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# Market drop of 28%

## Time to change gears

Europe's automotive engineering services sector has gone into a tailspin this year. Drastic cuts in research and development funding by automakers and suppliers have ended a two-year boom. The new Oliver Wyman study »The Future of Automotive Engineering Services« highlights the most important trends, challenges and changes facing engineering service providers (ESPs).

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Demand in Europe for automotive engineering services peaked in 2008. With revenues of 3.8 billion euros and growth rates of more than 20 percent, ESPs were growing faster than any other automotive industry segment. The companies that profited most were those providing engine and powertrain development expertise. These ESPs benefited from increased spending by automakers (OEMs) on solutions that lower CO<sub>2</sub> emissions. Electric and electronic services providers also achieved above-average growth, particularly in software and hardware development as well as in component and system testing.

### A roller-coaster ride

Like they did during the last market collapse in 2003 and 2004, OEMs are cutting costs. The ongoing slowdown in new-car sales has forced manufacturers to cut their budgets for vehicle and powertrain programs. R&D investments are being postponed and all spending is being closely reviewed. Outsourcing of engineering services is being reduced by 20 percent to 30 percent in 2009.

European ESPs will not see a recovery until 2012, when growth rates of nine percent can be expected. The main drivers of this growth will be trends toward niche markets and extensions of vehicle programs; the CO<sub>2</sub>-induced push to achieve fuel efficiency and alternative drive systems; future NO<sub>x</sub> emission reductions; and the continued spread of electric and electronic systems.

### Anticipate trends

The current economic situation is a critical time for many ESPs. Nonetheless, they must anticipate mid- and long-term trends in order to be prepared for future growth and to emerge from the crisis even stronger. After all, the sector is dealing with fundamentally altered buying behavior with significant shifts in values. A two-tier structure much like the one seen in the parts supplier sector is developing among ESPs. In the future, OEMs will work closely with a few Tier 1 ESPs, who, in turn, will create a network of subcontractors (Tier 2 ESPs). Close, stable partnerships with Tier 2 ESPs will be complemented by flexible,

project-specific relationships. This will result in a stronger need for system-solution expertise and module specialization. In addition, manufacturers will draw a stronger distinction between ESPs' know-how and cost positions. In this process, cost-dominant services will be obtained from low-cost countries (offshore engineering).

### Profitable growth

In accordance with target-group requirements and their own strategic (re-) positioning, special expertise for dedicated modules like the driveline should be strengthened further along the engineering chain, extending all the way to the assumption of system-solution responsibility. Engineering service providers must bundle their range of offerings into corresponding service products and market them in order to offer a higher service level externally and to generate more repeat and learning effects.

The demand will be for skills in such key technologies as electrification of the entire powertrain, alternative drive systems as well as material and concept lightweight construction. System expertise goes hand in hand with the corresponding assumption of responsibility and project-management skills in engineering networks. As a result, the strategic determination of core skills, the extent of a company's own services, and external partners will become the keys to a successful business model for ESPs.

The companies that can withstand the incoming wave of offshore engineering will be those that actively exploit low-wage potential, either through their own locations or through partnerships in such places as India or eastern Europe. Otherwise, this service volume will migrate to providers in low-cost coun-

### Six focal points for engineering service providers

- 1 Focus the skills set in terms of target customers, systems, modules and the engineering chain.
- 2 Actively shape network design and management as Tier 1 or Tier 2 ESPs for selected target customers.
- 3 Exploit and »cannibalize« low-wage potential through a company's own low-cost locations or partnerships for definable services.
- 4 Industrialize internal processes in engineering in the form of process components and standards.
- 5 Standardize and modularize service products for superior solution expertise and specialization benefits.
- 6 Assume a lead role in the »war for talent« for technology, system and project-management expertise.

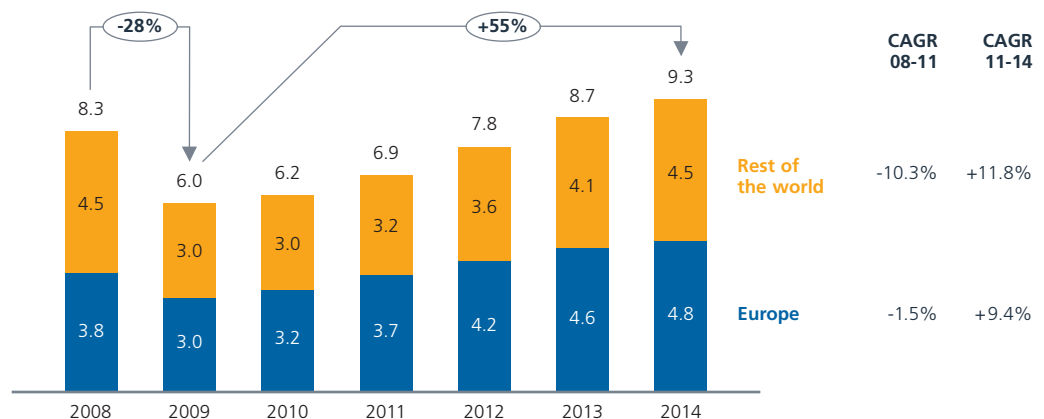
tries that already have offices in Europe. For this reason, ESPs must position themselves internationally to create competitive cost positions for their domestic markets particularly in terms of commodity services. This effort also involves an industrialization of the engineering value chain in the form of process components and standards.

Automotive ESPs are caught up in a dramatic downturn at the moment. Short-term adjustments to the cost structure and resources must be made to survive the current crisis. Nonetheless, the crisis also creates an opportunity to review and refine the business model. Right now, objectives can be set more systematically and faster in many cases. For this reason, engineering service providers should take two steps: modify operations and strategically overhaul their business model.

## Global market for automotive engineering services

The market has experienced a massive drop during 2009. It will not recover in Europe until 2012 – and in the rest of the world until 2014

In euro billions



CAGR = compound annual growth rate  
Source: Oliver Wyman study »The Future of Automotive Engineering Services«