

Driving to global, speaking the same language

Globalization is an essential strategy for success in the automotive industry. The key differentiator is how companies capitalize on their business processes, teams, and technologies across the global supply chain.

Strategy—The driving forces are familiar: growing competition, emergence of new players, overcapacity, legacy financial strains, increasing demand for safety, and product innovation. Many tactics are under way: organizational consolidation, new business alliances, faster product development, research on new technologies, and a shift of cost and risk to lower tiers in the supply chain.

But the overriding strategy must be to drive relentlessly toward global. Competitive scale is no longer achievable regionally. Leaders develop regional products from common global vehicle platforms and drive worldwide standardization. Capture and reuse of corporate assets is imperative.

Business Processes—Global common work requires disciplined, standardized processes. Teams must agree to standard definitions of deliverables to ensure smooth transactions. All players must commit to timeframes and project plans. Twenty-four-by-seven collaboration is the norm. Companies must capture the best of their processes for standardization, and the best of their components for reuse in products. Only common, lean processes can drive standardized work practices globally. Look for significant transformation of design, engineering, and manufacturing business processes.

Teams—Today's work force may include marketing experts in Brazil, designers in California, engineers in Germany, and production workers in China. There is daily interaction between continents, cultures, and time zones, bringing new requirements for collaboration. Alliances and partnerships are quickly formed and dissolved to meet market demands. Successful leaders organize true global teams, acting as a single unit regardless of boundaries. The diversity of the work force brings new ideas and a global perspective that fuel innovation.

Technology—Product and process innovation will continue to evolve as companies develop and exploit new technologies. The industry will continue to transform based on new materials, new propulsion means, automation, and breakthrough use of electronics.

Information technology (IT) is a key enabler for globalization.

Business processes are being standardized and transformed by ever-expanding capabilities of IT. Designers and engineers—regardless of location—work in a digital world, creating their deliverables in context, immediately understanding the impact on upstream and downstream processes. Product decisions are made in near real time, using high-fidelity virtual models for evaluation. There is a new global common language: digital product and process data. Global teams can assemble to see a full-size representation of a vehicle, in virtual reality, months before a physical model exists. The use of visualization tools is revolutionizing how products are developed, validated, manufactured, and serviced.

The reliability and security of a company's IT environment is critical. Everything from voice and data communications to plant-floor robots must be secure and 100% available—fully functioning across every inch of the global enterprise. A network down for 15 minutes can cause devastating delays and cost millions of dollars. Sensitive data in the wrong hands can bring legal penalties or a major loss in market position.

Standardized work must be deployed using common processes like Information Technology Infrastructure Library, ISO 9000, and Capability Maturity Model integration. Chief information officers are minimizing IT operating costs and focusing spending on new, innovative solutions that drive business transformation.

Successful companies are differentiating themselves on their ability to globalize business processes, teams, and technology while their leaders drive standardization, execute as one team globally, and move with the highest sense of urgency. **aei**

SAE Future look

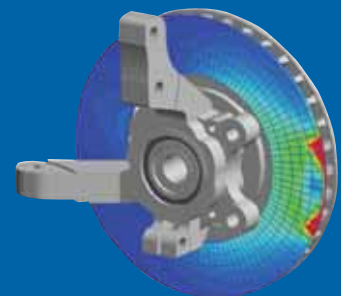
In celebration of SAE's Centennial in 2005, industry executives discuss the future of mobility technology.



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EDS' Global Service Management
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The new common language:
digital product and process data