

# Vehicle Routing and Scheduling A Buyers Guide

## HOW-TO-GUIDE

Choosing the Right VRS  
Software Platform



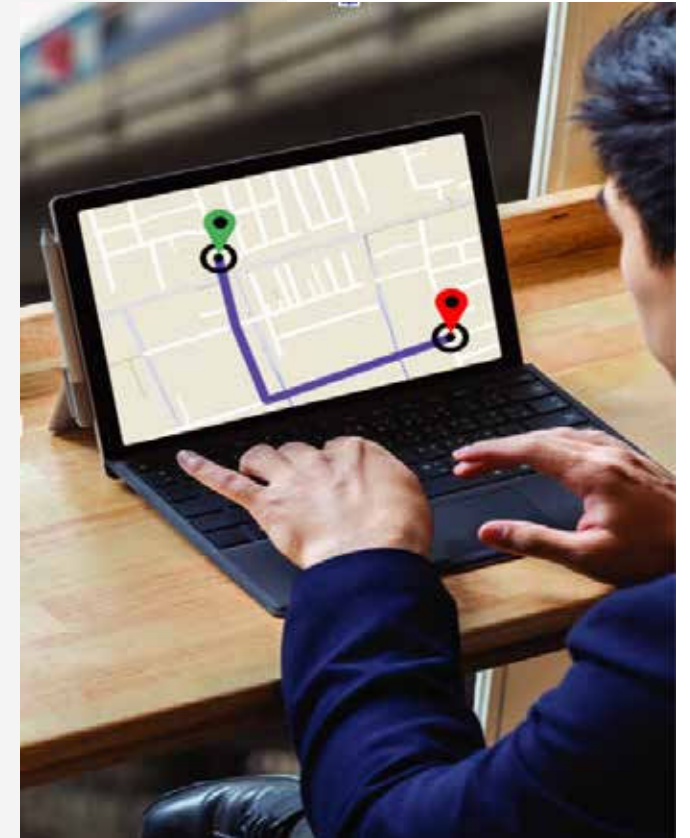
# What is a VRS Solution?

Gartner defines Vehicle Routing Solution (VRS) as “Solutions for vehicle routing and scheduling and last mile are specialized transportation applications aimed at organizations that directly (e.g., private fleet) or indirectly (e.g., contract fleet, crowdsourced fleets) manage shipping assets and resources. These tools are used to develop route plans that meet the delivery objectives at minimal cost/mileage based on the firm’s input (such as from orders), rules and constraints. The route plans must also address customer experience. The aim is to minimize transportation costs while satisfying feasibility constraints as to when and where stops are made, what can be loaded in each vehicle, and what routes drivers can serve. More recently, companies are looking at optimizing these routes for sustainability and using alternative-fuel fleets to minimize greenhouse gas emissions.” VRS has become critical to a company’s fulfillment operations as the last mile typically is the most expensive segment of a delivery chain. Driving efficiency in the last mile can therefore directly affect the company’s bottom line and improve customer satisfaction.

## How to select the right VRS?

Before you start looking at solutions from different vendors, consider what you truly want to derive from that solution. Making an informed decision should lead to

- Increased last mile operations efficiency
- Reduced risk due to future changes in business
- Continued Software upgrade in system capabilities to support changes in business
- Improved revenue cycle through reduction in data discrepancies



# What can a VRS solution do for **your business?**

## 1. IMPROVED DISPATCHER EFFICIENCY

Quickly plan the most efficient routes for your pickups and deliveries. A good VRS should provide your dispatchers with the ability to plan dedicated, managed and co-mingled transportation routes dispatchers should be able to respond to everyday changes and disruptions in their day.

## 2. BETTER INSIGHT INTO METRICS

VRS should provide **Stem out and Stem In driving distances and times** to allow for a better placement of assets. It should surface revenue and cost assessments like revenue per mile, **revenue per vehicle and revenue by asset class** in real-time to provide valuable insights to help in identifying revenue loss.

## 3. INCREASE ASSET UTILIZATION

VRS should enable **consolidation of pickups and deliveries to drive better asset utilization and drive down costs**. A good solution should be capable of consolidation of stops across delivery days. while meeting customer delivery commitments. You shouldn't have to break the bank to improve customer satisfaction scores.

## 4. IMPROVED VISIBILITY

Where's my freight? - A decent VRS solutions can provide real time driver location and status of shipments to dispatchers. A VRS platform can provide **visibility to all stakeholders in real time**, his includes business units across terminals, end customer visibility, shipper visibility and the business as a whole. This will result in overall reduction of calls to customer service by a whop

# What can a VRS solution do for **your business?**

## 5. DOCUMENT MANAGEMENT

A pickup and delivery operation almost always results in paperwork – tons of it. **Say NO to: wet, damaged or missing paper.** A Great VRS solution manages all paperwork and takes away this friction. Digitization of this process alone can immensely improve the quality and effectiveness of your business process. Lost documentation can result in fines, delays to payment and reconciliation.

## 6. EFFICIENT DRIVER WORKFLOWS

A better visibility tool combined with Document Management can increase efficient dispatches **Drivers can have electronic documentation right on their devices.** **Say NO to shuffling paper and missing stops and packages along the way** Signed paperwork can be sent to all parties immediately upon completion, reducing the need for the drivers to return to the depot to turn in physical paperwork.

## 7. BETTER OS&D REPORTING

Overage, Shortage and Damage(OS&D) process can be laborious without appropriate data and if done incorrectly can result in denied claims, additional penalties and an irate customers. VRS should provide reliable OS&D reporting with proof points attributing source of the problem in a timely manner. **VRS solution can shine valuable insight in resolving and identifying source of errors** and keep a healthy shipper-carrier-customer relationship.

# What can a VRS solution do for **your business?**

## 8. IMPROVED CUSTOMER SERVICE

VRS should be able to reliably set customer expectations for delivery windows and communicate proactively on schedule changes throughout the day **Real Time ETA tracking reduces detention delays at loading and unloading points.** According to ATRI (American Transportation Research Institute), detention delays rank in the top 10 issues for Drivers and Carriers

## 9. RELIABLE REPORTING

Over 75% of transportation companies are run using spreadsheets and paperwork. Getting reliable information from this jungle of disconnected sources can lead to burnout and missed opportunities. Focus on VRS solution that can provide **custom reports and insight into operational inefficiencies and faster ways to handle customer audits,** claims processing and reduced claims denials.

## 10. MULTI-LEG SHIPMENT PLANNING

Multi-leg shipments transit through terminals or hubs and undergo consolidation/ de-consolidation along their journey. **An extended VRS platform can provide enhanced capabilities across terminals.** Looks out for more on this topic in a separate guide focused on Multi-Leg Shipment Planning and Execution.

# Core Features of VRS Solution

## 1. INTUITIVE INTERFACE

Dispatcher efficiency is paramount to successful solution acceptance. Say No to cluttered and clumsy interface. A feature rich solution should not have users running for a training manual. **An A VRS should offer an intuitive interface that keeps the dispatcher in mind** and focuses on having information readily available on the screen that reduces clicks.

## 2. DETAILED MAPPING

**An extended VRS platform can provide enhanced capabilities across terminals.** with contextual information relevant to the user

## 3. REAL TIME SCHEDULE CHANGE MANAGEMENT

VRS should be able to **accommodate schedule changes with ease and communicate with drivers** on these changes in real time. This improves dispatch efficiency and driver satisfaction.

## 4. AUTOMATED CUSTOMER COMMUNICATION

VRS solutions must **communicate ETA to customers at the beginning of the day and through the delivery process.** VRS solutions must be able to communicate via text and message tracking links having map based information driver and shipment information. This capability is critical to **reduce calls to customer service.**

# Core Features of VRS Solution

## 5. FLEET, AGENT AND CONTRACTOR SUPPORT

Last mile operations often involve a mix of dedicated private fleet, managed transportation and independent owner operators. A good solution can support all of the business scenarios with configuration. A user interface that can reduce clutter and keep the business focused on the task at hand is a winner. Information readily available on the screen that reduces clicks.

## 6. MULTI SERVICE LEVEL SUPPORT

Transportation demands are varied by customer and sector. Look for solutions that **support for same day, nextday and, multi-day shipment handling**. VRS solution must be capable of consolidation across routes and days for improved efficiency. **Look for solutions that consolidate new orders into routes** that have already been dispatched or built.

## 7. MOBILE SOLUTIONS

VRS must provide secure and easy to use mobile solutions on Apple and Android devices. The mobile apps should offer instant dispatcher sync, offline operations, document management signature on glass, and Real-Time status reporting. The mobile solutions should go beyond offering **GPS dots on a map to Live updates that communicate status of the driver, traffic, ETA to destination, Driver communication, and Shipment delivery status**.

## 8. INTEGRATION CAPABILITIES

A feature rich standalone VRS will not allow your organization to realize its full potential. A good VRS should be able to work in conjunction with your existing Ordering, Inventory, and Billing systems. Look for VRS that provide out of the box integrations using various forms such as Spreadsheet, EDI, Open API as your situation demands.

# Core Features of VRS Solution

## 9. ORDER VISIBILITY/CUSTOMER PORTAL

An effective VRS can help reduce your customer service calls by providing self-serve mechanisms to capture customer orders through branded and customizable portals. If your business involves a lot of manual order entry, a VRS with customer portal can reduce your call center costs.

## 10. CUSTOMER BILLING

Billing often becomes a long drawn and error prone process in the transportation world. Look for VRS with capabilities to **generate customer billing inside within the solution or out of the box integrations with your billing systems.**

## 11. MULTI-TERMINAL HANDLING

If you have or plan to have multiple terminals, there are solutions that provide a business level view across terminals. VRS that offer centralized dispatch can greatly improve the efficiency of your dispatch operations.

## 12. CUSTOMER EXPERIENCE

Getting to know your customer's delivery experience can be vital to growing your business and improving customer satisfaction. Customer feedback collected through VRS can be used for driver training and performance improvement. Select a solution that offers customer feedback surveys that drive greater engagement with the customer.



# Core Features of VRS Solution

## 13. AI & ML CAPABILITIES

Artificial Intelligence and Machine Learning is still at infancy compared to what it can truly achieve. Knowing the current capabilities and future product roadmap can show insight into innovation and investment on part of your vendor.

Ensure that you are investing in a solution that you can grow into for at least the next 3-5 years horizon.

## 14. SOFTWARE UPGRADES

Know how often upgrades are offered to customers and how long your version will be supported. A SaaS (Software as a Service) solution is most common these days, however beware of upgrades and service charges

## Advanced Capabilities of a VRS

These are more nuanced in features based on your specific needs, but are worth mentioning

- Auto-correction of address
- Multi-Leg planning and execution
- Delivery window determination
- Handling of missed or re-deliveries
- Auto-adjustments of ETA
- OS&D reporting capabilities

# About nuVizz

nuVizz makes tough transportation and delivery challenges seem easy, combining a visionary mindset with responsive execution. nuVizz, Inc. is a leading network-based last mile delivery & transportation management and customer experience SaaS platform.

nuVizz lights the way to better delivery and transportation logistics. From the first mile to the last mile—and everything in between—we're trailblazers in supply chain optimization and digitization. Infinitely flexible, the nuVizz SaaS platform drives visibility, control, cost savings, and a better customer experience across the fulfillment lifecycle.

Our single-minded mission: simple, sustainable transportation solutions for every business on the planet. Go further, grow faster.

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**Vehicle Routing & Scheduling Solution**  
Choosing the winning solution matters!

Capabilities: 5 stars (indicated by a dashed line with 5 stars)

Legend: ● Other Gartner Vendors (blue), ● nuVizz (green)

Capability	Other Gartner Vendors	nuVizz
Core	Low	High
AI & ML	Low	High
Last Mile	Low	High
Fleet	Medium	High
Industry Coverage	Low	High
Geographical Presence	Medium	High
Partnerships	Low	High

nuVizz | Delivery & Transportation Orchestration Platform 2.0 Powered by AI & ML  
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