Digital Transformation of Field Service
with MicroStrategy
The challenge
Organizations that deploy field service staff as part of their day-to-day operations need to successfully manage work orders, optimize the deployment of their valuable assets, maximize productivity, and provide exceptional customer service. Safety concerns, vehicle and equipment maintenance, and the emergence of new technologies also contribute to this challenging business environment. To stay relevant, it’s critical for field service organizations to eliminate information silos and harness the power of their data to drive performance and efficiency.

The solution
MicroStrategy is an integrated enterprise analytics platform that equips field service organizations with powerful tools to help them streamline dispatch operations, optimize assets, promote safety, and deliver outstanding customer service. These comprehensive, secure solutions pull together data from various sources, provide a comprehensive view of information, and enable users to make better, more timely business decisions. And by leveraging our mobile platform, organizations can build custom, native mobile apps that empower field service management and technicians to better manage work orders, monitor performance and resource allocation, help improve customer service, and boost first-time fix rates.

MICROSTRATEGY provides field service companies with a platform to digitally transform their businesses.
The challenge
Dispatch operations are key to the success of any company with a sizable field service organization. Dispatchers are the first line of communication with customers and it is imperative that they have the tools they need to enable them to effectively respond to service calls, track vehicles and equipment, relay information, and coordinate operations.

The solution
MicroStrategy can bring together data from numerous sources and provide a unified view of information to dispatchers. By leveraging the MicroStrategy platform, dispatchers can quickly view real-time, critical information related to work orders, equipment deliveries, truck routes, and more. Powerful visualizations enable dispatchers to quickly identify trends and process bottlenecks, and our transactional capabilities give them the flexibility they need to make adjustments on the fly.

Our platform also enables field service companies to continuously measure and fine-tune the performance of their dispatch operations. By providing better visibility into call center metrics such as wait times, quality and length of calls, and customer satisfaction, MicroStrategy helps organizations identify call handling problems and refine their operational and customer service strategies.

**Provide better visibility into call center operations, customer satisfaction, work orders, and resource allocation.**
USHER/SECURITY APPLICATION:
CALL CENTER AUTHENTICATION

The challenge
Call center representatives face the important task of quickly and securely validating an incoming caller’s identity in order to help ensure account security. Traditional methods of remote authentication like security questions negatively impact call center operations by increasing average call handle (ACH) times. Just a few questions can add precious seconds or even minutes to each call and can significantly drive up aggregate costs.

The solution
Usher helps prevent fraudulent behavior in a call center environment by offering a variety of secure, remote authentication methods. Call center employees can authenticate a person’s identity over the phone using one-time Usher codes or push notifications that are available via a user’s smartphone. With Usher, call center personnel can also offer password alternatives, like QR codes, for accessing sensitive customer information and applications.

By eliminating the time spent using traditional personal identification information methods to authenticate customers over the phone, call centers can shave precious seconds off of every inbound call. Depending upon the call center’s annual call volume, this can add up to hundreds of thousands of dollars in operating expenses each year. On top of that, identity authentication through Usher can help improve customer service, positively impacting customer satisfaction and retention rates.

Leverage remote identity authentication capabilities to help prevent identity theft and reduce call center operational costs.

Usher code
During a customer service call, a customer can provide a call center rep with a secure, one-time passcode generated by the Usher app. The rep then enters the passcode into their portal to confirm the customer’s identity.

Remote application integration
A call center rep can also send a customer a push notification via the Usher app. The customer confirms their identity by acknowledging the notification on their device.
ANALYTICS APPLICATION:
ASSET OPTIMIZATION

The challenge
Field service organizations often struggle to overcome informational silos to get a comprehensive understanding of how to improve asset utilization in order to achieve their efficiency goals. Industrial equipment in particular can be very expensive when sitting idle, making accurate demand forecasting especially critical.

The solution
Increased visibility into asset utilization is invaluable for helping field service organizations uncover opportunities to improve process efficiencies and increase their return on assets. MicroStrategy can be used to create easy-to-use applications that incorporate optimization models for capacity planning, resource management, and work scheduling.

Our platform allows users to build customized dashboards that show personalized KPIs and real-time analysis to help improve asset utilizations with proactive asset management. By leveraging MicroStrategy, organizations can closely monitor information related to labor, vehicle wear and use, inventory availability, and equipment utilization and maintenance.

With MicroStrategy’s vast library of native gateways and drivers, organizations can seamlessly connect to a variety of data sources and achieve a single, comprehensive view of their enterprise assets and maintenance activities. MicroStrategy’s advanced analytics capabilities can also be used to help organizations predict vehicle fleet usage and identify potential equipment issues before they lead to failure and a negative customer experience.

Deliver real-time insights on asset availability, reliability, and efficiency.

Analyze assets by category, performance, and operating conditions to evaluate work orders, scheduling, and workflows.

Use predictive analytics to monitor asset health and make more informed maintenance decisions.

Identify the availability of your assets to prioritize and optimize resources.
MOBILE APPLICATION:
FIELD SERVICE MANAGEMENT

The challenge
Field service managers have the difficult task of maintaining a profitable balance between labor budgets and delivering the quality of service their customers expect. It is critical that their teams operate in an agile fashion in order to optimize workflows, avoid downtime, streamline operations, and keep costs under control. However, information silos, communication breakdowns, lost paperwork, and solutions that don’t work offline can all hinder their ability to effectively manage their workforce.

The solution
With MicroStrategy mobile apps, management personnel can analyze and monitor real-time data related to productivity, operations, systems, costs, equipment, and even weather forecasts. Field service managers can quickly understand if their teams are not meeting target output levels and dig into data to identify process bottlenecks and potential solutions. Because field management personnel can utilize apps to instantly view up-to-date workforce performance information, they are able to recognize top performers and provide coaching to technicians who are struggling. They can easily track time and attendance information and make scheduling adjustments as needed. Supervisors can communicate with their technicians directly from the app (and vice versa), helping to facilitate improved quality of work, compliance, productivity, and safety. Context-aware maps make it easy to track work orders, technician utilization, and service quality.

Enable field service managers to obtain a comprehensive view of work statuses, resource utilization, and technician performance.

Managers can analyze data related to the quality, productivity, and compliance of their technicians’ work.

In-app communication for field supervisors and technicians.

Context-aware maps make it easy to track service calls, technician utilization, outstanding work orders, and service quality.

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**MOBILE APPLICATION:**  
**WORK ORDER MANAGEMENT**

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**The challenge**
Field service technicians are a company’s front line and it is important to empower them with the tools they need to properly manage their individual workload in a single convenient location. Yet, many field service organizations still rely on error-prone, paper-based work order management processes that hinder both agility and productivity.

**The solution**
Using the MicroStrategy platform, field service organizations can combine key technician workflows into a single streamlined app that’s available online or offline. These apps provide technicians with real-time visibility into work order information in order to improve customer service and first-time fix rates.

Technicians can view comprehensive job data related to assignments, completion times, average customer satisfaction scores, and more. By leveraging the platform’s transaction services capabilities, technicians can report on the progress of their jobs, re-open closed work orders, schedule follow-up appointments, input estimates, and order parts. Furthermore, technicians can secure customer signatures for inventory orders or requested repairs directly from the app. These apps help technicians stay organized, ensure that they understand their work order priorities, and facilitate the quick exchange of information so that operations can run efficiently.
MOBILE APPLICATION:

ESTIMATES AND EQUIPMENT INSPECTION

The challenge
The current paper-based processes used by many field technicians to create job estimates, inspect equipment, or document safety issues is inefficient and error-prone. Headquarters-based personnel often don't receive documentation until the following work day and in many cases that information is incomplete.

The solution
MicroStrategy Mobile apps reduce paperwork, accelerate documentation processes, and help ensure that field technicians are working with live data. These solutions incorporate transactional input forms that empower users to capture and submit data directly from their apps while on-site. App users can log information related to safety violations, repairs, compliance, and property or equipment maintenance issues. Inspectors or site managers can capture and submit photos of incidents or infractions and enter notes for review. Field technicians can leverage apps to input job estimates—complete with photos and supporting documentation—that instantly write-back to the database. Using these apps, companies can streamline operational processes and improve repairs, compliance, safety practices, preventative maintenance, customer satisfaction, and workforce productivity.

Streamline job estimates and equipment inspections by enabling mobile, on-site data entry and fast information sharing.
MOBILE APPLICATION: TECHNICIAN PERFORMANCE

The challenge
Field service technicians often lack up-to-date visibility into their performance metrics and rarely understand how their productivity levels, work quality, and compliance attainment compares to their peers.

The solution
By leveraging MicroStrategy Mobile apps, field service technicians can receive constant, up-to-date, and automatic feedback on their performance. Visually compelling dashboards allow technicians to view KPIs related to customer service, productivity, compliance, and work quality over various periods of time. Employees can quickly understand how their performance compares to their previous achievements, as well as their peers.

These apps provide a vehicle to recognize top performers and enable technicians to easily identify areas to work towards improving. Additionally, these apps provide field service technicians with confidence that employee ratings are based on accurate, unbiased data and can help to improve communications with supervisors. By incorporating incentives such as financial rewards, company-sponsored trips, or additional paid time off, organizations can further drive performance improvements and increase app usage.

Boost field technician productivity by giving them instant visibility into their performance and how it compares to their peers.

Provide visibility into peer performance and highlight top-ranked technicians

Enable technicians to identify areas for improvement

Allow technicians to view KPIs related to customer service, productivity, compliance, and work quality
MOBILE APPLICATION:
TECHNICIAN TRAINING

The challenge
Field service technician productivity is often limited by their inability to access up-to-date documentation when they need it.

The solution
MicroStrategy Mobile apps empower field service technicians with the tools they need to perform their jobs safely and correctly—the first time. These apps integrate data from a wide range of sources and give technicians seamless, on-the-go access to training videos and materials related to safety, equipment, company procedures, repairs, and installations.

By allowing field technicians to instantly view the latest multimedia training content, companies can help their employees better diagnose problems, assess the extent of the issues, and decide on the best course of corrective action. These apps aid less experienced technicians in trouble-shooting complex issues, performing specialized repairs, understanding product options, and properly documenting product and system issues. Furthermore, these powerful service enablement tools can help boost customer satisfaction by decreasing job times, increasing first-time fix rates, and improving a technician’s ability to answer questions and exchange information with customers.

Put powerful service enablement tools directly into the hands of your field technicians.

Highlight popular content

View detailed product information related to product specifications, pricing, and availability

Access video training content while on the go
Envision an emergency scenario: there is a collapsed mine, a downed power line, or a gas leak. Depending on the situation, emergency responders need to be dispatched and specific buildings need to be evacuated or locked down. When the appropriate response has been determined and is being executed, managers at warehouses, mines, corporate offices, and out in the field face various challenges. How will everyone affected be notified? During an evacuation, do you know if all individuals in the area made it out of the hazardous situation? If not, where are the remaining employees located and who is still in danger?

The solution
Usher Professional gives building and operations managers at industrial warehouses, factories, offices, and field locations the ability to take fast, targeted action during emergencies. For example, when a mining site is evacuated, the entire workforce can receive a push notification letting them know to stay away from dangerous areas. Similarly, people who are still at an evacuated site can be quickly identified, located, and rescued.

Regardless of the type of incident, Usher’s instant visibility into employees’ locations tremendously increases emergency response capabilities. During an emergency situation, real-time maps of user activity can be viewed and management personnel can now communicate with their dispersed teams at the touch of a button, helping to ensure the safety of their employees and customers.
ANALYTICS APPLICATION: 
EMPLOYEE TIME 
AND ATTENDANCE

The challenge
Traditional methods of employee timekeeping, like timesheets or digital clock-in systems, can be expensive, difficult to manage, and prone to accidental or intentional errors in time-logging. Both overestimating and underestimating hours can result in costly consequences for an organization.

The solution
Replace timesheets and other outdated methods of timekeeping by allowing field employees to automatically check in and out of their shifts via their smartphone. With Bluetooth proximity features combined with geo-fencing or time-fencing capabilities, employees enjoy a more convenient experience, while Usher’s multi-factor authentication ensures user validation and secure facility access.

This solution specifically pinpoints when employees enter or leave any corporate facility or customer location. By leveraging Usher, managers can ensure that employees are where they need to be at a specific time so that operations run smoothly. Usher records employee activity using Bluetooth proximity and by logging information whenever an employee accesses enterprise resources such as training, safety, or product information. With this identity intelligence, field service organizations can improve operations, adjust security protocols, mitigate risk, and optimize resource utilization.

Record employee activity using Bluetooth proximity, or by having the employee tap a digital key on their smartphone.

Track when employees enter or leave any location.

Help ensure that the proper personnel are in place for the job at hand.

Replace timesheets and paper-based processes with automated, proximity-triggered clock-ins via a user’s smartphone.
Mobile Application: Customer Portal

Incorporate in-app surveys to help drive top-notch customer support.

The challenge
To retain customers and stay relevant, field service companies must evolve the way they do business and take advantage of all engagement channels to deliver truly top-notch customer service.

The solution
MicroStrategy empowers field service organizations with the tools they need to provide a superior, personalized customer experience that boosts customer loyalty and creates new opportunities.

Using our platform, companies can give their customers – both businesses and residential consumers – convenient access to information related to billing, contracts, customer service, and support calls, and service disruptions. This solution also lets consumers view photos of service technicians assigned to their jobs as well as their estimated time of arrival. By incorporating features like social media feeds and surveys directly into consumer-facing apps, field service organizations can help facilitate additional consumer interaction and top-notch customer support. Data-driven ‘smart alerts’ help ensure that customers are notified of dramatic shifts in their product usage or costs, as well as service technician delays.

Supply customers with timely information related to service calls, billing, and customer service.

Allow consumers to view photos of their service technician as well as their estimated time of arrival.

Facilitate additional customer interaction by letting them input comments about their service experience.
Customer case studies

Learn how our customers are using MicroStrategy to digitally transform their business.
Founded in 1993, Kinross has quickly grown to become one of the world’s leading gold mining companies. Kinross is Canada’s third largest gold producer and is headquartered in Toronto, Canada. They have over 8,000 employees worldwide with mining operations in the United States, Brazil, Chile, Mauritania, Eastern Russia, Ghana, and Canada.

Prior to MicroStrategy, Kinross would compile data in Excel to present to management. They lacked the ability to drill down into the data in that format. “I didn’t get the right information at the right time to be able to make effective business decisions, or when I did get the information, I got it three weeks later than I really needed it and it was so manual that I questioned the data quality. Initially, we were going down a roadmap where we were using some of the other solutions and what we were finding was, we were spending way too much time maintaining the systems and getting them to the point where we can actually deliver business value. We needed to make a course correction in our BI strategy,” says David Cefai, VP of Information Technology.

Kinross completed a full analysis of all the available BI vendors to decide what would be their platform of choice. Some of the important considerations for Kinross were performance, ease of use, mobile functionality, speed to develop and the costs of ownership. Once all these were considered, MicroStrategy was the leader.

Now, with MicroStrategy, not only can they drill down but they can also access the information while on the go. Additionally, Kinross has seen a reduction in the time and cost required to produce reports. This has given them more time to analyze the data and identify areas where they could improve their mining operations. MicroStrategy has also helped Kinross meet the challenge of finding a mobile solution that could address their diverse workforce that speak multiple languages including, English, Spanish, Portuguese, Russian, French and Arabic. Today, this app is used across multiple sites and can change automatically based on the language needed.

“As we have been implementing MicroStrategy, we have also been making significant business process changes as well. There is no debate that the solutions that we implemented both from a process and technology perspective are delivering significant value; and I would be very comfortable to say that in most cases it is delivering a payback of less than 12 months,” say Cefai.
Liverpool Community Health (LCH) believes that a mobile device is a critical tool necessary for all staff and greatly improves the way they work as an organization. From an information governance perspective, clinicians are able to more securely collect patient information and no longer need to handle paper records. Another benefit is the ability of LCH to obtain patient feedback in a confidential manner. The staff is now able to hand the mobile device over to the patient, who can answer a survey and hit submit on the spot. This new approach provides greater confidentiality and ensures more completed surveys than previous paper-based versions. Likewise, the mobile application provides instant analysis from the patients’ feedback and acts as a diagnostic tool, allowing staff to focus on correcting any highlighted issues.

According to Helen Lockett, LCH Director of Operations and Executive Nurse, “Having the app completely fits in with our mobile working. Nearly all of our clinicians now have some sort of mobile device, and it is about releasing time to care for patients. They spend more time face to face with patients rather than going back to base in order to input information.”

Gary Andrews, LCH Director of Finance and Deputy Chief Executive, states, “When we look at developing mobile devices across the organization, we’re looking at paybacks of less than three years on mobile devices, which includes the initial investment we’d have to make to set up the templates and all the management. So we’re really keen to do this, but the primary drive forward, as well as the financial savings, is the improvement in quality and assurance that we have by having the right information available to clinicians whilst they’re out in people’s homes and in the community dealing with patients.”