Integrated Service Management for travel and transportation

Optimize travel and transportation operations

Highlights

- Increase availability and reliability of travel and transportation assets to improve performance
- Track, manage and service IT and business assets from a single system to extend asset life
- Consolidate disparate asset management systems onto a unified platform
- Achieve a holistic view of asset performance while automating common processes
- Leverage built-in best practices to improve asset productivity

The management of travel and transportation operations has grown increasingly complex because infrastructures and assets across the globe are rapidly becoming digitized. Every day the world is becoming more instrumented, interconnected, and intelligent with the growing use of sensors, radio-frequency identification (RFID) tags, navigation systems, and other digitally aware "smart" devices that are creating opportunities for new, differentiated services and products. Travel and transportation organizations that can rapidly adapt and innovate to meet or exceed customer expectations for these new services and products will be in a position to accelerate growth and gain a competitive edge.

A more digitized world requires changes in the way we think about, design, deliver, and manage business services and products. Business and IT assets and systems will need to interoperate seamlessly. Lines of business, IT, facilities, and customer management teams, as well as the processes, tools, and information they depend on, must align around a common set of objectives to ensure that service quality is maintained, costs are controlled, and risks are effectively managed.

In order to manage emerging smart devices and their associated data, leading travel and transportation organizations are doing away with siloed, disparate systems. Instead, they are enabling a more dynamic infrastructure by converging their systems into a unified structure. By integrating management systems—for business and IT assets—travel and transportation organizations enable shared data, processes, and workflows to achieve operational optimization that can reduce costs, improve service delivery, and drive incremental revenue.

Converging business and IT infrastructure management

As organizations in the travel and transportation industry increasingly connect their critical business assets to their IT infrastructures, the lines between IT and business assets are disappearing. Effective business and IT infrastructure management requires organizations to manage all types of assets through all phases of the asset management lifecycle. They must be able to integrate and automate business and IT management processes. In this way, a consolidated asset management infrastructure can provide productivity gains and help reduce IT costs, resulting in more agile travel and transportation organizations.

In order to tackle inefficiencies, organizations must take a holistic approach to optimizing and automating the delivery of services. The increased visibility provided by combining asset management systems in a dynamic infrastructure enables organizations to focus less on managing individual assets and more on providing improved service. Integrated Service Management enables organizations to achieve this holistic view of asset performance while automating common processes.

Service management focused on business goals

The convergence of business and IT asset management provides a means for integrating service orientation and service management focused on business goals across all types of assets within the organization. By enabling a dynamic infrastructure and a unified asset management infrastructure, Integrated Service Management Solutions provide visibility, control and automation across all business and IT assets to facilitate human collaboration, workflow management, problem resolution, and process automation, thus providing corporate executives the ability to view and manage assets across the enterprise to achieve corporate objectives.

Integrated Service Management connects all elements of a dynamic infrastructure, enabling organizations to measure and manage services "top down"—from the defined business services that generate revenue to the underlying physical and IT components that support them. It also enables companies to measure and manage services from the perspective of the end user receiving the service.

Integrated Service Management: A unified solution

To optimize operations, organizations require end-to-end visibility across each of the assets that comprise their operations, including fleet assets such as cars, trucks, buses, trains, vessels, and aircraft; linear assets such as railways, runways, and roadways; facility assets such as depots, terminals, stations, and buildings; and IT equipment such as servers, networks, desktops, and telephony.

Integrated Service Management offerings provide a unified solution built on a common platform and leading, standards-based technology. As part of an effective IT and business integration strategy, Integrated Service Management focuses on the visibility, control and automation needed to address the key challenges travel and transportation organizations face as they strive to optimize operations:

- **Visibility** – See your business. Establish a clear service strategy across business and IT, and gain real-time, actionable intelligence on the health and performance of business services, processes, and infrastructure, as well as the key performance indicators (KPIs) needed to meet defined objectives.
- **Control** – Manage and secure your investments. Enforce policies and procedures, secure vital assets and information, and improve compliance reporting and tracking across the service lifecycle for reduced operational risk.
- **Automation** – Build agility into your operations. Improve work-flow integration and automation across silos, tools, technologies, information and processes, and reduce time to market as well as operational costs.

Integrated Service Management can help set the foundation for the type of business innovation travel and transportation organizations require to successfully develop a more dynamic infrastructure that leverages both smart and traditional assets. A service management context can help travel and transportation organizations support their people, processes and technologies to tackle their most pressing needs—including on-time service delivery, IT and business asset optimization, capital preservation, reducing operating expenses, and reducing maintenance costs.

End-to-end asset lifecycle management

Many travel and transportation organizations have critical operating information scattered across disparate systems, applications and departments, with no ability to gain a comprehensive view of their asset data. IBM's Maximo® Asset Management solution for transportation provides a rational consolidation for all of an organization's existing asset management systems. This allows for end-to-end management to improve return on investment for:

- **Rolling stock** – locomotive, passenger cars, freight cars.
- **Linear assets** – track signals, railways, runways, tunnels.
- **Facilities** – stations, depots, buildings.
- **Support fleet** – cars, trucks, specialized equipment.
- **IT** – servers, routers, WiFi networks, closed-circuit TV, pervasive devices.

Maximo Asset Management has built-in best practices to help users implement a service-centric business model, allowing organizations to manage asset performance from a holistic perspective. The business model encourages partnerships between the maintenance organization and its internal customers. It also broadly supports third-party service providers by tracking relevant activities and monitoring asset and service performance to service level agreements (SLAs).

Maximo Asset Management for Transportation can help organizations reduce costs, facilitate and automate common processes, and respond to tough challenges faced by operations and IT, including:

- **Preserving capital** – a holistic approach to asset management can extend the life of assets and reduce or defer additional capital purchases.
- **Fuel volatility** – improved asset performance can help offset the impact of fuel volatility.
- **Recovering warranties** – users are now able to track warranty information and better manage warranty transactions.
- **The impact of an aging workforce** – capturing critical intellectual capital is key as greater numbers of the valuable workforce population approach retirement.
- **Capturing actual asset cost** – the solution provides the ability to capture all costs, including costs for materials, labor and service.

Integrated Service Management provides a unified solution to help travel and transportation organizations consolidate management of diverse assets.

Fleet optimization

IBM's portfolio of telematics and vehicle monitoring solutions offers a wealth of business analytics that integrate key data measurements for a vehicle or truck and its cargo into a company's enterprise resource planning (ERP), customer relationship management (CRM), supply chain management (SCM), enterprise asset management (EAM) or billing system. This enriched knowledge allows travel and transportation organizations to dynamically manage fleets, which leads to significant operational efficiencies. IBM's fleet optimization solutions also include capabilities to communicate with operators using wireless devices and computer applications to improve operator productivity.

IBM's fleet optimization capabilities include:

- Fleet reporting for vehicle, trailer, freight and drivers.
- RFID technology for virtual real-time freight tracking and delivery status.
- Integrated vehicle diagnostics.
- Automated driver logs and fuel tax reporting.
- Text-to-speech and voice recognition over cellular connections.

When integrated with IBM's asset management solutions, IBM's fleet optimization solutions can provide real-time vehicle condition monitoring data (such as mileage, fuel, temperature ranges, and tire pressure alerts), which is combined with optimized scheduling algorithms to provide an on-demand maintenance capability. The integrated solution not only extends the vehicle lifecycle, but also helps ensure that the vehicle is most effectively deployed to maximize the return on investment.

Maintenance, repair and overhaul

Organizations that manage complex assets— maintenance, repair and overhaul (MRO) departments, original equipment manufacturer (OEM) service lifecycle managers, and third-party service providers— have very specific requirements to help them manage the performance and reliability of their assets. IBM offers a unique portfolio of integrated MRO solutions to benefit clients, including:

- **Asset configuration management** – supporting highly regulated and safety-driven environments.
- **Service provider management** – supporting contract management, SLAs and billing.
- **Business intelligence reporting** – enabling a rich set of self-service reports for business and IT requirements.
- **Content management** – managing all types of digitized content across multiple platforms, databases and applications.
- **Technical document management and delivery** – providing a customized technical document encyclopedia.
- **Dynamic inventory optimization** – enabling effective inventory management.
- **Planning and scheduling** – offering advanced mathematical programming, optimization tools and engines for efficient planning and scheduling.

IBM's MRO solutions enable clients to increase asset utilization, provide cost-effective maintenance services, introduce lean techniques, reduce overhaul time, and optimize inventory.

Integrated Service Management for the travel and transportation industry

In today's uncertain economic climate, travel and transportation organizations are focusing on how to do more with less, how to capture more of the market share, and how to quickly achieve breakthrough gains in productivity. The Integrated Service Management portfolio includes solutions for asset management, fleet optimization, and maintenance, repair and overhaul. These solutions can assist organizations in optimizing business and IT infrastructures—creating dynamic infrastructures that can help organizations reduce costs and exploit new opportunities.

Through visibility, control and automation, these solutions can help organizations address some of the biggest issues in the industry today—and prepare for the challenges of tomorrow.

Visibility

- View real-time metrics of the entire travel and transportation enterprise in a fast and intuitive graphical interface.
- Utilize role-based views with drill-downs into meaningful operational details.
- Create and maintain consistent representations of asset performance, asset relationships, reports, vendor specifications, compliance metrics and more.
- Perform deeper and more sophisticated analysis of asset performance, viewing all KPIs and measurements in the right business context for real-time decision-making and operational planning.

Control

- Monitor data and key process indicators based on thresholds and sophisticated historical models.
- Facilitate collaboration amongst maintenance supervisors, asset owners and IT departments.
- Increase knowledge about vehicles, cargo and drivers with real-time information collected by global positioning system (GPS) technology, RFID, and built-in vehicle diagnostics.
- Centrally manage security and compliance data to improve efforts to comply with travel and transportation industry regulations.

Automation

- Achieve proactive asset management with accurate, real-time data.
- Automatically generate information such as driver logs and fuel tax reports.
- Consolidate systems to optimize management of operational deviations.
- Enhance operational capabilities—automated workflow, reporting, and improved inventory data reliability.

Integrated Service Management offers a new approach to service management that can provide travel and transportation organizations with a better way to manage their operations. As part of an effective IT and business integration strategy, Integrated Service Management focuses on the visibility, control and automation needed to address the key complexities of the travel and transportation environment and lower the costs of operating the business.

For more information

To learn more about Integrated Service Management for travel and transportation organizations, contact your IBM representative or IBM Business Partner, or visit **ibm.com**/servicemanagement

About Integrated Service Management

IBM offers a service management platform for organizations to deliver quality service by providing visibility, control and automation—visibility to see and understand the workings of their business; control to effectively manage their business, minimize risk and protect their brand; and automation to optimize their business, reduce the cost of operations and deliver new services more rapidly. Unlike IT-centric service management, IBM delivers a common foundation for managing, integrating and aligning both business and technology requirements. Integrated Service Management is designed to quickly address an organization's most pressing service management needs and help proactively respond to changing business demands. Integrated Service Management includes a robust IBM software portfolio and is backed by world-class IBM Services, IBM Support and an active ecosystem of IBM Business Partners. IBM clients and Business Partners can also leverage each other's best practices by participating in independently run IBM User Groups around the world—visit www.tivoli-ug.org

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