Cars can be assembled in 60 labor hours.
But it also can be done in 15. This is one of the central findings of The Harbour Report™ 2008.*

*See page 10 for more details
Dear Readers,

The economy is slowing around the world as the financial crisis works its way into the real economy. The automotive industry has taken an immediate hit. In many geographic markets, plunging sales have become a fact of life during the second half of 2008. Worried consumers, price decreases and residual value risks are making the situation increasingly difficult. At the same time, prices for raw materials are volatile, and massive investments in environmentally friendly vehicles are now unavoidable.

But it is too early to cry doom. Automotive companies have overcome previous crises and emerged stronger from each one. Governmental support does indeed help and needs to create similar international competitive conditions. But the rescue must come from within – particularly in the balancing act between addressing customer priorities and cost-cutting. Fast, sustainable savings along the entire automotive value chain must be achieved with a pragmatic approach. The model pipeline with environmentally friendly drive systems must be designed with the customer’s needs in mind. In stagnating markets, a determined commitment to sales and operational excellence at the point of sale are also important. And finally, this is an ideal time for acquisitions and partnerships aimed at tackling development tasks or tapping new markets and acquiring new customers.

In this issue of Oliver Wyman’s automotive manager, you as a manufacturer, supplier, or dealer will find many practical suggestions, high-value actions, and first-hand reports. We trust you will find these insights interesting and useful, and we look forward to a continuing dialogue with you.

August Joas
Head of Oliver Wyman Automotive Practice
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Lean production – exploiting further cost-reduction potential
Production Consulting Services
From a Single Source

Oliver Wyman has extended the range of services it offers to the automotive industry. The acquisition of Harbour Consulting and further additions of experts in production strategies and processes to our international Automotive Practice underscore the firm’s standing as the leading management consultant for automotive manufacturers and suppliers. Oliver Wyman’s unparalleled expertise in all aspects of the automotive value chain, from R&D to after-sales service, has thus been markedly strengthened in the area of production.

Around the world, the automotive industry is facing major challenges. On one hand, the agenda includes CO₂-reducing technologies and optimization of the product line. On the other hand, automotive firms are being thrashed about the financial crisis, exchange rate fluctuations, rising raw-material prices, as well as stagnation and growth occurring simultaneously in various regions. The impending transformation will significantly change all links in the value chain. Production, the most complex and highly developed link, will be most profoundly affected.

**Conflicting imperatives**
Faced with growing cost pressures, production will have to juggle an increasing number of technologies, equipment demands, and model and drive system variants, while having to reduce manufacturing costs and investment levels. At the same time, the demands of the world’s growing markets must be served more vigorously with local production embedded in intelligent networks. Furthermore, new manufacturing clusters, production trends, logistics concepts, and changes in product streams will affect the complex production processes. Nearly all manufacturers and suppliers are aware of the urgency to streamline production. Yet, this can only be done successfully in the context of the overall value chain.

**Detailed expertise and measurable results**
Oliver Wyman’s Automotive Practice has deep experience in the development of business models as well as R&D, downstream, and product strategies for OEMs and suppliers. Oliver Wyman is the first international management consulting firm to offer a complete range of specialized consulting services for production. The portfolio extends from value-added and manufacturing strategies, through network and site planning, to the optimization of production lines and jobs and the implementation of lean-management concepts.

Consulting for direct and indirect business segments draws on a unique combination: First, specialized production and lean-operations consultants have detailed knowledge and extensive experience. Harbour Report teams, for instance, visit more than 80 factories around the world each year. The Harbour Report™, a benchmark study published by Oliver Wyman, which acquired Harbour Consulting in January 2008, represents an unmatched database on productivity in the automotive industry. Second, Oliver Wyman offers expertise in automotive program management and methods, as well as teams that work well side-by-side with the client teams. Our goals are to achieve measurable improvements in quality and flexibility, stability and reliable planning, as well as cost and output, as quickly as possible.
Tailored strategies and tools
Successful production consulting relies on specific knowledge about markets and customers, as well as trends in society and technology. We use our analysis of growth opportunities and customer preferences to generate target portfolios of skills and target profiles of operating locations, as well as recommended steps to modify parts of the value chain. This applies to the company’s own production activities and to work done with suppliers, service providers, and customers. The use of numerical parameters that shape a company’s targets is an indispensable part of any effort to introduce and manage production strategy, but the optimal set of such indicators must be custom made.

Scope of services
Services in production consulting range from optimizing the entire production network or specific production lines to special programs for maintenance, quality or flexibility. Manufacturing due diligence is carried out for purchasers of businesses. Annual manufacturing assessment and benchmarking enables improvements to be objectively measured and exposes existing weaknesses.

Before plants are reorganized and placed in operation, the production concept and factory layout have to be designed or refined. We focus our attention here on the alignment of work stations, logistics, and assignment of tasks, as well as optimization of throughput, work pace, idle times, and capacity utilization. The integration of the supply chain right down to the operation’s physical logistics is typically an important component. In this sensitive environment, interaction among all players from the plant manager to the assembly-line worker and from the works council member to the head of human resources is essential for achieving sustainable results.

Good intentions are not enough
Automotive companies introduced processes of lean production, continuous improvement, and zero-defect production years ago. So far, however, few manufacturers and suppliers have actually reached the goal of continuous improvement. While lean management and the comprehensive tool kit associated with it have achieved some initial successes at most companies, the results still were not always measurable and the effect lasted only as long as dedicated lean consultants remained on-site. Boom years with broad variety of models, very high plant utilization rates, and an increasingly complex model range did the rest in those fast-paced times.

Anchored in a lean culture
Building a sustained culture of lean management takes years, yet most companies need improvements as quickly as possible, and they demand measurable results within observable project times and project costs. For this reason, Oliver Wyman is taking a new approach that links traditional top-down measures with quickly measurable boosts in efficiency and the sustainable development of structures and training for the long-term promotion of a lean culture. The appropriate lean methods and tools are put in practice with a standardized, five-step program for improvement of quality, productivity, and flexibility. The results: A “first time-through-quality” culture of production diminishes the need for quality controls; labor effectiveness and machinery operating rates are improved; and the workload on each station is balanced.
Integration of senior leadership
Lean management should breed a culture of continuous improvement throughout the factory organization by means of training and coaching. The goals here are stable and dependable production processes that combine high standards of quality, effectiveness, and profitability. This program also integrates upper-level management more closely into production processes and expands the process knowledge and the sense of responsibility among all employees. Targeted benchmarks, presented simply, promote communication across staff levels, fueling a sustainable transformation.

Uniform worldwide systems
Thanks to the know-how, worldwide coverage and the necessary size of Oliver Wyman, lean projects can be organized and supported in many plants simultaneously. This approach also promotes the strengths of a uniform, standardized lean-plant management system across multiple operating bases – a fundamental requirement for a customer-specific production system.

Efficient interface management
Interfaces with customers, suppliers, and other direct and indirect departments are a source of efficiency gains that remains largely unexploited. Better networking and transparency, clearly delineated shared processes, institutionalized contacts at many levels, escalation paths, and other instruments can help reduce mistaken deliveries, down times, and buffer stocks.

The design-for-manufacturing program analyzes the products, production processes, and solutions of major competitors. In the process, it identifies opportunities and the cost potential of production-optimized goods. The goals here are simpler products and work processes, shorter throughput times, and the reduction of material consumption, machinery requirements, and retooling. A related consulting service links purchasing and key suppliers more closely to production in order to set up common processes and problem-solving at various levels.

Most manufacturers and suppliers acknowledge the need to make improvements in production. Properly initiating such activities is a major challenge that should be tackled within the larger context of all value-added stages in automotive engineering.

Overall concept for optimizing automobile production

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Value levers
- Continuous improvement
- Efficient product design (DFA/DFM)
- Collaboration production/engineering
- Sustainability of shopfloor measures
- Behavioural change of management and operators
- Continuous improvement
- Layout redesign
- Line balancing
- Maximized operator and machine utilization
- Definition of “Quick Wins”
- Focused recommendations

Tools (Excerpt)
- RFI
- Lean assessment
- Line balancing
- Layout optimization
- Tool use
- 5S
- Roles & responsibilities
- Error proofing
- Teardown
- DFA/DFM
- CIP
- Rollout management
- Expert pooling

Performance of plant/production network

Legend:
- Rollout
- CIP = Continuous Improvement Process
- DFA/DFM = Design for Assembly/Manufacturing
- RFI = Request for Information

Source: Oliver Wyman Manufacturing Team
Despite losing billions of dollars and substantial market share as American consumers shift from large trucks and SUVs to smaller cars, the three Detroit-based automakers have reached near parity with their Japanese rivals in manufacturing efficiency, according to The Harbour Report™ 2008.

Productivity Gap Narrows Across North America and Europe

Of the six largest automakers in North America (General Motors, Toyota, Honda, Ford, Chrysler, and Nissan), the gap between the most and least productive is now just 3.5 labor hours per vehicle, or about USD 260, down from 10.51 labor hours, or USD 709 per vehicle in 2003. Chrysler showed the biggest improvement, cutting its total manufacturing labor hours per vehicle by 8 percent to 30.37, approximately the same number recorded by Toyota. Performances of the other four companies were all similar: Honda, 31.33 hours; General Motors, 32.29 hours; Nissan, 32.96 hours; and Ford, 33.88 hours.

In Europe, the gap between the most and least productive remains wide (from less than 20 hours per vehicle at the best plants to more than 60 at the worst). Some automakers have made substantial progress toward the types of sustainable manufacturing processes that characterize the world’s best competitors. Others have only just started or are just starting to implement the most basic tools of lean production.

Hours per vehicle reflects time worked by all direct and indirect labor involved in manufacturing a vehicle. This includes both hourly

Ron Harbour, Michelle Hill
and salaried workers who are assigned to each company’s stamping, engine, transmission, and assembly plants. The total hours worked are divided by the number of vehicles produced in the calendar year to yield the labor hours per vehicle. It is not a measure of how long it takes for the vehicle to be assembled, rather it measures the quantity of labor required to produce a vehicle.

Productivity matters
As labor becomes a smaller portion of the total cost of producing a car or truck, why should this metric matter? Detroit automakers are losing money in their home market (as all are now) primarily because of two main factors. First, the labor agreements they signed decades ago that committed to paying retirement and health care now add a burden of USD 1,000 to 3,000 per car penalty. Second, the strict dealer franchise laws make it near impossible and costly to eliminate the surplus brands and dealers costing the companies billions.

One reason productivity matters is that the money saved by streamlining the manufacturing process can be invested in more technical features, higher-quality materials, and enhanced performance of vehicles. Better quality can improve and reinforces a brand’s reputation, which allows the best performers to charge a higher price for their products. The Detroit Three’s ability to improve productivity has been impressive and will help them as competition grows fiercer and consumers move to smaller, more fuel-efficient (though sometimes less profitable) vehicles.

Flexibility is reflected through capacity utilization. When demand falls, or shifts away from one market segment to another, the most flexible manufacturers will find a way to respond to that change without closing plants. Ford of Europe has been very successful at reducing its manufacturing footprint to match its market share. As the European market remains divided between a mature, high-cost model in Western Europe and a high-growth, low-cost model in Eastern Europe, older plants in the West will not survive unless they can consistently operate at close to full capacity and at close to the cost of their newer counterparts in the East.

Another element of flexibility is achieving the best balance of labor and automation. There are many cases of plants that are so automated that they risk hurting productivity because some of the most modern equipment can break down. The right balance will be determined by the relative labor cost in a plant’s region and the skill level of workers in monitoring and maintaining the equipment in their plant.

Four strategies for improving labor productivity

1 Focus on in-process quality; reduce labor and time devoted to inspection and repair.
2 Increase cooperation between manufacturing and product development to improve design for manufacturability and drive out complexity and variation.
3 Develop standardized manufacturing systems with flexible work teams trained to continuously improve processes and rebalance work loads.
4 Strike a balance between labor and automation that is appropriate for the labor costs and technology in a given region.
Emphasize in-process quality and reduce inspect-and-repair

There are a variety of strategies that can lead to better productivity. Buyouts of older high-wage workers and two-tier wage structures are part of Chrysler’s, Ford’s, and GM’s strategy in the U.S. But standardized work instructions, flexible work teams, and designs that reduce the complexity of option packages and structural variations have also contributed. Focusing on quality drives better productivity, but only if the quality is built in the first time. Too often, large numbers of people and labor hours are devoted to inspecting and repairing the vehicles not built right at first. Without a robust process for tracing a defect to its root cause, the defect can occur again and again.

Global labor productivity comparison in 2008

Note: Excludes plants < 30,000 unit/year
Source: Oliver Wyman
The truck sector worldwide is going through a cyclical downturn. Over the next few years, the main goals of makers of heavy commercial vehicles will be to retain customers and to tap new sources of revenues and earnings. To accomplish these goals, they must have a better understanding of customer needs and address these needs with customized products. Oliver Wyman’s study, “Truck Customer 2008,” offers insights into the priorities of commercial vehicle customers and identifies the most pressing areas for manufacturers to act.

For the second time, Oliver Wyman conducted a survey of truck customers that focused on the present and future significance of roughly 50 buying criteria in six categories, as well as the fulfillment of these criteria by individual manufacturers. In all, about 1,000 commercial vehicle customers in China, France, and Germany were surveyed.

**Costs concerns rise to the top**

The quality of the vehicle itself remains extremely important. However, truck customers see no need for major changes in terms of comfort, safety, or technical innovation. By contrast, customers expressed concern about cost-related issues such as purchase price, operating costs, and the range of services. In all countries and customer segments, purchase and life-cycle costs are the most central buying criterion for trucks, now and in the near future. Yet the importance of the issue to customers has not been matched by a response from manufacturers. Truck customers expect manufacturers to help them lower their operating costs. In addition, customers want improved service quality and availability of replacement parts at repair shops. In emerging markets, customers also criticized the extent and the quality of the repair-shop network. Customers voiced a desire for increased reliability and shorter downtimes; other related services are particularly important for larger fleets and mature truck markets.
Significant regional differences

The ranking of customer needs and expectations differ significantly by country, suggesting that truck manufacturers must increasingly adjust their product lines to meet regional requirements. While German and Chinese customers focus on the overall costs of trucks, French customers say that purchase price is the critical factor and that operating costs play a secondary role. Of the countries surveyed, the French are the most safety- and environmentally conscious buyers of trucks. In Germany, the length of repair times is the third most important factor, while it ranks seventh in France and 15th in China. Germans are concerned about warranties and goodwill, while Chinese commercial vehicle customers pay more attention to the vehicle brand — a sign of a fragmented market with wide differences in product characteristics.

In China, foreign truck manufacturers still lag in service

Generally speaking, Chinese commercial vehicle customers do not rate foreign brands higher than domestic ones such as FAW or Dongfeng. Chinese customers do consider foreign vehicles to be technically superior to domestic models, particularly in terms of maintenance requirements and cabin comfort. But European models cost significantly more and have a much smaller service network than domestic competitors do. Service is a general problem for Chinese customers.

Only 15 percent of commercial vehicle customers surveyed in China use the brand’s repair shop; the rest rely on their own or independent workshops. Those who do use brand-name repair shops complain about high prices and long delivery times for replacement parts. In particular, they criticize the higher hourly costs for mechanics’ work and the long distance to the nearest repair shop of foreign brands. At the same time, local brands in emerging markets cannot meet the rising demands being placed on vehicles and must be retrofitted.

All truck manufacturers in emerging markets should think about investing heavily in services. The survey’s findings in China clearly show that both domestic and European brands will be in a good starting position if their service is solid and affordable. In this area, partnerships with competitors or specialists should be considered, as they allow for sharing high initial investments. In such markets, the range of financing services is critically important, and the survey found that needs in this area were insufficiently covered.

Low-cost trucks have little appeal

The Oliver Wyman survey asked about demand for Asian and Eastern European low-cost trucks in Germany and France. German customers have no interest in low-cost trucks made in emerging markets, with about two-thirds of German customers considering ve-

The most important customer requirements in a country comparison

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Rank in Germany</th>
<th>Rank in France</th>
<th>Rank in China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel consumption</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Reliability &amp; need for repair</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Down-times</td>
<td>3</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Vehicle’s mileage cost</td>
<td>4</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>Availability of spare parts</td>
<td>5</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Safety</td>
<td>6</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Warranty and goodwill</td>
<td>7</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Service quality</td>
<td>8</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Vehicle’s purchase price</td>
<td>9</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

1Question in China: Importance of the availability of spare parts on the open market

Source: “Truck Customer 2008,” Oliver Wyman analysis
vehicles produced in China, India, and Russia to be of unacceptable quality. Vehicles from Eastern Europe fared only slightly better. French customers have a more positive attitude toward vehicles made in these countries, with 15 to 20 percent of French customers viewing these vehicles as having comparable quality. Customers expressed doubts about low-cost trucks’ reliability, safety, and service network.

Rethinking the business design
The study highlights areas that are especially relevant in the context of the current slowdown in sales worldwide, and suggests a number of recommendations. First, the broad task is to reduce and also to make transparent to the customer the overall vehicle costs. Frequently, premium manufacturers do not exhaust their full potential. Vehicle manufacturers must examine their entire value chain to determine how they can influence costs in order to lower end-customer prices. Significant savings might be found by reducing the vertical integration of manufacture, since customers no longer consider in-house production of engines to be a decisive factor.

Taking a long-range perspective, the study results also raise the question of whether the truck industry’s current business design, with its focus on added value in development and production, is sustainable. If cost increasingly becomes a decisive factor and the vehicle itself has little differentiation, manufacturers could narrow their focus to vehicle conception, integration of parts, and operation of sales and service networks. These are the most important elements that drive customer satisfaction, and will likely remain so in the foreseeable future. Production of components could be gradually turned over to value-added partners. If this step were taken, the impact on the OE business must be kept in mind. Such a new focus would free up capacities that could be used to optimize such areas as sales or repair-shop performance and higher-value services.

Creating needs-based products
In mature markets such as central Europe, products and services should be tailored for specific regions and customer segments. The definition of each segment should derive from detailed knowledge about customer priorities, leading to corresponding product and service ranges. For higher-value services such as fleet management, mobility guarantees, service contracts, or short-term rentals, the study shows that offerings – possibly through partnerships with specialized providers in individual areas – and customers’ perception of those offerings must be improved. To date, customers have not been won over by the current range of offerings, but many consider it to be an important area. Even if commercial vehicle manufacturers do a decent job of meeting the needs of their customers across brands and markets, this is not sufficient to gain a competitive edge. Manufacturers will have to tailor their offerings to specific customer requirements in different segments and regions. In mature markets, two goals should be to improve the interface between the customer and the manufacturer, and to generate additional revenue by offering intelligent services. In emerging markets, the service structure must be improved in order to match brand promises and to remove doubts about vehicle availability and quality.

Five recommended actions for truck manufacturers

1. Improve workshop service: This is a decisive purchasing factor and the place where the customer’s cost position can be improved. Starting points are expanded and standardized repair-shop formats as well as intelligent planning of the sales and service networks.

2. Create operating cost-optimized offerings: Operating costs are customers’ most important concern and can be addressed in numerous areas, from purchase and use to residual value. That also applies to the sales pitch.

3. Develop specific offers for regions and segments: The best offering for target customer groups requires deep knowledge about the groups per segment and region.

4. Improve and communicate added-value services: Customized offerings and enhanced communication activities about the service range in such areas as fleet management and service contracts will increase customers’ willingness to buy and satisfaction.

5. Sustainable business design: Because there are fewer and fewer differences in commercial vehicles, manufacturers must constantly scrutinize their business design. By employing a reduced vertical range of manufacture, for instance, they can use newly tapped resources to bolster important customer-contact interfaces.
Vehicle and feature variants have proliferated in recent years, with a segment such as compact cars having huge numbers of possible combinations. Despite attempts to address this problem, new variant types re-appear like the many heads of the mythical hydra.

Complexity: The Automotive Industry’s Hydra

For many years, complexity has been addressed and reduced through the use of module strategies, differentiating software, design guidelines, and production-line standards. Frequently, though, these traditional approaches have not been sufficient or sustainable.

Pragmatic approach necessary
What breeds complexity are a range of factors including additional vehicle models, engines, optional features, country types, differentiated needs of customer groups, legal requirements, and competitive demands. Frequently, the manufacturer bears some responsibility, as a culture designed to exploit every market opportunity also fuels the proliferation of options. An overloaded catalogue of features creates both higher costs and increased error rates.

The pragmatic question about whether additional options or functions bring real benefits
tends not be asked, because of the lack of clear criteria. Yet a large number of customers do not notice the many options and high-quality technical features or, if they do, fail to appreciate them. This applies to series functions as well as to special functions within individual features. The time has come to “slim down” for the customer’s sake, as long as a feature is not critical to long-term brand positioning.

But which variants are crucial factors in purchasing decisions? And for which part of the product is the customer willing to pay a premium? Drawing on customer surveys and historical purchasing data, Oliver Wyman’s approach creates a systematic variant-type management and coordination of product features.

**Customer-based variant-type management**

The first step is to determine the number of necessary variant types. This is done with the help of a selected model series, starting with a “zero based” model and making it necessary to justify each additional option. The range is then systematically developed on the basis of derivations, various drive trains, country models, and their combinations, visualized in a complexity driver tree. With a maximum of 100 drivers, all options and combinations can be shown.

**Optimize product substance**

For every basic variant type, examine the product “substance” – that is, the characteristics and functions of series and special options. Build a “gray list” that consists of all characteristics not relevant to brand positioning. For instance, this would include a complex sports chassis for a user-oriented high-volume brand. A “black list” contains characteristics that do not have any purchase-influencing impact on customers, including two very similar variants of seat upholstery.

Using “strategic-choice analysis,” one can then evaluate the relevance to customers of the range of special features. This methodology simulates a purchasing environment and determines the impact of various options or product characteristics on the customer’s behavior. With the help of a demand-elasticity curve, the price is set at a level that maximizes revenue. The model uses alternative variants to forecast customers’ switching habits within a brand as well as among competitors.

---

**“Reducing complexity must be evaluated from the customer’s point of view. More does not necessarily mean better.”**

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**A comparison of zero-based and incremental approaches**

The zero-based approach facilitates significant project success at acceptable costs

- **Zero-based approach**
  - Radical reduction with minimum restrictions
  - Clear and substantial changes
  - Reversal of reasoning

- **Incremental approach**
  - Many small decisions
    - Little effect
    - Long line of argument
    - Difficult goal setting
  - Weak arguments as a result of little information

Source: Oliver Wyman
Optimal variant policies do not just enhance brand value; they also allow the customer to better see and understand the benefits of a particular package. And they improve the manufacturing margin per sold vehicle.

**Anchored in processes and culture**

To maintain control over variant growth, complexity management must become a fixed, cross-divisional component of business processes, just as processes include quality, customer satisfaction, or total cost of ownership components. Strong complexity management can add earnings of up to 300 euros per vehicle, as well as improving fundamental metrics such as sold vehicles, customer satisfaction, and reliability.

Slaying the hydra, the many-headed serpent in Greek mythology, was one of the 12 labors of Hercules, made more difficult because each time he cut off a head, another grew back. Yet Hercules and his nephew Iolaus figured out a solution and defeated the hydra.
Economic recession has increased the importance of the cost positions of automakers and suppliers for their commercial success. Even in economically good times, their profit levels have been markedly below those of other sectors. At the same time, large investments are being planned – to develop CO₂-cutting technologies and to meet expanding customer requirements and legal regulations.

Typically, companies go through phases of less activity followed by sweeping efficiency-boosting programs that feature across-the-board budget cuts and layoffs, without having too much sustainable impact. Such cost-cutting frequently leads to drops in product and service quality, measures that lower customer satisfaction and the chance of creating sustainable customer loyalty. An example are the product-cost programs introduced by many manufacturers at the beginning of the 1990s, causing lower product quality. Those programs continue to have a negative effect on the brand image and customer satisfaction of the individual manufacturers today.
Focus on the customer’s priorities
The challenge is to optimize costs systematically and sustainably, while also maintaining or even improving customer satisfaction. It is important to distinguish between processes that directly address specific customer requirements and those that are primarily internal and affect customers only indirectly. In the sales area, for instance, customer-relevant processes on the wholesale level include offer preparation, complaint hotlines, and order handling. These areas should be optimized to promote growth and customer satisfaction. By contrast, internal processes such as payroll accounting and human resources can be trimmed to achieve cost efficiency.

In one project with a European vehicle maker, we determined that overall wholesale costs could be reduced by 40 percent. The company cut a quarter of costs through bundling and outsourcing, and about ten percent through process optimization. An additional five percent came through efficiency-focused transfers to the manufacturer or to large retail groups. At the same time, customer satisfaction rose significantly in the affected markets over two years following the efficiency-boosting programs. Similar programs can be effectively carried out in development, administration, and indirect production areas.

Sustainable success
To ensure that efficiency gains in indirect areas have long-term success in terms of earnings and customer satisfaction, there are five principles that managers should follow.

1. Direct the cost program to the market and customer. The “voice of the customer” is the undisputed basis for all optimization activities.

2. Focus measures on the added value that they produce for internal and external customers. This results in a sensible balance of performance- and cost-optimized organization.

3. Direct the optimization solutions at market performance, not at costs. Many processes operate more effectively and cost efficiently with lean structures and less duplication. The most important customer-relevant processes must be improved, not cut to death.

4. Draw on best practices and benchmarks of leading organizations in the automotive industry that focus intensely on customers.

5. Communicate the changes jointly from management and central employees. Otherwise, there is a strong possibility that motivation and sales will decrease, particularly within the sales force.

Successfully optimizing costs for more satisfied customers

<table>
<thead>
<tr>
<th>Costs</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundling and outsourcing</td>
<td>25%</td>
</tr>
<tr>
<td>New processes</td>
<td>10%</td>
</tr>
<tr>
<td>Transfers</td>
<td>5%</td>
</tr>
<tr>
<td>Target personnel</td>
<td>60%</td>
</tr>
</tbody>
</table>

Total cost of the European wholesale level
Source: Oliver Wyman project example
Done right, mergers allow companies to generate growth, increase their profitability and competitiveness, and increase shareholder value – and the automotive supplier industry succeeds in doing this. Oliver Wyman analyzed the direct (transaction-related) results of 192 mergers and acquisitions announced and implemented between 1981 and 2004. For the transactions analyzed, the share prices of the companies intending to make an acquisition, each adjusted for market effects, improved on average by a statistically significant 1.6 percent within the time span of five days before and after announcement of the proposed deal. In light of the generally more negative valuations of M&A activities for companies making acquisitions, this is an unexpected finding. It shows the potential of mergers to increase shareholder value.

Despite the cultural risks of international deals, stock markets respond positively to these deals as well. With share prices gaining an average of 1.8 percent for national transactions, the price increase for international and transcontinental M&A totals 1.5 percent and 1.6 percent, respectively. As a result, the global automotive supplier industry also performed well in cross-border transactions.

Stock markets respond to mergers and acquisitions (M&A) by automotive suppliers much more positively than to the mergers of companies in other industries. The Oliver Wyman study “Mergers and Acquisitions in the Automotive Supplier Industry” shows that stock prices of companies in that industry generally begin to rise immediately after a strategic transaction is announced. This is why tier 1 suppliers in particular should pick up the pace in terms of M&A. They are the suppliers that must react quickly and globally to manufacturers’ rising demands.

On the Fast Track With M&A

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Five recommended actions for successful M&A management

1. Include integration measures early in the process.
2. Create a comprehensive integration architecture.
3. Communicate the integration strategy quickly.
4. Leverage enthusiasm and the willingness to change shortly after the transaction.
5. Consider differing corporate cultures during integration efforts.

Take early action

Despite the positive outlook our study suggests, mergers pose significant challenges. In roughly 40 percent of the transactions examined, the acquiring company achieved, at most, no return. For the integration to unfold successfully, M&A management must be addressed long before the transaction. Including integration issues into strategic considerations before the actual transaction decision is crucial for success. In addition to strategically selected acquisition candidates and a clear game plan, effective management of post-merger integration is essential. This begins at early on and extends from the initial communication of the targeted goals to the realization of concrete synergy measures in the newly created direct and indirect company divisions.
E-Drive: Hype and Reality

Electric cars are all the rage. In the race to find the first alternative drive system capable of being mass marketed, a few players are starting to emerge from the pack. Manufacturers are now working with energy providers, oil companies, suppliers, and even governments to develop the necessary infrastructure. Yet despite the euphoria, it’s likely that alternative drive systems will remain a niche market over the next decade.

Cars powered by electricity, fuel cells, or hydrogen are making headlines alongside the industry’s sales crisis. For instance, during the span of just a few weeks in mid-2008, Renault Nissan signed partnership contracts and government agreements to develop a network of recharging stations in Israel, Denmark, and Portugal. By 2010, the company intends to develop cars powered exclusively by electricity for these markets. Innovative Honda, meanwhile, is concentrating on hydrogen drive systems and intends to have them ready for serial production within ten years.

**Consumer enthusiasm dictates a presence**

The public’s enthusiasm for rechargeable vehicles has now reached such heights that, for image reasons alone, automakers cannot afford to ignore the technology. With its hesitant approach to hybrid drive systems, the German automotive industry now must worry about the possibility of falling behind in research on a popular, environmentally friendly technology for the second consecutive time. To prevent this from happening, BMW will be testing how more than 100 Minis outfitted with electric-drive systems perform under everyday driving conditions. Daimler is launching the Electro Smart and can determine over the next two years whether e-vehicles are fleeting or here to stay. Research on electric drive systems is also being propelled by the growing number of local regulations being introduced around the world to combat particulate matter. Like London, other European cities could soon introduce municipal “congestion charges” to promote zero-emission vehicles. Consumers generally favor such pollutant-free mobility schemes, at least for now.

**The facts must temper that presence**

Engineers argue that, in the end, battery-driven vehicles consume more energy than do gasoline-powered vehicles. Supporters of electric cars counter by pointing out that more electricity in the future will come from renewable energy sources. In any case, the
The future of drive technologies

1 If fuel-cell drives can be developed, they could someday squeeze all other systems from the market, as no other system can match their efficiency. It’s not clear when affordable fuel cells capable of daily use will be introduced, but widespread adoption should not be expected before 2020.

2 Pure electric drive systems will succeed as emission-free, short-distance vehicles primarily in dense cities, driven primarily by more affluent consumers.

3 Hybrid-drive systems are an interim solution that can save a maximum 30 percent of energy. But they remain viable for a mass market as long as batteries or fuel cells remain relatively expensive.

A high efficiency level (nearly 90 percent) achieved by the latest electric drive systems nearly offsets the increased primary-energy need for electricity production and transmission. Still, the electric motor does not reach the efficiency level of a modern diesel drive system without a hybrid engine.

Another issue is that batteries are relatively expensive, their disposal poses an environmental threat, and they can be used for only a limited time. Makers of electric vehicles will also experience high system costs associated with the exchange of empty batteries for fully charged ones. In the Norwegian electric auto “Think City,” such a concept costs 200 euros a month. Higher costs and lower efficiency indicate that the enormous development costs of a pure electric vehicle will wind up serving a relatively small niche market.

However, it makes sense to develop a pure electric drive system for two reasons. First, consumers are very interested in the work on clean vehicles, so this research has a positive impact on the manufacturer’s image. Second, automakers must prepare for situations in which electric autos are more attractive than conventionally powered vehicles as a result of government efforts, like those in London.

“Double betting” is a logical strategy

Public subsidies, new consumer priorities, and technical progress make it difficult to forecast the share of conventional and alternative drive concepts in the next ten years. According to current estimates, alternative drive systems could have a share of 17 percent in the world market by 2015. To prepare for all market eventualities, automakers must consider investing in a range of technologies, both conventional and alternative. Their greatest challenge is to develop a new electro-drive platform that largely eliminates such traditional components as the drive train and brakes in order to save on weight and cost. Such a platform could be used for both a battery and a fuel-cell car.

Development of drive-system technologies


CAGR = Compound Annual Growth Rate

Source: Industry database, Desk research, Interviews with experts, Oliver Wyman analysis

Otto engine

- Units

Diesel engine

Alternative power trains

12% Hybrid and electric drive
5% Alternative fuels
1% Fuel cell
Cost pressures are being brought to bear on automotive suppliers even for current vehicle series. Approaches that factor in not just procurement, but also development and production, are proving to be the most successful. But companies must move fast to integrate these approaches into business processes.

Saturated markets and overcapacity are putting intense cost pressure on automakers and suppliers. The markets can cope with only a limited number of additional vehicles. Recent forecasts for Western Europe and North America assume that following the dramatic drop in volume experienced in recent months, the recovery will take several years. Growth will move on a long-term basis only around one percent per year. Even Asia and other emerging markets are not growing as fast as manufacturers’ capacities, leading to further price pressures across all segments, intensified by the lack of differentiation among products, and, in turn, cost pressures.

**Savings potential in procurement and production**
The industry can counter such pressures by scrutinizing its largest group of costs: raw materials, purchased parts, and in-house production and assembly. These tend to rise because of high raw material prices and the addition of vehicle features. Lowering prices without taking a hit on profit margins requires continuous optimization of product costs even after the start of a series production. By that point, the key parameters have been set, specifications defined, and tools procured, and the remaining term and thus amortization time often prevent changes related to large investments.

Nonetheless, companies can still reap significant cost savings once the series has been launched, with a direct effect on profitability. Mid-sized suppliers in Germany, for instance, have been able to save up to ten percent of product costs across a broad product range after production had begun.
These companies generally make use of comprehensive approaches that help reduce both material and technical product costs. In their regular procurement waves for key groups of components, auto suppliers now draw on subcontractors from low-cost countries. Yet, even in higher-cost regions such as Germany, savings can be achieved by rigorously exploiting the competitive situation.

Reducing technical product costs involves optimizing current production, assembly, and logistics, as well as reaching into engineering. This requires comprehensive analyses prepared by cross-functional teams from product development, procurement, production, quality, logistics, and the research department. The analyses range from comparisons with competitors’ products and other production processes through cost, value, or specification analyses, to factor cost simulations, to adaptation of the design for manufacturing or assembly requirements.

Best-practice companies use incentive systems to activate the expert know-how throughout their supply chain, and together with their suppliers hold intensively prepared workshops to develop options to lower their cost base. Companies then can generate their cost reduction opportunities, evaluate their potential, and implement them. Top management must actively support these programs to ensure that the identified savings potential is not diluted by weak implementation.

Fast and sustained action needed
In our work with OEMs and suppliers, we have found a key success factor to be the balance between fast action and sustainability. After all, delays in identifying savings and implementing programs will reduce the time during which such a measure can pay off. Hasty individual measures will prevent the structural integration of cost reductions into the suppliers’ organizations. A proper balance will ensure lower operating costs over the long term, allowing companies to counter persistent cost pressures.

Five success factors to lower product costs in series production

1. Rigorous integration of all areas, from procurement through product development and production.
2. Establishment of cross-functional teams with shared responsibilities.
3. Integration of expert know-how from the entire value chain, including existing and new suppliers.
4. Comprehensive analytical preparation, through product-specific methods such as product and process benchmarking as well as cost analyses.
5. Rigorous implementation to maximize cost-cutting benefits during the remaining term.

Continuous and massive product cost cutting needed in series production

![Cost-cutting potential and Life-cycle costs diagram]

- Comprehensive programs required to pinpoint potential
- Remaining product life span reduces the number of viable measures with high one-time costs

Source: Oliver Wyman
Falling prices and intense competition are turning the automotive supply industry into one of Europe’s most competitive sectors, as documented by an Oliver Wyman survey. To date, most suppliers have been able to boost productivity every year and drive profitable growth. And the more globalized the suppliers are, the better their productivity gains. Globalization skills thus continue to be important, along with cost management and a customer orientation.

European Suppliers on the Razor’s Edge

European suppliers have transformed themselves into high-performance players in a global market, according to a study, “Automotive Suppliers – A High-Performance Industry” by Oliver Wyman and HypoVereinsbank, which is based on a comprehensive survey of top managers in Europe. These suppliers have been lowering their prices by an average 2.4 percent a year, while boosting their productivity by 3 percent and investing more than 5 percent of sales in research and development. As a result, European suppliers were able to increase sales by an average 3.4 percent a year between 2001 and 2006, in many cases accompanied by rising returns.

Although EBITDA margin remained unchanged at about 11 percent during this period, the average return on equity rose from 2.4 percent to 5.3 percent, with operating earnings rising from 2 percent to 4.2 percent of sales. Although differences in performance are very low, growth rates within the sector diverged considerably: While the top 25 players managed to improve on all key indicators, the average total return on equity in the bottom quartile declined from 1.9 percent in 2001 to 1.4 percent in 2006, with operating earnings amounting to 1.2 percent.

Common success factors
The study sought to identify the key factors behind the business success of automotive suppliers, and found that the same factors apply irrespective of company size, business model, or scope of activities. The surveyed
managers report that long-term economic efficiency is the key factor as measured by operating earnings, cash flow, return on sales, and sales growth. “Soft” factors are also important at many companies, particularly employee satisfaction and job creation. More than 75 percent of the surveyed managing directors and management board members are even willing to forgo short-term optimization of their business success in favor of these criteria. Other factors mentioned by respondents include customer orientation, an entrepreneurial approach, cost management, employee qualification, and strong innovation. Top companies in the sector rank above average on all these criteria.

The study highlighted a significant correlation between business success and customer orientation. The more that companies tailor their services to manufacturers’ and motorists’ needs, the more successful they are in the market. While the respondents think that they have successfully positioned their companies to meet manufacturers’ requirements, they are a long way from optimally serving the end consumer. At the moment, for example, only about 50 percent of all automotive suppliers conduct market research, and few R&D departments tailor their product strategies to end consumer priorities.

Developing low-cost offers
Future competitiveness depends on suppliers’ ability to boost productivity. To date, volume providers as well as module and system providers have achieved this best through plants in low-cost countries. However, many European suppliers say they are not able to develop cheap modules for emerging markets in Asia, America, and Eastern Europe. They acknowledge that the target price is a key metric and that production capacities must be set up to allow for the development of truly low-cost products.

Cautious about globalization
Suppliers themselves regard the gap between their current positioning and global market requirements as their greatest challenge. Most rate their own global coverage as merely satisfactory to good, while low performers acknowledge that they are badly positioned. Small and mid-sized companies, in particular, shun the high risks related to internationalization, and they fear that management resources would become overtaxed. As a result, they focus mostly on European locations and say they will make their move only when automotive manufacturers actively demand globalization of suppliers.

Faced with continued globalization, new competitors from low-cost countries, as well as pre-financing requirements, warranty risks, rising material costs, and increasing product complexity, few suppliers see any margin for error – one surveyed manager called it “rolling along the razor’s edge.” To date, however, the sector has managed to master the challenges it has faced and improved its own performance capacity. Suppliers know that they will have to improve their cost base and their global positioning in coming years if they want to continue to achieve profitable growth.

“Suppliers are like top athletes – success or failure can boil down to a hundredth of a second. Only companies that achieve top scores on nearly all success criteria will succeed.”

Six recommendations for automotive suppliers

1 Top performers should test all available means to permanently optimize their cost base. There must be no “sacred cows” when it comes to cost-cutting.

2 European suppliers must extend their technology leadership in cooperation with the automotive manufacturers to improve both functions and costs.

3 In the low-cost vehicle segment, the fastest-growing segment in automotive, low-cost modules, development capacities, plants in low-cost countries, and local sales resources must be set up, offering consistently high quality adapted to local specifications.

4 Just like automakers, suppliers must consider their end consumers more closely by undertaking market research.

5 Suppliers should look for suitable network partners and restructure their own organizations accordingly.

6 A globalization strategy must be worked out independently or in cooperation with partners.
Partnerships are no longer taboo in the European commercial vehicle industry. Manufacturers are entering alliances in response to requirements generated by new technologies and customer needs, as well as to lower sales per location. The new Oliver Wyman study, “Commercial Vehicle Manufacturer Cooperation in Sales and Service,” shows which partnerships make the most sense for Western European manufacturers.

European truck manufacturers’ procurement and production activities have long followed a uniform strategic logic – except for the sales and service network, which account for about 20 percent of a truck manufacturer’s costs today. Individual manufacturers’ networks still differ significantly in terms of structure, set-up and density. Equally varied are the sales base layout, controlling options, and the range of services. Manufacturers have hesitated to abandon these fixed structures in favor of a uniform strategy as they fear that this could threaten their existing local business.

Yet the need for change in this regard is becoming more acute. Mobility guarantees, comprehensive service agreements, and customers’ rising service demands are forcing manufacturers to act. At the same time, manufacturers are faced with declining sales per location at regional distribution and service outlets.

Strong willingness to cooperate
Partnerships are proving to be essential strategic options that allow companies to close the gap between increasing requirements and declining sales. The latest Oliver Wyman study shows that 70 percent of all companies frequently enter into partnerships with downstream links in the value chain, such as body manufacturers, rental firms, or leasing firms. In its Sector Information Center, for example, Mercedes-Benz displays complete vehicles in cooperation with more than 60 body manufacturers and informs customers about sector solutions. MAN provides replacement vehicles in cooperation with Europcar. Only 30 percent of truck manufacturers, on the other hand, also occasionally cooperate with companies from other sectors, and just ten percent enter into such alliances regularly and with foreign providers. One of these rare examples is Iveco Finance Holdings, a joint venture of Iveco and Barclays Bank.

Even reservations toward other truck brands are disappearing in view of the competitive environment. Half of those surveyed are already working to some degree with competitors on sales and service. Here, partnerships within companies dominate, such as the systematic joint service offering by Renault and Volvo, or between different commercial vehicle segments. For example, Volvo and Nissan, and MAN and Volkswagen are cooperating at select locations. Most survey respondents think this does not damage the individual brands.
Sights set on new markets and more products

The commercial vehicle sector has seized the benefits of partnerships and has set its sights on two goals in particular: improved market exploitation and an extension of the service spectrum to offer one-stop shopping. While most companies achieve their goal of extending their service ranges, only a few have managed to tap their markets more deeply. Nonetheless, the surveyed truck manufacturers see more opportunities than risks from partnerships.

Manufacturers attribute any shortfalls in attaining their targets primarily to in-house failures, caused by the partnership processes being insufficiently defined. In addition, commercial vehicle manufacturers focus more closely on the implementation of partnerships than on the underlying strategy. The strategy, however, is where the success of an operation is often decided.

So far, few manufacturers have defined how the demands placed on sales and service will change. Forwarders with more than 50 trucks grew by 90 percent between 1999 and 2005. For this reason, manufacturers must redefine the increasingly important interplay among key account management, regional sales forces, and branch sales. They should also analyze and secure the optimal density and quality of the service network for each region – including networks built through partnerships.

Better services, lower costs

The study “Commercial Vehicle Manufacturer Cooperation in Sales and Service” identifies three areas of interest to sales and service partnerships for truck manufacturers: First, manufacturers should cooperate even more closely with body manufacturers, including through joint sales, in order to offer customers solutions from a single source. Second, alliances with partners from other sectors such as telematics or financial services offer benefits in the provision of customer-oriented services related to the more or less interchangeable truck product. Cases in point include fleet management, remote diagnosis, replacement vehicles, and financial products. And, third, partnerships with competitors for jointly operated service points may prove to be advantageous – but remain off-limits in many cases. Such joint locations can help cut costs, for example, when the service network of two niche players cannot be operated economically. In a medium-sized European market, both could save sums in the double-digit millions through joint network operation. This, however, means that manufacturers must abandon the idea of always offering sales and service from a single source.
The Chinese word for "crisis" consists of two ideograms meaning "danger" and "opportunity." Faced with slowing auto sales, lowering dealer margins, and more than a few bankruptcies, potential investors such as private equity funds can be forgiven for concluding that China’s auto dealerships are in crisis. However, there is increasing evidence to suggest that the dangers facing the dealership sector could help to revamp the sector and thus be turned into an opportunity to create value for intelligent investors.

On the surface, it is difficult to develop an investment case for the auto dealership industry. Though the market is quite concentrated at the front end, with top ten players taking 44 percent of market share, the rest of the market is shared by tens of thousands of small dealers across the country, with no dealer having yet developed anything remotely resembling nationwide coverage. Furthermore, dealer margins have little variability, and customer prices are essentially fixed – the average dealer operating margin is just under two percent. The vast majority of dealers are unsophisticated in their management and operations know-how.

The reason for this low degree of sophistication across the industry is essentially a lack of incentive to improve. With low car penetration and a rapidly growing market, most dealers have not had to work hard to achieve substantial profits. Besides, with sky rocketing property prices, dealers often see the dealership as a side business as they watch the land on which the dealership sits double and triple in value.

Of late, however, the situation has changed. The combination of growing competition, slowing car sales, declining dealer margins, and a cooling property market will force
dealers to return to their core. By implementing a few key initiatives, auto dealerships can become a highly lucrative sector for direct investors:

**Scale up.** Investors need to help dealers to scale up on operations and network through consolidation. Increasingly stringent dealer policies will require large investments in know-how and human capital, which will be offset by greater economies of scale. Those players that can quickly realize network effects through quick consolidation will be able to differentiate themselves.

**Focus on downstream profits.** As the installed base of vehicles continues to grow, the ability to maximize profit capture from downstream offerings will become critical. By 2015, downstream businesses are expected to account for 65 to 75 percent of the industry’s profits. Dealers must adopt measures to enhance dealer loyalty and focus on building a broader after-sales network.

**Develop strong OEM relationships.** Successful OEM relationships require a combination of cordiality and bargaining savvy to obtain favorable policies and support from OEMs. Scale is certainly one important factor, but, for instance, Shanghai’s Yongda has also created a powerhouse of multi-brand dealerships in Eastern China, allowing it to obtain significant concessions from OEM partners.

**Adopt best practice HR operations.** More so than in other markets, China’s dealership market is very much a people business. At the same time, a lack of qualified talent and intense competition has caused turnover in this sector to run as high as 40 percent in some cities. Dealerships that develop HR policies that allow them to hire, train, develop, reward and retain the best and the brightest will create significant strategic control.

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**Top ten players have a market share of 44 percent**

![Graph showing market share of top ten players with Guangwu at the top and others below.](image)

*Source: China Commerce Statistic Year Book 2007, CATARC Statistics, Private Company Database, Oliver Wyman analysis*
Completely carefree

No Car Without Insurance

More and more insurers are offering products containing extended service warranties to their customers. When a problem occurs, insurers generally send the vehicles to independent garages, a development that is costing manufacturers and dealers service-department business. By packaging insurance, financing, and other services, manufacturers and dealers can hold onto their service-department customers. Offering insurance policies at the point of sale has a good deal of expansion potential.

When HUK-Coburg began to offer a package of liability and collision insurance that also contained an extended service warranty in 2004, the company became the brunt of competitors’ jokes. But while overall policies in force grew only by 0.9 percent annually between 2004 and 2007, HUK-Coburg achieved a growth rate nearly twice as high. Today, there is hardly an auto insurer that does not offer its own warranty rate.

Comprehensive service is well received

Customers are content to let the insurer select the garage because that can lower their premiums. At Axa and HUK-Coburg, for instance, customers save nearly 15 percent. When a liability claim is filed, the insurer selects the partner garage to handle the repairs and manages the claims management itself. Customers benefit in multiple ways, not only do they receive a premium reduction, they get pick-up, drop-off, cleaning, and replacement-vehicle services. As a consequence, dealers and manufacturers lose out as they see their profitable service-department business slip away.

Volkswagen succeeds with insurance

Given the surge in garage programs, the sale of insurance at the auto dealership has become a key component of earnings for manufacturers and dealers. The issue for them is not new, but most attempts to address it have fallen short in the past.

However, Volkswagen’s product solutions such as the “Carefree Maintenance” program show that insurance policies can be successfully offered at the point of sale. In the past three years, Volkswagen Bank has increased its portfolio of policies in Germany by about 30 percent a year. It has also achieved annual growth of about nine percent in other European countries. Through comprehensive accident management, the automaker provides complete coverage for necessary...
services. Volkswagen Insurance Service, the partner network with its own accident specialists, and the VW customer hotline, provide an easy first contact for claims. With its “Clever Repair” program, VW offers customers the option of conducting complete repairs with original parts or the repair of only damaged components. Mobile so-called “Clever Repair” units fix problems on the spot. Hence, VW’s comprehensive services are increasing customer satisfaction and, as a result, the image of individual dealers.

**Agenda for a successful insurance business**

In light of these market changes Oliver Wyman has identified seven courses of action for automakers and dealers that will determine their success in the insurance business.

**Innovative and simple products.** Auto sales representatives need simple products and need to bring forward convincing arguments in order to sell insurance to customers. Standard products offered by insurance firms rarely fulfill these requirements. A product bundle tailored to the dealership and its target customers is required.

**Integrated sales process.** To sell insurance products, sales representatives need a simple, integrated process with good technical support.

**Bonuses for sales representatives.** The growing importance of insurance must be reflected in the remuneration and incentive systems of the sales representatives. Setting minimum penetration targets and/or linking bonuses to the service-department business can be good first steps in this direction.

**High penetration rates.** Individual auto dealerships need a high penetration rate to allow for tailored insurance products such as fixed-rate premiums for special offers or model-related rate options with special discounts. Only a sufficiently large number of policies can build a balanced risk mix that forms the basis for attractive insurance premiums.

**Subsidized premiums.** For the individual insurance product or for integrated bundles, the actual insurance premium should be subsidized. This will boost the number of sold policies and form an attractive mix of customers.

**Joint profit model.** As a result of an increasing number of customers and an improved risk mix, manufacturers and insurers will benefit from a joint profit model. Insurers can let manufacturers and dealers share in their higher profits instead of just paying them commissions.

**Systematic portfolio management.** Systematic management of the existing client base prevents customers from migrating to other insurers. This approach can include special offers, like a free winter inspection, when policies are renewed early.

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**Slightly increasing policy portfolio and decreasing premiums for car insurance**

![Graph showing insurance policies and booked premiums](data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAgAAAAAqCAYAAAAw26HzAAAAGXRFWHRTb2Z0d2FyZQBBZG9iZSBJbWFnZVJlYWR5ccllPAAAAxyJREFUeNrs2NSgDgC2B1QlGQcQWMBQ8Gpjk1NQaOQAwJkA4IiA8AAAABJRU5ErkJggg==)

Explanatory note: Includes liability, collision, comprehensive and bodily injury insurance

Source: GDV (Association of the German insurance industry), 2008
The After-Sales Growth Program

With an average contribution margin of about 30 percent for manufacturers and more than 50 percent for dealers, after-sales is a crucial source of income for the automotive industry. Service, as an important customer touch point, is also a fundamental driver of customer satisfaction. At the same time, the intensity of competition between manufacturer channels and independent providers is increasing. Oliver Wyman has identified ten crucial areas where manufacturers should act if they want to secure sustainable market leadership in after-sales service.

The after-sales business is going through profound change worldwide. While established markets in Europe and North America are declining as a result of decreased service needs per vehicle, business is markedly climbing in emerging automotive regions in Asia and South America, because of significant volume growth there. By 2015, global after-sales markets are expected to grow to a total of USD 424 billion, roughly 16 percent higher than in 2008. At the same time, competition is growing more intense. Fast fitters and intermediaries like insurance firms and leasing companies are pushing their way into the market, challenging the dominance of manufacturer-linked channels. In the worst-
case scenario, this means that the manufacturers will lose up to 35 percent of their total after-sales revenue and up to two-thirds of their earnings to independent channels by 2015. Their networks could consolidate by up to 50 percent, and market leadership in after-sales service would be lost.

"Manufacturers can win the battle for market shares in after-sales service by waging an offensive against independent providers and simultaneously strengthening the loyalty of current customers."

Expanding market shares
To counter this scenario, manufacturers will have to implement aggressive growth programs in vehicle segment II, i.e. the five to seven years old used cars, employ customer-loyalty tools such as maintenance contracts and extended warranties, and use their own garage formats in the independent aftermarket. The loyalty of major customers, fleets, and intermediaries to OEMs must be won through attractive offers in sales, service, and especially customized high-quality processes.

Through a superior, integrated soft-franchise model, the manufacturer can bolster system leadership in after-sales on a sustainable basis. The manufacturer becomes a system center and ensures a uniform market presence and a consistent brand experience for customers by managing a few key performance indicators. In broad terms, this approach offers the OEMs an opportunity to boost market shares by up to five percent by 2015 and to effectively use after-sales as an instrument for customer satisfaction and customer loyalty.

Focus on the customer
The key to bolstering market leadership is a sharp focus of the entire organization on the customer and earnings. Manufacturers can improve customer satisfaction and loyalty by introducing far-reaching measures that extend all the way to dealers. Among business and fleet customers, for example, manufacturers must offer an integrated, needs-based line of services.

A comprehensive networking of after-sales service with the new vehicle business, as well as financial services and a central, uniform handling organization on the manufacturer and dealer levels, can address critical customer needs. The same applies to uniform market prices and conditions for fleet customers. And to acquire small-business customers, the dealer organization should be provided adequate funding and bonus structures. Customers of older vehicles (segments II and III), where manufacturers’ market shares have eroded, must be addressed in a targeted manner as well. Signal prices, in the form of fixed-price campaigns for segment II vehicles, can be effective here. Change-of-owner strategies, extended warranties, segment- and current-value-justified prices for genuine parts, and an intelligent bundling of products and services will strengthen customer loyalty to the brand. A needs-based extension of the product range with accessories, competitively focused price differentiation, particularly for cross-brand small components, and greater service for handling and logistics will all help to secure customer loyalty to the dealer.

Market specific strategies
Automotive growth markets in Asia and South America offer the greatest growth potential for after-sales service. Manufacturers must create high-performance service networks and

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<th>Eight trends in after-sales service</th>
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<td>1 Customer structures change. In mature markets, society is aging, the income structures are polarizing, and the number of female customers as important purchase decision makers is increasing.</td>
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<td>2 Business and fleet customers as well as intermediaries are becoming more important. In 2015, business customers will have a 60 percent share of registrations. This will increase the demand for complete solutions.</td>
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<td>3 Garage systems and fast fitters are becoming an increasingly threat to the OEM after-sales.</td>
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<td>4 Format innovations in after-sales lead to broad diversification from the service factory to the fleet-management operation.</td>
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<td>5 Greater use of electrical systems and electronics increases the technological complexity of the vehicle.</td>
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<td>6 The proliferation of models and options as well as the shortening of the model cycle will continue to increase the range of parts.</td>
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<td>7 Consolidation in retail and the dominance of multi-brand operations will spread, particularly in the major markets of continental Europe.</td>
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<td>8 The purchasing loyalty of dealers is fading, and manufacturers are increasingly competing against one another in after-sales service.</td>
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create sufficiently attractive offerings to win over the best dealer partners. Professional employee recruitment, qualification and retention as well as development of effective wholesale structures will form the basis for servicing of vehicles that are newly introduced to the market. Integrated customer retention initiatives in Asia and South America help to sustain the market position of the manufacturers from the beginning.

The situation is different in the mature, commoditized markets of Europe and North America. In addition to securing current business, manufacturers should consider direct targeting of providers in the independent aftermarket. Current-value-justified lines of parts and all-makes assortments might work here, aimed at the core business of alternative providers.

Competitive price strategies and active price communications can win back the cost-conscious regular customers of independent providers, provided that adjustments of the conditions and margin systems can refocus the sales system on these customers. By directly entering the independent market, manufacturers can also participate in the strong growth of this segment – either through professional sales of parts in independent channels or through their own brand-independent service formats.

**Determined introduction**

A sustainable after-sales strategy calls for manufacturers to bundle all sales activities and sensibly integrate the sales channels, formats, and structure of the network. Furthermore, future market changes as for instance the Block Exemption Regulation 2010 in Europe must be considered, and cost-cutting endeavors at the manufacturer, wholesale, and retail levels must be exploited. Manufacturers, importers, and dealers must work together to achieve leadership in after-sales service. Oliver Wyman uses a proven implementation program to safeguard the manufacturers’ market leadership in after-sales service.

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**Agenda for profitable growth in after-sales**

1. Increasing customer satisfaction and loyalty
2. Developing a business strategy for fleet customers and intermediaries
3. Conquering emerging markets
4. Regaining used-car customers
5. Creating a product strategy for the independent aftermarket
6. Differentiating between parts, prices and bundling
7. Bolstering dealer purchasing loyalty
8. Forming a integrated channel, network and format strategy
9. System leadership soft franchise
10. Cost efficiency and performance gains

Source: Oliver Wyman
A Passion for Cars

August Joas is head of the Oliver Wyman Automotive Practice, which has offices in Europe, the Americas, and Asia. Joas helps automotive companies develop and implement programs for profitable growth and sustainable increases in efficiency.

The central goal of all projects carried out by Oliver Wyman is to recommend and help implement actions that will produce concrete results and, above all, measurable success. “The critical point is to understand the customer’s challenges and needs,” Joas says. “Our work must focus on feasibility and deliver a ‘real impact.’ Our global automotive team is measured against this standard every day.”

Joas laid the foundation for his work today while he was a student. In addition to earning a master’s degree in business and a doctorate in strategic marketing, he assumed operational responsibility in domestic and international business early on. He worked with Professor P. W. Meyer, a former board member at GfK, one of the world’s largest market-research firms, on strategy and marketing projects for industrial companies. After completing his college education and spending a year in South Africa, Joas moved to Munich in 1990 and became a consultant with Unternehmensberatung München (UBM), a firm that was acquired by Mercer Management Consulting in 1993. Mercer has been known as Oliver Wyman since 2007.

In addition to nearly 20 years of experience in consulting, Joas has also acquired hands-on managerial experience in industry. Following a restructuring project in the supplier sector, he served for 18 months as an interim CFO. In this position, he carried out the recommendations on organizational development, cost reduction and performance improvement that he had proposed as a consultant. “By working on-site, that is, directly in the plant or at the point of sale, you feel the daily pressure to perform that companies face.” In another project, for an automaker, the objective was to tap growth opportunities in sales. Working with his team, Joas developed strategic growth plans on an international basis and packages of operational measures. “We had to overcome internal growth blockades and organizational barriers before the opportunities in the market could be exploited,” he says.

In recent years, Joas and his team have systematically worked to turn the Automotive Practice of Oliver Wyman into one of the leading international management consultancies for the industry. Clients worldwide now include automakers, component suppliers, and service providers. Practice expertise extends across the entire automotive value chain and focuses on growth strategies, efficiency-boosting programs, and the resulting transformation processes.

Business success, he says, hinges on building a highly motivated, passionate, and qualified team, a global network of experts skilled in all relevant issues facing the auto industry. Team spirit is also a personal priority for Joas; he is a member of the Oliver Wyman soccer team, on which he has been playing each week for nearly 20 years.

Joas sees several major challenges for the automotive industry. “Automakers are absolutely world class when it comes to innovations and new technologies,” he says, “but there is a considerable need for action in terms of a commitment to the customer. Faced with continuing strong cost pressure, companies must also constantly ferret out productivity and efficiency potential. In light of the current market weaknesses cost excellence and flexibility certainly are crucial success factors for every firm in the automotive industry.”

He describes one of the most critical challenges this way: “Companies must make sure that their products and services do not turn into a ‘commodity’ over the long term. Success depends on having an exciting brand experience for the customer, and the manufacturers must work on this with passion and emotion — from the members on the board of management down to each employee.”
U.S. Automakers Are Moving Fast to Meet Higher Fuel Economy Standards

When President Bush signed into law the landmark Energy Independence and Security Act in December 2007, environmentalists and automakers joined in applauding the 40 percent increase in fuel economy standards and a corresponding 30 percent reduction in greenhouse gas emissions that the law required. While automakers acknowledged our responsibility to advance the United States’ energy security, we cautioned that meeting these challenging standards would be difficult if consumers were not made part of the solution.

The rise in gas prices during the first half of 2008 succeeded in doing just that. Consumers are responding by purchasing smaller vehicles and changing their driving habits. Fleet-wide fuel economy is increasing and greenhouse emissions from the auto sector are falling.

At the same time, automakers are responding with innovation. Decades of research and development are yielding new technology for safer, cleaner, and more fuel-efficient autos. Globally, the auto industry invested USD 74 billion in research and development in 2006. In fact, four of the top ten R&D spenders around the world were automakers. An automotive revolution is underway as engineers and scientists design the future of mobility.

To understand how dramatic and how fast the shift to smaller, more fuel efficient vehicles has been, consider this: Prior to March 2008, there had only been one month (May 2007) in the last six years in which passenger cars outsold light trucks (minivans, SUVs and pickup trucks) in the U.S. In fact as recently as February 2008, light trucks outsold passenger cars by 53 percent to 47 percent. However, since then, higher gas prices and a troubled economy have led to a dramatic shift in consumer buying habits. As of August 2008, passenger cars were outselling light trucks by 53 percent to 47 percent. Driving habits are changing as well. According to the U.S. Department of Transportation, since November 2007, Americans have driven 53.2 billion miles less than they did over the same period a year earlier — topping the 1970s’ total decline of 49.3 billion miles.

Our concern with fuel economy regulations has always been that automaker product decisions alone cannot guarantee compliance with Corporate Average Fuel Economy (CAFE) standards. Because CAFE is based on the mix of vehicles sold each year, whether a manufacturer meets the CAFE standard or not depends both on what products are offered and on what products consumers purchase. While the law holds manufacturers responsible for meeting CAFE standards, in reality, consumer purchases play a huge role in determining whether a manufacturer meets, exceeds, or falls short of the standard in any given year. For the past several years, consumers valued fuel economy, but they valued many other attributes such as passenger and cargo room, performance, towing, and hauling capacity more. So while meeting higher CAFE standards remains a challenge, the rise in gas prices allows automakers to swim with rather than against the current.

With more than 100 models that achieve highway fuel economy ratings of more than 30 miles per gallon, U.S. automakers are working hard to meet consumer demand for more fuel-efficient vehicles. And with 70 models of alternative fuel automobiles powered by hybrid electric technology, clean diesel, and ethanol (up from just 11 models in 2001), automakers are continuing their efforts to bring alternative fuel vehicles to market. For years, automakers have pushed for a comprehensive policy to increase fuel economy standards that includes autos, fuels, and consumers. Now, with higher gas prices here to stay, and a new nationwide standard, we are well on our way toward reaching our goal of enhancing energy security, reducing emissions, and ultimately saving consumers money.

This isn’t the first time the auto industry has faced challenges, and it won’t be the last. This industry remains a vital organ of the U.S. economy, accounting directly or indirectly for one of every 10 American jobs. Our ability to adapt to this new market is an important element to the overall U.S. economic recovery. Through this dynamic transformation, we will reinvent the automobile by producing cleaner, safer, and more fuel-efficient products than consumers have ever seen.
The automobile has long been a toy, a favorite child, the incarnation of our mobility dreams. Yet now it has become a scapegoat, stigmatized by environmentalists and city planners. The days of “good times, fast cars” may be over, the end of a glorious age characterized by increasingly safer, larger, more luxurious, and emotive cars. Are we returning to the roots of the automobile, the bare essentials, perhaps even a declaration of denial on wheels?

In an era of rising mobility costs, putting the pedal to the metal seems to be turning into a privilege of a few, and average drivers are being forced to simply do without – already today, about one in ten European car customers plan to switch to a smaller, less powerful vehicle.

The magic formula to attract customers in the future may look like this: smaller cars with smaller engines, less weight, and reduced functionality. The industry has good reason for its fervent effort to develop more efficient drive systems, more sophisticated energy and weight management, as well as alternative fuels and low-cost solutions. More than Euro 240 billion will be invested over the next ten years. Will that be enough?

Yes and no. No doubt, technical innovations form the basis for the business’s future. Without them, companies would soon find themselves on the technological and commercial sidelines. But more than technology is needed. The key questions are: What does the customer really want, and how much is he or she willing to pay? After all, only one in ten customers will pay extra for an environmentally friendly vehicle.

For many people, the car is simply a means of transportation, and it must be affordable, not only in terms of its purchase price, but also in its daily costs. For good reason, therefore, R&D departments are investing large sums of money to improve fuel efficiency.

However, the automobile is more than a means of transportation. It is the most emotive form of individual mobility, conveying a sense of individual freedom and other elements of personal values and lifestyle. Despite the environmental debates, people want emotive products that can provide an exhilarating driving experience and relatively low mobility costs.

More than ever, therefore, innovation and emotion must form a symbiotic relationship. The future of the automobile belongs to vehicles and vehicle concepts that are both innovative and emotive, and that re-define the driving experience. The industry must develop emotive products that go easy on their customers’ pocketbooks, but still offer the sort of driving experience that sets the automobile apart from all other modes of transportation.

Then we can again embrace the motto: “Good times, fast cars.” We must keep our eyes fixed on emotive, exciting products that offer an economical driving experience for all desires and tastes as well as provide a good fit with the brand!
Truck Customer 2008

The commercial vehicle industry is evolving into a mature industry where specific customer know-how is becoming a more critical factor. The study “Truck Customer 2008” is based on a survey of about 1,000 truck customers in China, France, and Germany. It offers a comprehensive overview of customers’ current and future needs, and provides strategic guidance to manufacturers.

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The Harbour Report™

The Harbour Report™ is the leading benchmark analysis on manufacturing performance in the North American automotive industry. The annual benchmark analysis that appeared for the first time in 1989 examines productivity, procurement and capacity utilization in the areas of assembly, stamping facility and drive train. The Harbour Report™ does not just focus on developments over the previous year. Instead, it explores events that extend back several years. By taking this approach, it can show which companies are developing systems and processes that optimize quality, lean manufacturing, continuous improvement processes, the application of workers and technology, product complexity and work-flow design. The 2008 edition for the United States has just been published. In Europe and Asia, the report is an exclusive study available only to manufacturers.

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Commercial Vehicle Manufacturer Cooperation in Sales and Service

In Europe, those involved with sales and service networks for commercial vehicles are increasingly feeling the pressure to make changes. The latest study shows that cooperative agreements are one way to face future challenges. In particular cooperating partners can contribute service expertise and help reduce the high costs associated with dense networks of service locations.

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Automotive Suppliers – A High-Performance Industry

Oliver Wyman and HypoVereinsbank examined over 50 factors in business management success in the study entitled “Automotive Suppliers – A High-Performance Industry,” with a view toward the importance of these factors and their impact on the automotive supplier industry. In the past, suppliers have sought to become either cost leaders or technology/innovation leaders. But today, they need to combine these strategies. Other considerations are success factors such as a clear customer orientation, business management practices, innovation leadership, highly qualified employees and cost-effective manufacturing.

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M&A in the Automotive Supply Industry

Stock markets are reacting much more favorably to mergers and acquisitions among automotive suppliers than to M&A in other industries. Shares in the automotive supply industry often rose the moment strategic corporate transactions were announced. This is true of both national and international mergers, as the Oliver Wyman study “Mergers and Acquisitions in the Automotive Supply Industry” shows.

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Turnaround Management and Performance Improvement

Ensuring sustainable success has become increasingly difficult for companies. Today, crises are less predictable, bear greater risks, and the measures necessary to prevent them are becoming exceedingly complex. This brochure of expertise is primarily geared toward top management in charge of operative performance-enhancement initiatives for their company or individual corporate divisions.

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Get to know our Automotive Practice.
We look forward to your call or to your e-mail.

Oliver Wyman’s automotive experts have broad industry experience and a commanding track record of successful consulting projects for leading automotive OEMs and suppliers in Europe, America and Asia. We offer consulting services along the entire value chain of the auto industry: R&D, purchasing, manufacturing, sales and channel management, after-sales and financial services.

Oliver Wyman’s global Automotive Practice supports clients with strategic topics like brand management, customer orientation, corporate and business strategies, market, competitive, and technology analyses, product development, innovation management, sales strategies and after-sales programs. Operational optimization includes purchasing, production optimization, efficiency improvement programs, reengineering, turnaround management and restructuring. In addition, Oliver Wyman offers the whole range of mergers & acquisitions consulting services, from partner search to evaluation, transaction support, and post-merger integration.

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