Taking Food and Beverage Distribution to the Next Level

Using smart tech to deliver for evolving business and customer needs

Food and beverage distributors have never had it easy. Add in a pandemic, and it’s become even more of an uphill climb to plan deliveries, meet high customers’ expectations, and achieve healthy profits.

The pitfalls of falling short? Everyone’s bottom line suffers when customers are disappointed and products fail to show up at the right place, the right time, and in one piece.

But proven remedies exist. Top-performing organizations are relying on advanced strategies and logistics technology like strategic route and hybrid route planning combined with artificial Intelligence and machine learning to keep customers happy and safeguard product integrity and security.

Learn more inside.
AI-Based Solutions to Traverse a Competitive Landscape

These days, traditional delivery models are falling to the wayside. To consistently give customers what they want while controlling costs and addressing the labor shortage, it takes a mix of advanced strategies, tactics, and the latest technology.

Advanced route planning and real-time GPS-based execution solutions play a vital role in helping food and beverage companies be more flexible, responsive, and profitable.

To stay competitive, industry leaders are adopting:

**Strategic Route Planning**
Identify the delivery strategy that optimizes customer service and profit

Strategic route planning is a technology-enabled route planning process that determines the optimal combination and location of resources (e.g., distribution centers, fleet size, and drivers) to meet customer service and financial targets while considering service policies and operational practices.

Constant changes in order volume and mix, customers, customer service policies, and business strategies can cause distribution networks to become imbalanced. It’s costly and means the organization doesn’t run optimally. Strategic route planning from Descartes addresses this and enables organizations to:

- Model and evaluate the impact of potential changes to their distribution network before implementation.
- Operate with agility by treating various operational factors as variables.
- Determine which new or altered routing strategies will best address demand changes or new business goals.
- Understand the best approaches to entering new markets or consolidate acquisitions.
- Predict the costs and capacity needed to move forward.

Strategic route planning is applicable to fleets that run static, master, and dynamic routes.

**Hybrid Route Planning**
Serve customers uniquely while reducing delivery costs

Traditional strategic route planning cannot keep up with customers’ higher service demands and changing order mix, resulting in poor customer service and inflated operating costs. Distribution operations are moving to Descartes’ Hybrid Routing, a blend of dynamic and static routing.

With this solution, food and beverage distributors get the benefits of both dynamic routing and static routing. **Dynamic routing** allows key customers to continue to be served on a fixed schedule and then dynamically adds the remaining customers into a route, improving responsiveness to customer order changes (e.g., off-orders) and route productivity.

**The best of both worlds**

Food and beverage distributors can continuously optimize routes with dynamic routing to respond quicker and more efficiently to unexpected situations, but without any disruption to the static deliveries that keep their top-tier customers serviced on time, every time.

Descartes’ Hybrid Routing uses Artificial Intelligence and Machine Learning algorithms and is constantly learning from historical and real-time routing data to generate more accurate stop and drive times and customer delivery locations that improve customer service and reduce costs.
To stay competitive, industry leaders are adopting advanced route planning and real-time GPS-based execution solutions in helping food and beverage companies be more flexible, responsive, and profitable. It takes a mix of advanced strategies, tactics, and the latest technology. These days, traditional delivery models are falling to the wayside. To consistently give customers what they want while controlling costs and addressing the labor shortage, strategic route planning is applicable to fleets that run static, or fixed schedule and then dynamically adds the remaining deliveries that keep their top-tier customers serviced on time, unexpected situations, but without any disruption to the static routing benefits of both dynamic routing and static routing.

Descartes addresses this and enables organizations to:

- Understand the best approaches to entering new markets or address demand changes or new business goals.
- Predict the costs and capacity needed to move forward.
- Determine which new or altered routing strategies will best operate with agility by treating various operational factors as master, and dynamic routes.
- Model and evaluate the impact of potential changes to their distribution network before implementation.
- Serve customers uniquely while reducing delivery costs.
-Build true delivery orchestration. Through a combination of real-time optimization and GPS-enabled mobile applications, Descartes’ route execution solution provides:

  - A closed-loop solution that proactively manages drivers throughout their route and frees dispatchers and managers to focus on exceptions and process improvement.
  - Complete visibility to routes as they are being executed.
  - Machine learning for more accurate ETAs.
  - Route sequence rescheduling suggestions to keep drivers on track and reduce disruptions.

As well, two-way communication automates delivery additions, deletions, and customers making last-minute schedule changes. If multiple resources are needed for a delivery, they can be automatically synchronized to arrive at the same time.

**See route information any minute**

All the route execution information captured is available in an easy-to-use real-time performance dashboard for drivers, dispatchers, and managers. Managers have mobile applications designed to help them understand how their drivers are progressing and workflow to approve specific changes.

**Proactive Route Execution**

*Orchestrating deliveries with maximum efficiency*

Descartes route execution solution provides distribution companies the comprehensive capabilities needed to achieve true delivery orchestration. Through a combination of real-time optimization and GPS-enabled mobile applications, Descartes’ route execution provides:

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**Telematics**

*Building business intelligence*

Telematics solutions continuously monitor vehicle and driver performance, helping food distributors comply with regulations such as the mandatory use of electronic logging devices to record hours of service.

They also provide more comprehensive, up-to-date business intelligence used for identifying areas requiring improvement, predictive maintenance, and long-term strategic decision making.

Our telematics solutions offer these advantages:

**Ensuring Product Safety and Security**

- Automatically record trailer movements, inspections, and security seal changes.
- Immediately detect temperature variations or door-opening events.
- Quickly identify trailer contents to ensure product integrity, managing performance and compliance.
- Identify critical cold chain and traceability data points for chain of custody.
- Automate Individual Vehicle Mileage Reports (IVMRs) and fuel purchases for accurate reporting.
- Improve driver behavior and retention with performance management programs.

**Reducing Costs**

- Fuel
- Vehicle maintenance
- Potential fines
- Insurance

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<th>Item</th>
<th>Telematics Solutions</th>
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The Descartes Difference: A Seamless Solution

Delivery performance has never been more important for food and beverage distributors. The challenges of today’s markets are causing a rethinking of distribution strategies and the role and value of distribution capabilities to the top and bottom line. But by adopting new business models, advanced distribution practices, and the right technology, distributors can accelerate forward.

Descartes is supporting food and beverage distributors around the globe with holistic routing, mobile, and telematics solutions. By combining AI and machine learning with our real-time planning and execution solutions, we leverage real-world performance data to better inform our route planning and execution solutions.

We’ve unlocked the next-generation strategies and tactics in our advanced planning and execution solution needed to thrive in today’s challenging food and beverage distribution markets.

To learn more about our fully-integrated routing, mobile, and telematics solutions designed specifically for the food and beverage industry, visit Descartes Food & Beverage Distribution Success.