FleetOwner

Trucking embraces technology

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A new report by Frost & Sullivan suggested that last year's dramatic rise in diesel prices has brought "about tectonic changes in the priorities of the trucking industry." That is just one of the conclusions in the analysis, entitled "North American Fleet Managers Desirability and Willingness to Pay for Advanced Heavy-Duty Truck Technologies."

The report suggested that "heavy-truck technologies are expected to drive most revenue growth opportunities for truck makers and their suppliers over the next five years," concluding that fleet managers will seek out more benefits and attributes from advanced technologies to enable them to reduce operating expenses while improving driver and vehicle productivity.

While the report said that companies will continue to explore technological developments for **safety** and efficiency reasons, **regulation** and price may actually hold fleets back from more advanced systems. "It appears that when fleet managers are 'forced' to adopt technologies due to regulation compliance, only the minimum is likely to be invested," the report said, adding that when price was removed as a factor, fleets were more interested in technologies that offer auxiliary benefits in addition to regulation compliance.

The survey, which was roughly 175 questions long, covered powertrain technologies, safety technologies and telematics technologies. It targeted fleet managers who were part of the purchasing decision for their fleets, are expecting to make vehicle purchases within the next two years and their fleets have Class 6, 7, and 8 vehicles.

Among the managers responding to the survey, **fuel efficiency** (59%) ranks highest in importance for powertrain technologies. Navigation-based fuel consumption optimization systems are generating more interest for fleets as they seek ways to cut diesel fuel dependence. Only 3% of respondents, however, report owning hybrid trucks.

The report also said "**Selective-catalytic reduction (SCR)** technology seems to be emerging as the technology of choice for **EPA 2010** regulation compliance. The high levels of importance placed on fuel-efficiency by surveyed fleet managers is likely a key reason supporting this trend. This also appears to indicate that fleet managers who will purchase new trucks in 2010 are likely to opt for SCR technology trucks over cooled exhaust gas reduction (EGR) only trucks."

Navistar is the only major manufacturer to opt for the EGR solution.

Most fleets prefer GPS-based telematics services, with cost savings and mobile resource productivity improvement the key elements managers are looking for, according to the report. Among technologies fleet managers are most actively investigating for possible purchase: remote diagnostics and prognostics services. "This validates the high rankings of cost savings and mobile resource productivity maximization. Remote diagnostics and prognostics can greatly reduce operating costs and reduce vehicular uptime therefore enhancing both cost saving and mobile resource productivity," the report said.

Forty-seven percent of fleets reported owning some type of communication technology, with 13% using location and tracking technologies. Cost savings is the greatest benefit with 41% noting that as their top reason for owning telematics technologies.

Fleets also reported that tire pressure monitoring systems (TPMS) and advanced braking systems are expected to remain top safety technologies. TPMS is the highest in terms of purchasing intentions. "The ability of these systems to directly enhance the vehicular stability of the host trucks and enhance fuel-efficiency appear to be key reasons for their perceived importance, high degree of desirability, and purchase intentions among fleet managers," the report said.

The report did say that the technologies associated with safety systems are not easily understood by fleet managers, thereby holding back the market.

"High costs already are restraining market penetration of emerging safety systems. The availability of different types of driver information and warning systems and chassis control systems appears to be confusing to some fleet managers, forcing them to select the most effective and pertinent safety systems for their unique needs. This results in a preference for certain safety systems over others and depriving the market of overall growth impetus. Concerted strategies built around system level integration enabled by sensor fusion and system-on-a-chip design may greatly facilitate adoption of safety technologies. Marketing efforts aimed at enhancing awareness of fleet managers, drivers, and technicians regarding the ability of safety technologies to reduce their fleet's exposure to potentially damaging accidents must be executed, especially in times like these when fleets are experiencing severe financial stress."

The report also indicates that most fleets (71%) plan on making purchases within the next year. Only 7% said they will not be purchasing in the next two years.

The survey was conducted from December 2008 through January 2009.