



THE ROAD AHEAD

for Italian automotive suppliers –
2030 and beyond

November 2020

Foreword

The automotive sector is never short of challenges and opportunities. It has long represented one of the leading industries in terms of technological innovation. It is an industry capable of interpreting, often ahead of its time, the changes that are gradually coalescing in our behavior with regard to mobility and to which business models must quickly adapt.

Today, the world is facing a challenge the likes of which none of us has seen before: the COVID-19 pandemic. For the automotive sector, this comes after a decade of technological, regulatory and cultural changes that in recent years have become deeply disruptive. The industry is in the throes of a transition that even the virus is incapable of stopping.

The obvious question is whether the automotive industry is ready for this transformation, taking place at a moment of exceptional difficulty for the world. And if the industry is unprepared for the challenge, what should business and governments be doing to close the gaps in expertise, investment and innovation?

The ongoing revolution is driven by a number of factors, as we discuss in this study. But what makes it particularly challenging is that it impacts not just automotive products but also applications, production processes and infrastructures. It is not just one single revolution but multiple revolutions occurring together, in which digitalization plays a prominent role and efficiency and cost competitiveness are the major drivers of success.

Italian companies are known for their production excellence, creativity, flexibility and ability to innovate. That gives them a good starting point. But are these traditional strengths enough for Italian automotive companies to emerge from the transition as winners?

Marco Stella

President of Components Group, ANFIA

Gianmarco Giorda

Managing Director, ANFIA

Andrea Marinoni

Senior Partner, Roland Berger

At a glance

COVID-19 is a major calamity for the global economy. The impact of the pandemic has been particularly harsh for the automotive industry, which has experienced a sharp downturn in the short term and is facing great uncertainty going forward.

This study was first prepared for publication in February 2020, at a time when the automotive industry was already going through a period of change and disruption. Despite the long-term view remaining valid, the economic environment is very different for a world that is now more volatile, uncertain, complex and ambiguous than ever before.

Even before COVID-19, consumers' mobility habits were changing as fast as the underlying automotive technology. We identify four key drivers of this disruption, captured in the acronym **MADE**: new **Mobility** trends around the world, the arrival of **Autonomous** technologies, the development and use of **Digital** features, and **powertrain Electrification**. Changes at this fundamental level inevitably create opportunities as well as challenges.

In this study we focus on the automotive industry in Italy. In particular, we attempt to identify the major market opportunities for Italian automotive suppliers in the medium to long term. We also try to predict the level of technological disruption that they will have to deal with.

The industry landscape in Italy is fragmented, characterized by mid-market suppliers working in vertical domains with skill sets built around traditional product technologies. These players have overcome challenges in the past and they have strengthened Italy's positioning in certain legacy areas of the global supply chain. But what action should they be taking to prepare themselves for the radically transformed mobility landscape of 2030 and beyond, under the shadow of the ongoing pandemic?

Our answer to that question, based on our own analysis and insights from industry and academic experts, is multifaceted: The future success of Italian automotive suppliers lies in a blend of ingredients, from product enhancement to a problem-solving attitude and an innovative mindset, making the country an attractive place to invest in. We believe that suppliers need to embrace a transformation agenda that has become even more urgent as a result of COVID-19, and – critically – the country needs to respond with corresponding industrial policies.

Contents

CHAPTER 1

The automotive industry is experiencing massive disruption

Suppliers have an opportunity to shape their future p. 5

CHAPTER 2

Electrification, autonomous driving and "digital soul" are key

The domains with the greatest potential are *electronics* and *powertrain* p. 10

CHAPTER 3

Italian automotive suppliers must embrace change

Investing in innovation and increasing relevance in the value chain are critical p. 13

CHAPTER 1

The automotive industry is experiencing massive disruption. Suppliers have an opportunity to shape their future.

We are living in what analysts love to call a VUCA world: volatile, uncertain, complex and ambiguous. The speed of change in many industries is unprecedented and its direction difficult to predict, especially in light of the COVID-19 pandemic. Complexity and confusion abound and the risk of losing the way is ever-present.

The passenger vehicle industry is no exception. Familiar behaviors are changing with remarkable speed and technological advance is creating both unexpected challenges and unforeseen opportunities. Various scenarios are possible over the coming decade: The journey towards a new landscape is uncertain and will doubtless differ between countries and regions, driven by differences in industry structure, consumer preferences and the pace of technological change. But one thing is already crystal clear: The industry will ultimately be characterized by a large share of electrified and connected vehicles, a low level of individual ownership compared to traditional patterns, and a radical change of the industry structure.

COVID-19 has made an already challenging situation even less predictable. According to the latest estimates, the GDP of the top five European economies is expected to shrink between eight and 13 percent, with Italy at the extreme end of this range. The automotive market is particularly strongly impacted due to loss of production volumes, expected to be valued at some EUR 18-25 million – a drop of 20 to 30 percent compared to 2019. Recovery globally is not expected to be immediate,

leading to cumulative production losses for the period 2020-25 of an estimated 60-70 million vehicles globally.

From an industrial perspective, the pandemic has triggered both temporary and lasting changes. Potential structural changes include the redesign of production systems and the transformation of supply chains from global to "glocal". Governments have put in place a set of measures of unprecedented magnitude. Their objective is twofold: to secure the short-term survival of companies, and to leverage the momentum to lay the foundations for future competitiveness. Individual countries are focusing on different areas, such as demand or supply, and different objectives, such as turnaround or technological development. In Italy, for example, the focus has been on turning the sector around and trying to relieve pressure on both supply and demand. → [A](#)

Even before COVID-19, the automotive industry was going through remarkable changes. The key factors driving this disruption are neatly captured in the four-letter acronym MADE, standing for new Mobility trends around the world, the arrival of Autonomous technology, the development and use of Digital features, and the rise of powertrain Electrification.

The "M" in MADE – new Mobility trends around the world – refers to the changes currently taking place in customer behavior, including the trend towards sharing assets rather than owning them. Known as the *sharing economy*, this is exemplified by the rise of ride-hailing

and ride-sharing models. Urbanization is also reshaping traditional mobility and logistics concepts, as a new mobility mix and innovative business models emerge. Overall market value is increasing but its distribution along the value chain is changing. Inevitably, some existing players will exit the market and others enter it in the course of this dramatic reshuffling. The competitive landscape in 2030 and beyond is expected to be radically different from today's, with a new category of *mobility service providers* playing a key role. → **B**

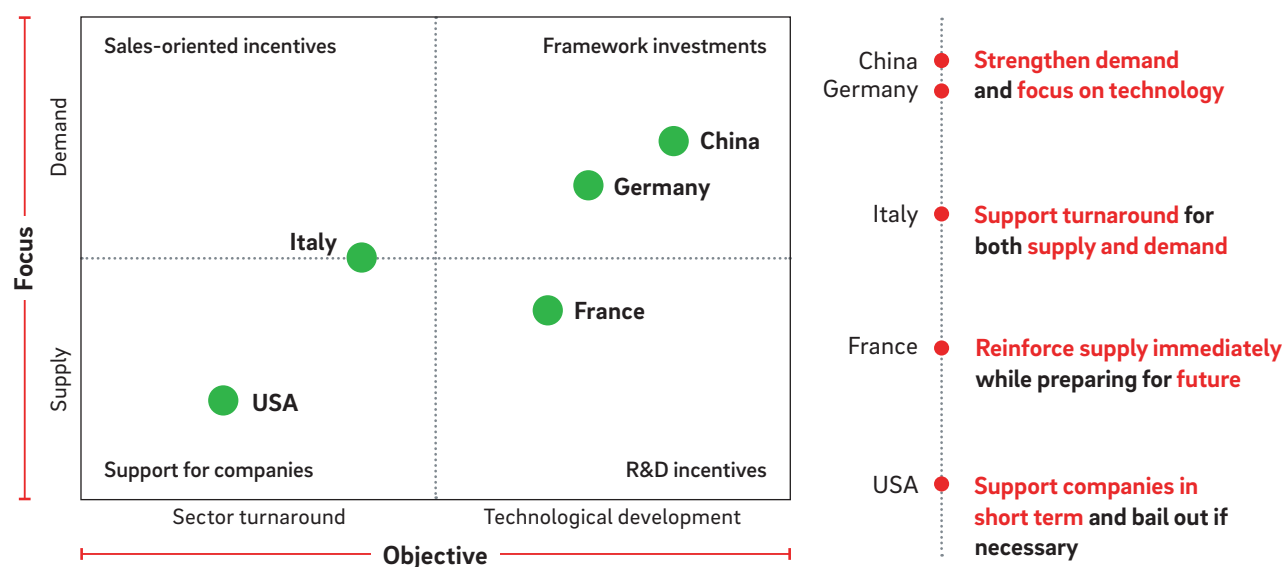
The "A" in MADE stands for the arrival of Autonomous technology in the car industry. Currently, autonomous driving is at Level 2 of the five levels in the SAE classification, which are based on the degree of human

intervention needed. Level 2 is *partial automation*, in which one or more driver assistance systems can take over both steering and acceleration/deceleration, while the driver monitors the driving environment. The technology already exists for Level 3 to be implemented – *conditional automation*, in which the system takes over all aspects of driving, while the driver has to respond appropriately to a request to intervene. In practice, however, current regulation prevents the industry moving from Level 2 to Level 3.

Industry experts agree that, ultimately, fully autonomous driving will likely only be achieved in applications with specific missions. At the moment, the most concrete example of this is robocabs, for which customer acceptance already appears to be good. Their

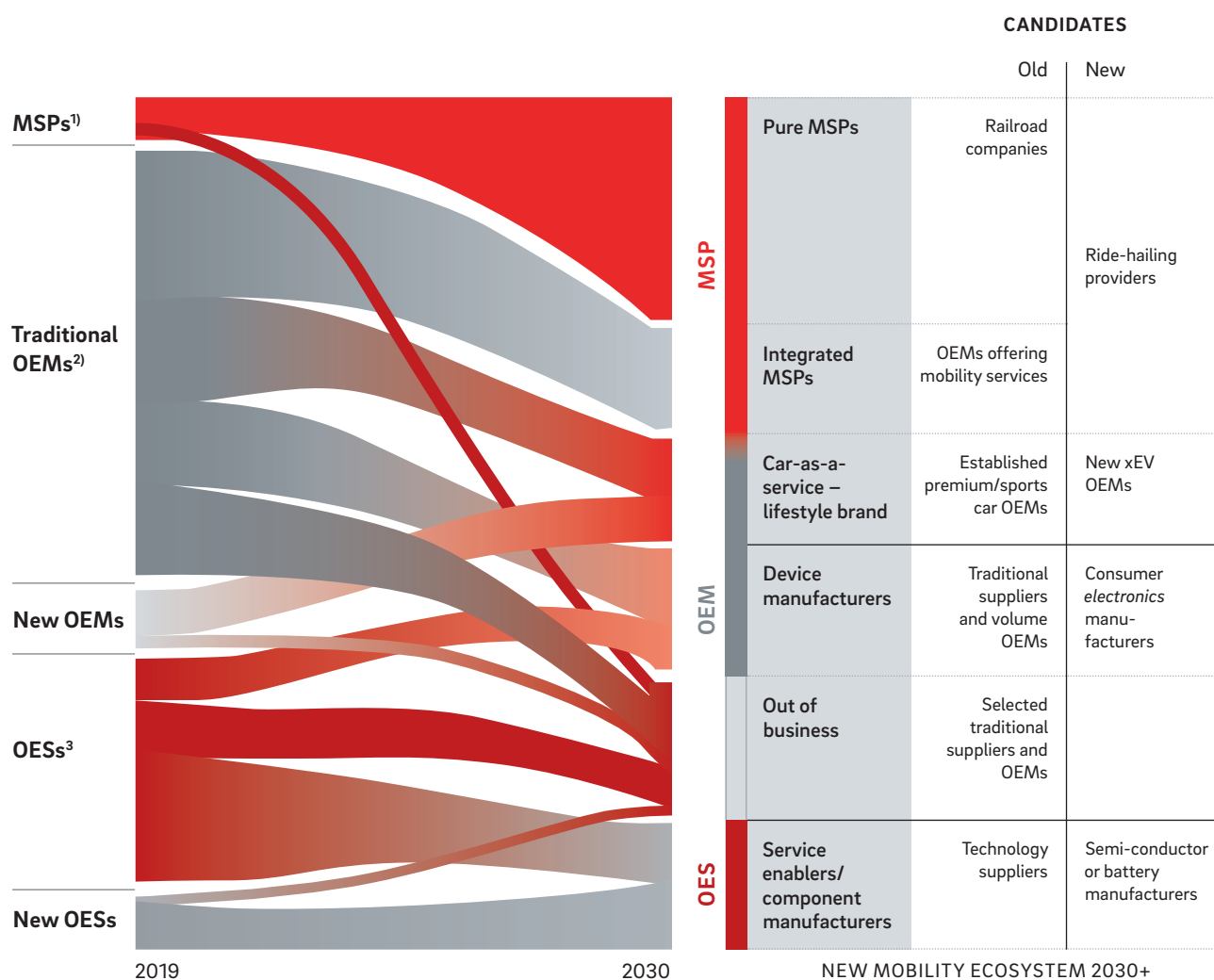
A Post-COVID-19 recovery measures

Focus of actions differs by country



B The new competitive landscape

Changes in the mobility landscape and the rise of mobility service providers



1) MSP = mobility service provider 2) OEM = original equipment manufacturer 3) OES = original equipment supplier

emergence will mark a convergence of the different business models – ride-hailing, ride-sharing, car rental and so on – eliminating the barriers between them.

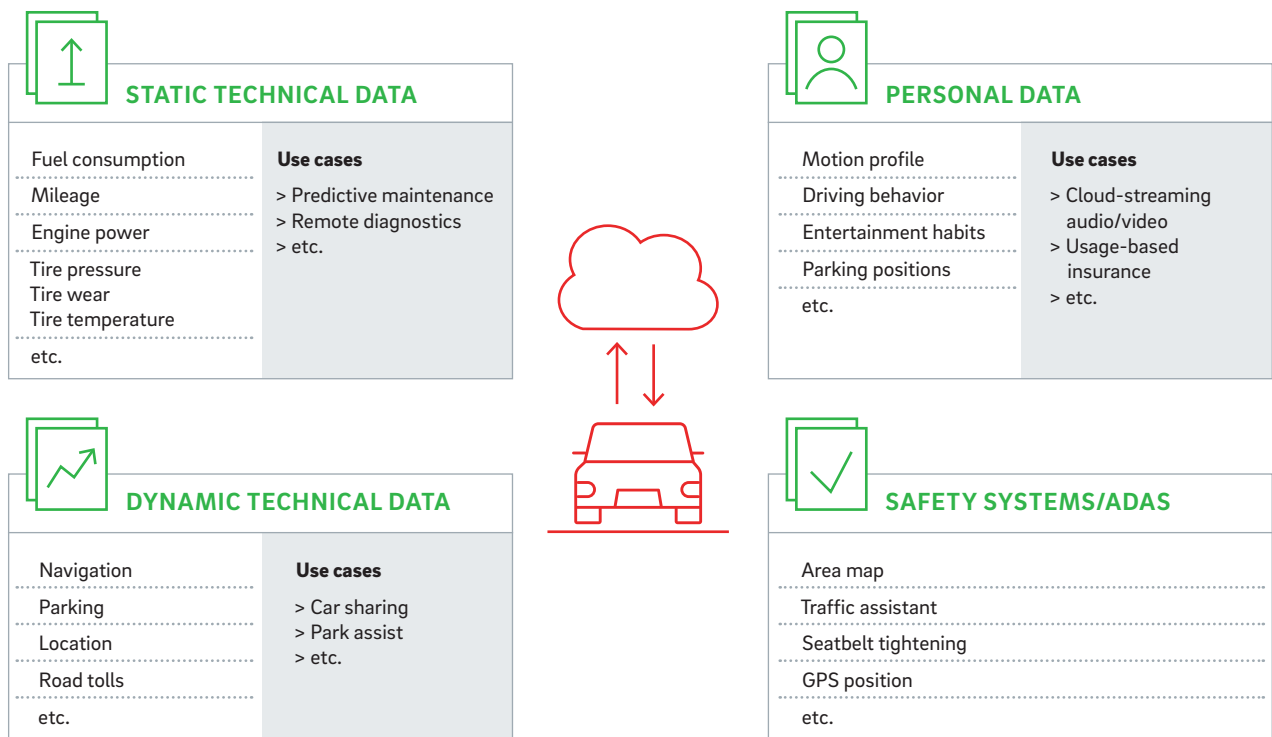
The "D" in MADE stands for the development and use of Digital features enabling the "connected vehicle" and new on-board services. Digitalization is already spreading across all domains of the automotive industry, giving OEMs the possibility to collect and monetize a large amount of data, be it static (fuel consumption, mileage, tire pressure and so on), dynamic (navigation, location), personal (motion profile, driving behavior) or

generated by the safety systems. New business models will arise built around artificial intelligence (AI) and the integration of the connected vehicle into every aspect of customers' day-to-day lives. Ultimately, new technologies will capture the majority of automotive value added. → **C**

The final "E" in MADE stands for *powertrain Electrification*, meaning the use of an electric motor, either alongside the traditional internal combustion engine (ICE) or completely replacing it, to drive the vehicle. Electric vehicles (EVs), both hybrid and full

C Pervasive connectivity

Types of data that can be collected and their potential application



D Few and far between

Public charging infrastructure for electric vehicles

charging stations per 100 km roadways

January 2017

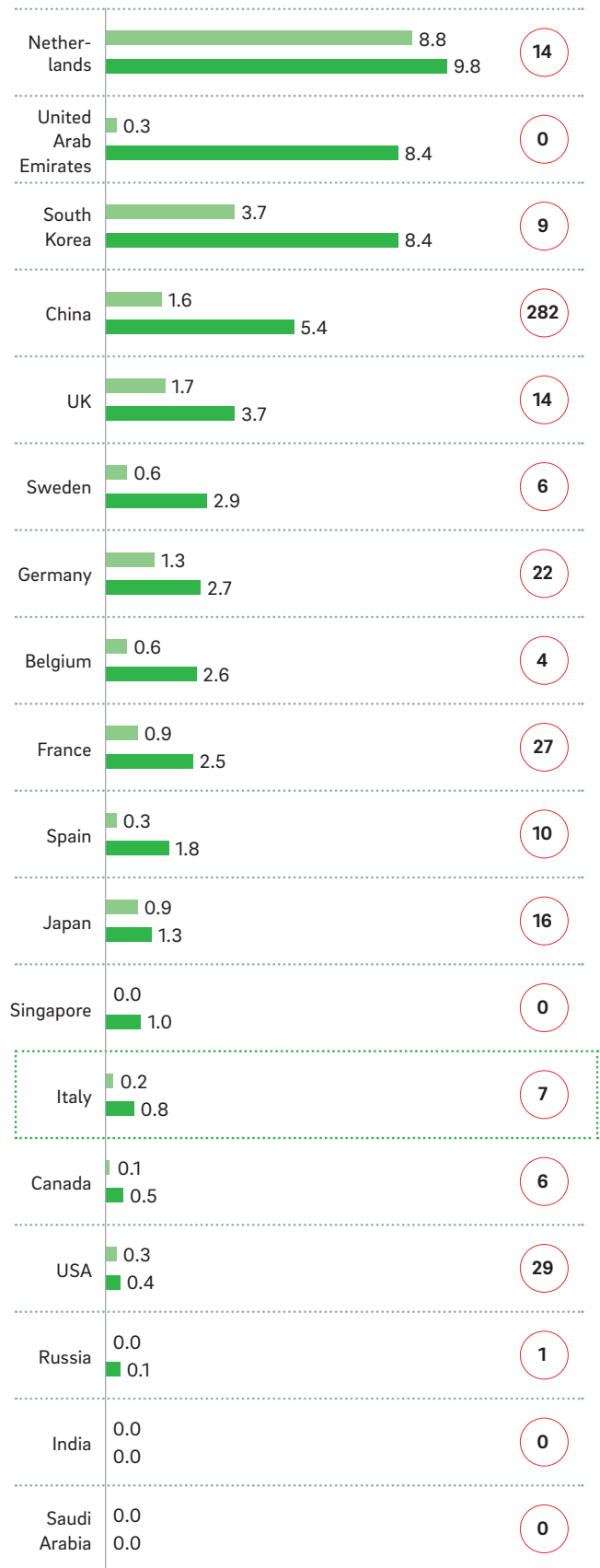
January 2020

No. of charging stations ('000)

electric, are currently spreading rapidly across the market, driven by limits on emissions and incentive schemes for their purchase. In recent months there has also been strong interest in the development of hydrogen-propelled engines, with countries announcing important investment plans; for example, Germany plans to invest EUR 9 billion in hydrogen technologies. For customers, the adoption of EVs is closely correlated to the availability of charging infrastructure. This is a significant problem in many countries, including Italy. The underlying technology for EVs is evolving quickly but costs remain very high, so governments must create incentives in order to push the dissemination of such vehicles. Overall, customer preferences appear to support the spread of xEVs (vehicles of various types including hybrid, battery and fuel-cell electric vehicles). → [D](#)

COVID-19 is already impacting all four of the MADE factors, changing the speed with which they are developing by reshaping both supply and demand. In the journey from conventional vehicles to the car of the future, the challenge for the whole industry will be to address technological change while ensuring economic sustainability. Automotive suppliers cannot remain passive in the face of this disruption. True, the eventual shape of the industry is as yet unknown – but it is the job of industry players to help mold that future. Companies should therefore adopt an explorative approach, embracing the evolution of the industry while expanding their spectrum of activities with new products, business models and partnerships.

In the following chapter we look at where the greatest opportunities for players lie – those areas where they would be best advised to focus their energy.



Source: EV Volumes, desk research, Roland Berger

CHAPTER 2

Electrification, autonomous driving and "digital soul" are key. The domains with the greatest potential are *electronics* and *powertrain*.

As the passenger vehicle industry shifts and changes, opportunities are opening up for Italy's automotive suppliers on all sides. To determine where the greatest potential lies, we follow a specific methodology, focusing on major changes in the transition from conventional vehicles to the car of the future – the development that will have the biggest impact on automotive components.

Our first step was to look across the five vehicle domains – *powertrain*, *chassis*, *interiors*, *exteriors*, *electronics* – and identify within them 22 key modules. We then examined which of those modules are likely to experience the fastest growth over the coming decade, and which will entail the greatest level of technological disruption, or what we might call *non-linear advance through innovation*.

We based this analysis on the results of 30 high-level interviews with OEMs and suppliers, industry associations outside Italy, academics, senior managers at ANFIA and automotive experts at Roland Berger, plus benchmark analyses of the top 100 national automotive suppliers in Italy and Germany and an examination of the last ten years of automotive industrial policy in eight major countries around the world.

The most relevant "discontinuity factor" is electrification, a process that is already underway. Electrification results in a total change of paradigm and technology in the *powertrain* domain, with consequences for the entire vehicle. The main implications are as follows:

→ Simplification of vehicle architecture

As much as 85 percent of the *powertrain* components of ICEs could become obsolete in battery electric vehicles (BEVs), as the vehicle architecture is simplified from around 1,400 components to fewer than 200 and fully integrated platform solutions for the *powertrain*, such as the *skateboard chassis*, are introduced.

→ Transformation of traditional components

Components such as cooling systems and transmission will need to be upgraded to match the new requirements of hybrid configuration and batteries. In hybrid electric vehicles (HEVs), for example, the ICE needs to be downsized, and in both HEVs and BEVs several systems may need to evolve, including wheels, tires, brakes and suspension.

→ Introduction of new components

xEVs require completely new components, such as battery packs, power *electronics* and electric motors. These components are rapidly evolving in terms of technology and standards are still to be defined.

→ New service offering

The advent of xEVs is leading to the creation of new services, such as fast charging stations and battery recycling systems. A second-life battery market is also emerging.

Autonomous driving requires the vehicle to have a "digital soul". This has a number of implications for product technology:

→ **Connectivity as an enabler**

Vehicle connectivity, both V2V (vehicle-to-vehicle) and V2I (vehicle-to-infrastructure), represents a key enabling factor for new vehicle functionalities. It will lead to significant advances in cockpit features with regard to the human-machine interface, infotainment, driving assistance/autonomous vehicle information and improved cybersecurity.

→ **Consolidation of ECUs**

ECUs (electronic control units) are becoming more and more powerful in terms of real-time data processing, enabling autonomous-driving functionalities and a reduction in the number of units needed. We expect the number of units to fall by as much as 90 percent, ultimately to one per domain rather than one per component.

→ **Boom in ADAS sensors**

The market for cameras, radars and lidars will boom as the autonomy level of vehicles increases. At the same time, the price of sensors will fall as they become commoditized.

→ **Growing importance of software**

Software is acquiring a pivotal role as a key differentiating factor for OEMs. It is also having a huge impact on the onboard experience, now recognized as one of the main purchasing criteria for customers. Software is also a major driver of vehicle cost due to the exponential increase in the number of lines of code required.

→ **Redesign of the onboard experience**

Autonomous driving is pushing OEMs to optimize the onboard experience. Interiors will evolve in order to accommodate passenger needs during autonomous travel, with growing demand expected for purpose-built vehicles.

involving the highest level of technological disruption – are *electronics* and the *powertrain*. Within *electronics*, key modules are specifically ADAS software, ADAS ECUs, infotainment and ADAS sensors, the last of these expected to show the strongest growth in terms of volume. Within the *powertrain*, key modules are battery packs, power modules and e-motors. We also identified a number of modules with medium potential, showing growth potential in line with total vehicle sales but a high level of technological disruption. These modules include transmission, cockpit and thermal management. → [E](#)

Having identified the specific modules with the most potential, the obvious question is: How well positioned are Italian suppliers to exploit these areas? We explore this issue in the following chapter.

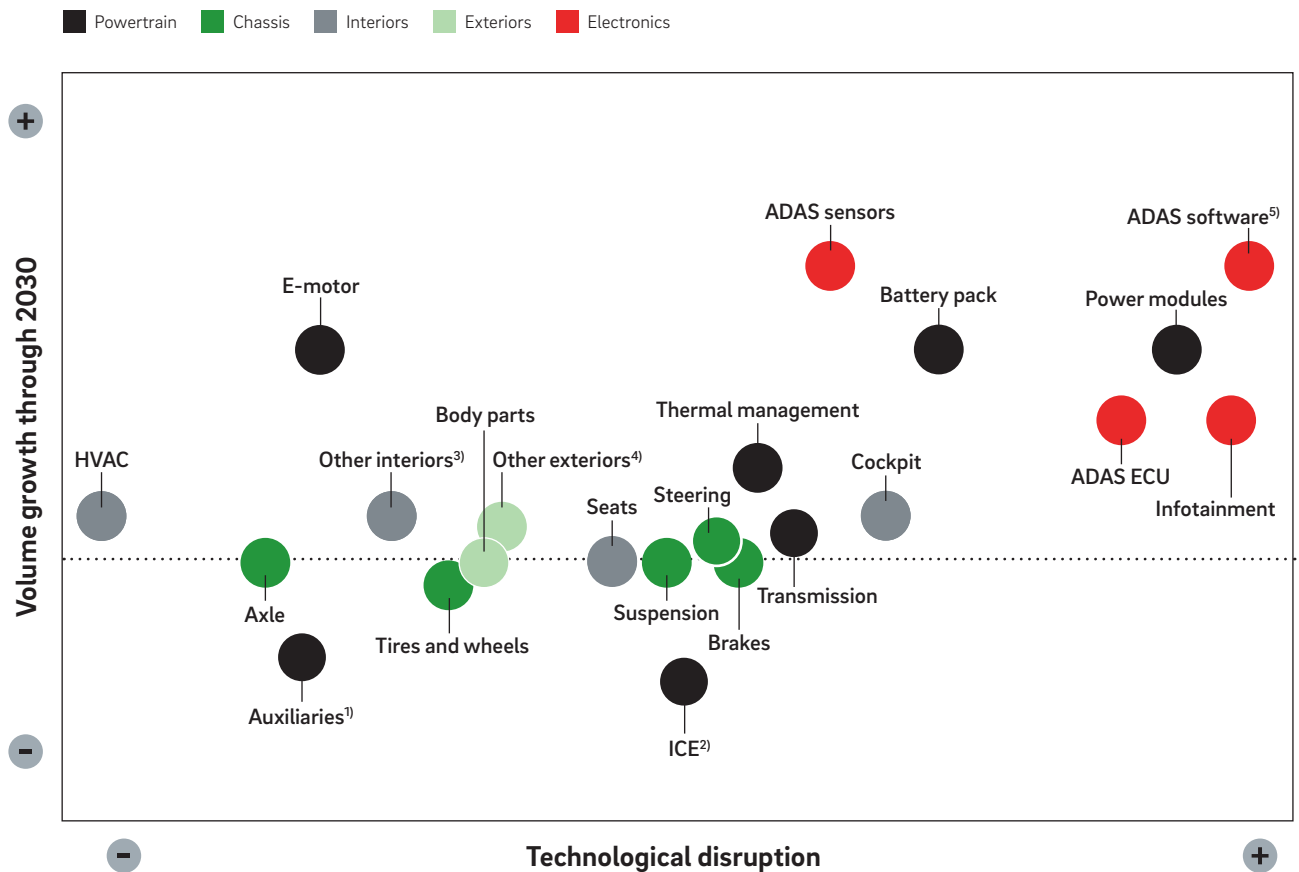
"High growth in shared mobility will accelerate the development of smart components that drive data monetization."

Marco Maria Monti, President of the Automotive Division, STMicroelectronics

The domains with the greatest potential in the period to 2030 – those showing the strongest forecast growth and

E Where are the opportunities?

Forecast market growth 2018-30 vs. level of technology disruption by module



1) Incl. air intake, auxiliary drive, fan, fuel delivery, oil filter, oil pump, other, piping, radiator

2) Incl. engine, exhaust, injection, ignition/glow system and valve train

3) Incl. vehicle security, carpets, trim, trunk mgmt., window lifter and wiring

4) Incl. BiW, lighting, lock system and windows

5) Incl. cybersecurity

CHAPTER 3

Italian automotive suppliers must embrace change. Investing in innovation and increasing relevance in the value chain are critical.

In the previous chapter we identified which automotive modules appear to demonstrate the greatest potential for the period to 2030 and beyond. Opportunities abound; now is the time for Italy to lay the foundations for creating future champions.

Europe has always been a leader in technology for automotive applications. This strength has allowed it to enjoy a largely positive trade balance and to play a central role in strategic choices by the industry, despite the fact that it is responsible for less than a fifth of light vehicle production volumes globally. Italy accounts for just five percent of production in the European Union, and volumes could potentially contract over the period to 2025 and beyond as we see a shift in vehicle production to emerging countries.

CURRENT POSITIONING OF ITALY

The current industry landscape in Italy is fragmented. Many players are small in scale and have a traditional focus on producing mechanical components. Suppliers are concentrated in certain areas of the country. For example, Piedmont, Emilia-Romagna, Lombardy and Campania are centers of excellence for R&D (research and development) in motors and mechanical components.

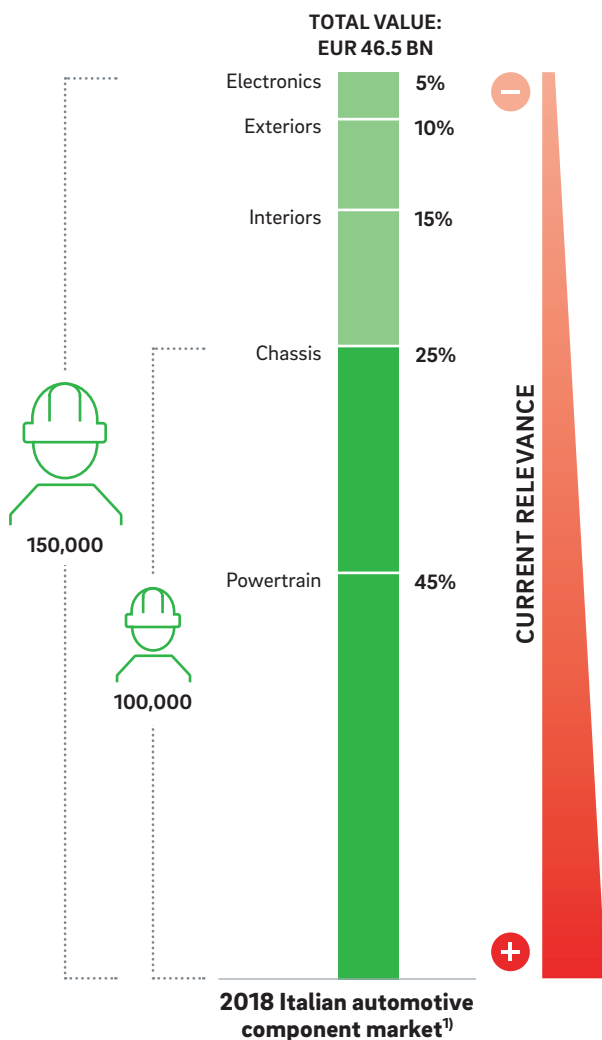
The Italian automotive components industry currently employs around 150,000 people in the area of specialized components alone. Of this number, some 100,000 work in the *powertrain* and chassis domains. However, Italy


"The transition to the electric vehicle entails a huge simplification of the engine. Moving forward, competition will increasingly be based on efficiency and cost factors, rather than technological excellence."

Gabriele Allievi, President, Bosch Italia

F Areas of focus

Italian automotive component market by domain, 2018, %



 No. of FTEs working in specialized automotive components market in Italy

¹⁾ Breakdown based on revenues of top 250 Italian component manufacturers by domain

has little presence in the area of *electronics*, a domain that is set to see strong growth. → [F](#)

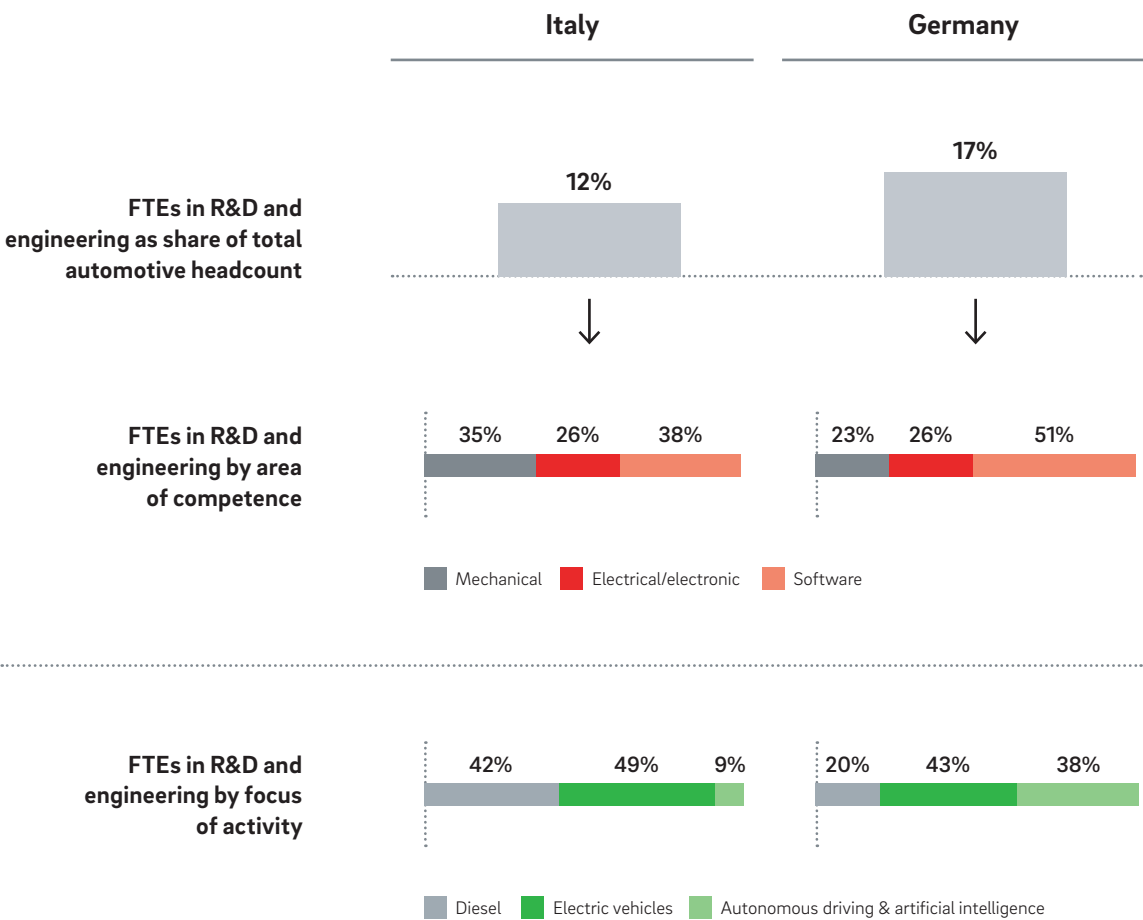
Using data from LinkedIn we can analyze the current employment situation in the industry. The comparison between Italy and Germany is revealing. Italian suppliers are generally less focused on innovation than their German counterparts: 12 percent of the workforce in Italy works in R&D and engineering, compared to more than 17 percent in Germany. Looking at the specific competence areas of R&D workers and engineers, it appears that the focus on software is weaker in Italy (38 percent of workers) than in Germany (51 percent). This contrast is even clearer in autonomous driving (Italy: 9 percent vs. Germany: 38 percent). However, Italian workers have a stronger focus on EVs (49 percent) than their German peers (43 percent). → [G](#)

"Italy must offer a strong value proposition for global investors. The credibility of institutions and the attractiveness of the macroeconomic context are key factors for securing the huge investments needed to bridge the country's gaps in future technologies."

Roberto Vavassori, Head of Business Development, Brembo

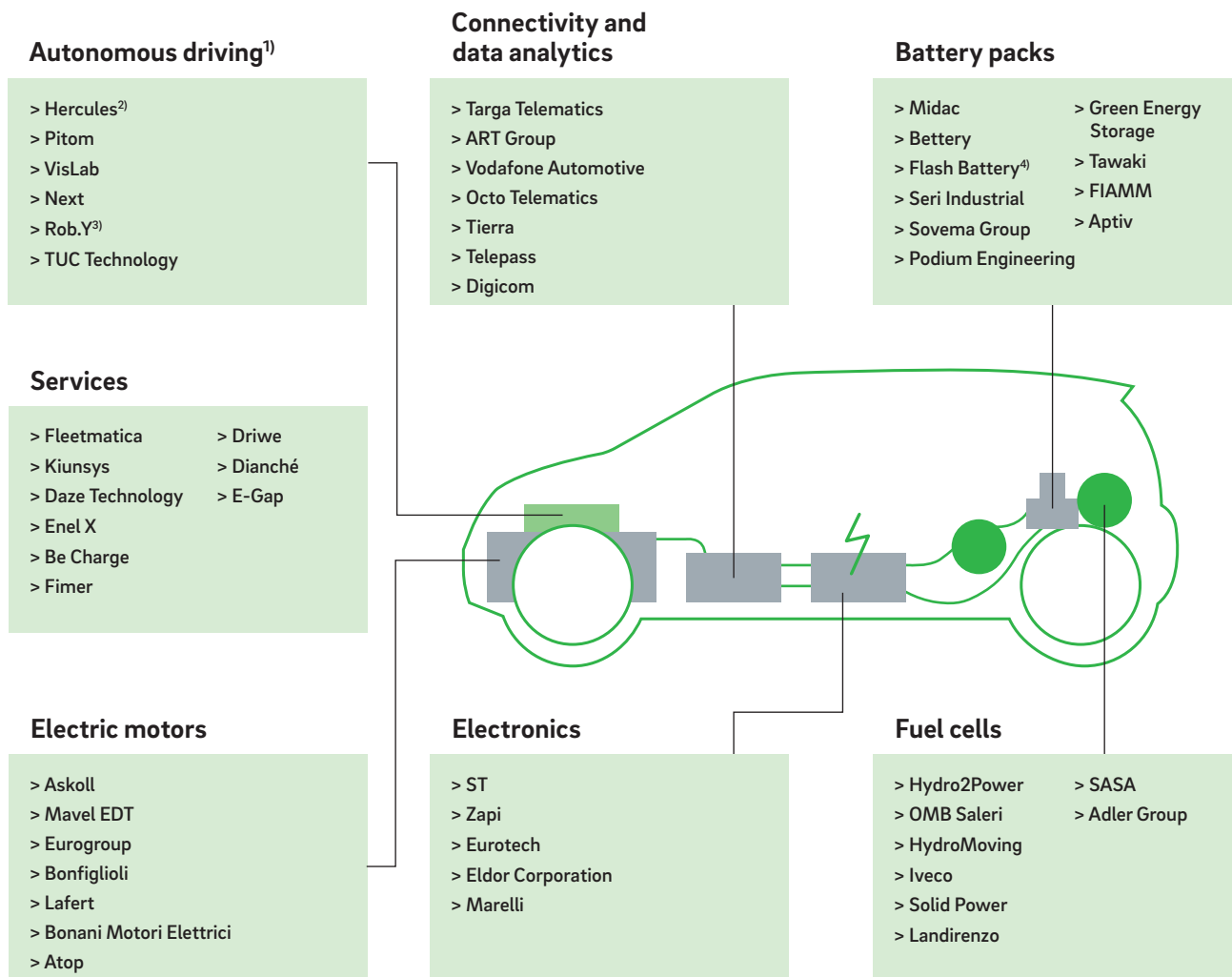
G Areas of innovation

Focus areas of R&D and engineering employees, Italy vs. Germany



H Fragmented but growing

Selected Italian competence pools in innovative modules



¹⁾ Includes modules mainly used for autonomous driving (e.g. modular vehicle platforms of Next, Rob.Y, TUC Technology)

²⁾ European Union project

³⁾ Technology developed by e-Shock, part of e-Novia

⁴⁾ Product developed by Kaitek

As we have seen, Italy is largely focused on traditional domains such as *powertrain* and *chassis*, with a weaker focus on R&D than Germany. Yet Italy does have a certain number of companies, often startups, working in cutting-edge areas. We believe that the country has a chance to establish itself in innovative modules. For instance, Italy is showing promise in the area of fuel-cell technology that is consistent with existing LNG/CNG technology and infrastructure. → [H](#)

The *powertrain* – an area with many modules that are subject to a high level of technological disruption – is the main area of expertise in Italy, representing around 45 percent of the country's automotive component market. In the domain of the *chassis*, Italy also has a number of manufacturers of tires and brakes with global reach, making this another area of expertise. In addition, the country is strong in the manufacture of steel, aluminum and plastic body parts for *exteriors*. These two domains – *powertrain* and *chassis* – are both expected to be strongly influenced by the development of autonomous driving and *powertrain* electrification. This will also have an impact on the workforce. It is thus all the more vital that Italian suppliers play an active part in shaping the future of the automotive industry.

STRENGTHS AND WEAKNESSES

It is worth looking in detail at Italy's current positioning in each of the domains in turn:

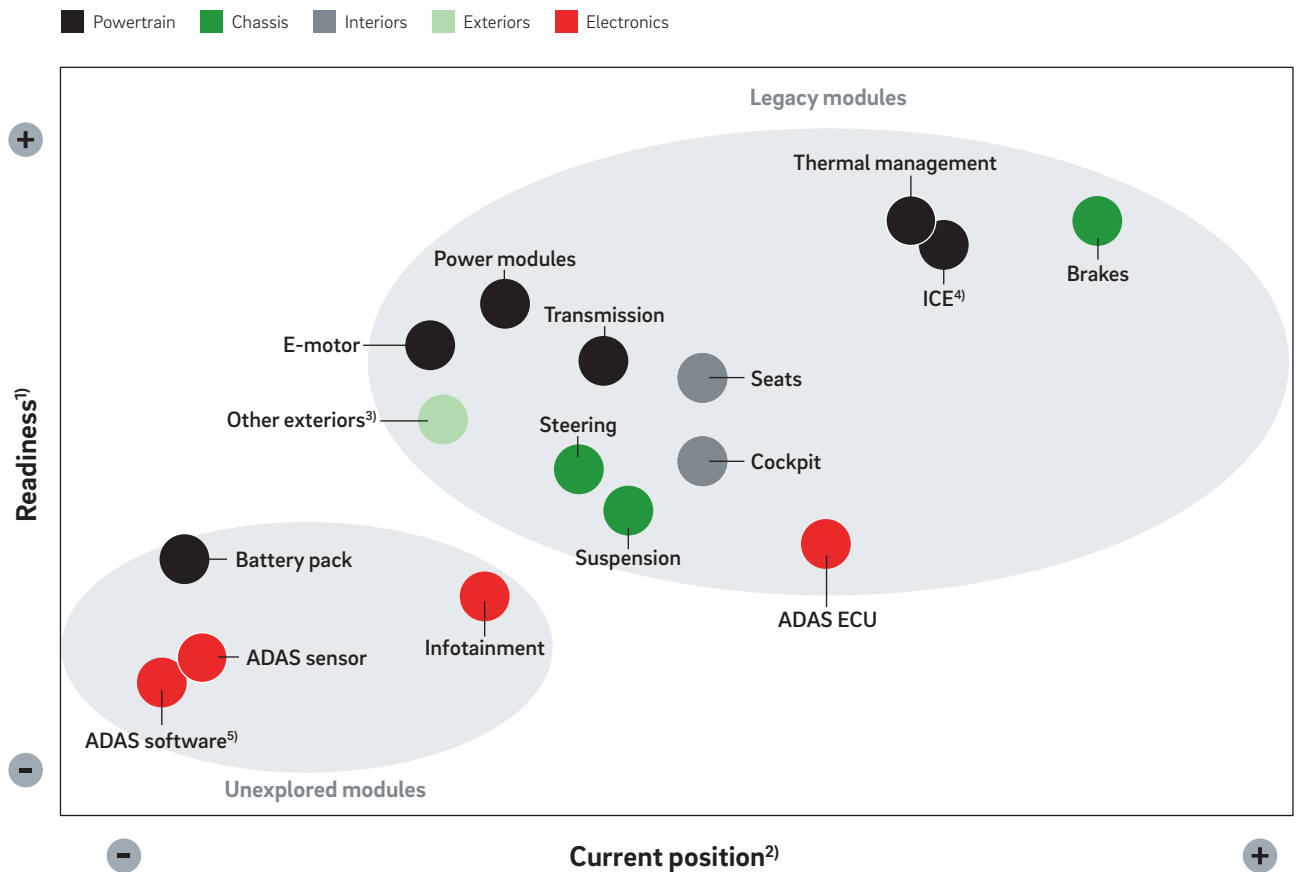
- **Powertrain** – Italy has recognized expertise in certain mission-critical applications, such as thermal management systems and components for ICEs. But the country is still showing a gap in the battery pack production and assembling. In e-motors and power *electronics*, despite outstanding expertise, the country's position is marginal, especially compared to its industrial automation competence pool.
- **Chassis** – Italy has significant global market share in brakes. It also has a few other areas where it demonstrates technological excellence, but they are limited in their application to market niches, such as sports and luxury cars. Overall, Italy has a marginal position in high-volume segments.
- **Interiors** – In the interiors, Italy displays a recognized expertise in product and process technologies, with high aesthetic and functional values, increasingly oriented towards the development of materials and concepts in terms of sustainability and impactful contribution to the circular economy. Relevant tier 1 suppliers cover comfort related parts (incl. carpets, headliners, panels) and the seat structures, within a fragmented supply chain.
- **Exteriors** – Italy has recognized expertise here, with some major players in areas of metalworking such as sheet-metal stamping and cold forging of fastening systems. It also has relevant expertise in lighting.
- **Electronics** – Italy has a number of well positioned companies in the area of components and processors. However, its coverage of the field of sensors and software is very limited.

This leads us to another key question: **How does the current shape of the Italian automotive industry and its areas of strength map onto specific modules?** To find out, we took the 22 key modules and selected the 16 showing the greatest potential. For each module we plotted current production by Italian manufacturers against the country's readiness in terms of availability of skills, the two dimensions often being correlated. On this basis we identify two distinct clusters: **legacy modules** and **unexplored modules**.

The areas identified as **legacy modules** include brakes, thermal management, the ICE and ADAS ECUs. In these areas Italy appears to be equipped to tackle the

Match or mismatch?

Italy's current positioning



1) Based on investments in the module (e.g. R&D) and availability of skills

2) Based on current production and Italy's share of the European market

3) Incl. BiW, lighting, lock system, windows

4) Incl. engine, exhaust, injection, ignition/glow system and valve train

5) Incl. cybersecurity

coming changes in product technology thanks to its expertise, developed over many years. Notably, e-motors and power modules are currently "under-positioned" in terms of expertise compared to the potential shown by the local environment. Italy has some best-in-class automation providers, such as manufacturers of winding machines, but the manufacturing of components is typically done by global vehicle manufacturers or Tier 1 suppliers.

The areas identified as **unexplored modules** include infotainment, ADAS software, ADAS sensors and the battery pack. Here, Italy has a relatively weak position compared to other countries. By contrast, Italy's positioning in advanced *electronics* is restricted to a few outstanding examples in specific areas, such as processors. The country thus lacks an effective competence pool in this domain. → **I**

"Italian longstanding technological leadership is not fully reflected in terms of market share."

Marco Rollero, Executive VP of Supply Chain, Eaton Automotive

A STRATEGY FOR THE FUTURE

What, then, should Italian automotive suppliers be doing to successfully navigate the coming decade and beyond? Figure J outlines the range of customized strategies that companies can pursue on the road towards the new mobility landscape. Their overall goal should be to master the transformation of legacy modules and develop unexplored modules through radical innovation.

For **legacy modules**, the strategies depend on the lifecycle of the company. Small companies should aim for enrichment on the production side by increasing scale and strengthening their problem-solving approach. At the same time, they should leverage their flexibility and hone their ability to deal with product and service issues as a way to differentiate themselves (Strategies 1 and 3). By contrast, companies that are already consolidated should adapt their business models to the new mobility requirements. They can achieve this by developing new technological and managerial skills, potentially combined with external growth (Strategy 2).

For **unexplored modules**, suppliers should aim to **connect bits and atoms**, that is, to link traditional automotive companies with the new ecosystem around digital technologies. A stronger venture capital ecosystem is needed in order to fuel product and process innovation at traditional companies and allow these players to develop open innovation concepts as in other countries. With this backing they can then pursue innovative projects on a European scale in emerging areas, such as fuel cells, ADAS, data management and related services offered through new business models (Strategy 4).

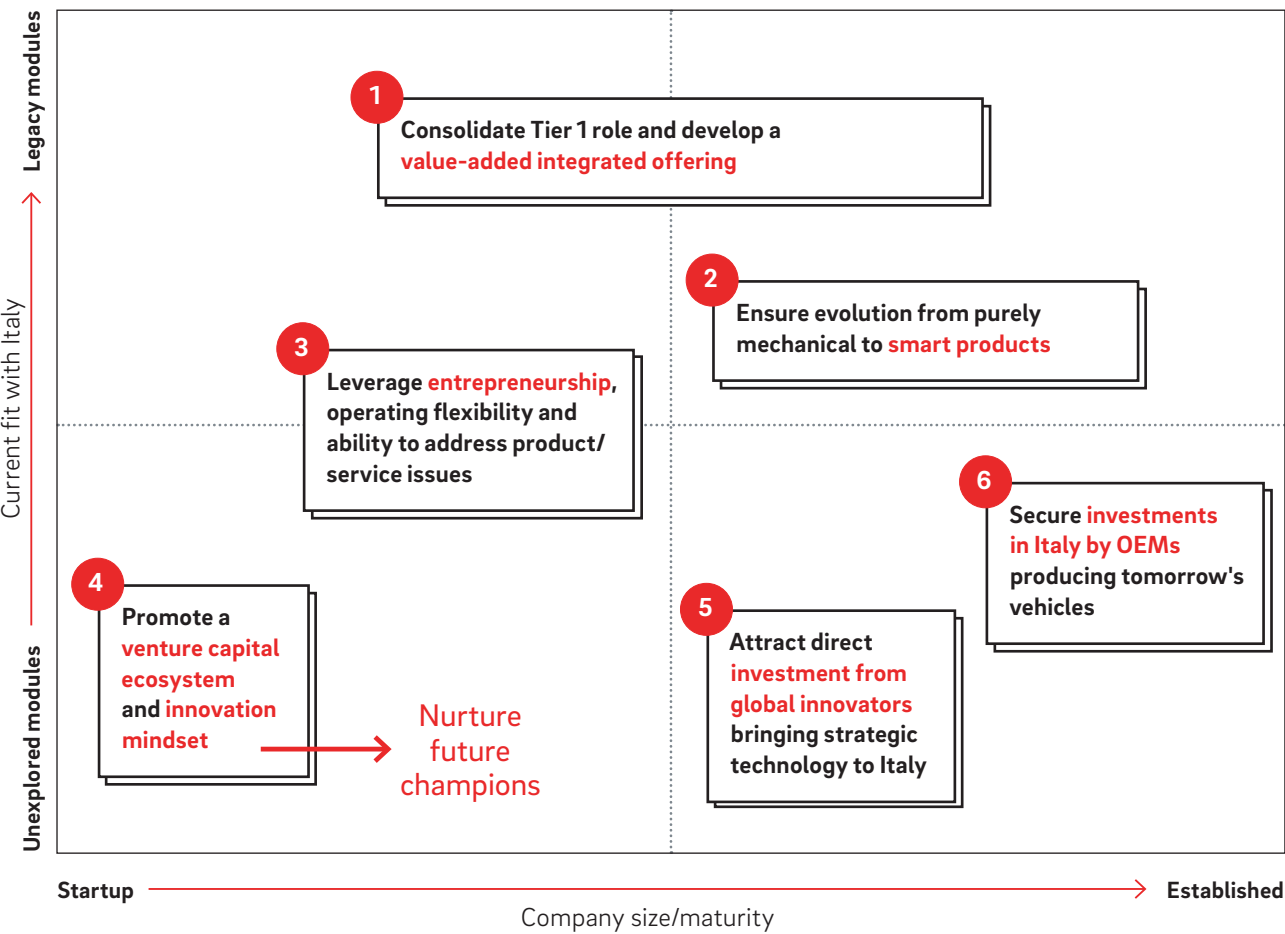
Italy should also aim to attract foreign direct investment from global innovators (Strategy 5) and vehicle manufacturers (Strategy 6). Doing so will have a **spillover**

effect on the entire business chain, speeding up the development of key modules, such as batteries, ADAS sensors and ADAS software. Each new plant that opens

can potentially radiate a positive impact through collaboration with local companies. → [J](#)

[J](#) Towards the new mobility landscape

Potential moves impacting future competitiveness



Many leading players in innovative modules have already started building new capacity in Europe in line with the localization requirements of major OEMs. For example, Asian and North American battery suppliers have

entered Europe, although not Italy as yet. Manufacturers of lidars and e-motors have limited presence in Europe at the moment, but possible future expansion could open up interesting opportunities for Italy. → **K**

K Coming to Europe?

European presence of leading international battery, lidar and xEV players



BATTERY

Country	Company	Plants in Europe
USA	A123 Systems	Czech Republic
Japan	AESC	✗
China	BYD	UK ✗
China	CATL	Germany
Japan	GS Yuasa	Hungary UK
South Korea	Inzi Controls	Hungary
South Korea	LG Chem	Poland
Sweden	Northvolt	Sweden Poland ✗
Japan	Panasonic	Czech Republic
South Korea	Samsung SDI	Hungary Austria
South Korea	SK Innovation	Hungary
USA	Tesla	Germany ✗



LIDAR

Country	Company	Plants in Europe
USA	Aeye	✗
USA	Baraja	✗
USA	Blackmore	✗
USA	Cepton	✗
China	Hesai	✗
Israel	Innoviz	✗
USA	Luminar	✗
Japan	Omron	✗
USA	Ouster	✗
Japan	Pioneer	✗
China	Robosense	✗
USA	Velodyne	✗



xEV

Country	Company	Plants in Europe
China	BAIC ¹⁾	✗
China	BYD	Hungary France
China	Byton	✗
USA	Canoo	✗
China	Chery	✗
China	Geely	UK Belarus
China	JAC ²⁾	✗
China	Leap Motor	✗
USA	Lucid Motor	✗
China	NIO	✗
USA	Rivian	✗
USA	Tesla	Netherlands Germany ✗

1) R&D center in Italy 2) Design center in Italy

✗ No presence in Europe ✗ Plan to open European plant

FOSTERING A SUPPORTIVE ENVIRONMENT

For Italian automotive components suppliers to be able to steer the coming transformation, they need the support of government in the form of industrial policy. → [L](#)

This can include a number of different areas:

- **Incentivize consolidation and collaboration:** Policies can include introducing fiscal advantages for SMEs (small and medium-sized enterprises) in connection with M&A activity, and creating incentives for hiring temporary managers. Such initiatives predominantly help companies that are active in legacy modules establish a solid management structure, pursue ordinary and extraordinary growth initiatives, and develop their products into integrated solutions.
- **Support R&D activity:** Potential policies include tax credits for R&D costs and grants for R&D carried out by universities or businesses. This helps suppliers operating in legacy modules integrate ICT features into their products, turning mechanical products into smart products.
- **Respond to changing demand for skills:** Policies can include opening new faculties at universities (for example, mechatronics), expanding university courses, and improving communication between the academic and business worlds. This enables companies to benefit from a pool of skills that are in line with market trends, as demonstrated by "Motor Valley" in Emilia-Romagna.
- **Coordinate national strategy:** This can be achieved by establishing automotive taskforces made up of politicians, industry representatives and technology experts to develop unexplored modules. Promoting international cooperation and venture capital is also beneficial.
- **Promote foreign direct investment:** This can be facilitated by means of special agreements regarding

the market entry of global components suppliers and OEMs, creating incentives for developing unexplored modules.

LEARNING FROM PEERS

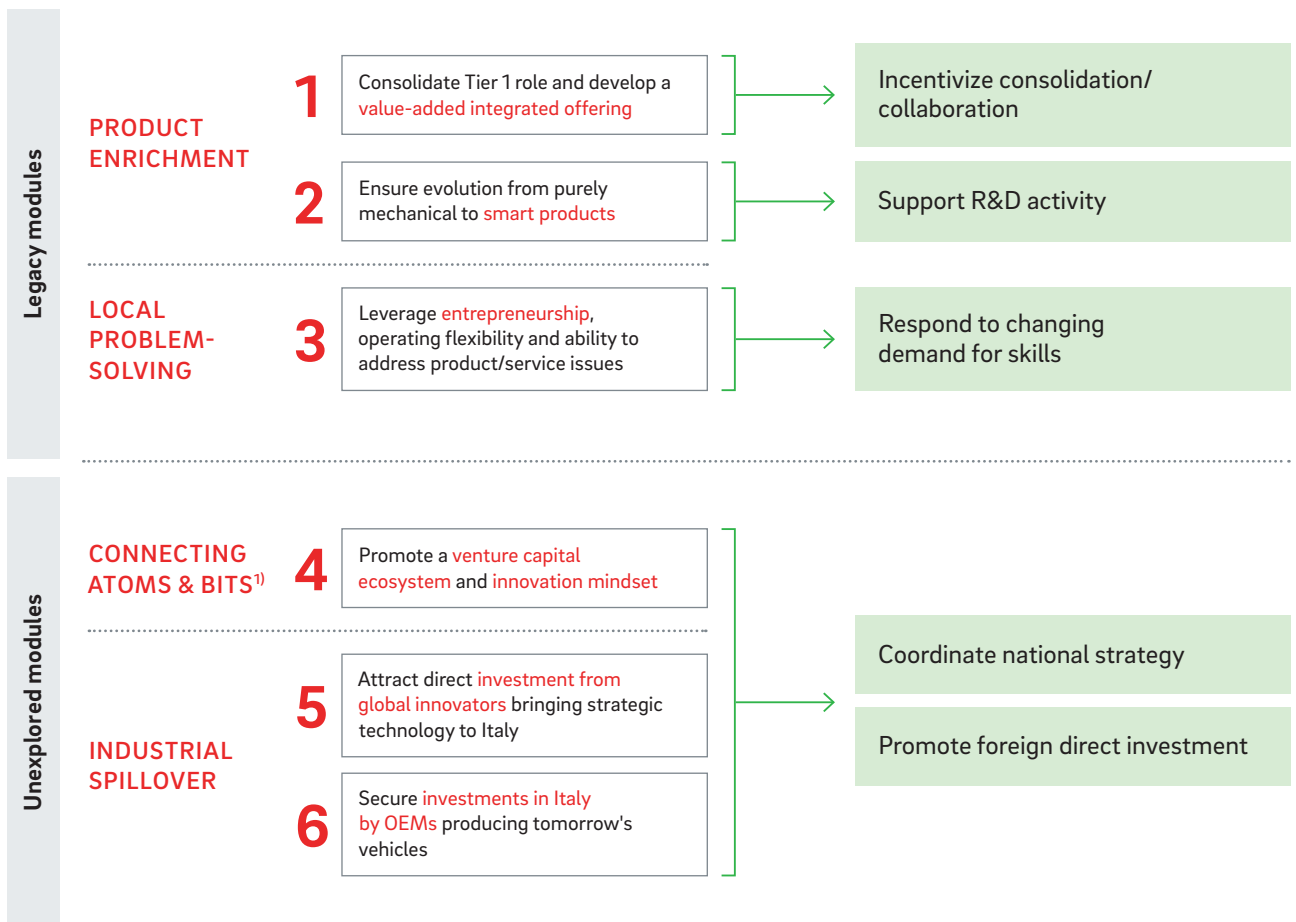
Many countries already have industrial policies in place that support automotive companies. Their impact on local businesses has been considerable. The challenge for Italy is to learn from its peers and find the right mix for the specific situation within the country.

In Europe, the leading automotive nations are busy implementing industrial policies tailored to their current positioning and future ambitions. The German government, for example, has recently introduced cross-domain initiatives in a bid to protect its undisputed leadership of the industry, including regulations on company mergers, laws protecting intellectual property and measures specifically aimed at ensuring the supply of skilled labor. Spain has created incentives for PSA Group to invest in new assembly plants, allocating more than EUR 20 billion in public funds to reinforce its position in vehicle assembly. Similarly, Slovakia has recently supported Jaguar Land Rover in the construction of a new car plant.

Other countries are focusing more on emerging trends. For example, France is promoting R&D by companies by introducing tax credits for startups and innovation. Similarly, Hungary is subsidizing global battery manufacturers who open production centers within the country, in an attempt to create a hub for production and the development of related technology. Outside Europe, China, which enjoys a leading positioning in electrification, is now focusing mainly on AI, making huge public investments in strategic tech companies through various initiatives.

L Creating a supportive environment

Customized strategies for suppliers, and potential industrial policies



1) "Atoms" are well established companies, "bits" are startups

In conclusion, although the precise shape of the mobility market in 2030 and beyond is as yet unknown, Italian automotive suppliers face a clear imperative: They must adopt an explorative approach, embrace innovation and move outside their comfort zone in terms of skills, products, business models and collaboration. Mastering the transformation agenda will allow industry players to shape the future – and at the same time guarantee their future success.

Credits and copyright

This study was written by Roland Berger in partnership with ANFIA, the Italian Association of the Automotive Industry.

The Roland Berger team was as follows:

→ **Andrea Marinoni** (Senior Partner)

→ **Nicola Morzenti** (Principal)

The work was supported by the Roland Berger Automotive Competence Center.

In particular, we would like to thank:

Thomas Schlick (Senior Partner), Marcus Baum (Partner) and Eric Esperance (Partner).

The research was coordinated by an advisory board made up of the following individuals:

→ **Giuseppe Barile** (Executive VP Customer Group, Webasto Roof Systems and former President of Components Group, ANFIA)

→ **Andrea Debernardis** (Head of Economic & Internationalization Department and Director of Component Suppliers & Coachbuilders and Designers Groups, ANFIA)

→ **Gianmarco Giorda** (Managing Director, ANFIA; CEO, ANFIA Service)

→ **Marco Rollero** (Executive VP of Supply Chain, Eaton Automotive)

→ **Marco Stella** (President of Components Group, ANFIA; CEO, Duerre Tubi Style)

→ **Aimone Storch** (President, Vimi Fasteners)

The following industry experts contributed industry data and shared their unique perspectives and suggestions through interviews:

→ **Gabriele Allievi** (President, Bosch Italia)

→ **Silvio Angori** (CEO, Pininfarina)

→ **Paolo Bocca** (Sales Manager for Italy, TomTom)

→ **Majo Cecur** (Head of Engineering, Eaton Automotive)

→ **Giovanni Coppola** (Corporate Development Manager, Enel X)

→ **Federico Galliano** (Public Affairs, PUNCH Torino S.p.A.)

→ **Niccolò Gasparin** (Executive VP Mobility Power Solutions, FIAMM Energy Technology)

→ **Massimo Gilardi** (Head of Partnerships, Octo Telematics)

→ **Marco Monti** (President of the Automotive Division, STMicroelectronics)

→ **Cristiano Musi** (CEO, Landi Renzo)

→ **Andrea Sanguedolce** (Country Manager, FEV)

→ **Roberto Vavassori** (Head of Business Development & Marketing, Brembo – President, CLEPA European Association of Automotive Suppliers)

The following academics contributed their expertise:

- **Gianpiero Mastinu** (Full Professor of Vehicle Engineering, Politecnico di Milano)
- **Emilio Paolucci** (Vice-Rector for Technology Transfer and Full Professor, Politecnico di Torino)

Representatives of the following automotive associations contributed to the report through interviews:

- **VDA** – German Association of the Automotive Industry
- **OESA** – Original Equipment Suppliers Association (USA)
- **FIEV** – Federation of Vehicle Equipment Industries (France)

The following individuals from ANFIA were actively involved in creating this study:

- **Emanuela Pregnolato** (Head of Economic and Internationalization Area)
- **Fabrizia Vigo** (Head of Institutional Relations & Car Manufacturers Group)
- **Marisa Saglietto** (Head of Research & Statistics Department)
- **Miriam Gangi** (Head of Communication, Public Relations and Events Department)

WE WELCOME YOUR QUESTIONS, COMMENTS AND SUGGESTIONS

CONTACTS

ANDREA MARINONI

Senior Partner

+39 335 7305073

andrea.marinoni@rolandberger.com

NICOLA MORZENTI

Principal

+39 335 5982676

nicola.morzenti@rolandberger.com

GIANMARCO GIORDA

General Manager ANFIA

+39 011 5546511

g.giorda@anfia.it

This publication has been prepared for general guidance only. The reader should not act according to any information provided in this publication without receiving specific professional advice. Roland Berger GmbH shall not be liable for any damages resulting from any use of the information contained in the publication.

© 2020 ROLAND BERGER SRL. ALL RIGHTS RESERVED.

