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The Advantage in the Waste and Recycling Industry

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"SMART TRUCK" SOLUTIONS
ARE THE WAY TO GO**

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*Thank you to all who served to
protect our freedom & our country.*

Top Five Reasons Why Integrated “Smart Truck” Solutions are the Way to Go

“Integrated” is the latest advancement for smart trucks.

■ By Martin Demers and Bryan Dodds

Over the past few years we have witnessed significant advances in mobile technologies for waste collection vehicles. Fleet managers who want complete visibility into fleet operations to run safer, greener and more responsive fleets are increasingly adopting these connected “smart” truck solutions. They are typically installed as after-market solutions in trucks by both municipalities and private haulers who want to enhance their existing fleets and operations. As a next step in the smart evolution, forward-thinking truck manufacturers are now offering a complete and fully-integrated smart truck with onboard computing and back-office software systems pre-installed. These new, integrated smart trucks make a compelling offering for waste management organizations. Integrated smart truck solutions are trucks that come pre-installed with an onboard computing system (OBC), mobile digital video recorders (DVRs), camera systems and software solutions for fleet tracking, route management, inventory management, billing interfaces, enterprise reporting and much more.

Five Reasons Why an Integrated Smart Truck Makes Sense

#1: Reduced IT Complexity and Cost

There are so many individual solutions and applications available for fleet management today in the market. These single-point or partial solutions can focus on route optimization, fleet tracking, video surveillance, driver direction, etc. IT departments can spend inordinate amounts of time and effort on sourcing, purchasing, integrating, updating, maintaining and training on these many and new versions of applications. Upgrades are often an implementation and integration headache in terms of getting the different versions of software to work together effectively. As a result, IT teams, managers and

users need to spend significant amounts of their time on this—time that would be much better spent on improving overall business operations and productivity. Additionally, IT maintenance and consulting costs can often accelerate.

A truck that comes with an OBC and software applications pre-installed delivers greater solution consistency and simplicity. With an integrated solution, everything already works as a complete system and there is a single support and upgrade environment. Users are ensured of an optimal performance on all features and functionality with limited downtimes. In short, the system will work the way it was intended, with minimal impact on IT resources.

#2: Greater Process Efficiency Across the Organization

Every waste fleet management team has many processes that form their daily operations such as route progress tracking, vehicle activity monitoring, stop scheduling, fuel consumption tracking and driver scoring to name a few. Automating these processes through a fully integrated system enables maximum efficiencies and a comprehensive view into all operations that may not be possible with cobbled-together, single-point solutions.

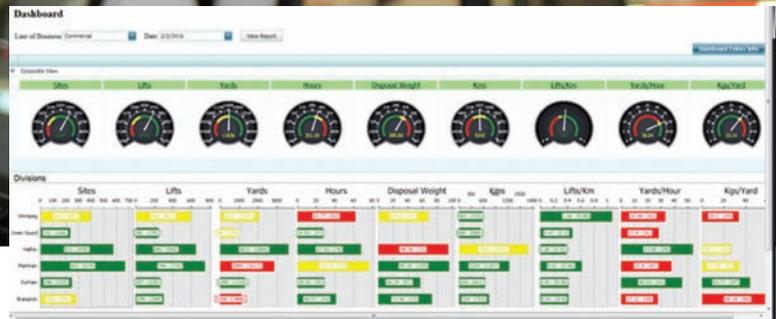
A fully-integrated smart truck allows organizations to access accurate and comprehensive information from all aspects of fleet operations—drivers, vehicles, trash and customers. It further enhances efficiencies by:



Left: A fully-integrated smart truck delivers complete, real-time for timely and well-informed decision-making.

Right: Integrated smart trucks will facilitate faster and more accurate responses to customer service issues.

Images courtesy of FleetMind and McNeilus.



Top: Integrated smart trucks come pre-installed with OBC, mobile DVRs, camera systems and software solutions.

Right: A fully integrated truck enables maximum efficiencies and a comprehensive view into all operations.

- Reducing or eliminating duplication of data-entry and other manual tasks
- Empowering fleet managers and drivers with the real-time information when they need it
- Streamlining fleet operations processes through integrated activity management
- Reducing resource requirements
- Viewing servicing problems in real-time to improve customer satisfaction

#3: Ease of Support

The support burden for a compilation of multiple single-point solutions can be cumbersome. An integrated smart truck solution typically comes with a single support source that understands the entire system from both macro and micro levels. IT staff do not have to struggle with running software on disparate hardware platforms and all the other variables that typically come into play when trying to combine a variety of hardware and software solutions. With an integrated smart truck system, all that information is centrally controlled, which means that replicating and resolving problems becomes a more efficient and effective process. In addition, maintenance tasks are simplified and easier to implement across an entire fleet.

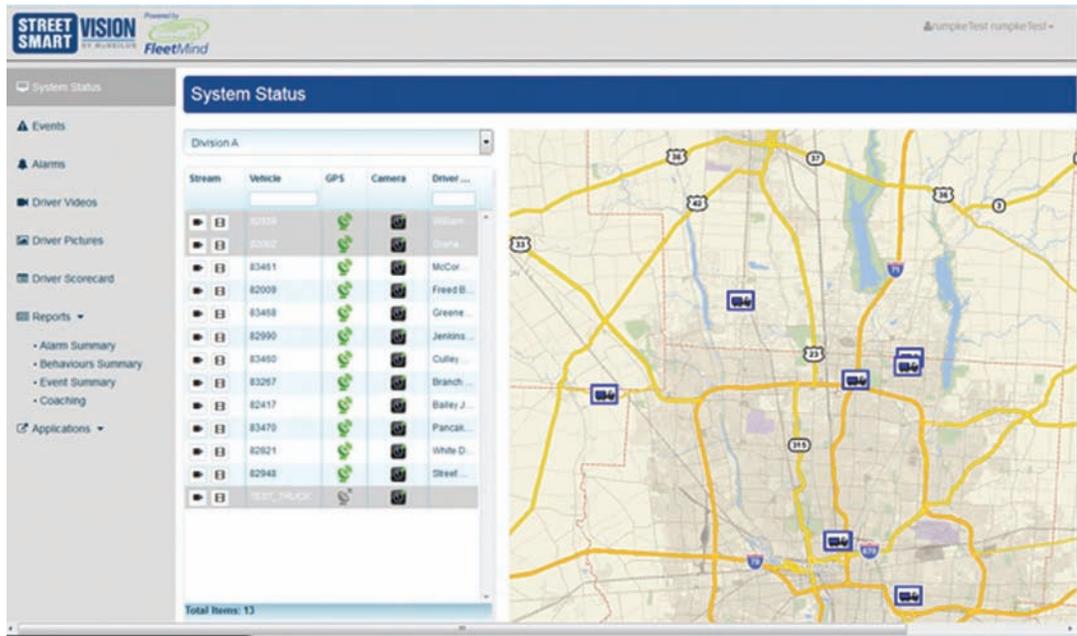
#4: Vastly Improved Visibility

When fleet management systems are not integrated, you can have many overlapping databases, sensors, cameras and other informational inputs. This makes it difficult to get a unified, quick

and efficient view of your fleet and driver performance. Reports that show performance across vehicle, driver, route, customer, fuel and other functions are critical toward gleaning an integrated view of the entire fleet operation. Often, in a non-integrated environment, many hours are wasted trying to correlate or compile unrelated, overlapping, error-prone and often out-of-date information together. As a result, the decision-making process is hampered by incomplete and untimely data.

A fully-integrated smart truck can deliver the kind of encompassing and real-time visibility that is essential to making timely and well-informed decisions. When data can be accessed instantly from anywhere, without the need for labor-intensive data extraction and compilation from disparate sources, managers can make smarter, faster and better decisions. Real-time visibility into fleet activity lets fleet managers view and understand data at any time via dashboards and real-time reports and alerts. As a result, they can understand where issues are and can take immediate action to remediate any problems before they escalate.

In addition, integrated camera systems can provide unprecedented insights into and all around a vehicle. These pre-installed cameras ensure complete visibility by capturing images and video of all internal and external activities from all angles, identifying any driver-related safety issues for rapid remediation, capturing evidence for accident and dispute resolution, eliminating blind spot areas for a complete round-the-truck view, tracking bins and containers, and getting footage of day-to-day driving and incidents for individual coaching.



A fully-integrated smart truck lets organizations access accurate and comprehensive information from all aspects of fleet operations.

#5: Optimal Customer Service

Waste management organizations place the highest value on ensuring accurate service delivery and a problem-free customer experience. An integrated smart truck system ensures that managers and drivers have immediate access to all the customer information that they need to service both residential and commercial customers most effectively.

By integrating systems and the data collected, fleet managers are empowered with complete visibility into every aspect of the waste collection process. Thus, the speed of any required response is dramatically improved, issues can be dealt with immediately and any required customer support can be provided without delay. Integrated smart trucks will facilitate faster and more accurate responses to customer service issues as they can track and photograph any route or pickup issues, provide photographic evidence of services if required, and send video recordings or live camera feeds to the back office—all in real-time. They will further ensure real-time remote connectivity between the back office and each vehicle to facilitate prompt customer service follow-ups.

Individual customer information—from damaged carts to insufficient cart capacity—is easily captured into a centralized, integrated database, thereby eliminating the inefficiency of data from disparate sources.

A New Era

In this exciting new era of connected 'smart' fleets, it was only a matter of time before refuse truck manufacturers and technology developers got together to create a complete and fully-integrated smart truck with fleet management software and systems pre-installed. Making it easier, more user-friendly and technologically seamless to operate a smart fleet is now the next logical leap forward for waste management organizations. | **WA**

Martin Demers leads FleetMind (Montreal, QC), a Safe Fleet brand company, as Vice President and is a long-time technology industry executive. Under his leadership, FleetMind has grown into a leading on-board computing (OBC) solutions provider for waste and recycling fleets. Martin has often been published in industry publications including FleetOwner Magazine, Trucking Info Magazine and RFID Journal. He is a frequent speaker at technology and waste management events. Martin can be reached at mdemers@fleetmind.com.

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