number of champions in a particular industry)/(Total number of companies surveyed in that particular industry)

Source: Accenture 2019 Industry X.0 Survey

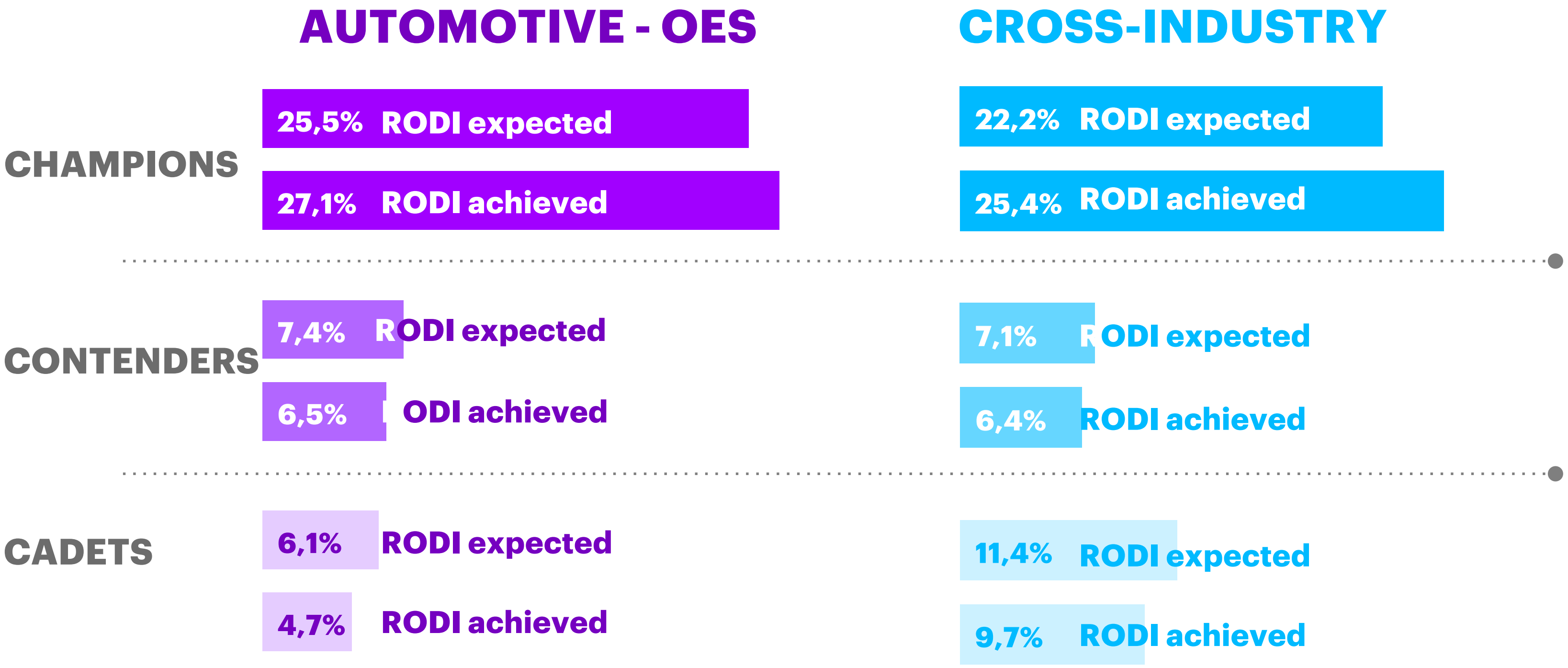
AUTO-OES CHAMPIONS SET THEMSELVES HIGHER “RODI” TARGETS AND ACHIEVE THEM TOO.

Automotive – OES Champions achieved over 4 times the RODI clocked by Contenders; proving that its not how much you scale, but how you scale that matters

Returns on Digital Investment (RODI)

RODI = Returns on Investment (Net Gain/Total Investment) from scaled digital PoCs across all the key business functions.

We asked executives about the average RODI they expected before scaling digital PoCs, and the RODI they finally achieved.



Source: Accenture 2019 Industry X.0 Survey

Q:

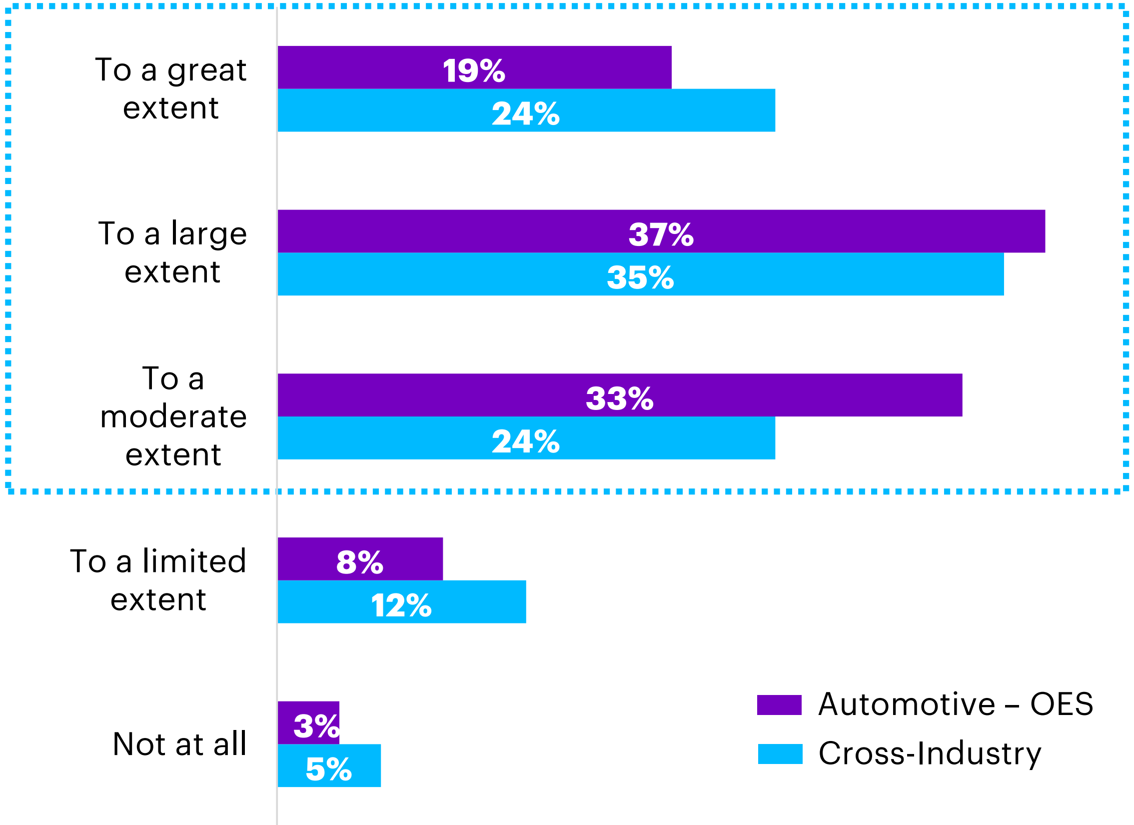
WHAT'S STOPPING CONTENDERS AND CADETS FROM BECOMING CHAMPIONS?

A:

LIKE CHAMPIONS, CONTENDERS AND CADETS TOO FACE ALIGNMENT AND TALENT DEFICITS. WHILE CHAMPIONS OVERCOME THESE, OTHERS CONTINUE TO GRAPPLE WITH THEM.

SECURING FUNDING FOR DIGITAL REINVENTION FROM THE BOARD IS A MAJOR ROADBLOCK FOR AUTO – OES COMPANIES

EXTENT TO WHICH SECURING FUNDING FROM THE BOARD FOR DIGITAL REINVENTION IS A CHALLENGE



RANK	KEY REASONS WHY BOARDS OF AUTOMOTIVE – OES COMPANIES REFUSE TO FUND DIGITAL REINVENTION
1.	Failure to scale digital PoCs in the past
2.	Shortage of and difficult access to digital skills; Lack of a clear digital roadmap; Foreseen immaturity of technology
3.	Shortage of budget for capital investments
4.	Inadequate ROI from digital investments
5.	Poor understanding of digital reinvention within Top Management
6.	Lack of a digital-native mindset among Board members

Source: Accenture 2019 Industry X.0 Survey

ALIGNMENT CHALLENGES AND SKILL DEFICITS ARE OF PRIMARY CONCERN

Automotive – OES executives' top picks* for "biggest challenges to scaling digital PoCs"

■ Biggest challenge
▨ Second biggest

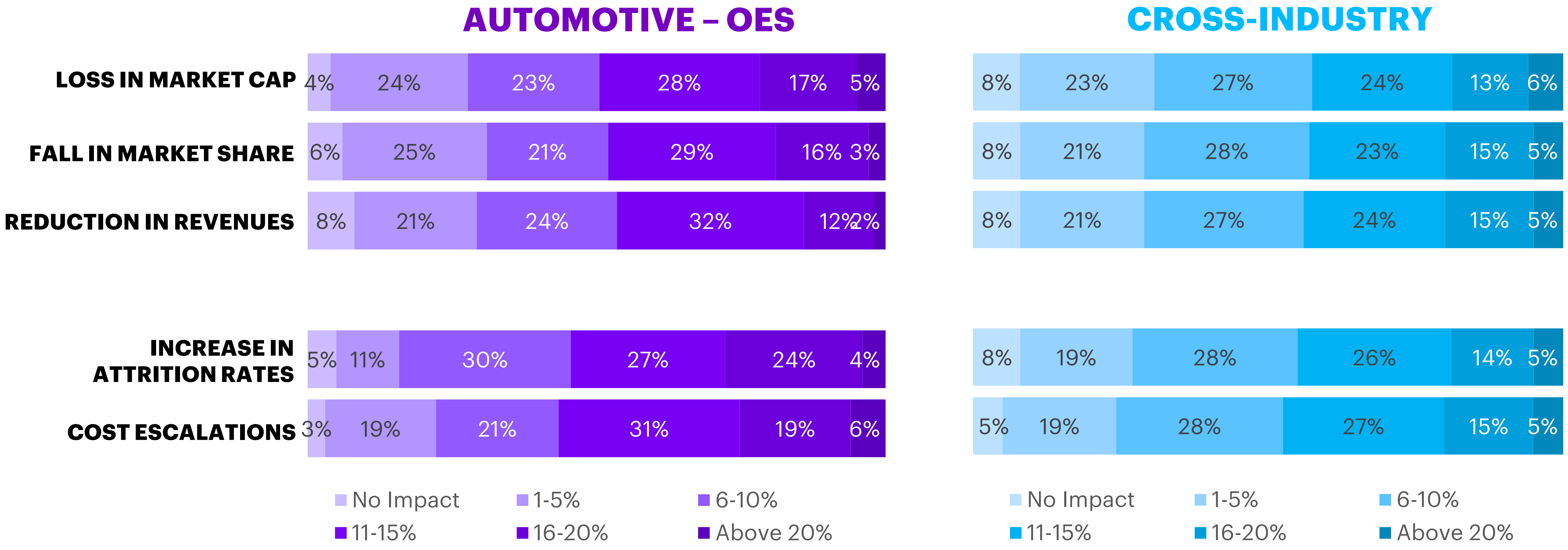
	PRODUCT & SERVICE DESIGN			PRODUCTION & OPERATIONS			SUPPLY CHAIN & LOGISTICS			SALES, AFTER SALES SERVICE			DIGITAL / PHYSICAL SECURITY			CONTINUOUS CUSTOMER ENGAGEMENT		
CHAMPIONS (CH), CONTENDERS (CT), CADETS (CA)	**CH**	**CT**	**CA**	**CH**	**CT**	**CA**	**CH**	**CT**	**CA**	**CH**	**CT**	**CA**	**CH**	**CT**	**CA**	**CH**	**CT**	**CA**
Inability to align top and middle management to innovate customer value		■				▨	■	■	■		▨	■	■					■
Inability to align talent pools and IT assets across key business functions	▨							▨					▨		▨			
Inability to align top management view on 'digital value'				■			▨								■			
Lack of adequate skills to translate digital proofs of concept into scaled-up action plans	■								▨									
Inadequate infrastructure to innovate relevant digital value with speed					▨	■												
Absence of culture to stimulate technology driven cross-functional innovations			▨														■	

* other options which weren't picked and often included: "Inability to align to in-house innovation systems/architecture with agile digital ecosystems", "Lack of skills to innovate with digital technologies and platforms," "Lack of skills to identify and articulate business case for digital," "Absence of culture to design, develop and deliver digital business models," "Absence of culture to stimulate cross-functional innovation with digital," "Absence of culture to drive on-time innovation of monetizable customer experiences", "Lack of partnerships to bridge digital gaps across processes," "Inadequate metrics to systematically track digital investments"

Source: Accenture 2019 Industry X.0 Survey

WHAT DO COMPANIES STAND TO LOSE IF THEY FAIL TO ADDRESS THESE CHALLENGES?

Around 80% of Automotive – OES leaders fear significant escalations in cost (>5%) alongside losing talent (>5%), if they fail to overcome organizational challenges

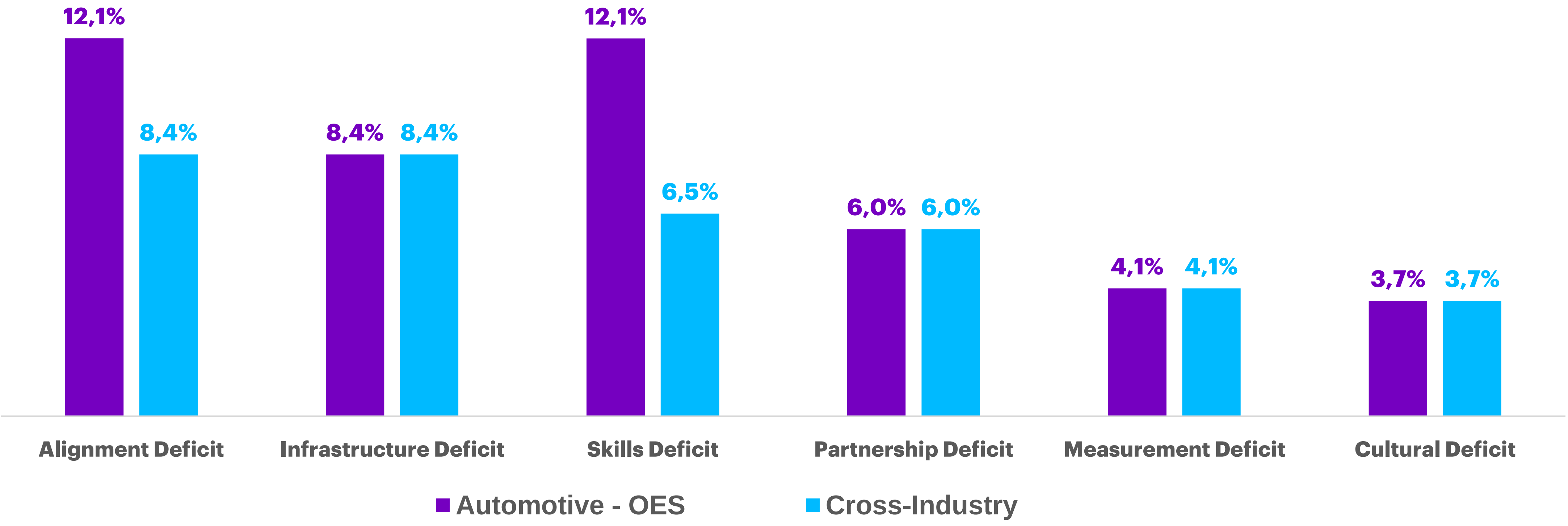


Source: Accenture 2019 Industry X.0 Survey

HOW MUCH CAN COMPANIES GAIN IF THEY OVERCOME THESE DEFICITS?

Automotive – OES companies have the opportunity to achieve sizeable increase in RODI, if they focus on overcoming skill and alignment deficits

INCREMENTAL RODI POTENTIAL IF DEFICIT IS OVERCOME



Source: Accenture 2019 Industry X.0 Survey

Q:

HOW DO CHAMPIONS OVERCOME THESE CHALLENGES AND SCALE THEIR DIGITAL INNOVATIONS?

A:

WITH 4 SPECIFIC BEST PRACTICES.

1.

DEFINING THE VALUE THAT GUIDES INNOVATION EFFORTS

Champions assess the opportunities before them, and narrow in on the market opportunities they want to pursue. They then use that clarity to communicate with middle management and direct their innovation efforts to secure expected returns.

2.

FOCUS ON INTERNAL CHANGE AND EXTERNAL VALUE

Champions prefer a measured approach to blend organizational change with digital transformation initiatives, creating what we call an ambidextrous organization. With a clear view of the customer value, managers and employees are less likely to feel blindsided by a digital learning curve that is too steep.

3.

BUILD IN-HOUSE INNOVATION FACTORIES WITH TARGETED INFLUENCE

Champions recognize the enormity of integrating rapidly advancing technologies, along with talent and assets, back into their organization. In line with their ambidextrous approach, they take the vital step to re-rig the core of their organizations, seeding and growing new digital innovations organically within organizational boundaries.

4.

MAP KEY INNOVATION ENABLERS TO APPROPRIATE BUSINESS FUNCTIONS

Most manufacturers use the same enablers to drive innovation, such as software applications to support operations, or analytics platforms to generate better insights. However, Champions alone are masters at matching the support to the function that needs it most and will use it best.

Q: IS THERE A ROADMAP TO MATURE AS AN ORGANIZATION TOWARDS SUCCESSFULLY SCALING DIGITAL INNOVATION?

A: YES THERE IS…

… WE HAVE BUILT ONE LEVERAGING FIVE KEY ORGANIZATIONAL LEVERS

LEADERSHIP & CULTURE

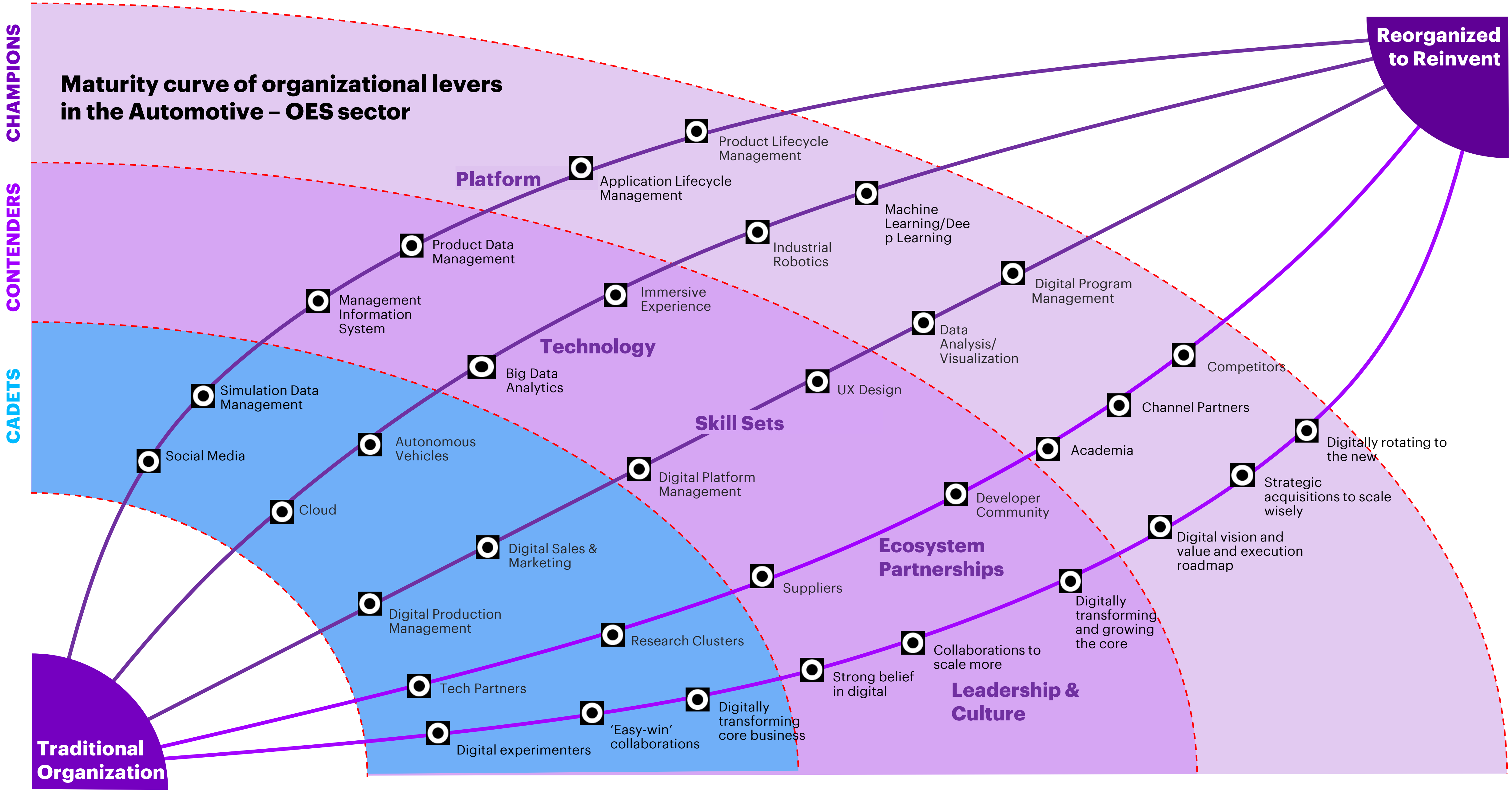
ECOSYSTEM PARTNERSHIPS

SKILLSETS

TECHNOLOGY

PLATFORM

Maturity curve of organizational levers in the Automotive – OES sector



CHAMPIONS

CONTENDERS

CADETS

Traditional Organization

Reorganized to Reinvent

Platform

Social Media

Simulation Data Management

Management Information System

Product Data Management

Application Lifecycle Management

Product Lifecycle Management

Technology

Cloud

Autonomous Vehicles

Big Data Analytics

Immersive Experience

Industrial Robotics

Machine Learning/Deep Learning

Skill Sets

Digital Production Management

Digital Sales & Marketing

Digital Platform Management

UX Design

Data Analysis/ Visualization

Digital Program Management

Ecosystem Partnerships

Tech Partners

Research Clusters

Suppliers

Developer Community

Academia

Channel Partners

Competitors

Leadership & Culture

Digital experimenters

'Easy-win' collaborations

Digitally transforming core business

Strong belief in digital

Collaborations to scale more

Digitally transforming and growing the core

Digital vision and value and execution roadmap

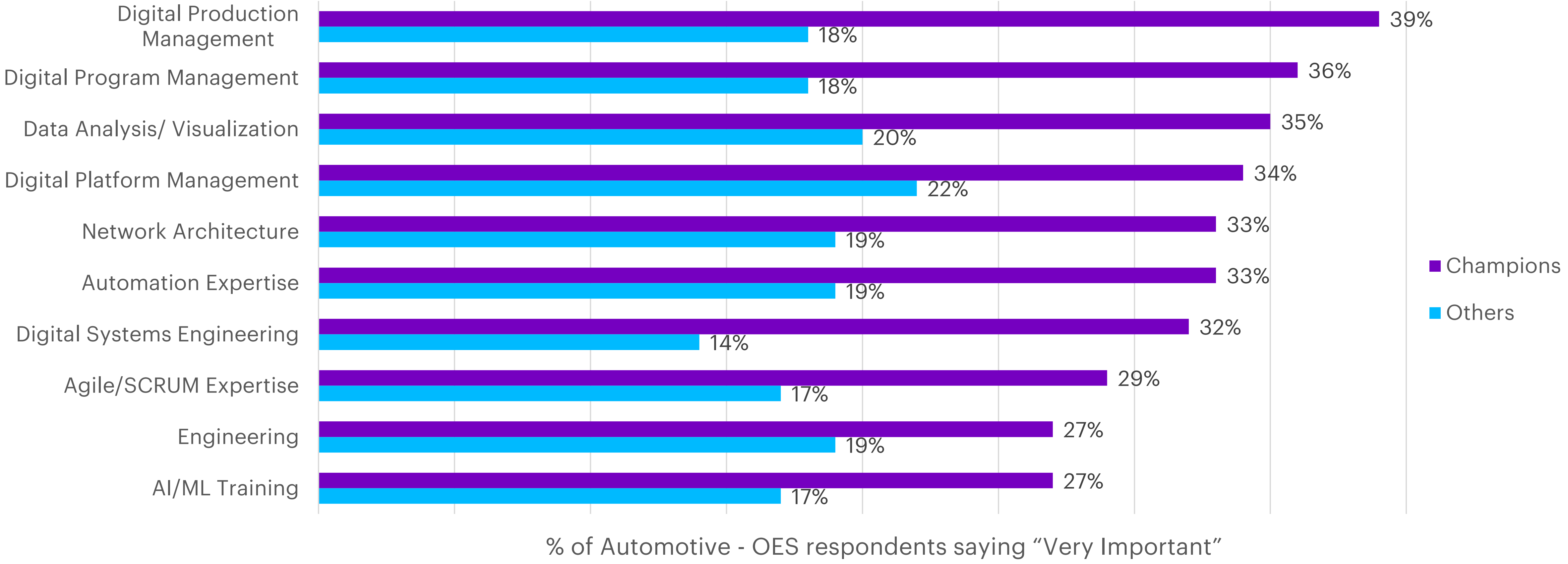
Strategic acquisitions to scale wisely

Digitally rotating to the new

Source: Accenture 2019 Industry X.0 Survey

TOP 10 SKILL SETS FOR AUTOMOTIVE – OES CHAMPIONS

Digital Production Management along with Digital Program Management are critical skills to scale digital PoCs

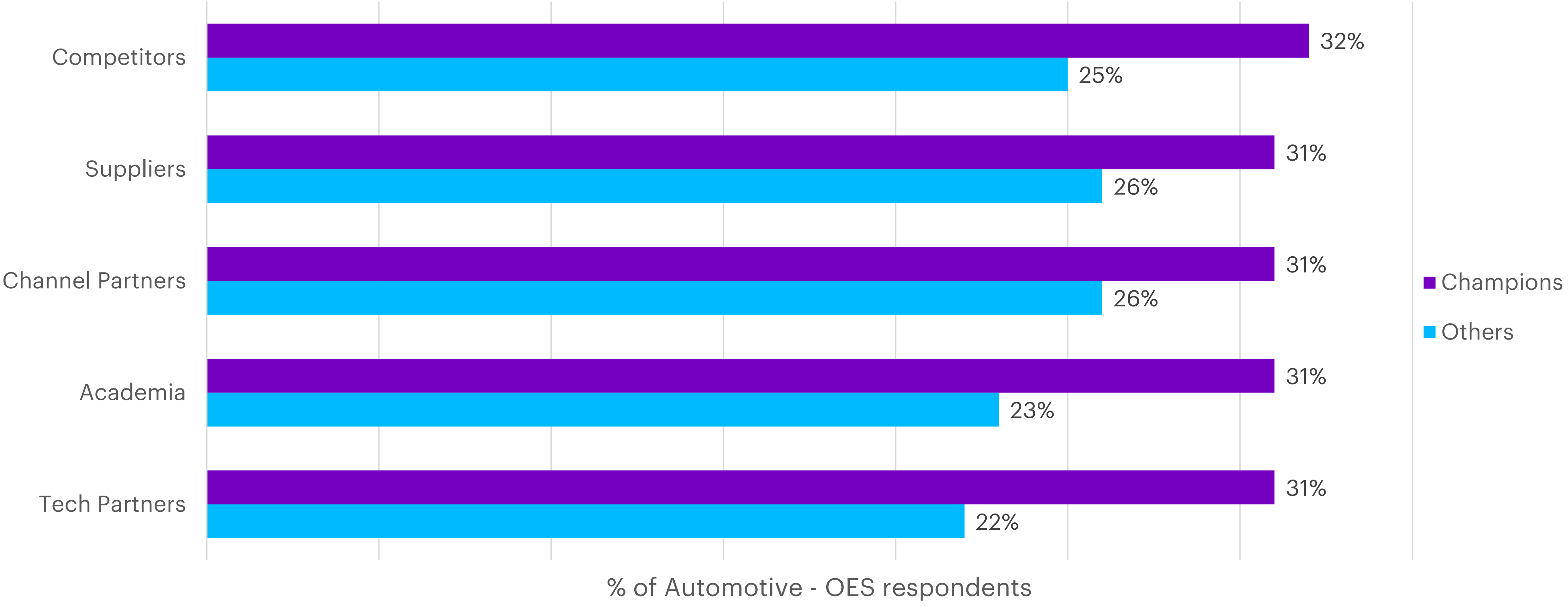


	Champions	Others
Digital Production Management	39%	18%
Digital Program Management	36%	18%
Data Analysis/ Visualization	35%	20%
Digital Platform Management	34%	22%
Network Architecture	33%	19%
Automation Expertise	33%	19%
Digital Systems Engineering	32%	14%
Agile/SCRUM Expertise	29%	17%
Engineering	27%	19%
AI/ML Training	27%	17%

Source: Accenture 2019 Industry X.0 Survey

TOP 5 PARTNERSHIPS FOR AUTOMOTIVE – OES CHAMPIONS

Competitors and suppliers are critical partnerships to scale digital PoCs



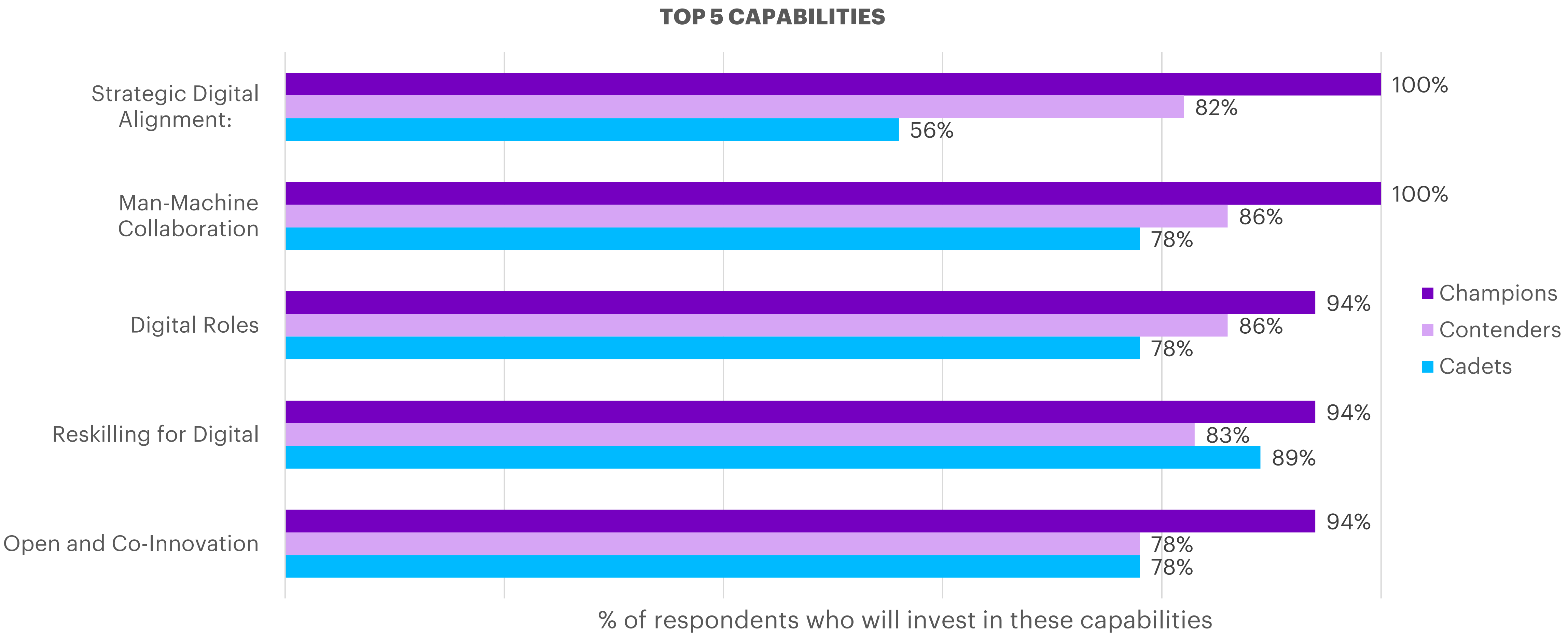
Source: Accenture 2019 Industry X.0 Survey

Q: WHAT CAPABILITIES DO AUTOMOTIVE – OES COMPANIES NEED TO BUILD AS THEY NAVIGATE ALONG THIS ROADMAP?

A: CHAMPIONS PRIORITIZE CERTAIN CAPABILITIES, AND INVEST HEAVILY IN THEM

CHAMPIONS WANTS TO INVEST IN STRATEGIC DIGITAL ALIGNMENT, DIGITAL ROLES AND MAN-MACHINE COLLABORATION

This corresponds with their choice of Competitors and suppliers as partners



Source: Accenture 2019 Industry X.0 Survey

Striving to scale your own innovations?

Get in touch!

Whether you are seeking to start new initiatives the right way, help with scaling those you already have—we are ready to help you improve your outcomes by putting our knowledge to work! Please reach out to **raghav.narsalay@accenture.com** or **aarohi.sen@accenture.com** at Accenture Research, or visit **accenture.com/scaling-innovation**

References:

David Abood, Aidan Quilligan, Raghav Narsalay, and Aarohi Sen (2019), Rethink, Reinvent, Realize, downloadable from here.

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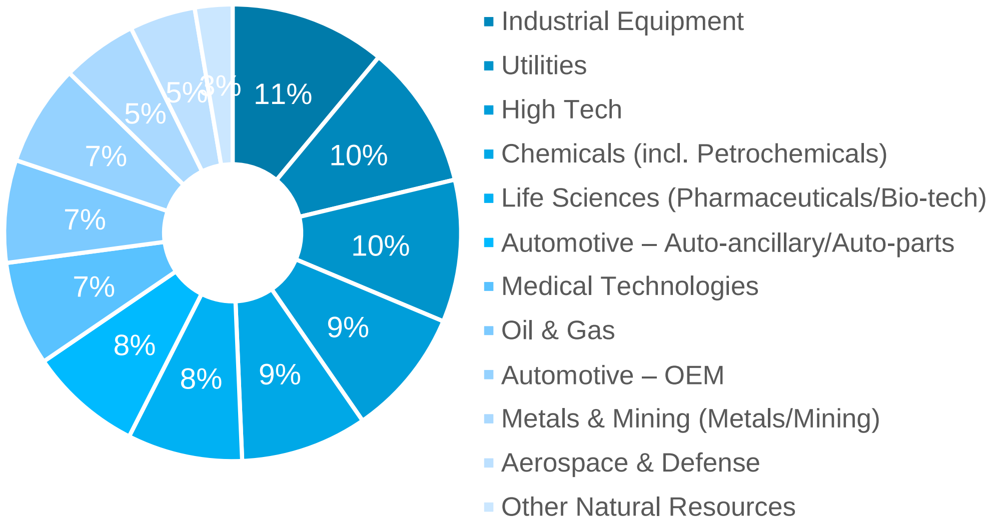
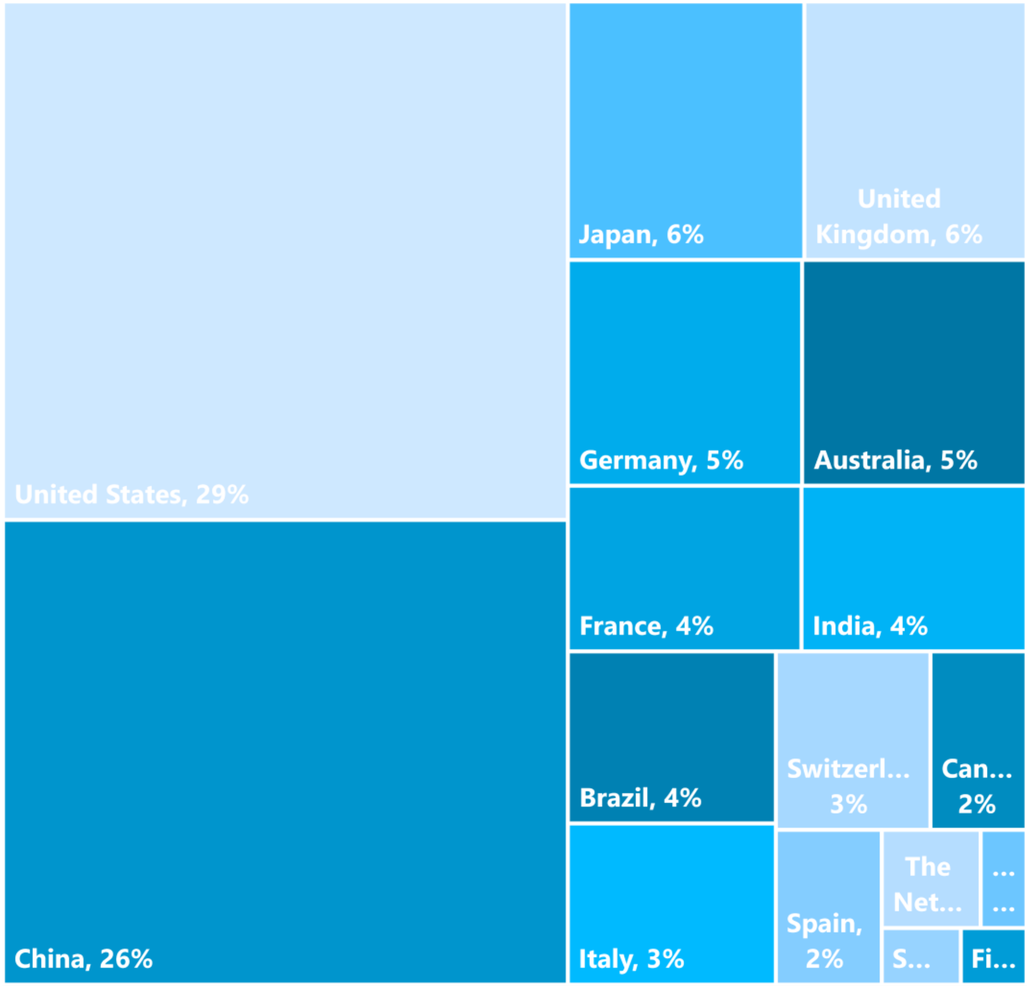
APPENDIX

SURVEY DEMOGRAPHICS – OVERALL (n=1350)

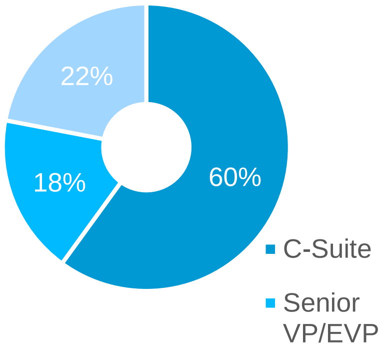
INDUSTRY



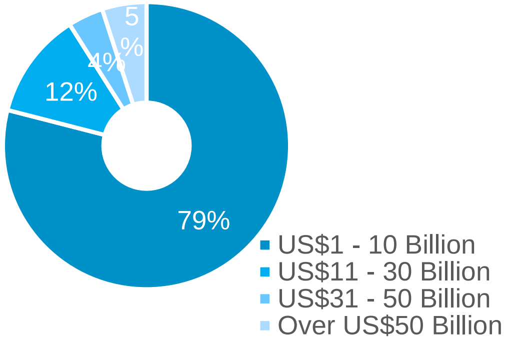
GEO-SPREAD



EXEC PROFILE

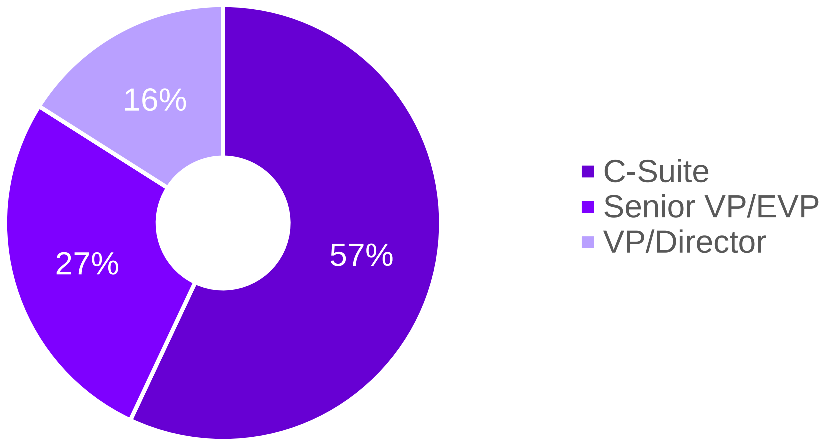


ANNUAL REVENUE

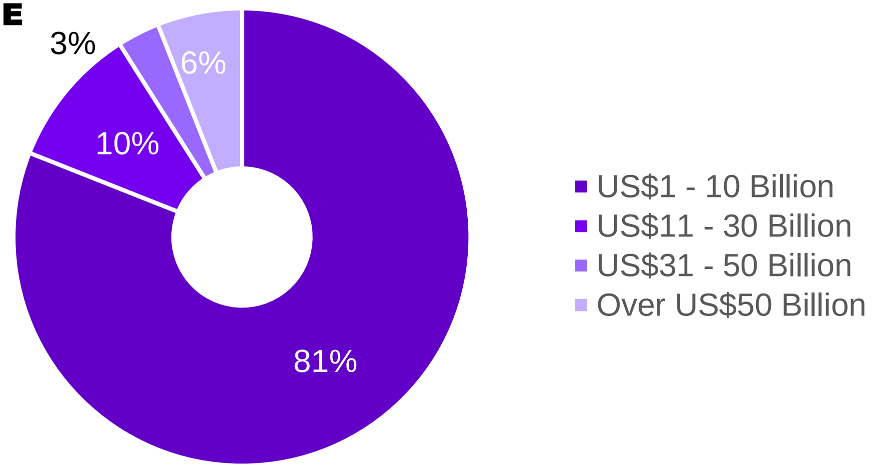


SURVEY DEMOGRAPHICS – AUTO–OES (n=108)

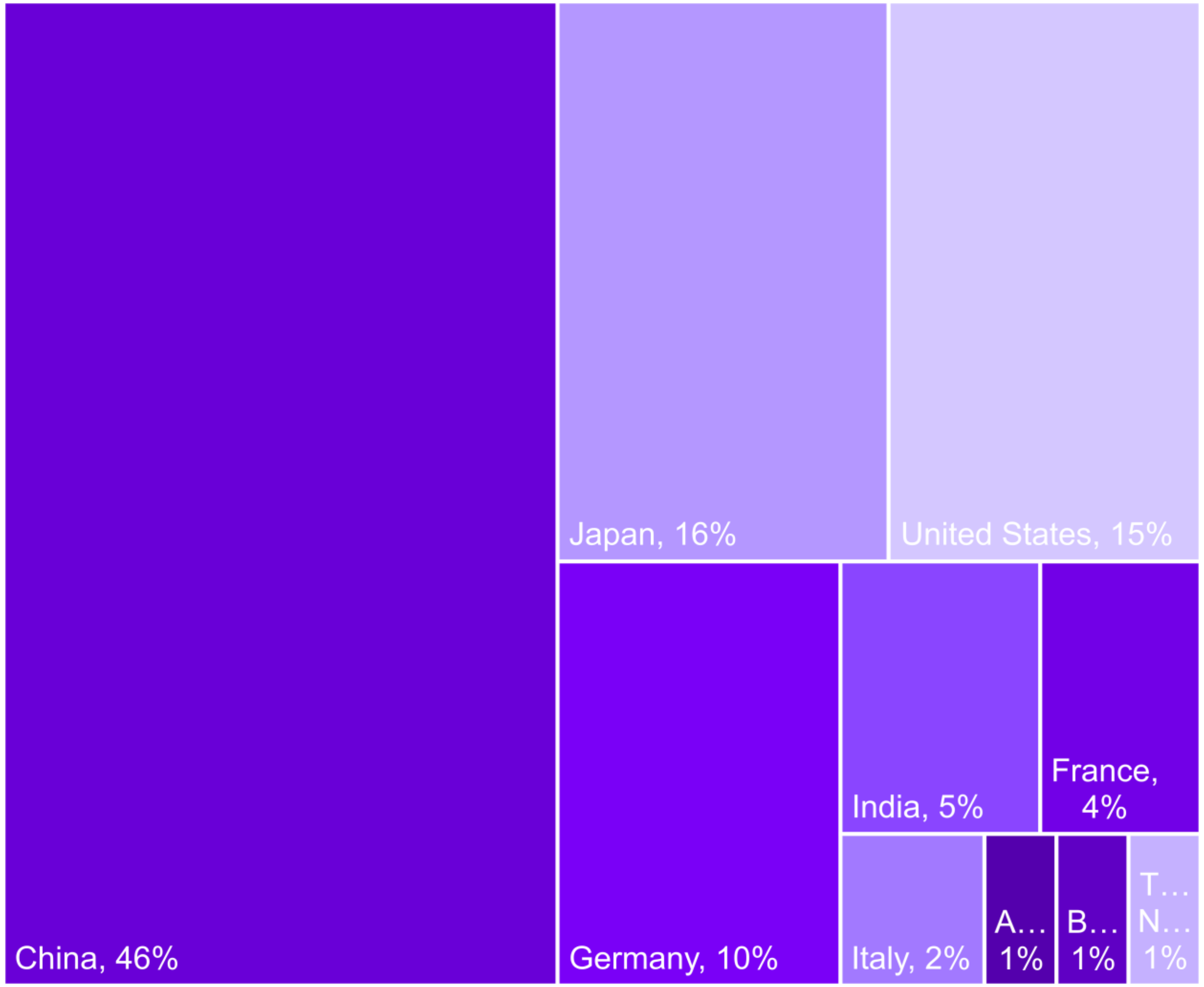
EXEC PROFILE



ANNUAL REVENUE



GEO-SPREAD



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