GETTING AHEAD OF SEVEN SUPPLIER DISRUPTIONS

The new FAST 2030 report highlights the digital disruptions automotive suppliers face.
THE AUTOMOTIVE WORLD is shifting into overdrive. Automakers and suppliers can no longer count on predictable changes and the occasional, isolated disruption. Instead, they must prepare for a cascade of transformative technologies and digitally driven customer behaviors that will end-up much of the industry’s conventional wisdom. Underestimating the urgency of this challenge will leave suppliers in the digital dust.

A new report by Oliver Wyman and the German Association of the Automotive Industry (VDA), Future Automotive Industry Structure – FAST 2030, assesses the impact this transformation will have on automotive value creation through 2030 based on seven major trends. (See Exhibit 1.) It suggests several clearly defined ways suppliers can ensure their future competitiveness.

The seven trends will drastically change cars themselves, how companies create them, and the ways that customers use them between now and 2030. Unlike in the past, when industry players might face one or two major disruptions at once, now, organizations must deal with all seven simultaneously.

EXHIBIT 1: SEVEN TRANSFORMATIVE AUTOMOTIVE TRENDS THROUGH 2030

Seven fundamental trends drive the automotive industry, enabled and accelerated by digitization, AI and machine learning.

- **CONNECTED VEHICLE**: Additional safety and (services) revenues through increasing connectedness.
- **AUTONOMOUS VEHICLES**: Progression of today’s partially automated driving into fully driver-less vehicles.
- **E-MOBILITY**: Increasing electrification of powertrains, resulting in decreasing penetration of ICEs.
- **DIGITAL INDUSTRY**: Increasing digitization of processes through predictive and adaptive data capability.
- **HUMAN-MACHINE-INTERFACE**: New and digitized control concepts for driver/car interaction.
- **CHANGING CUSTOMER STRUCTURE**: Partial replacement of individual vehicle buyers by large fleet or group buying driven by mobility-on-demand services.
- **NEW DISTRIBUTION CHANNEL PAY-PER-USE**: Provision of selected vehicle features as pay-per-use for certain target groups of vehicle owners.

Source: Oliver Wyman analysis
VALUE-LADEN HOTSPOTS WILL SHIFT

Over the next decade or so, these trends will drive major changes in automotive value creation. Markets will experience horizontal and vertical value shifts, along with increasing regional variations.

The most obvious horizontal shift will involve the substitution of e-mobility systems for internal-combustion engines (ICEs). This should eliminate entire value chains while creating a competitive edge for new players, such as those in Asia, which have a headstart in adopting the new technological requirements. However, other vehicle systems could also see significant changes. While the chassis will increase in value through the addition of active and intelligent systems, the industry’s strong focus on costs will prevent such positive developments in the body-in-white despite the regulation-influenced need for weight reduction.

Value could also shift within individual systems. Take the interior, for example: The cockpit and seats should rise in value with the addition of sophisticated electronics and greater functionality as the industry pivots toward autonomous cars, while areas such as interior trim and roof and door elements remain largely the same.

Vertical shifts involve the transfer of value between the automaker and its suppliers. Auto companies will become increasingly involved in e-drives and batteries, and will rely more on their suppliers for advanced driver assistance systems (ADAS) and autonomous vehicle technologies.

On a regional basis, new technologies will erase many historical competitive advantages, thus shifting value creation opportunities into the “best benefit” countries, which stand out not only because of low costs, but also in terms of predictable long-term regulatory frameworks and other considerations.

SUPPLIERS: SURVIVING AT GROUND ZERO

The strengths that have traditionally benefited suppliers could leave them short as the seven trends take hold and value chain hotspots continue to shift. To remain competitive, many suppliers will need to develop new business and operating models and achieve holistic improvements in performance. Success will require greater flexibility, new capabilities and talent, and innovative partnerships; for some, significant portfolio adjustments will be in order, along with the need to secure the capital for financing change. It will also require superb timing as companies build up new offerings while simultaneously abandoning obsolete ones.

Our report identifies nine new business models across the automotive value chain that suppliers might employ to set themselves up for success. (See Exhibit 2.)

Of the nine supplier business models, five warrant greater attention, given their potential to create substantial value.
Driven by the current and emerging trends, new supplier business models are being established along the automotive value chain.

**E-drive and battery specialist.** Suppliers offering integrated power systems for EVs, as well as control software and subsystems, face high upfront capital requirements and will need tier-1 and tier-2 supplier relationships, a solid grounding in the pros and cons of the latest technologies, and a comprehensive understanding of e-powertrain design. The supplier must proactively manage R&D and co-development efforts, understand material economics and tracking for rare materials, and fully understand new manufacturing methods and equipment requirements.

**Tier 0.5 supplier.** A tier-0.5 supplier is an automaker’s “wingman,” taking over responsibility for major systems and modules from a vehicle value-creation perspective. Often co-located at automaker facilities, it offers system-level R&D, integrating the ecosystem of suppliers and partners, and providing system integration and program management expertise. Such companies will need to have ready access to capital markets, understand end-customer dynamics, and excel at high capacity production flexibility.

**“White label” vehicle manufacturer.** Essentially contract vehicle manufacturers, these players build unbranded vehicles for automakers to sell under their own brand names. Doing so requires manufacturing and engineering expertise, along with available manufacturing capacity located near the major components suppliers, lean manufacturing capabilities, access to strategic partnerships, and flexible manufacturing abilities. Players need strong manufacturing expertise and design capabilities, close
ties with the R&D organizations of their automaker customers, and high degrees of production flexibility.

**Ramp-down of fading technologies.** These companies actively manage the ramp-down of fading technologies, such as ICEs and associated drivetrain components as EVs gain market share. This is a consolidation play, requiring economies of scale, sophisticated capacity management, and pricing and negotiation skills. To succeed, companies must embed a proactive ramp-down process in the organization and plan to reap long-term profits on declining volumes by capturing late-stage oligopolistic profits.

**Direct channel aftersales.** Suppliers in this category make direct sales of aftersales products to end customers, third-party repair shops, and large fleet operations. They tend to have strong brands and marketing apparatus, understand shifts in customer behavior, and control distribution systems. They offer value pricing (made possible by distribution efficiencies and strong delivery-performance), thus resulting in customer satisfaction and loyalty.

**TOUGH DECISIONS NEEDED NOW**
Suppliers need to act now to lock in future industry value. Smaller and midsize suppliers that fail to adapt to the new business models will fall behind. Existing multinational suppliers have an opening to expand their roles, reshaping the industry and offering complex systems, such as complete chassis “skateboards” for electric cars or entire systems for driverless cars. At the opposite end of the value chain, online and direct aftermarket businesses could develop substantially and challenge incumbents. To manage risk while striving to capture emerging opportunities will require both toughness and vision on the part of firms.