

FLEETING MOMENTS IN IoT

Part I, Finding Your Lane

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THOUGHT LEADERSHIP





Part II: Finding Your Lane

Selling IoT (Internet of Things) to organizations operating a fleet can sometimes feel like asking a stranger if their spouse is cheating. It's after business hours; do you know where your trucks are? If not, can you trust the word of your drivers and customers? How do you know if/when a job is scheduled, in progress, or completed? And if a driver is late, or a no-show, how long before you know about it?

To overcome these challenges, fleet managers have taken a mobility approach. There was a time when flip phones with walkie-talkie features provided advanced communication between drivers and managers. But the inherent issue of cell phone use while driving caused major concerns, if not road accidents.

As M2M (machine to machine) technologies flourished, the affordability of GPS-and-cellular-based fleet tracking drew attention away from smartphones and tablets, and towards the IoT. [New research by Verizon](#) shows that 73% of executives are either researching or currently deploying an IoT solution. If your organization is not in the IoT game, it won't be long before you are.

The fundamental problem with managing a mobile workforce is that you may not realize something's wrong until it's too late. Imagine that Lisa, a delivery person, hits traffic on the fastest route to her customer. Lisa uses GPS navigation on her iPhone to find a less congested route.



But unfortunately, she still arrives more than 20 minutes late to her destination. The customer is upset, because this is the 2nd late delivery in as many months. How would you know what happened in this case without speaking with Lisa or her customer?

The example above reveals why the IoT has made a significant impact on fleet and mobile workforce management. [APIs](#) (application program interface) take the IoT even a step further by enabling integration between devices, systems and applications. API-enabled solutions like our [ThingX™ Platform](#) bring data together, and provide clarity to your 360° view of the business.

Assume for a moment that Lisa's company hasn't adopted GPS fleet tracking. We may gather from Lisa's quick thumb-work on her iPhone that she's rewarded or punished based on her performance. The problem with this approach is that it could [potentially undermine](#) satisfactory behavior over the long run. What's more, it doesn't solve for traffic congestion, vehicle breakdowns that lead to costly repairs, accidents, or meeting compliance with [safety regulations](#). Reward and punishment need to be engineered into a complete fleet management system to be effective.

Also, what if a survey tool is used to measure customer satisfaction in this example? There are [pros and cons](#) to consider when using tools, such as [Net Promoter Score \(NPS\)](#) by Satmetrix. NPS is designed around the question, *"How likely are you to recommend this business to a friend or colleague?"* Questions related to a specific transaction could be erroneously influenced by subjective feelings about the overall relationship with your organization, resulting in skewed data. In this example, the customer may feel inclined to rate Lisa based on the last two experiences with the company instead of just the most recent.

Lisa's company faces a complex task anticipating traffic issues, service level expectations and customer satisfaction. That's why more organizations are turning to an API-enabled IoT platform for seamless integration across business systems and applications. ThingTech's [GPS fleet tracking](#) and [field service](#) solutions together provides a real-time view of the data points that influence your business growth—routes, vehicle location and movement, cargo status, inventory/stock levels, fuel consumption, driver

behaviors, arrival/departure times, job start/stop times. Plus, we integrate work orders into real-time dispatch, resulting in routes that can be optimized up-to-the-minute.

Finding the right lane, which leads to digital transformation is a major undertaking. There's no one-size-fits-all solution. But making better, data-driven decisions starts with integrating data that provides instant visibility into your fleet operations.

In the next segment of this three-part-series, we'll examine the best KPIs/metrics to measure when launching a fleet management proof of concept or pilot.

Learn more.

ThingTech is a trusted IoT partner. We have enterprise ability and startup agility. Our solutions enable real-time decision making by connecting the dots with data and analytics



Part II: Getting Your Pilot Off the Ground

Congratulations! Your ambition to bring the IoT (Internet of Things) into your company has moved you into the pilot phase. The question now becomes: Are your IoT goals centered on cutting costs or generating revenue? It's critical that your objective aligns with organizational goals, and when the focus is on revenue generation, leveraging the IoT can earn you a seat at the revenue table.

Most organizations spend too much time fixated on cost saving in the pilot phase. There are plenty proven ways to achieve ROI in this manner: ultimately, any solution should provide automation throughout your organization, turning data into intelligence that you can act on in real-time.

However, customer loyalty is the key to unlocking profitable growth. In other words, existing customers generate revenue, tell others about their experiences (positive and negative), and provide feedback critical to enhancing your products and services. It goes without saying that customers are what's most important to your business. And they'll stick around if you're the fastest, cheapest, best, most reliable answer to their problem(s).

Customers don't care about how hard you've worked or how hard you've tried. What matters most to them is [trust](#)—if you've kept your brand promise. No one expects perfection, for the most part. Even with organizations that run like well-oiled machines, things don't always go as planned.

But for companies running a fleet of vehicles, mistakes can be costly. Traffic congestion, road accidents, and breakdowns can turn your trucks into twisted metal screws drilled into concrete roads.

Investing in the IoT should make your job less stressful, and provide scalable service level improvements. A good fleet management solution gives you active control of your vehicles. It enables you to prevent molehills from becoming mountains, and helps you to see around corners, anticipating service interruptions to your customers. Now that your pilot is off the ground, a good place to start is by homing in on a specific use case that benefits from 1) dispatch and route optimization, 2) vehicle diagnostics, and 3) real-time work order visibility.

Dispatch and route optimization play a critical role by automating your ability to navigate quickly and cost-efficiently to your customers. Adding a [suite of APIs](#) to the mix will score more points with customers by helping to predict and determine routes based on current road conditions, traffic, historical information, and weather-related data. Smart technology like this also opens the door to mobile applications and text alerts that keep customers up-to-date with their scheduled deliveries or service.

The next metric to focus on is vehicle diagnostics. Unexpected breakdowns on the road put unnecessary pressure on your operations, and usually result in [detractors \(i.e. unhappy customers who share their experience with others\)](#), towing fees, repairs, part replacement, and employee downtime. Adding an [enterprise asset management](#) component to your fleet management pilot is invaluable. With the ability to pull, store, and analyze data directly from your vehicles onboard computer system in real-time, you can improve uptime and facilitate proactive, scheduled maintenance.

The third metric to look at is real-time work order visibility. To monitor and measure how your workers are performing at the customer end-point, you need to add a mobile workforce application to your fleet management solution. Once workers have access to a mobile application that gives them the ability to record work start and stop times in real-time, you can automate alerts to notify you if a job takes longer than expected, or hasn't been completed at all. This data can also be used to 1) achieve better dispatching based on location and job types, and 2) develop score cards for vehicle and drivers.

If your IoT pilot closes the gap between where you are and where you want to be, you're moving forward in the right direction. The success of your pilot should be measured on revenue generation versus cost savings, and how well you execute service delivery using the an IoT fleet management solution.

In the last segment of this three-part-series, we'll examine how to squeeze the juice out of your freshly unboxed fleet management solution once you're pilot has landed.

Learn more.

Companies of all sizes, in both public and private sectors, are adopting the IoT for any number of reasons—digital transformation, meeting compliance with federal regulations, rising/fluctuating fuel costs, lack of visibility into field operations, competitive forces.

Changing the future happens today [Contact us](#) anytime to discuss your fleet tracking needs, or to [schedule a free demo](#)



Part III: What Happens Next?

Before the IoT, your business was operating on historical data. Now, all of a sudden, you have a stream of real-time data, the value of which can only be realized through IoT-driven automation. Keeping an omnipresent eye on vehicles and field workers can be a huge cost-saving, game-changing innovation for your company. But there are more benefits and opportunities out there. In [Part 2](#) of this series, we asked readers to answer this question: *what are my IoT goals?* Now that your fleet management system is up and running, the question now becomes: *what do I do with all this data?*

Fleet management systems can generate enormous streams of data. Without a sense of what to monitor, measure, and manage, big data becomes noise for managers to cut through. When it comes to data, it's not how much you collect, it's what you use and how you use it. Of course, it's hard to ignore the low hanging fruit—cutting costs by improving average miles per gallon, route optimization, etc. But a more efficient use of the IoT is applying analytics and data models to uncover patterns and intelligence you can act on.

Consider trucking, an industry contending with growing regulations around logging hours of service ([HOS](#)). The government's quest to make roads safer produced the [ELD](#) Mandate, requiring truckers to prepare HOS records with electronic devices. One way to determine the value of the ELD rule is by asking this question: does it make trucking companies better?

On one hand, it's predicted that the trucking industry will save annually [nearly \\$2 billion per year](#) in paperwork, \$365 million in crash reduction costs, and [hundreds of injuries](#) resulting to crashes. Then again, the ELD rule creates a [disadvantage](#) for smaller businesses whose costs for ELD hardware, software, and data plans will likely exceed cost savings on fuel and paper in the short run.

We believe that fleet management solutions, such as ELD devices, make trucking companies better. But these are only a gateway to digital transformation. The next step in your IoT journey is putting your data to work. [ThingTech brings together](#) smart devices, mobile applications, powerful APIs, and a flexible Salesforce cloud that enables IoT deployments to scale efficiently.

With ThingTech on board, your [IoT platform](#) can gather information from the field and feed it to any department that needs it. Customers will experience optimal service levels. Drivers paid by the mile will have the tools and information they need to maximize safety and earnings. Maintenance managers will be pleased that predictive maintenance schedules keep vehicles running better and longer. The finance team will be thrilled as costs for replacement parts decrease due to better tracking of warranties. And executives will extol your growing repository of data models, which provide insight and predictability into the relationship between IoT data (historical and real-time) and the organization's progress toward its goals.