Trapeze™

Data & Analytics

Tell your story with a data platform purpose-built for transit.

More than ever, public transit needs reliable, actionable data to determine whether agencies are meeting the needs of their riders, to help them better navigate change and disruptions, and to plan for a transformational future. Your transit data should give you quick answers to questions that impact your service planning such as - What do absences truly cost you over time? What are the most frequently delaying service? What was your ridership in 2020 by date, route, and stop?

To tell your operational story and plan for the future, you need a powerful transit analytics platform that integrates data from diverse sources, then converts the data into meaningful knowledge to improve your decision-making in real time and provide you with a holistic, 360-degree view of planning and operations.

With Trapeze ViewPoint Data & Analytics solutions, the data you mine from your vehicles, operators, and customers is processed and made available to you through intuitive and interactive content and self-service analytics. It affords you insights that help managers, dispatchers, and field staff monitor key performance indicators (KPIs), review operational effectiveness, and act where and when it's needed most.

ViewPoint is a SaaS BI solution, integrated with Microsoft's Azure BI infrastructure, including PowerBI, Azure Analysis Services, and more. It leverages custom ETL processes and in-memory data modeling to provide ultra-fast, secure, and reliable analytics with a user interface requiring minimal technical expertise for content development. Combining this Azure platform integration with our knowledge of transit data, we deliver a reporting, dashboarding, and analytics tool to meet your transit-specific needs.

94%
of transit agencies use big data techniques/analysis

Ref: Apta.com

54%
of enterprises find cloud-based BI critical to business strategy

Ref: Forbes.com

AGENCY BENEFITS

Develop highly personalized, individual experiences on a mass level.

Make Better Decisions, Faster

Proactively support the day-to-day decisions that lead to improved transit operations and actively monitor the impact of policy changes and decisions. Deeper data visibility enables you to better manage schedules, revenue, service and assets and quickly identify trends and operational inefficiencies.

Improve Operational Efficiency

Consolidate data in one place to create an enterprise-wide, single source of truth, eliminating time-consuming data re-entry across databases. Analyze trends in events, absences, pay, and work, and look for opportunities to improve efficiencies and system safety.

Engage Your Workforce

Democratize your data by empowering everyone in your organization to work with analytics using a simple interface that's easy and intuitive. A lower barrier to entry for analysis enables your staff to quickly access and visualize data, improving discussions and decision-making.

Gain Insight at a Glance and Plan for the Future

Quickly and easily determine what is working and compare against past performance. Proactively analyze maintenance and operations- such as service delays, work orders, inventory - data in real- or near real-time so you can address asset issues as they develop instead of reacting after the fact. Use predictive analytics to generate what-if scenarios and successfully predict the impacts of any decision.

Improve Data Governance

Build your analytics from a centralized, holistic baseline of available data inputs, measures, and metrics. Spend less time finding and processing your data and more time discussing and acting on it.

PASSENGER BENEFITS

Create and refine your data strategy to meet your agency goals.

Safer Transit System

Improve data visibility across your system to address safety-critical issues, prevent accidents, and improve maintenance processes. Understand and communicate passenger loads and accurate, real-time bus arrival data so customers can safely and confidently plan their next trip.

Improved Service

Reduce complaints by using real-time metrics and projections to monitor on-time performance. Quickly and easily determine routes that are failing to meet service standards for on-time performance, revenue and non-revenue time and distance and other important factors such as layover time, lost trips, and dwell time. Improve service planning through monitoring of ridership by route, stops, distance, and time.

Enhanced Passenger Experience

Analyze granular data on customer behavior to improve delivery of customer-focused services. Recycle customer data inputs back into your service planning efforts to ensure an elevated customer experience.

Understand the Story Your Data Tells You

Agencies that invest in Business Intelligence and Analytics significantly outperform those that don't. Powerful analytics extract important insights from the minutest and obscure data bits to enhance your strategic and operational decision-making. With real-time, actionable intelligence, you learn from past mistakes, build on your successes, and create an agile, information-driven organization that challenges norms and continuously innovates.

PRODUCT FEATURES

Real-Time Reporting and Alerts

Get and manage real-time alerts based on your defined KPIs and custom thresholds. Create an immediate impact on your operations by tracking metrics and trends in real time, and not only with historical data that may no longer be relevant to the situation.

Pre-Built Reports

Leverage hundreds of out-of-the-box (OOTB) content tailored for transit – e.g., historical/real-time OTP, pull-in/pull-out metrics, passengers per hour/mile, slack time, revenue miles/hours, asset inventory management, State of Good Repair, complaints and commendations, Mean Miles Between Failures (MMBF), and work order management. Customize reports to your requirements: update, modify, copy and paste content and edit as needed – all leveraging a comprehensive data model. Our OOTB content is ready for use from day one, but is flexible to be customized as desired.
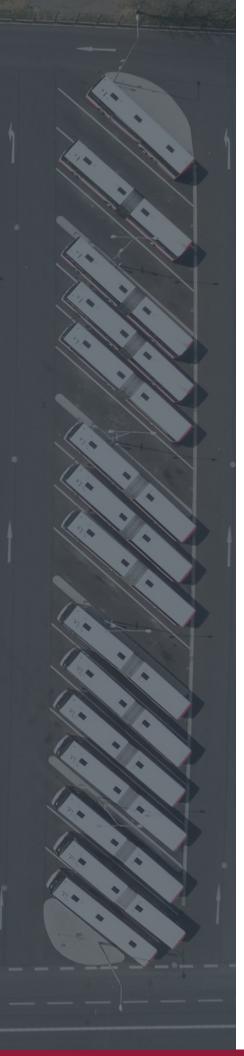
Ad-Hoc Reports

Create new content easily. Use simple drag-and-drop functionality to build your own reports in a familiar interface, based on our transport-focused data model. Choose from hundreds of data values, measures, and pre-built calculations which can be presented as interactive visuals and dashboards.

"Ask a question."

Build visualizations using AI-based natural language processing ("NLP") capabilities to augment and enhance analytic effort with little knowledge required of the underlying data structures.

Robust ETL Process

Ensure you get the right decision out by working with clean data. Orchestrate data through a data gateway and abstract the reporting data into a transit-focused in-memory data model and real-time reporting engine. Analyze critical, real-time operational metrics while the ETL process updates historical data for granular system analysis over time.

Custom Dashboards

Drill down on specific data you need with fully customizable, easily manipulated dashboards that work well on the big screens used in dispatch and operator rooms. Select required visuals from source report and assign to a specific dashboard. Resize, assign color themes, categorize, and drag and drop to create unique and focused dashboards that meaningfully display your data.

Maps and Specialized Visuals

Visualize and monitor key metrics on maps, such as your operations' geographic analysis of trips, on-time performance, reliability, adherence, and more. Generate customized visuals for your unique business need using more than 30 different interactive charts, graphs, maps, and filters.

Scheduling and Distribution Interface

Schedule and subscribe to reports as often as desired within the web-based interface. Distribute reports to individual users or groups. Configure the format, frequency, times of day, days of week, and date ranges for report distribution.

Role-based Configuration

Get tailored alerts and notifications for your specific roles and workflows – e.g., OTP alerts for dispatchers set at 90% and 85% for operations manager.

High-level System Design and Security

Integrate with the Microsoft BI and analytics stack, including Power Bi, Azure Analysis Services, and more. Fully secure all data with end-to-end data encryption both at rest and in transit.

Enterprise BI

Expand to other third-party technology footprints such as Power BI. Integrate with back-office applications such as asset management, planning and scheduling and combine data from different systems.

A 360° View of Your Agency Operations

Reach out to our experts for a demo.

Data and Analytics

Connect with our Experts

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