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21st Century Car Distribution in Europe

IESE 2012 MBA Project



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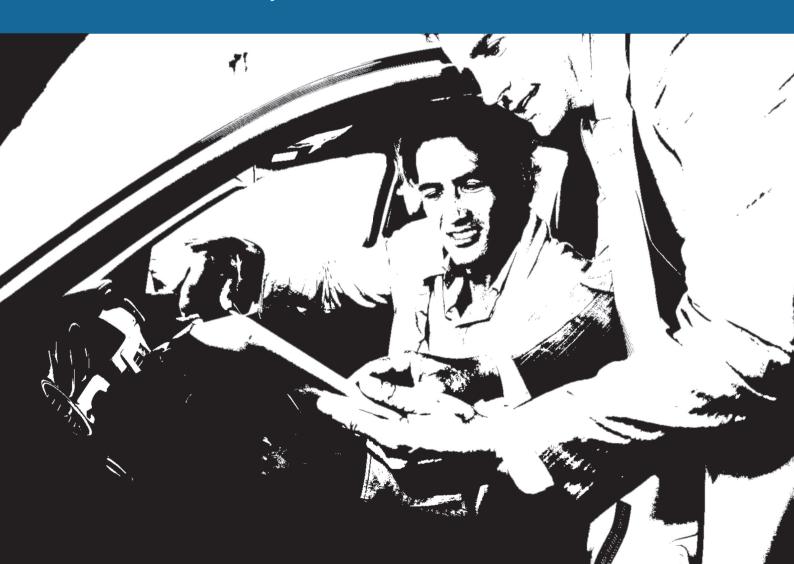




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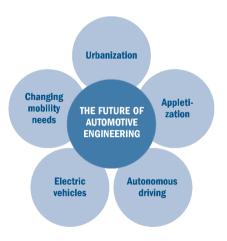


Car Distribution in the 21st Century - Introduction

For more than 125 years, the automotive industry has played a key role in the evolution of business and industry. Visionaries such as Carl Benz, Henry Ford, Alfred P. Sloan and Taiichi Ohno (just to name a few) have left their mark not only on automotive engineering, but on industry and business in general. This perhaps explains why Peter Drucker referred to automotive engineering as "the industry of industries".

In the 21st century, the industry continues to play a pivotal role in economic development and human progress. Ongoing changes in the automotive ecosphere, however, make the future of the industry less predictable than ever before. Several key trends can nevertheless be identified:

- Supply and demand: China has become the largest automobile nation in the world in terms of both supply and demand. This tectonic shift in the industry will lead to a gradual change in some of the key determinants of the industry. Some of these changes can already be observed today (such as its impact on the profit and loss statements of many car manufacturers). Others will take more time to become apparent (such as changes relating to technology and design). Either way, most of them are certainly of relevance to Europe.
- > **Technology:** The issue of "peak oil" and environmental concerns are forcing governments around the globe to introduce legislation encouraging automotive manufacturers to reduce emissions from their products. As a result, the traditional powertrain is being modified and new engines are being introduced that pair high performance with lower emissions. The electrification of the powertrain is progressing at the same time - from start/stop systems all the way to full electric and fuel-cell-powered vehicles. In light of increasing urbanization around the globe (and related emission and congestion problems), the electrification of the powertrain is regarded by many governments as a rather attractive solution. China sees it as an opportunity to leapfrog established manufacturers in Europe, Japan and the US. As things stand, no dominant technology platform has yet emerged. Consumers thus find themselves lost in a maze of more or less intuitive technology acronyms: BEV, EV, ICE, PHEV, FCEP, REHV, and so on. On the other hand, many pundits believe that the traditional internal combustion engine (ICE) will still be around for many years to come. All these factors add to the uncertainty facing car dealerships in the first half of the 21st century.



- > **Mobility needs:** Market studies show that the desirability of cars has fallen significantly among younger generations. While most teens and young adults in their twenties aspired to owning a car as recently as 20 years or so ago, today's young people prefer car sharing (in all its forms) to having "their" car. This has significant implications for the whole automotive value chain.
- > **Driver support systems:** All leading car manufacturers are currently working on driver support technology, i.e. systems that allow a car to execute tasks normally handled by the driver. Most choose an evolutionary approach, developing systems that warn the driver when they are leaving a lane, slow or even stop the car when an obstacle is identified or park the car automatically, for example. Other companies adopt a more radical approach that places driving in the hands of an on-board and networked computer, effectively making the driver a mere passenger. The ongoing roll-out of these technologies will shift drivers' attention to other activities, eventually making driving an activity that is secondary to, say, working or communicating while on the move. The implications would be far-reaching, bringing cars a step closer to becoming a commodity.
- > Appletization: The emergence of "applets" in smartphones and tablets has changed expectations about usability and the customization of the user experience among consumers aged 30 and under. The introduction of multimedia interfaces in cars marked a first step in response to this trend. Further steps will follow, ultimately making the customer's experience of services rendered while driving more important than the actual driving itself.

The trends listed above are by no means the only ones. But they are trends that will affect the whole automotive industry, including distribution and sales. The latter are crucial links in the value chain and, as such, have come under increasing pressure in recent decades. Most studies of European car dealerships share at least one insight: Margins have eroded. This being the case, some of the trends listed above are rather disturbing for dealerships. For example, the introduction of the electric powertrain will generate additional costs (by introducing new tools, for example) while reducing the need for maintenance (in the form of less brake pads and oil changes, for instance).

Against this backdrop, Section A of IESE MBA 2013 was tasked in March 2012 with a course project entitled "21st Century Car Distribution in Europe". The project was conducted in close collaboration with Alexander van de Ven, Managing Director of AUTOMANAGER, and David B. Panton, of DP Management Consulting. It was supported by Roland Berger Strategy Consultants. Sixty-six students from more than 40 nations were organized in nine teams and asked to answer the following question:

How would you structure a greenfield approach to car distribution in the 21st century?

In June 2012, the nine MBA teams presented their results to a panel of senior managers from the automotive industry and Roland Berger. The presentations were followed by a short question and answer session.

Some findings were shared by most of the teams. These included the possibility of cutting costs by pooling activities through larger regional dealerships that offer a full range of services and are supported by smaller satellite dealerships with a more narrow service offering. Similarly, many of the students saw the concept of multibrand dealerships as a logical development. Car sharing was another suggestion made by many teams. Other forms of interaction between car dealerships and customers were also suggested, driven both by the idea of car sharing and the emergence of electric vehicles and the associated challenges to profitability in the value chain. A third idea cluster related to information management, i.e. the concept of using new forms of interaction with customers. This included the use of social networks to gain a better knowledge of customers and permit customized service solutions.

Due to the limited time available for the project (less than three months, during which the participants were required to attend four other courses in parallel), the students could naturally only scratch the surface of many of the issues identified. Nevertheless, the work of our MBA students raised some very interesting questions that the reader will hopefully find stimulating.

Apart from the project output itself, the objective of this undertaking was to allow a group of highly talented MBA students to gain a more profound knowledge of the automotive industry – and possibly to acquire a taste for it. This would help ensure a continuing influx of very gifted people into this "industry of industries", which continues to form part of the backbone of European prosperity.

Professor Marc Sachon

Chairman IESE AUTO IESE Business School University of Navarra

21st Century Car Distribution in Europe



Introduction

Professor Pedro Nueno started in 1986 with the Automotive Sector Meetings at IESE Business School (University of Navarra). These annual meetings in Barcelona are being highly respected by leading automotive sector players throughout the world. IESE was recently voted the number one business school in Europe by the Financial Times.

Each year, Professor Marc Sachon teaches a core course on operations strategy within the framework of IESE's MBA program. As part of this course, nine student teams of up to eight students are required to work on a project. This year's project was entitled "21st Century Car Distribution in Europe". Professor Sachon runs this project in collaboration with industry experts Alexander van de Ven and David B. Panton.

The project

The project started in late March 2012 and ended on June 14, 2012. The key points from the project briefing given to the student teams were:

- > That European auto retailing plays a big role in the economy
- > That the competitiveness and financial efficiency of the traditional franchised dealer system should be examined
- > That there is a need to understand how customers private and fleet approach the industry
- > That environmental issues are increasing in importance for consumers and legislators
- > That advancements in vehicle technology may play an important role in changing distribution
- > That overall market potential is shrinking
- > And that technology in cars is becoming increasingly "connected"

To support their project work, student teams had access to a large number of industry reports, databases and other sources of information. They were expected to examine the main activities in European automotive distribution and retailing – in particular new and used car sales, after-sales and finance/insurance.

IESE's MBA students come from more than 45 countries, have an average of three years' work experience and have earned academic degrees in subjects from the arts, engineering and mathematics to physics, law and education. Given this variegated background, it was expected and hoped that they would challenge traditional thinking in the industry and make recommendations that might be considered unorthodox by those with experience in the sector.

Publication and sponsorship

This project was sponsored by AUTOMANAGER and Roland Berger Strategy Consultants.

Following on from the project team's conclusions, the sponsors will invite industry experts to comment on the findings. Roland Berger will then circulate an executive summary of the students' findings together with the opinions of the experts to all major automotive organizations worldwide.

In October 2012, Professor Sachon of IESE presented a summary at the autumn meeting of Automotive Fellowship International (www.automotivefellowship.com) in the UK, followed in November by a comprehensive presentation and discussion at IESE's 27th Meeting of the Automotive Industry (www.iese.edu/en/ad/EncuentrosWEB/20122013/automocion/ Automocion.asp) in Barcelona. The latter conference brings together global industry executives and experts described by the Wall Street Journal in 2009 as "bringing the sector into the classroom to spark discussion about big issues like technological change, competition from emerging economies and the relationship between business and governments".

Key finding: No more business as usual

Following the approach adopted for the student project, this paper is not a traditional "executive summary". Instead, it seeks to highlight what might be considered the nuggets within each group's work - the gems that could well feed the deliberations of future strategists and decision makers as to how the European automotive distribution system will develop in the longer term. It is worth remembering that none of the MBA students has an automotive background, so they are not limited in their thinking by traditional automotive industry norms. At first sight, some of the views might appear unusual or even naïve. Yet their work also constitutes a refreshing examination of the industry from a truly unbiased position and by students who will be tomorrow's business leaders.

Generally, the vehicle manufacturers are seen as "dominant". On balance, while this is understood, it is not regarded as a valid reason for failing to respond to change. Low dealer profits are identified as unacceptable; yet there is the suggestion that dealers need to reconsider their role. In general, the use made of dealer facilities is regarded as poor and concerns about the retailers' selling skills in certain areas are noted.

Younger customers are much more likely to respond to social media, be it in the initial stages of a purchase, during the actual purchase or in the after-sales phase. The terms "inbound and outbound marketing" are used by several of the groups.

Car sharing and taking a new look at personal mobility are two areas that have come in for special attention. Although not a universal comment, criticism is leveled at the 'protected' franchise approach to the bundling of certain services such as after-sales. This view must be seen against a background of a falling after-sales market and intensified competition, compounded by the expectation that things will get even tougher as electric vehicles (EVs) require less servicing and consume far fewer spare parts.

The groups identify the need for much better use of vehicle inventory: a concept **known as inventory pooling.** This is likely to reduce the physical space needed by dealers, reduce discounts and lead to more accurate forecasting. Inventory pooling, though, will also involve extra costs - probably for the vehicle manufacturers. For metropolitan areas in particular, a "hub and spoke" representation model is one that some groups recommend. Across the industry as a whole, it will be essential to develop IT to deliver an integrated approach that both meets customer expectations and adds profit for the industry.

In many ways, one inference to be drawn from all of the teams' findings is that the automotive industry must make a far greater effort to collaborate. If it does not do so, serious opportunities will be missed - and there will be no more "business as usual".

The Teams

Team A1

Amaia Merino Anthony Campbell Varun Dalal Carlos Parra André Lacape Jeff Kohlhoff Fuyumi Sato Stefano Charrey

Team A2

Daniel Ramirez Alberto Amoros Vikram Rathi Manuela Metl Andrew Ghadimi Clara Cano David Riphagen Lei Wang

Team A3

Kiana Bahadorzadweh Minoru Fukuda Ricardo Jardim Cardoso Denis Nakagaki Jordi Balsells Canals Peter Hayward Anne-Cécile Martineau Maruti Pai

Team A4

Rayyan Alaji Mohammad Jazayeri Roy Ayllon Leonardo Ramirez-Peña Patricia Cabrera Valeria Romero Hirotaka Ito Ioulian Stoitchkoy

Team A5

Gaspare Simeti Lucas Souza Shievar Bolipata Shintaro Ito Tina Wong Victor Romía

Team A6

Niccolo Cappon Sébastian Chaoulli Juan Pablo Diez Takemune Iwasa Olga Nikiforova Martins Mellens Manuel Velilla

Team A7

Antonella Monteverde Alberto Duhau Dumitru Furtuna Alfonso García-Moreno Oriol Chimenos Clemens Fischli Shaswat Sharma

Team A8

Anurag Ganguly
Bastian Ruenz
Courtney Woodruff
Luis Reig
René Moreno
Santiago Tatay
Shahin Gahramanzade

Team A9

Benedict Einarsson Martin Axnick Parul Karnick Enrique Baranda Guillermo Sierra Tim Kao Nabil Hadria

Team A1:

Pragmatic change and 'win-win-win' with innovative P2P car sharing

This group considered two aspects of potential changes in distribution in Europe. The first was a very pragmatic approach to improving the existing model. The second was a rather more innovative approach to car sharing that benefits the customer, dealer and OEM – effectively creating a 'win-win-win' situation.

For the first, more pragmatic approach, the team based much of its research on the Italian market. It was particularly concerned by low dealer profitability, high dealer inventories and the high overall distribution costs inherent in today's business model. If these issues can be successfully addressed, dealers will be able to turn their attention to the changing customer trends such as the idea of car sharing. The team was also concerned by the absence of any flexible usage of dealers' facilities and fixed assets, which could admit alternative uses in periods when the automotive business turns down.

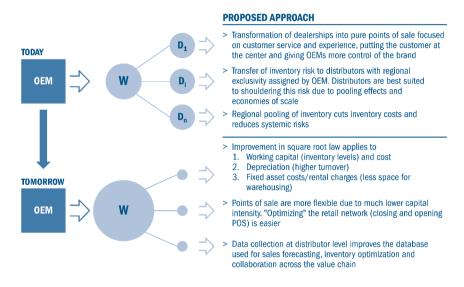
The OEMs' dominant position has so far emphasized a "push" focus rather than allowing for a "pull" vehicle supply strategy. However, the OEMs seem generally dissatisfied with their franchised retail representation. The team therefore proposes a new business model that will eliminate dealer inventory, leading to an increased focus on sales and after-sales processes, in particular prospecting for new customers and achieving high levels of satisfaction with existing ones. This will require greater professionalism on the part of dealers and will present several challenges to all players, including a more equitable share of profits. The team anticipates that the supply chain improvements it proposes in the Italy example – which essentially involve moving unsold inventory to regional warehouses that are owned and managed by the wholesalers – will yield significant cost savings. This new pragmatic change to the model will also take today's untenable inventory risk off the shoulders of dealers – although the team reckons that this approach will be cheaper overall for vehicle manufacturers too.

The team focused particularly on the second part of its project: the opportunity for collaborative car sharing. Fewer cars might be sold initially, but this will be offset by stronger customer loyalty, leading both to more after-sales business and also to revenue streams for all parties involved. While the proposed car sharing program would necessitate a relatively high investment (in hardware, software and website development), the benefits of being able to shape development of this unique person-to-person (P2P) car sharing business model are self-evident. This is a model that would be led by the vehicle manufacturers and dealers, but in which car owners too become a critical element. The concept is based on moving away from traditional car sharing logic to one in which infrastructure needs are met by the vehicle manufacturers and dealers.

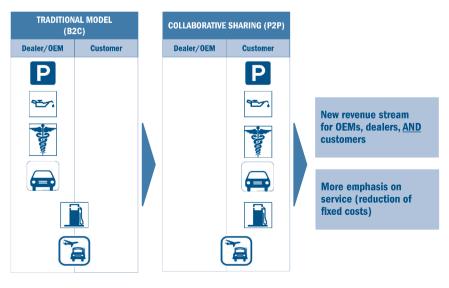
In this model, vehicle owners who only use their cars some of the time would be able to sign up to a program affording them a preferential initial purchase price plus the opportunity to rent the car out within the OEM's P2P system during periods of non-usage.

Rental income from this arrangement would be shared between the parties concerned: The proposed split is 60% for the car owner, 30% for the OEM and 10% for the dealer. All parties would therefore have a commercial interest in making this program work – a fact that should encourage the OEM and dealer to actively promote the rental program in their marketing activities. If the complexities of the resultant business relationships can be overcome, this looks like a win-win-win idea.

New RETAIL network: no inventory, focus exclusively on sales. WHOLESALER bears inventory risk – best for scale and pooling



Collaborative car sharing will transfer risk and naturally complement the consolidated retail model by focusing on customer service...



Team A2:

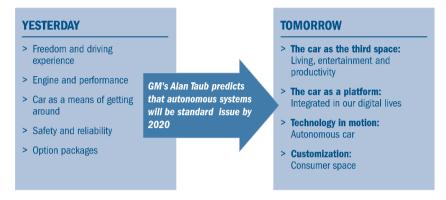
The car of the future: Just a way of getting around? Or a third living space?

Team 2 considered how future personal mobility technology will affect not only how vehicles are used, but also how they are supplied in the future. This perspective is rooted in technological developments in the direction of autonomous driving. In this scenario, the vehicle of the future becomes more of a third living space in which travelers can do many things as they drive because their vehicles essentially 'drive themselves'. It follows that configuring and building cars to meet travelers' third space and free time needs and expectations will require greater flexibility and major changes. As the team developed this project, the members asked themselves (and others) the question: If the car did the driving for you, what would you like to do in the car? The responses to this question form part of the research findings for the project conclusion.

In addition to this third space element, the team also observed that the market is threatened by low margins, rigid networks and significant shifts in customer preferences. It felt that today's "push" model is largely the result of vehicle manufacturers' high manufacturing costs, high fixed costs and the need to keep plant capacity utilization high. The team saw that new business models – such as car sharing – are already emerging which challenge the status quo. Its online research in the Barcelona area indicated that the traditional role of the car will change.

Consumers enjoy the freedom a car offers. This, coupled with the fact that cars will become more of a living space and a platform for integration in customers' digital lives as autonomous driving gains ground ('technology in motion'), will therefore require even more customization. And such changes will have implications throughout the industry. It is, for example, conceivable that companies – such as Google – that are normally completely alien to this industry could become contributors to the manufacturing process. This kind of involvement would be essential to meet the needs of customers' third space requirements, resulting in a greater influence on the distribution system of the future. Dealers' staff will therefore need to acquire different skills, especially in sales. Additionally, the customization of cars will most likely take place further down the value chain than it does today, with dealers (rather than vehicle manufacturers) involved in running customization/personalization centers closer to the point of sale.

The insights gained show that the attributes of the traditional car will change:



Sources: http://www.wired.com/magazine/2012/01/ff_autonomouscars/2/

If the car did the driving for you, what would you like to do in the car?



Team A3:

Size matters – and so does the used car and electric vehicle business

This team tackled multiple aspects, studying the volume segment issues in today's business model with a view to improving profitability in the short to medium term. It believes that changes in dealership size and business/geographical structures will improve dealers' potential return on sales (ROS) – as will a more developed and focused approach to the used car business. A separate element with a longer term focus (2025) then added a greater emphasis on online aspects and developed the business model to exploit new potential in the electric vehicles segment as EVs grow in popularity.

For the short to medium term, the team focused on national sales companies (NSCs) and dealers operating in the volume segment, which represents 85% of total market volume. The team believes that many dealerships today make a loss due to scale effects in this highly competitive segment, which is sometimes known in the automotive industry as the 'killing field'. The average return on sales is just 0.5%, with many dealers actually losing money. In general, the larger dealers at least have more of a chance to make higher profits. The outlook for the traditionally profitable after-sales business also looks uncertain as cars become more reliable, new car sales stagnate and competition from non-captive repair shops increases.

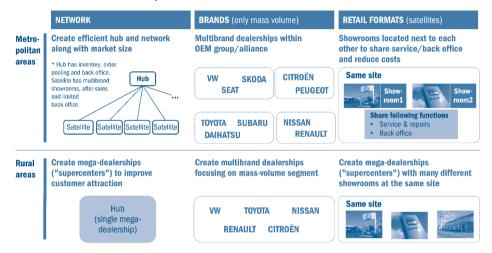
The team expects that, in the short to medium term, these challenges will almost certainly result in fewer dealerships. An increasing need will therefore emerge for hub and spoke dealer constellations to cover larger geographical areas. The team also suggests that it would be preferable to change the logic of the rigidly exclusive-brand site to one that allows greater consumer choice and higher volumes for the dealer. The proposal, referred to in the project as 'the consolidation model', seeks to satisfy elements of the vehicle manufacturers' need for brand focus in metropolitan areas by using the concept of multibrand operations within an OEM's brand portfolio. The VW group, for example, could have a multibrand presence for its own group brands at such metropolitan area dealerships. On the other hand, given the huge difficulty of finding a suitable scale of business in rural areas, not even this OEM multibrand logic is sufficient in such regions. In this case, the team therefore proposes that vehicle manufacturers should relax their brand specialization in low-volume rural areas to allow multiple brands from different vehicle manufacturers to coexist at a single dealership/location. This should provide the scale needed for the dealer to earn sufficient profits. The short/medium-term proposals are then complemented by actions to target the next area of potential: development of a much stronger used car business, both in terms of prospecting for new customers and increasing the loyalty of existing ones. Simply put, the used car business should be treated with a level of importance equal to that of the new car business.

To support development of the consolidation model and this 'used car like new car' focus, the team proposes that greater use be made of direct B2C online activities. These activities would concentrate on the profitable used car and after-sales business,

as well as EV business support development to cover the final point in the proposal. The industry tends to look more closely at the risks that a growing electric vehicle fleet poses to profitability. In fact, however, this expansion can also create new business opportunities in battery replacement, battery charging services and – for some, perhaps – even a trend toward becoming EV specialists rather than brand-specific EV dealers. Going forward, the industry should therefore concentrate on opportunities for change and the upside potential that goes with them, rather than focusing on the problems and limitations of today's business.

The two models differ in terms of network scale, brands and retail format

Consolidation models - Concept



Key features of EVs could create new business opportunities for dealerships

Key assumption

EV will become more popular because of CO₂ emission regulations and success in reducing cost of licing batteries.

Key features of EVs

- > Compared to ICEs: Relatively easy to change automotive parts because of modular design
- > Electrical technology skills differing from those of traditional mechanics are needed to maintain and repair cars
- > No fossil fuels completely electric

BUSINESS MODEL FOR EV-FOCUSED DEALERSHIPS

1. Provide batteries and rapid chargers

- > EVs need to change batteries at regular intervals
- > Install rapid chargers at dealerships
- > Launch battery leasing business (Better Place business model)

2. Provide automotive parts and certifications

- > Customers could customize EVs easily
- In case of heavily customized EVs, consumers would require certification (for customers) instead of OEM's original certification

3. Sell multibrand EVs

- > Small OEMs (e.g. Tesla, Think) could not afford many captive dealerships
- > EV OEMs expected to increase in future

The state of the s

Source: Roland Berger

Team A4:

Vehicle customization: 'Local customer needs, locally met!'

Team A4 devoted its attention to the European premium car segment, basing its work on the fact that customers who purchase cars in this segment are more concerned with customization and personalization than with getting the lowest possible price. The team found that the importance of customization is driven by four trends: an aging population, the more modular design of electric vehicles, environmental issues and, lastly, the understanding that the car is becoming more of a 'man-machine interface'.

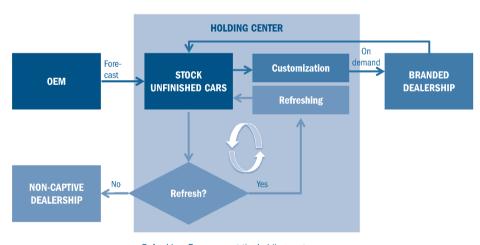
Customers are doing more and more of their pre-purchase research online. Decisions about vehicle specifications too are now mostly made before the customer ever walks into a dealership. The team believes that creating customer choice specification elements to service customization requirements opens up potential for late finishing of vehicle production close to the point of retail: Rather than force customers to wait months for customized vehicles to be built at the factory and delivered, why not build part-finished vehicles at the factory and hold these in stock on the market, ready to be locally finished to meet the customer's personalization needs. These mostly tend to involve body color, interior trim, sports option packages, in-car entertainment and designer alloy wheels.

Setting up and operating holding centers to realize customization will naturally add to the cost of national wholesale organizations. However, the team believes that customers will be prepared to pay higher purchase prices in return for faster delivery times. More generally, it is also convinced that the benefits to all the stakeholders involved will outweigh these additional costs: Factory forecasting of standard partbuilt vehicles will be more accurate, for example, and will be accompanied by shorter lead times. Dealers too will be able to reduce inventory levels to improve their return on sales and develop a more pull-oriented sales strategy. Lastly, customers will likely be more satisfied than with the significantly longer delivery times that are part and parcel of the traditional delivery system.

Management summary

SCOPE	> Premium car segment > Europe
OBJECTIVES	 Deliver suitably customized cars to consumers as fast as possible Maintain high quality Increase profitability of dealerships and OEMs
METHODS	 Produce unfinished models at OEMs and send them to regional holding centers for final customization based on customer orders Unsold models "refreshed" at the customization center Car dealerships focus on selling cars, keeping minimal inventory
COMMENTS	 The national distributor must be equipped as a finishing facility This model achieves speed and quality but at a higher cost Model based on late finishing to satisfy customer demands

Our late finishing approach pools inventory at national holding centers that are prepared for customization and quick delivery



- > Refreshing: Every year, at the holding center
- > Renewal: Every 7 years; sold to non-captive dealerships

Team A5:

Three steps to the future: optimization, utilization and integration

This group analyzed the three steps named above in light of a project scope that concentrated on franchised urban dealers in the European volume segment. In the process, they explored delivery channel performance and relationships, customer interaction and issues relating to shifts in mobility patterns. The three steps were reviewed in an attempt to find an overall transportation solution. The team stressed that this business is not (or should not be) just about selling cars.

The **optimization** step is about developing an intensive and disciplined approach to dealer qualification and performance measurement – an approach based on carrot-and-stick-style rewards and penalties systems. Those dealers that outperform a defined benchmark for certain performance parameters find themselves rewarded with bonuses and financial support for facility upgrades. Conversely, those that underperform the benchmark receive little or no support and, ultimately, run the risk of having their franchise revoked. This kind of focus will encourage dealer mergers and the creation of larger dealer groups with greater profit potential due to economies of scale.

The second step is referred to as the **utilization** phase, which involves developing new revenue streams for dealers by introducing car sharing programs. The team identified potential to make use of dealers' sizeable inventory of new cars. Rather than letting the stock of new cars become a financial burden whose value depreciates progressively, dealers could utilize those vehicles that are unlikely to sell easily by launching a local car sharing model. After a vehicle has completed its time in the car sharing business, it can then be switched to a certified used car program franchise. Given certain assumptions, the team believes that its model will lead to enhanced margins – possibly double what they are today, albeit subject to considerable variance.

An emphasis on car sharing will ultimately benefit vehicle manufacturers, allowing them to optimize production batch sizes, increase loyalty and analyze trends more accurately. Dealers will benefit from optimized inventories, new revenue streams and the option of becoming one-stop shops. Consumers too will benefit from 'pay as you go' arrangements, more ecofriendly mobility and the chance to drive a wider range of cars.

The third and final step in the group's proposal is the **integration** phase. The idea here is to harness smartphone technology to enhance both sales and after-sales business potential, but also to gain access to the 'big data' forecasting that is made possible by direct access to significant volumes of user data from mobile apps. The industry will need to exploit the rapid growth of smartphones (and apps) and ensure integration across all sectors of the industry.

The benefits to the OEM will be improved forecasting potential and fast and direct access to customer insights. Dealers will see their focus shift from business administration to more productive business development, as direct contact with consumers enhances their communication and market access options. Consumers will benefit from a more convenient way of accessing dealer services via smartphone apps, which fits better into a busy lifestyle.

The impact of car sharing on dealers



- > Can afford to wait for viable production batch sizes
- > Can develop brand loyalty
- > Can monitor car ownership trends at first hand

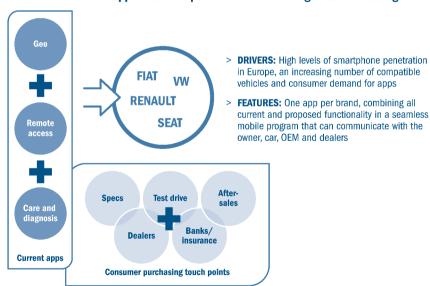
DEALER

- > Shorter lead times and less inventory
- > Diversified revenue streams and financial security
- > Position in growing car sharing market
- > Dealerships become one-stop shops for car buyers/users

END Consumers

- > Pay as you go
- > More ecofriendly mobility
- > Opportunity to "test drive" different cars for long periods of time

Central OEM mobile application for pooled demand and big data forecasting



Team A6:

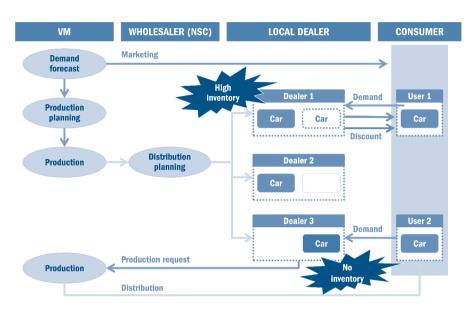
Sharing is caring - and makes good business sense!

Team A6 turned its attention to the volume sector in Western Europe in the short to medium term, focusing on the businesses of large dealer groups such as Stern Groep NV, Inchcape plc and Pendragon plc. The team identified inefficiencies in the flow of both products and information. The existing arrangement is a push system that generates significant commercial issues and is poorly coordinated between the vehicle manufacturers and dealers, all of which limits effective results. Six key issues were identified that will need addressing: low margins for dealers, high operating costs for dealers, insufficient cooperation between dealers, poor forecasting and supply throughout the value chain, production overcapacity for vehicle manufacturers and changing markets/demographics. In response to these challenges, automotive distribution must redefine itself. In the short term, the focus should be on improving inventory management and developing more relevant and effective customer communication. In the medium term, the value chain needs a pull system that delivers further optimization by emphasizing both the flow of information and the more effective alignment of every link in the chain.

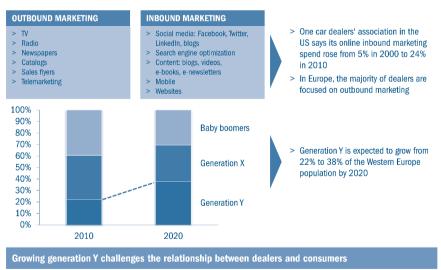
In the short term, priorities should, for example, include reducing dealers' inventories by virtually and physically pooling their stocks. This would optimize the potential to move products to where the pull customers are. Lower inventories will benefit dealers in particular, as they will need less space and be under less pressure to grant discounts. In the medium term, production levels must be better planned to limit idle inventory in the supply chain, the objective being to move toward on-demand end customer production.

On the communications and business/user intelligence side, traditional marketing will become ever more irrelevant to younger generations. Accordingly, vehicle manufacturers will need to use a combination of outbound and inbound marketing. Increasingly, word of mouth and social media will play a key role in the marketing mix and for data collection. The industry must therefore adopt more online tools to enable customers to research products, access the buying process and manage after-sales needs. Besides satisfying customers' more demanding expectations, this will help reduce costs and improve forecasting (thanks to superior intelligence). Inventory pooling should extend across the whole industry, as should the flow of information. The team felt that vehicle manufacturers were not yet sufficiently customer-oriented, and that this needs to change. Ultimately, all market players will need to be aligned. Failing this, it will be very difficult to remodel the industry.

The current supply chain contains inefficiencies in the flow of information and products



Car dealers still rely on traditional marketing tools, but a new generation of consumers has arrived and will keep growing



Source: Euromonitor International, Infosys – Innovation in digital consumerism for automotive industry 2012

Team A7:

Enhancing the customer's journey through revolutionary change!

This team identified three main problems: declining profits on new cars, underutilized dealerships and changing customer behavior. They believe that there is a need to realign profit sharing potential for new car sales by changing today's expensive and rigid franchised dealer structure, and also by improving communication and interaction with both prospective and existing customers.

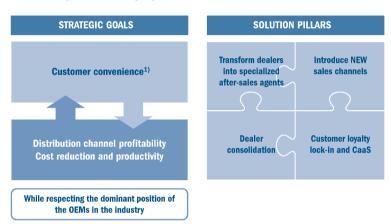
This revolutionizing of the sales channel involves identifying those real value-added elements that a physical dealer must provide – and then handling all other sales processes in some other way. At the same time, the team identified the potential to handle vehicle servicing activities by altering dealers' physical after-sales structure.

Most of its research for the project was based on Spain and Barcelona in particular (Seat being the local manufacturer). Most vehicle manufacturers have recovered from the 2008 crisis, but many dealers remain unprofitable (at worst) or need a better return on equity (at best). The team acknowledges that vehicle manufacturers have significant control over dealers, and that surplus production capacity puts pressure on dealers' pricing and stock. Although vehicle manufacturers are likely to remain dominant in the future, the team examined two strategic goals: customer convenience and improved profits for dealers. The team saw that these goals can be achieved by doing four things: transforming dealers into specialist after-sales outlets, developing new e-sales channels, consolidating dealer locations and, lastly, locking in service customers via 'eloyalization'.

The team questioned how much value is actually added by dealers, noting that many sales tasks can be carried out differently with an emphasis on customer convenience. In the buying process, for example, dealers can be eliminated completely from the initial awareness stage, which can be handled online in its entirety (and at lower cost). Customers would thus interact with sales advisors via live online systems, allowing most sales process requirements to be covered via this route. Test drives could also be booked as part of this online activity and then delivered via central test drive hubs. Additionally, the customer after-sales experience too would be significantly enhanced by an e-connected approach. Fast development of both vehicle and smartphone technologies will one day mean that smartphones are connected to in-car technology to interact in areas such as performance diagnosis and the monitoring of servicing needs. The same smartphone technology also facilitates effective, ongoing interaction with customers.

These changes will increase customer convenience and reduce the need for dealer assets (premises and stock in particular). As an example, the team's revised representation plan for Seat in the Barcelona area would mean less capital employed and far fewer staff. While acknowledging the risks inherent in the new pull system, the team concludes that vehicle manufacturers, dealers and customers alike all stand to benefit from these changes.

Goals and pillars of the proposed solution



1) As stated in "KPMG – Report 2011" the main value drivers relate to safety, total cost of ownership and trust in after-sales service

Remote channels

SOCIAL VIDEO SHOPPING

- > Enables "live" online customer interaction
- > Reduces required volume of sales personnel
- > Adopted by insurance companies

ONLINE SUPPORT

- > Time saving and convenient
- > Provides remote support for online channel
- > Focuses on "pull" sales

APP SUPPORT

- > Transfers the smartphone experience to the car
- > Analyzes car performance in real time
- > Creates "lock-in" effect to foster loyalty

Team A8:

A pragmatic approach: Speeding up business trends to deliver results

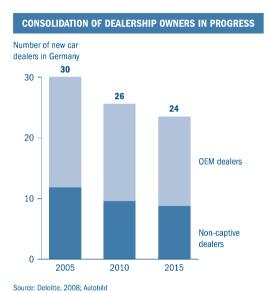
Team A8's approach is more about sharpening the focus on and accelerating those trends that European car distribution channels are already experiencing, in particular in the volume segment. They note that dealers' margins are razor thin – mainly because of the need to concede higher discounts in the current economic climate and because of increases in operating costs. As a result, certain trends are already emerging that must be taken into account in the team's future greenfield approach. These include: the consolidation of dealerships; responses to the growing competitive threat to the franchised after-sales business; more multibrand dealers emerging in smaller and/or developing markets; buyers making much greater use of the Internet to research and buy; and changing mobility needs (for example smaller cars and car sharing programs).

The team feels that heavy discounts can be reversed if there are fewer dealers and if smart trading 'rules' are achieved by better staff training and targeted incentives. Operating costs can be contained by making greater use of hub and spoke dealerships. However, the team also recognizes that these savings could be offset by risks such as a reduction in service business as well as the fact that the management process will be more complex. Service retention will be a challenge as a result of increased competition, more reliable cars, reducing scheduled services and, as electric vehicles become more widespread, fewer parts being needed.

A survey conducted by PricewaterhouseCoopers in Central and Eastern Europe found that multibrand dealerships are more common and tend to be more profitable in this region. The team believes that increasing use of online tools will benefit both franchised and independent dealers. The franchised sector must improve customer loyalty, essentially through a combination of coordinated communications and marketing via dedicated staff activities. Dealers will also need to adapt to growing demand for smaller cars and electric vehicles, with cars being seen less as a status symbol. The whole industry therefore needs to take a broader view of personal mobility than it has in the past.

The team sees two main dealer business models emerging: Volume brands will be sold via multibrand sites while premium brands will be sold via dedicated sites. By following these recommendations, the team believes that dealers can achieve 10% savings through lower discounts, improved operational efficiencies, better after-sales retention and higher sales thanks to better use of the Internet.

Intelligent consolidation and reduction in points of sale is needed



COMMENTS

- > Fewer points of sale lead to less intracompany competition and help reduce overcapacity/inventory at dealerships
- > Ownership of multiple brands is necessary for hub and spoke networks
- > Challenge of maintaining service levels can be mastered:
 - Audi successfully reduced its dealer network in Germany by ~20% (from 1200 to 950) in 2005 – and increased its market share
 - Fewer points of sale will not necessarily compromise service levels as cars are not impulse purchases

Source. Deloitte, 2000, Autobild

Estimated savings of around 10% are feasible

Reduce discounts	> Assumption: Reduce discounts by half, from around 10% to 5% > Result: Increase margins by 5%	
Hub and spoke structure	> Reduce operating costs by ~2% (estimate by ICDP)	
Consolidation	> Result: Increase margins by ~2%	
After-sales improvement	> A 5% reduction in the customer churn rate would result in a 2% increase in gross margins	
Multibrand	> Reduce operating costs by ~2% (assumption: similar to hub and spoke) > Result: Increase margins by ~2%	
Internet channel	> Increase sales due to additional channel > Upside potential to be validated by current business model trials	
Changing customer needs	> No major cost savings, but protection for future competitiveness	
Overall	> Cost savings of around 10% > Increase in sales due to additional Internet channel	

Source: Roland Berger, 2008; ICDP, 2012; Capgemini, 2009, 2011; Carfax, 2009; Team A8 analysis

Team A9:

Bringing vehicle manufacturers closer to the end customer through virtual interaction

Due to the different distribution challenges facing the multitude of car brands that exist, the team concentrated its efforts on the European premium brands and segment, looking ahead to the period after 2015.

The core idea behind this team's work is closer direct engagement between vehicle manufacturers and end customers using sophisticated user-friendly technologies. The team itself expressed this as "moving the entire customer journey into the virtual space", i.e. gradually moving marketing, vehicle-based and even financing interaction away from the dealer and toward the OEM. Within the scope of the project, the question was asked: "How can the automotive industry improve distribution margins while maintaining high service levels and a strong relationship with customers?"

The team backed up its project work with the results of a customer survey focused on urban consumers in the age range from 20 to 41 – the customers of today and those in the future who fit the timeline in the project scope. The core idea would require investment on the part of the OEM in particular, for example for new IT systems and for the resources (sales and marketing staff) to deal with the direct customer contact. Ongoing OEM/customer interaction would, however, quickly produce results that benefit not only production planning and forecasting, but also the vehicle manufacturers' brand(s) and the development of the kind of vehicle technologies and features that customers want.

Thanks to this direct contact, vehicle manufacturers too will be stimulated to drive greater synchronization throughout the business, particularly regarding inventories. This end result will, of course, lead to fewer staff at dealerships, which will in turn benefit the cost base. Notwithstanding, customers will still visit dealers toward the end of the purchase process and also to satisfy their after-sales needs. OEM costs will naturally increase as dealers downsize. However, this should be regarded as an investment in improving long-term business quality rather than merely as a cost item.

There will also be some quick wins – in test drive scheduling and virtual marketing, for instance. The IT platform will need to be better but simpler. It will then be possible to exploit social media in order to enhance the brand, drawing on the experience of other retail industries.

Transferring activities from the dealerships to the vehicle manufacturer would have a positive financial impact on the dealerships

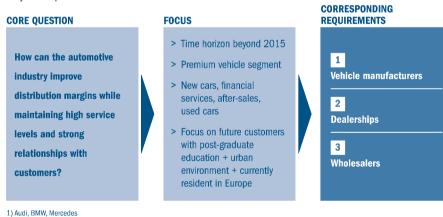
Business model - Resultant financial impact

VEHICLE MANUFACTURER	WHOLESALER	DEALERSHIPS	
> IT investments in infrastructure > Personnel (sales and marketing) > Investments in web and mobile content > Cooperative advertising savings due to virtualization	> More accurate vehicle demand forecasts	> Fewer local personnel > Optimized vehicle and space usage > Smaller new car inventory and lower vehicle holding costs > Lower advertising costs and less incentive spending	
= Increase in cost	t		

Operational distribution challenges differ for each brand – Our focus is on the European premium segment¹⁾

Project scope

Source: Spiegel Online Auto, Team A9



Expert opinions on the MBA project



Many thanks for the MBA students' evaluation. I agree with all of the points made. We need to discuss how quickly their thoughts can be turned into reality. I do hope that this excellent work will be open to the public and will add leverage to our future business. Congratulations on this success.

Albert Still, Chairman AVAG Holding

I commend this project for offering uniquely refreshing, unbiased, clear and uncompromising advice to vehicle manufacturers and dealers: Take cost out of your distribution system, generate new revenues with car sharing programs, make better use of online tools, share your profits more evenly and become more flexible, responsive and customer-oriented. At a time when the auto industry in Europe struggles with declining sales, low profits, rapidly evolving technologies and changing attitudes toward car ownership and use, I think it ignores this advice at its own peril. Still, I ask myself: Can it really do all this successfully without addressing its overcapacity problem first?

Marc Greven, Director Legal Affairs, ACEA (European Automobile Manufacturers Association)

From the report, it is clear that in the new car market, as in the independent aftermarket, there are too many steps in the value chain. Is that too much waste or too little added value – or both? The push model also means there is too much inventory in the market. Rameder has responded to this problem by removing steps in the chain; in particular, by selling a range of 5,000 different towbars and electrical sets directly to the garages or consumers via a web shop. Currently more than 60% of Rameder's revenue comes from this source. As a result, there are increased profits for the remaining players in the value chain together with lower costs to the end consumer. Eliminating the waste from the value chain has made Rameder the cost leader in the European sales and distribution market for towbars and electrical sets. A market pull model – only replenish when products are sold – results in much lower inventories throughout the chain and significantly enhances availability. There are lessons here for the automotive market as a whole.

Karel Bos, CEO, Rameder

Whether providing goods or services, all businesses need to focus on their customers' purposes within a context of inexorably increasing and changing customer expectations – themselves the result of competitive improvements. Within those purposes, the primary focus should be on the customer value 'basics' of: 'right-first-time, on-time, every-time' supported by the best possible convenience and customer service, all at the lowest cost. All activity that is not 'value to the customer' is waste (cost) of some form and should be eliminated. Vehicle manufacturers and national sales companies need to focus on value and waste down to a detailed level in all their processes so that they enable their retailers to provide the best customer value. Dealers need to do likewise; so all their processes truly deliver the basics of customer value. This extends to pre-sales processes too: the right information at the right time via the appropriate media for the customer.

John S. Kiff, Senior Fellow, Lean Enterprise Academy and co-author of "Creating Lean Dealers"

The modern motor car is a triumph of technology, but the system for provision of mobility is no longer viable. We need a model that is profitable, more convenient for consumers and does not systematically degrade the environment. We can only achieve all three by aligning the interests of commercial providers with those of consumers and the planet, by moving to the sale of mobility as a service rather than cars as a product. This changes the financial drivers for all commercial actors from obsolescence and high running costs to longevity and low running costs. Energy efficiency is becoming the dominant metric that we must pursue and demands a mix of fuels and powertrains. Nothing can compete with the efficiency of a hydrogen fuel cell vehicle for the range to which we have become accustomed. Although the pendulum of public opinion has swung between batteries, biofuels and hydrogen, the major vehicle manufacturers have been remarkably consistent about hydrogen as the end game. The shift from selling cars to service, together with the reduced maintenance requirements of a hydrogen electric car platform, will fundamentally change the role of the dealer. Far from online wizardry eliminating the need for face to face contact, this is an opportunity for a better quality of relationship with the customer.

Hugo Spowers & Sebastian Piëch, River Simple

As a leading distributor in several European markets, Autobinck believes that the automotive supply chain will be influenced by general pressure on the ability to finance and by changing customer needs. The various parties in the supply chain should concentrate on their core competences. Manufacturers should produce competitive products, distributing themselves only in larger markets (applying the 80/20 rule). Country and regional distributors should market and promote the brand and its product propositions, centrally manage stock and logistics and manage retailers and certain direct channels to "pull" customers to the brand. Retailers should manage the customer relationship and supply them with the required products and services with a price and service quality proposition that they value. Autobinck believes that a well-funded distributor with entrepreneurial management can exploit markets better than an OEM's national sales company. Autobinck distributors already hold a central stock and encourage retailers to focus on sales, customers and people and minimize balance sheets. This is the best way for retailers to secure a return on equity and to raise finance. The ideas from the IESA MBA project will help the industry get there.

Tim Tozer, CEO Autobinck Holding

Little has fundamentally changed in the franchised dealership system in almost a century. Its original purpose was to ensure proper sales representation and after-sales support, in an age when most sales and service retailing was primitive, and cars were novel and somewhat mysterious. These conditions no longer hold. Having 30 to 40 mainly single-brand networks in parallel means badly underutilized showrooms and sales staff, too few franchised workshops per brand for user convenience, inefficient local spare parts distribution and vastly excessive costs. The dealers' main role today is to force new vehicles into saturated markets, to protect incumbent manufacturers from new entrants, and to enable the cross-subsidization of loss-making new car production and retailing from captive audiences for service and parts. Perhaps most damagingly, the system fails to provide proper market feedback from truly independent retailers, thereby preventing the shake-out of excess production capacity and over-proliferated product lines. It also helps perpetuate manufacturers' weak business models and poor financial performance. Accepting strong, brand-independent sales and service networks will be painful, but it is part of the unbundling revolution that the automotive industry has to face.

John Wormald, co-author "Time for a Model Change"

I would like to applaud the students who participated in the project for their thoughtfulness and "out of the box" approaches to the future of European car distribution. While there are clear differences between the US and European auto retailing models, what is apparent from each of the groups' analyses is that Europe's challenges as identified in the report are similar to what the US automobile industry experienced leading up to the 2008/09 economic crisis. Faced with plummeting sales caused largely by the severe constriction of credit, both the vehicle manufacturers and retail dealers were forced to address structural problems and inefficiencies in order to survive the downturn. What we have today is a much healthier business that is due in large part to OEMs addressing the overcapacity issue and moving from a push to a pull distribution model. Dealers also moved quickly to control expenses and find more innovative and efficient ways to sell and service vehicles. Clearly, the euro crisis is shedding light on the challenges faced by the vehicle manufacturers and dealers alike. The hope would be that they find ways to work together to address these challenges, and move toward becoming a healthier automotive industry going forward.

Michael T. Regan, VP, Industry Affairs, National Automobile Dealers Association (NADA) As the study points out, social media and online tools will continue to play a key role in the marketing mix and for data collection. Harnessing these new trends may seem daunting but sitting on the sidelines is far more risky. However, proper cost efficient processes and technology tools must be in place if retail organizations are to take advantage of these new growth opportunities. This includes process optimization strategies that align OEM and dealership processes toward a single goal: namely, engaging all employees into achieving a strong customer-centric focus that results in a seamless and unified brand experience for the automotive customer, both online and off. As a result, customer-relevant activities can be carried out throughout the retail process at every opportunity, at the right time and in the right places. Our best practice experience has shown that this benefits vehicle manufacturers and dealerships alike by generating short term profit and long term customer loyalty.

Pieter van Rosmalen, Global Vice President, Retail Network Solutions at MSX International

Aftermarket profits are facing increasing pressure. With a volume of USD 430 billion, the aftermarket has been the global automotive industry's stable profit generator. But now we face negative developments in saturated volume markets. There are, though, several ways for the aftermarket to preserve its position as the main source of profit for the industry. Competition among car brands for customer satisfaction and loyalty, as well as multiple distribution channels in the independent aftermarket, have led to declining gross margins on components. Yet, manufacturers' and distributors' workshop service and support costs have risen. This gap can be filled by profits from supplying service support. Private equity companies are driving aftermarket consolidation, resulting in some large businesses representing both OESs and IAMs. Parts manufacturers will need to become directly involved with the repair market, as have tire manufacturers. Online car service marketplaces, such as the German FairGarage, will bring about fundamental change through greater transparency. This will lead to declining investment in offline after-sales concepts. Recruiting new after-sales staff with up-to-date skills will have crucial importance in this changing market dynamic. Without these changes, it will fall to a new generation of players to reorganize the aftermarket.

Helmut Wolk, CEO, Wolk After Sales Experts

The current car distribution processes face great challenges. In particular, the questions of changing customer behavior in terms of time preference and the growing importance of different sales channels, late order adjustments and short delivery requirements have to be answered. On the other hand, the increasing volatility of the markets and especially increasing competition must be addressed by new processes. New product concepts, new segments and growing environmental sustainability also lead to increased complexity. In the premium segment especially, the main changes are customer behavior, the use of new sales channels and market volatility. We therefore need to accept customer-driven flexibility in combination with short lead times. On the other hand, we have to acknowledge the need for planning stability in a supply chain that depends on the global purchasing network. In summary, only those who understand the new customer needs and combine the requirements of stability and flexibility in the whole process chain will be fit for the future.

Nils Bremer, BMW Group, Project Leader, Planning and Ordering of the Future

Aftersales is seen as important for customer satisfaction and as a significant profit source for dealers and ultimately manufacturers. This analysis is, of course, correct as is the warning that the aftersales market is declining. This has been the case for many years. Yet, there is little evidence that it has shaped behaviour in the franchised sector. There is a lot of talk about "getting closer to our customers" and always an acknowledgement that aftersales is very important. Indeed, some franchises and some dealers do take it very seriously and achieve good results but it is nowhere near universal. For example, career paths within both manufacturers and dealers indicate that aftersales is unlikely to be a route to the top. Also, at the customer facing end there is little emphasis on the last syllable of aftersales. With Block Exemption opening up competition and a declining market, this sector of the industry needs a complete rethink.

David Lansdowne, Director, Aftermarket Solutions Limited and Executive Director, Automotive Fellowship International Limited

Automotive distribution is a passive logistics function; in general, that is all dealers do. They add very little value and deserve very little compensation. If they are true retailers, however, they can focus on delivering high-value-added functions in which they are the experts and which manufacturers largely do not understand. Manufacturers should establish regional, rapid-delivery inventory centers that hold all but token amounts of "test drive" inventory in regional locations. This will dramatically improve both the profitability and efficiency of new car distribution. Inventory should be available on a first come, first serve basis to any dealer based on a signed contract; all holding costs should be borne by the manufacturer. This will improve the ability of customers to find exactly the car they want, while reducing excess duplicate inventory.

Additionally, it will also impose a strong discipline on manufacturers to avoid overproduction, as well as production of unpopular models. Once pooling is adopted, dealers can focus on what they can do best: sell new cars, sell used cars and deliver high-quality service. Dealers should be able to maximize the value of selling and presentation skills and minimize the value of dealer location, capital and inventory allocation. Dealers will now have the room to carry a better inventory of high-value used cars. Because used cars are unique (mileage, condition, age, etc.), the margin is higher than new. The dealer adds value by selecting, reconditioning, inventorying and potentially guaranteeing the vehicles. Franchised dealers have access to better training and information as well as rapid parts supply, so they should be able to offer a higher-quality service experience to customers at competitive prices and margins. One theme emerged that I strongly disagree with. I am not convinced that "car sharing" is a way to improve retail dealer efficiency. It is best left to specialized companies like ZipCar or the rental companies. Dealers have little or no value to add. Their space is too expensive to be used as a parking spot.

Austin Ligon, Co-Founder and retired CEO, CarMax, Inc.

I particularly liked Team 7's recognition that the current dealer business model (sales-service-parts) is probably not viable in the long term outside of highly populated areas. Its view is certainly heavily influenced by the Spanish market, which has suffered badly from the financial crisis, being today at less than 50% of its pre-crisis level.

New technologies have taken the customer much closer to a buying decision point before visiting the retailer. In the past, the only way to draw up a shortlist was to collect catalogues by visiting retailers. Today, via the Internet, the customer has often made product choice(s) before entering the showroom. With car configurators, customers can specify their vehicles and have a good knowledge of the list price.

The salespeople used to enjoy a kind of "knowledge advantage". But now the buyer comes with very precise questions based on a lot of insider information (blogs). When it comes to final price bargaining too, many sites already reflect current discounts. Interestingly, customers still want to see and feel the car before buying. So the real transaction is unlikely to happen without physical (static or dynamic) contact with the product.

It is worth remembering that, for many buyers, the first purchase "currency" is the used car that they already own. So there will still be a need for business partners (retailers) to undertake used car transactions. In the long term, one could imagine it might be possible to disconnect these two activities. However, most used cars will require some refurbishing to be put back on the market. We need an innovative approach on how to integrate new technologies in the purchase funnel to make it more efficient in terms of people, infrastructure and capital employed.

Alain Uyttenhoven, VP Toyota Europe

Automotive distribution will undergo evolution rather than a revolution, because of the two key player groups: the OEM and the consumer. As long as vehicle manufacturers continue to build large volumes, they will need a captive distribution network. Over the past decade, several forces – block exemption, e-commerce and Korean and Chinese manufacturers, for example – have pointed toward a new car distribution system. Yet little has actually changed, with the possible exception of larger dealer groups. New car customers have different requirements from used car customers. New car customers are likely to favor a distribution system that protects their investment, similar to the status quo. The Internet, though, will play a greater role in providing customer information and dealer selling techniques. Also, dealers will need to find new profit sources – such as car sharing – and reduce unnecessary costs. Electric vehicles might well be sold through new channels as a result of greater component standardization. This is still evolutionary, not revolutionary.

Thierry van Kan, President Febiac and former CEO, D'Ieteren Auto

This has been a timely project for a market in deep trouble and facing uncontrollable predatory consumer and third-party mobile online activity. The teams make accurate statements about core problems and interesting proposals for change. However, some key issues need examining more deeply, for example, the "who" and "how" of fixing the problems. There needs to be a much fuller analysis of the financial impacts of the proposals. Overproduction is a thorny problem, but factories need to be fully utilized and it is difficult to see how "build to order" can be easily accommodated, however desirable it might be. Resolving political-economic relationships between governments, vehicle manufacturers and dealers will also be extremely challenging. However, some of the necessary changes are already underway. Mobile online is already rampant in the US and catching on in Europe.

Vehicle manufacturers have been restructuring their networks for a while and multibrand groups are gaining strength. Fast-response IT is essential in all areas and relatively easy to provide. It is the basis of the consumer revolution: online buyers, anywhere, anytime, expecting immediate response. This is leading to OEM and dealer interactions with customers and attempts at "lifecycle management". Vehicle manufacturers are already engaged in some "direct to consumer activities". There are likely to be third-party intrusions into sales and service processes. Independent repairers and parts distributors have already demonstrated their ability to hold and even increase their shares of the aftermarket. Success will always depend on the business skills of those using the IT.

Mike Seaton, CEO, Woods & Seaton

Acknowledgements

Special thanks go to the following people for their help in compiling this report:

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Alexander van de Ven is founder and Managing Director of AUTOMANAGER, a specialized international vehicle remarketing company serving both volume and premium manufacturers. AUTOMANAGER is based in Antwerp and Berlin.

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David B. Panton is a very experienced senior manager in the car business, having worked at retail, wholesale and manufacturers' head office levels, primarily at Land Rover and BMW AG. His most recent OEM position was as Senior Vice President at BMW Group's Headquarters in Munich for both the European and the Asia Pacific business regions.

He is now continuing to support business development with his own company, DP Management Consulting Ltd., which provides business development support and advice at a strategic and operational level to companies operating in a variety of business sectors worldwide.

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Ralf Landmann is a Senior Partner with Roland Berger Strategy Consultants and member of the management team of Roland Berger's Global Automotive Competence Center. Ralf began his career with Daimler-Benz and Schott Glass before turning to consulting. Drawing on more than 20 years of experience in the industry, Ralf focuses on consulting with the world's leading automotive OEMs as well as clients in wholesale/retail, car financing and the fleet and mobility sectors. He supports clients in Europe, the Americas, and China on a variety of assignments, such as corporate-, global brand- and operational-strategies as well as wholesale/retail performance improvement. He is a regular speaker on automotive industry topics and author of various automotive publications.

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