Digital Transformation of Transportation with MicroStrategy 10
The challenge
Transportation and logistics companies face an increasingly complex market landscape. New low-cost transportation providers and carriers for cargo and passengers are challenging traditional modes of transportation and shipping methods. Customers are demanding greater transparency into pricing, the ability to transact with mobile devices, streamlined check-in, and an improved customer experience. And supply chain providers expect faster arrival times and real-time information on shipments and flights.

It is critical for transportation and logistics companies to streamline operations, distribution, and fleet management in order to better react to changes in costs, market consolidation, and global competition.

The solution
MicroStrategy 10 is an integrated platform that equips manufacturers with powerful tools to get the most out of their data. Companies are gaining innovative and significant benefits in almost all areas of operations: in the design process, on the production line, from distribution centers, or during the post-sale processes. Applying advanced analytics across diverse and complex data – even in various formats and from disparate sources – can improve processes throughout the value chain.

MICROSTRATEGY 10 enables transportation and logistics organizations to digitally transform their businesses.
The challenge
Transportation and logistics organizations rely on a variety of line-of-business reporting tools for operational and financial analysis. But in order to get a complete view of the enterprise, they require a single, integrated operational and financial reporting tool. A solution has to be secure, consistent, and built to handle large, complex datasets.

The solution
Executive officers require seamless access to critical information in order to make better business decisions, fast. MicroStrategy securely delivers the financial and operational data transportation and logistics executives require – all in a single, intuitive, real-time dashboard.

By providing key decision makers with this level of visibility across the enterprise, MicroStrategy helps executives efficiently manage daily tasks, make better business decisions, and effectively collaborate with colleagues. And by digitizing data into an easy-to-manipulate dashboard, organizations can save on time and costs by eliminating the need to produce large binders of printed material for board meetings.

Key decision makers can easily track shipment activity, driver productivity, and customer satisfaction metrics.
The challenge
Transportation and logistics organizations traditionally use separate systems of credentialing to secure access to physical offices and enterprise IT systems. This bifurcated approach has resulted in the fragmentation of identity management and access control. Ideally, organizations would deploy a single type of credential that can provide secure, frictionless access to both physical offices and sensitive IT systems. Providing this type of enterprise access and authentication would help identify potential security threats while working to improve employee productivity and operational workflow.

The solution
Usher provides a single digital identity solution that integrates seamlessly with most existing physical and logical systems. Usher facilitates the deployment of secure, digital identity badges to employees, customers, vendors, and others that grant role-based access to corporate facilities, web applications, VPNs, workstations, and more. This transformation renders multiple passwords, security tokens, and keycards obsolete.

The Usher platform also generates real-time telemetry data on enterprise access and authentication activity across both physical and logical systems. This information is used to populate a variety of out-of-the-box reports and dashboards built using the MicroStrategy analytics platform. These applications give administrators and executives a single, consolidated view of identity across the enterprise and can lead to increased employee productivity and enhanced security.
The challenge
A recent global study estimated that the median loss from a single case of occupational fraud is $150,000*. It’s critical that transportation and logistics organizations automate time and attendance systems to avoid accidental or intentional errors that could negatively impact the company’s bottom line.

The solution
Usher replaces traditional timesheets with dynamic check-in and check-out using employee smartphones. This solution specifically pinpoints when personnel enter or leave any enterprise facility. The streamlined process helps save time, eliminate inconvenience, and provide an opportunity to increase productivity.

Across the enterprise, Usher can record or monitor employee activity using Bluetooth proximity or logging each time an employee accesses an asset or resource. It provides real-time visibility into the activities and locations of employees, visitors, and vendors – empowering managers with the tools needed to analyze user behavior and system resource utilization. With this identity intelligence, key decision makers can improve operations and optimize the availability of enterprise resources and staff.

Replace timesheets and paper-based processes with Bluetooth-based digital badges.
The challenge

Many transportation and logistics organizations still compartmentalize information into data silos and struggle to obtain a 360-degree view of their customers. Without a complete understanding of their customer experience across multiple channels, these organizations risk losing clientele to competitors that provide seamless support and superior customer service.

The solution

MicroStrategy makes it easy for transportation and logistics organizations to quickly connect and analyze large amounts of customer data. Combining information across multiple customer touchpoints, including web, call centers, mobile apps, and social media interactions, MicroStrategy allows users to better organize and interact with data pertaining to telematics, revenue, complaints, marketing offer responsiveness, demographics, and more.

For example, a transportation and logistics organization can use MicroStrategy to monitor capacity levels, track third-party service work, and help ensure that customers are served in a timely manner. Organizations can use extracted insight to segment customers for marketing programs, predict customer defection rates, determine investment target areas, and personalize customer interactions. By taking proactive steps, transportation and logistics organizations can better position themselves to acquire new customers, retain existing ones, and maximize customer lifetime value.

Better understand consumer information and trends in order to personalize and improve the customer experience.
The challenge
Airline carriers generate a massive amount of data across disparate systems. But capturing and acting on all this information in a timely manner is a challenge. Airlines need a comprehensive solution to make dynamic and data-driven scheduling decisions that result in higher productivity and asset utilization rates.

The solution
Applications powered on the MicroStrategy platform can provide insights into critical airline data in real-time. By allowing users to interact with multiple layers of detailed flight data and operational information at terminals, airlines can increase their decision-making speed, better streamline business operations, and deliver an improved customer experience by minimizing delays and cancellations.

MicroStrategy can monitor data such as average time of flight delay, total number of flights, and percentage of flights arriving on time. Information from multiple, disparate systems across the enterprise can be easily consumed by users viewing intuitive dashboards. Using this tool, data can be filtered, analyzed, and visualized to deliver 360-degree visibility into operations. With a better understanding of logistics, asset productivity, and workforce availability, airlines are able to continuously monitor operations while optimizing flight schedules to meet demand.
SAFETY TRACKING AND COMPLIANCE

The challenge
In a high-risk industry such as transportation and logistics, a single major incident can have profound costs: significant financial repercussions, irreparable damage to the brand, or even loss of life. It is vital that organizations do whatever is necessary to ensure compliance with government regulations and protect the health and safety of their workforce and passengers.

The solution
MicroStrategy provides a platform to streamline safety tracking and compliance management processes. Using mobile apps, organizations can verify daily driver vehicle inspection reports, violation activity, and performance data such as mpg, idle time, and hard braking. This information is condensed to a single driver scorecard, eliminating the need for managers to check multiple websites, databases, and spreadsheets for a 360-degree view of the driver.

In addition to tracking information, MicroStrategy can be programmed to provide alerts regarding atypical driver behavior. After generating an alert, the driver receives an automatic assignment to undertake a corrective action. By automating this process, operational managers can spend more time communicating with drivers and less time simply searching for "at-risk" behavior.

Capturing information from any location is critical, so employees on the road can utilize MicroStrategy push-back capabilities to log information related to safety violations, maintenance issues, and environmental regulation compliance. Likewise, inspectors or site managers can capture and submit photos of incidents or infractions and include annotated notes to help improve communication, streamline tracking, and ensure compliance.

Streamline tracking, inspection, and documentation processes to help effectively comply with regulations.
ANALYTICS APPLICATION: EQUIPMENT MAINTENANCE, REPAIR, AND OVERHAUL

Proactively manage and schedule equipment maintenance to help avoid costly downtime.

Interactive visualizations let managers quickly assess trends in equipment usage, labor costs, and consumption by division and by month.

Compare aggregate equipment usage and labor costs by division

Examine equipment usage and labor costs by individual user or department to help uncover potential abuse

The challenge
Transportation, freight, and logistics organizations that depend on large vehicle fleets need to maximize the longevity of these assets. To do so, key decision makers require sophisticated analytical tools to help extend the operating life of each vehicle, minimize the fleet’s maintenance costs, and avoid downtime of inactive vehicles not contributing to the bottom line.

The solution
With MicroStrategy, organizations can better track, maintain, repair, and replace their assets with minimal waste or downtime. Advanced predictive modeling in MicroStrategy 10 allows managers to analyze data on usage and maintenance history of assets. This allows them to identify assets with an increased risk of failure, so that they can proactively take corrective measures to mitigate or eliminate downtime.

By minimizing the number of major repairs and conducting more preventative maintenance, organizations can significantly reduce their overall repair expenses. And because MicroStrategy provides real-time data, it enables transportation and logistics personnel to respond faster to issues requiring attention, which helps increase productivity and ensure high levels of customer satisfaction.
The challenge

Traditionally, transportation and logistics organizations have used printed boarding passes for passengers and documentation for cargo shipments. The manual check-in process using this form of ticketing can be time-consuming and cumbersome to manage. It requires staff, workspace, and printing costs. Organizations are challenged to reduce associated costs, maintain the integrity of the check-in protocol, and streamline the process to improve the user experience.

The solution

Usher delivers smartphone-based digital ticketing that is both convenient and secure. It offers strong, flexible multi-factor authentication to help protect sensitive information. And its security capabilities include push notifications, biometrics, one-time passwords, face-to-face validation, and Bluetooth proximity.

This mobile technology can dynamically generate time-to-board and walk-time-to-gate information using a passenger’s smartphone. Avoiding the cumbersome paper ticketing process enhances passenger convenience and additionally can provide an untapped revenue channel – allowing organizations to reduce overhead in addition to earning revenue. Furthermore, it can serve to minimize delays throughout the transportation hub, helping airports, ship terminals, and bus and train stations increase efficiency.

Convenient and secure access to transportation and logistics systems for passenger travel and cargo shipments.
The challenge
In an industry with mounting competition, fostering a sense of company brand loyalty can have a real impact on the bottom line. Devoted customers expect exceptional service, and transportation and logistics organizations are challenged to capitalize on this premise to better engage their most loyal customers.

The solution
Usher provides enterprises with a unified view of each customer’s identity across multiple channels. Organizations can combine and analyze data from sales, service, marketing, and enterprise systems. The insight gained can help personalize and prioritize service for the organization’s most valuable and loyal customers. And in the event a VIP customer arrives at a location in person, a Bluetooth-enabled Usher alert can automatically notify employees so they are prepared to deliver an exceptional experience.

Reward customers while transforming and personalizing their user experience across multiple channels.
Customer case studies

Learn how our customers are using MicroStrategy to digitally transform their business.
TRANSPORTATION AND LOGISTICS

PROFILE

**Industry Specifics:** Transportation trucking lines and services

**Location:** Global

**Products:** Mobile, Web, Server, Architect

**Core Capabilities:** Enterprise Analytics, Mobile Productivity Apps, Mobile Analytics, Enterprise Data Discovery

Application

In 2012, the City of Austin’s Financial Services Department received national recognition for developing an integrated financial portal that gave citizens and staff access to summary and detailed information about the city’s financial operations. Although the portal provided consolidated vendor information and unprecedented levels of information accessibility, internal users were still having trouble accessing the data they needed. Despite the efforts of the IT department, every departmental group was attempting to do BI on their own. This was extremely costly from both a maintenance and service perspective and led the City of Austin to look into purchasing an off-the-shelf analytics platform.

With MicroStrategy, the City of Austin has a standardized reporting platform that provides citywide data integrity. Through the use of MicroStrategy’s visual data discovery tool, Visual Insight, the organization has been able to push ad hoc reporting down into the workforce. Empowered to quickly and easily satisfy their own reporting needs, users are happier and the IT department is free to focus on other critical tasks. Business users are able to take analytics into their own hands to quickly respond to citizen and city council requests.

The City of Austin has many MicroStrategy projects underway to improve a wide variety of processes throughout the city that are expected to lower costs and improve services. The organization is building an HR application that will use dashboards to increase employee visibility among executive users. The Permits and Planning team is also implementing a MicroStrategy application. Additionally, the City of Austin is experimenting with MicroStrategy Mobile functionality to enable field employees to collect code compliance infraction data on properties.

“We see MicroStrategy as an integral piece to help us achieve that best managed city goal that we continually strive for.” – Greg Canally Deputy Chief Financial Officer, City of Austin, Texas.
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Application

A leading transportation and logistics services company is headquartered in San Mateo, California. The company operates in more than 18 countries, employs 30,000 highly-trained workers, and generates $4 billion in annual revenue. It was named as a Fortune magazine “Most Admired Company” in transportation and logistics in 2007.

The company required a dashboard to better manage employees, improve overall performance, and promote broader business intelligence adoption across the enterprise. It selected MicroStrategy as its BI standard, building applications on the platform aimed at promoting more efficient shipping operations and up-selling programs to existing customers.

A total of 8,000 global employees across all departments now use MicroStrategy to make more informed business decisions. They are empowered with real-time and historical data to better understand industry trends, determine the optimum price for a shipment, choose the appropriate number of shipping inspectors to hire, and successfully manage up-sell programs.

Since deploying MicroStrategy, the company has grown to increase shipping volume by 4x and annual revenue by $30 million.