



The Next Phase of Telematics: Moving Beyond Plug-and-Play

Introduction to Telematics & inthinc



inthinc Technology Solutions, Inc.

Telematics solutions that improve
driver safety, reduce fleet
management costs and support
regulatory and policy compliance.

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Introduction to Telematics & inthinc

Telematics is the “blending of computers and wireless telecommunications technologies...specifically referring to automobile systems that combine global positioning satellite (GPS) tracking and other wireless communications for automatic roadside assistance and remote diagnostics,” according to TechTarget.com. Over the years, “telematics,” especially when combined with real-time verbal coaching, has evolved to enable enterprises and fleets to obtain “smart” transportation and performance information on their drivers and vehicles. This includes whether drivers are speeding or swerving recklessly, driving with or without their seatbelts fastened, tracking vehicle location, viewing miles driven, etc. As a result, enterprises are able to use this data to modify driver behavior and increase fleet efficiency and mileage, and even retain their reputation by limiting accidents caused by reckless behavior.

Deploying a successful telematics program across an enterprise fleet takes work, however. It should not be approached as a “plug-and-go” system but as a comprehensive enterprise deployment program requiring an investment of time and resources. To ensure positive results for any deployment, a well-thought out strategy needs to be delivered that includes planning that results in a clear vision with coherent and obtainable goals for implementation; a holistic view of the implementation with participation and support from a broad range of stakeholders, including senior executives; and clear processes that facilitate the implementation and management of the project.¹

Fortunately, you don’t need to be alone in implementing this new and evolving telematics initiative.

As a global company centered on telematics, fleet management and driver safety solutions, inthinc has helped many organizations ensure a successful deployment and ongoing program. To this end, we’ve developed this guide to educate enterprises considering telematics for their fleets on what is required, highlighting critical “best practices” modeled after inthinc’s Efficient Execution Methodology, known as E²M. The company’s E²M approach to telematics deployment is a proven, consistent and effective methodology that enables successful, repeatable and efficient delivery of the telematics solution, which in turn helps companies maximize value.

We’ll be with you every step of the way.

A successful telematics solution for your fleet takes hard work, but with your vendor’s help it will increase driver safety and fleet efficiency while protecting your brand.



¹ IDC Whitepaper: The Business Value of Software Deployment Services,” October 2010

Project Preparation/Planning

Implementing – and managing – a telematics solution takes time, preparation and hard work, but if it's managed efficiently, you can enjoy dramatic money-saving results. To ensure success, a well thought-out strategy must be developed before you start. To facilitate the process, inthinc has developed the Efficient Execution Methodology (E²M). This “best practices” approach helps customers maximize value by enabling successful, repeatable and efficient delivery of the telematics solution.

E²M includes project planning; project execution, analysis and delivery; and project optimizing and monitoring. To be successful, each of these three steps should be planned out in advance, based on your specific needs. Let's walk through the preparation processes, with examples of what has worked especially well for inthinc customers such as Cintas Corporation and Barrick Gold Corporation.

Project Planning:

1. Set goals and objectives

Work with your safety committee and/or senior management team to determine what you would like to accomplish with this telematics program. Are you most concerned about improving driver safety? Tracking fleet efficiency? Both? Establish a vision for the company by setting goals on how much improvement you would like to see during a specific timeframe, and work with your provider – and your team – to reach these goals. Agree on criteria for success to help measure return-on-investment. Having an overarching, comprehensive goal for the project as a whole is critical, as allowing individual stakeholders to determine individual goals often result in conflicting expectations.² Actively communicate this vision and expectation throughout the organization to create a sense of urgency around safety and efficiency.

In its planning process, Cintas, the leader in specialized business-to-business services, defined four main objectives for its telematics program:

- 1) Reduce Speeding
- 2) Increase Seat Belt Use
- 3) Reduce Crashes/Incidents
- 4) Reduce Idling

By the end of the first year, the company had reduced speeding by more than 85 percent in all three regional divisions, seat belt use had increased in all divisions, ranging from a 79-89 percent improvement; the Northeast division saw a reduction of 46 percent in vehicle incidents in the first six months. In addition, by limiting the amount of idle time overall, the company has significantly reduced carbon emissions and fuel consumption. (Visit inthinc.com to view the entire case study.)

² IDC Whitepaper: The Business Value of Software Deployment Services,” October 2010

The company realized significant improvement and overall program success because it had set goals beforehand.

2. Determine Roles and Responsibilities:

To ensure success, someone within your organization must be assigned to take the lead. According to analyst firm IDC, a “best-practices approach” to any deployment³ should include input from anyone and everyone with a stake in the project’s success. However, the first step in this process is to determine who those stakeholders are and who ultimately is responsible for managing the program. Preferably, a safety committee or team would be in charge. Senior management must also aid in the deployment and drive business processes. If your company does not have anyone responsible for safety concerns, hire someone or appoint a project leader who will focus strictly on executing and monitoring the telematics project. If the size of your company warrants it, assign leaders at the corporate, regional and site level.

Determine who will train the managers and drivers, especially if they will be trained in more than one location and at different times. These trainers should be “champions,” people who believe in the program and can remain positive at all times. These trainers, in turn, will play a key role in choosing drivers who will champion the solution as well. If you get champions supporting the program from the beginning, issues will be easier to overcome.

Other roles and responsibilities to be determined include (but are not limited to):

- Dispatcher to interact directly with the drivers to ensure proper system usage and to provide basic support.
- Managers to oversee driver compliance to policy at the organizational level, determine corrective action for process breakdown and approve local changes to process participants, alerts, and zones.
- Project team to oversee installation of vehicles and implementation of policies.

3. Plan the Implementation, Step by Step:

One of the biggest challenges in the deployment planning process is to determine which vehicles will join the program first and how the solution will be implemented within these vehicles. If you have a thousand or more vehicles across your organization, pick one location at a time. While Cintas eventually installed the inthinc telematics solution in more than 1,200 Cintas vehicles, it started with 10-20 vehicles at a time until it completed this initial installation.

Work closely with your provider to identify specific vehicles into which the devices will be installed. At inthinc for example, when this information is received, work begins immediately on three important processes:

- 1) Software engineers begin writing programs enabling the driver safety device to communicate with the customer’s specific vehicles

³ IDC Whitepaper: The Business Value of Software Deployment Services,” October 2010

- 2) Speed-by-Street speed limit editors begin collecting speed limit data in the locations where customer fleets are located
- 3) The interaction and implementation team begins planning installation schedules and coordinating travel arrangements

4. Determine Relevant Data Reports for Analysis

A telematics solution should provide sufficient data to help you reach your goals. Work with the solutions provider to determine which data reports will be most valuable. For example, if improving driver safety is your primary objective, ask for reports on:

- Speed
- Aggressive Driving
- Seatbelt Use

If fleet management is most important, then track data on hours driven, which roads your drivers are on, miles per gallon driven, idling, etc. If compliance is critical, tracking reports that will tell you statistics on all three components will be even more valuable. If you want to reduce the environmental impact of your fleet, you can get data on how much time a truck idles during any given time. (According to the California Energy Commission, one hour of idle time represents 80 miles of engine wear and approximately one gallon of spent fuel, so this report would be highly valuable to a company wanting to increase fleet efficiency and reduce environmental output.)

For events such as speeding and seat belt use, drivers can be given a 10-second grace period to correct the unsafe action before the violation is recorded for managers to view. By monitoring driver behavior in real time, you can know exactly who is driving safely on the road, and who is not, and follow trends for both individual drivers and the entire fleet.

Here are other key reports to consider when preparing for the execution of your program:

- **Seat Belt Use Alerts:** Ensure drivers are wearing a seat belt while driving by sending alerts to drivers and managers alike if they are not.
- **Injury Severity Modeling:** Receive detailed reports of every crash via black box technology, including vehicle speed, GPS location, direction of vehicle, RPMs and more, which is recorded 10 seconds before and 10 seconds after a crash.
- **Monitor Fuel Use and MPG Tracking:** Monitor miles per gallon (MPG) for each fleet vehicle on a daily basis for up to 12 months.
- **GPS TRACKING:** Ensure routes are efficient and vehicles are being used appropriately to maximize fleet efficiency.
- **Live Fleet Visibility:** Monitor driver location and route details in real-time, including distance and time traveled.
- **State Mileage Reporting:** Generate state mileage reports, capturing state mileage for groups and vehicles.

5. Determine Policy

Before the program is executed, determine how your company will enforce and monitor it. Will you

offer incentives and rewards to drivers? Will you setup a disciplinary policy to manage poor drivers if they don't improve over a specific time period? Will you establish rewards programs at a national or local level? On a quarterly or yearly basis?

Barrick, for example, monitors real-time vehicle locations, driver habits and trip details at a corporate level. This gives managers insight into drivers' behavior, allowing them to reward safe drivers while also identifying those in need of additional training.⁴ Cintas' drivers receive points at the beginning of the year and must stay within a certain point level to remain in good standing. Each infraction removes points.

Project Implementation

Once the preparations are in place, it's time to start the project execution phase and begin to train your managers and drivers. Depending on the size of your company, your implementation process will take place in steps or an entire fleet in one location.

Installation

During your preparation/planning phase, you will send your solution provider a list of which vehicles need to have the system installed first and where. For example, with sites around the United States and Canada, Cintas implemented telematics to one group of trucks (10-20) at a time on a month-to-month basis. More than 1,200 were installed in the initial phase.

A member of your site staff should be at each location to monitor the execution of the project in each vehicle.

Training "Best Practices:"

There are two separate audiences that need training: 1) administrators/managers and 2) drivers. Manager training should take place first.

Manager Training:

Program leaders should be trained on the program and the management portal from your solution provider, and at least one of your leaders should then become a "subject matter expert (SME)" who will train the remaining managers on how the system captures data, how the data can be analyzed, and the scenarios that would lead to the driver being scored favorably or negatively by the system.

For inthinc customers, the initial training takes place via online or in-person instruction to walk through the inthinc.com Management Portal. Initial training includes a very basic overview of what the portal is capable of, how it works, how to generate reports and other helpful tips on how to get the most out of the waySmart® solution.

Over a 4-6 week period, you should learn and gain access to all parts of the portal and feel comfortable navigating the software and creating and reading reports. At this point, you will take full ownership of

⁴ <http://barrickresponsibility.com/2011/safety/safety>

the administration of your fleet. Your solution provider should help you through any issues or challenges you confront moving forward.

Driver Training:

The next step is to train drivers on the function of the telematics hardware component and how it will be used. The driver training (approximately an hour long for both Cintas and Barrick) is paramount to the entire project. If drivers aren't trained on what is expected of them and what the consequences will be if they don't comply, the project is more likely to fail.

Unfortunately, the default mindset for the driver is almost always defensive – at least initially: “Why are we doing this? I'm not a bad driver. I've never been in a crash.” Part of the training is to educate your drivers on why it is needed, to keep them safe AND to help your fleet be more efficient.

Training should include:

- Benefits to drivers – service hour log, better maintained vehicles, safer driving, more efficient routes
- Responding to the system – 10-second grace period to correct the action with no consequence
- Incentives and rewards – including performance reviews, bonuses, etc.

Project Optimizing & Monitoring

Now that you've implemented your telematics solution and have data piling in, what do you do with it? Use it. You need to implement a monitoring and management program that enables your organization to reach its goals—which means you need to determine how you will enforce compliance while rewarding good behavior. Typically, any change can be difficult for employees, and using telematics that will monitor on-the-job behavior is intimidating. However, if employees know what is expected of them and what recognition or penalties might come their way if they do or don't meet these expectations, they will be far more likely to embrace the program.

To facilitate the process and help ensure buy-in, integrate the telematics program into your company's fleet policy, holding drivers accountable for their behavior, recognizing the negative consequences for improper behavior, and understanding the program's goals.⁵

Leadership is Key

Leadership involvement – and example – is critical to a successful program. Take time to visit the field, interacting with your drivers. Communicate a sense of urgency around safety and compliance. Acknowledge good safety performance or take immediate action to correct any mistakes or negative behaviors. Having ongoing discussions to keep your goals “top of mind” (safety, efficiency, lower costs) will help keep drivers in compliance, and managers actively monitoring the program for data will ensure a strong “return on investment.”

⁵ FleetFinancials: “Senior Management Support of Telematics Crucial,” September 2010

Enforcing Compliance

Consider these steps to enforcing compliance:

1. Compare reports with baseline metrics to measure improvements in safety, economy and efficiency. Share improvements at all levels of the company. Recognize efforts to modify behavior. Note areas of non-improvement and slow improvement; develop training programs; adjust incentives.
2. Incorporate the results on individual performance evaluation. Identify ways to reach skeptical individuals (i.e. quarterly/annual incentives, training on safety and other benefits).

Cintas uses inthinc driver scorecards to identify safe drivers and those in need of additional training. A driver that scores the highest on a quarterly basis gets gift certificates for restaurants. Once every truck has the system, they will offer an annual, corporate-wide recognition program.

Drive for 5.0 Program

To help facilitate company-wide adoption of safety and cost savings initiatives, inthinc has developed the Drive for 5.0 program to support leadership in effectively communicating with drivers. The program provides co-branded support materials such as posters, email and press release templates, logos and other branded materials, all consisting of messages from senior management to promote safer driving habits, greater efficiency and cutting down on idling.

Guides and best practices on how to instill a culture of safety and efficiency in your fleet are also included.

Benefits of Drive for 5.0:

- Bridges the gap of communication between management and drivers
- Helps drivers understand the company's specific safety and cost saving goals associated with the inthinc solution
- Supports managers in their operations of the inthinc device
- Helps establish driver/operator accountability
- Promotes morale building across the organization
- Helps skeptical individuals better understand the purposes of inthinc

In addition, some companies have also included a rewards and recognition program to add extra incentives for drivers to improve driving performance.

Now What? Teamwork Continues for Optimal Performance

Once your telematics program is ongoing, your service provider should continue to work with you to ensure the program runs smoothly. inthinc will answer any questions you may have, provide guidance on collecting, optimizing and monitoring the data, and ultimately be the partner you need to get the most from your telematics solution.

Good luck!

To learn more about implementing large-scale mobile resource management and telematics programs, contact inthinc at contact@inthinc.com.