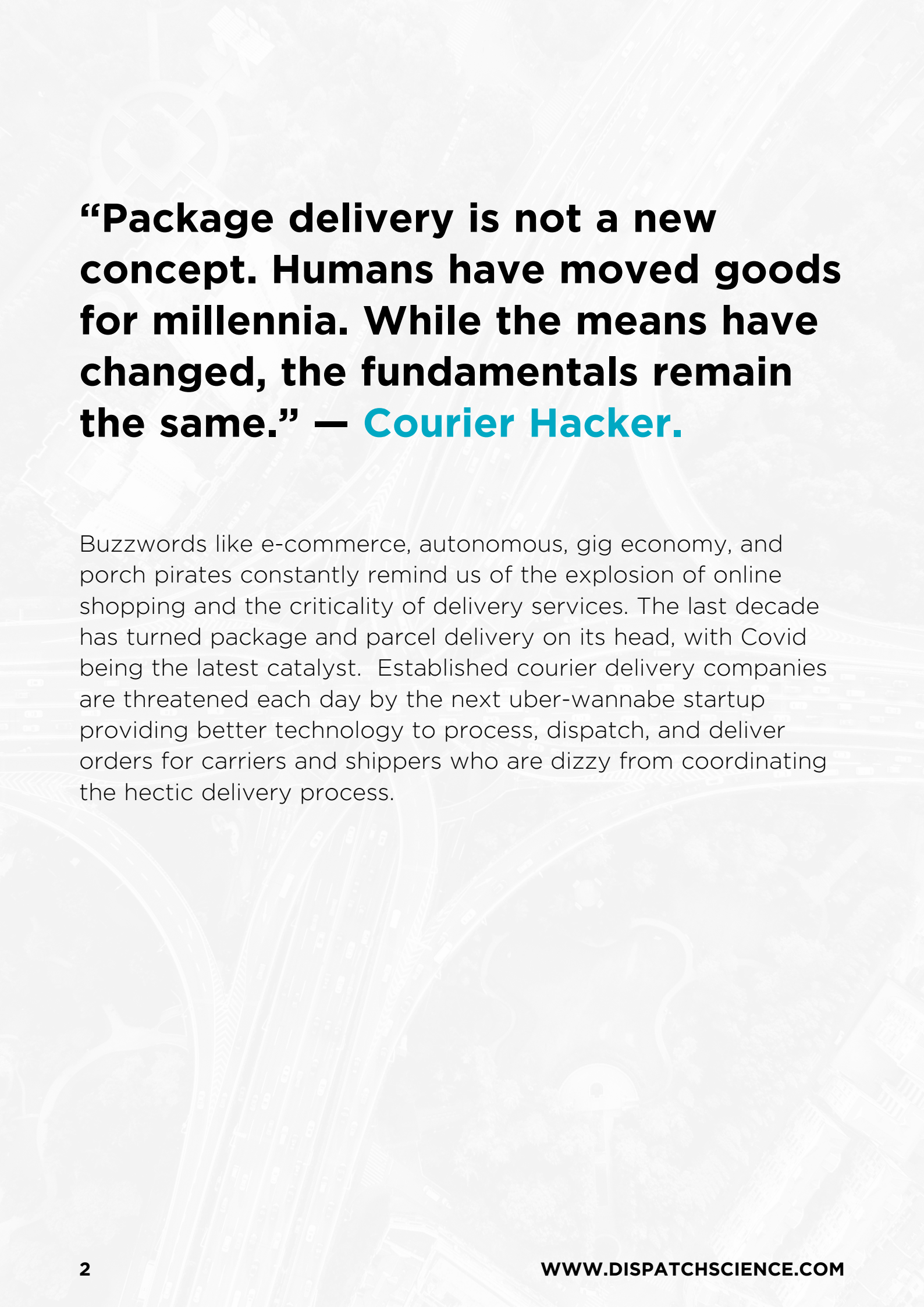

THE NEW FUNDAMENTALS OF DELIVERY

DISPATCH SCIENCE

An aerial map of a city, likely New York City, showing streets, parks, and buildings. The map is in grayscale and serves as a background for the text.

“Package delivery is not a new concept. Humans have moved goods for millennia. While the means have changed, the fundamentals remain the same.” — Courier Hacker.

Buzzwords like e-commerce, autonomous, gig economy, and porch pirates constantly remind us of the explosion of online shopping and the criticality of delivery services. The last decade has turned package and parcel delivery on its head, with Covid being the latest catalyst. Established courier delivery companies are threatened each day by the next uber-wannabe startup providing better technology to process, dispatch, and deliver orders for carriers and shippers who are dizzy from coordinating the hectic delivery process.

What is the challenge among couriers, carriers, and shippers?



*High volume of delivery orders AND **high service expectations**. They are struggling to do both.*

Why?



Insufficient software systems, lack of real-time data, poor fundamentals.

Which then leads to:

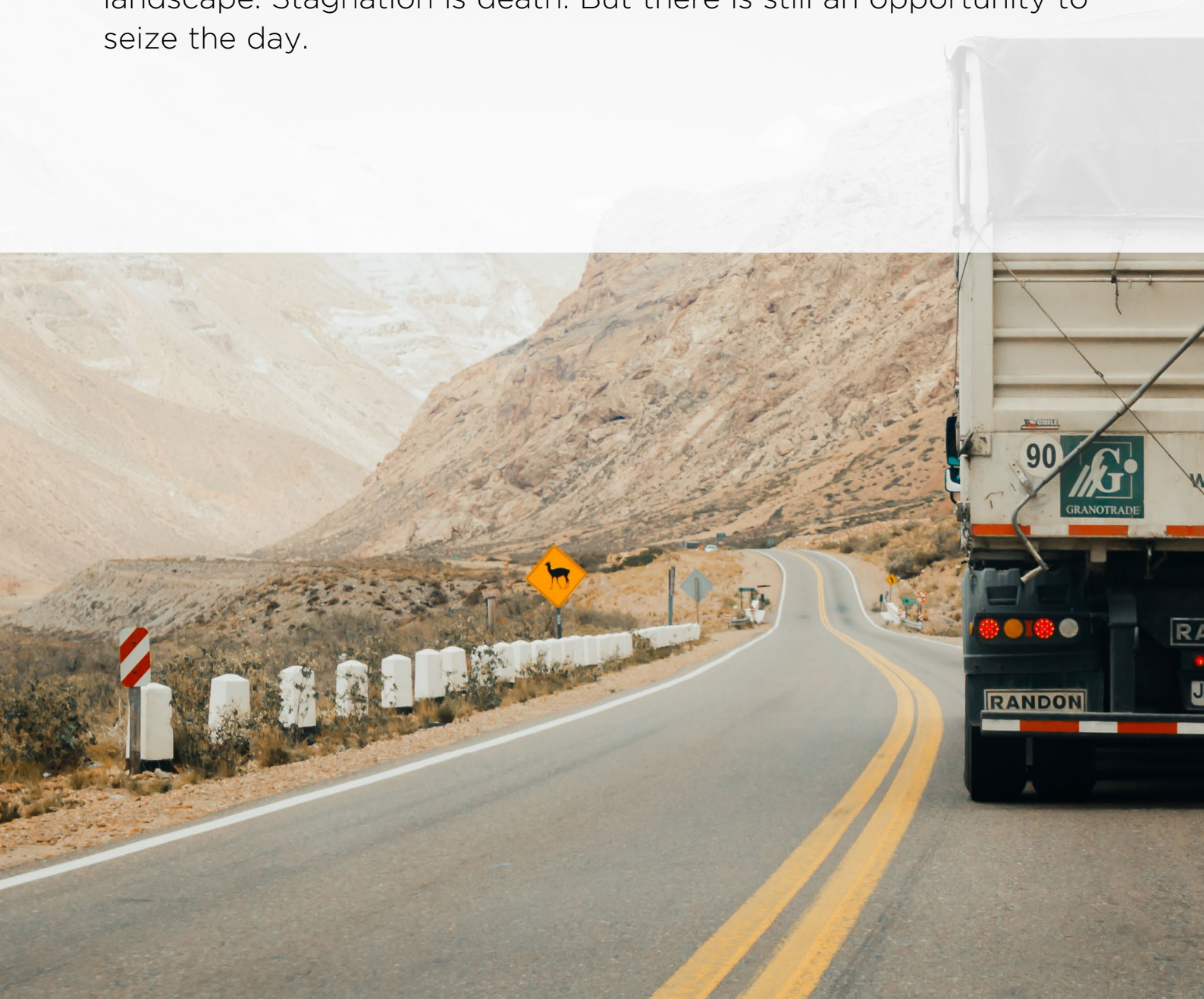


*Operational complexity, delivery errors, reduced brand loyalty, increased costs, and **stunted growth**.*

The one constant is change. It was only a few short years ago that typical deliveries were fulfilled in weeks, not hours. There was no way for people to track their packages or receive notifications about their whereabouts. Nowadays, with services like Amazon and Uber, people expect to track their orders with the tap of a button.

These heightened expectations of delivery service organizations are here to stay, and it takes more than just tools and tech to meet modern demands; but fundamental attitudes, elements, and mindsets.

Adaptation is vital for survival in a changing delivery service landscape. Stagnation is death. But there is still an opportunity to seize the day.



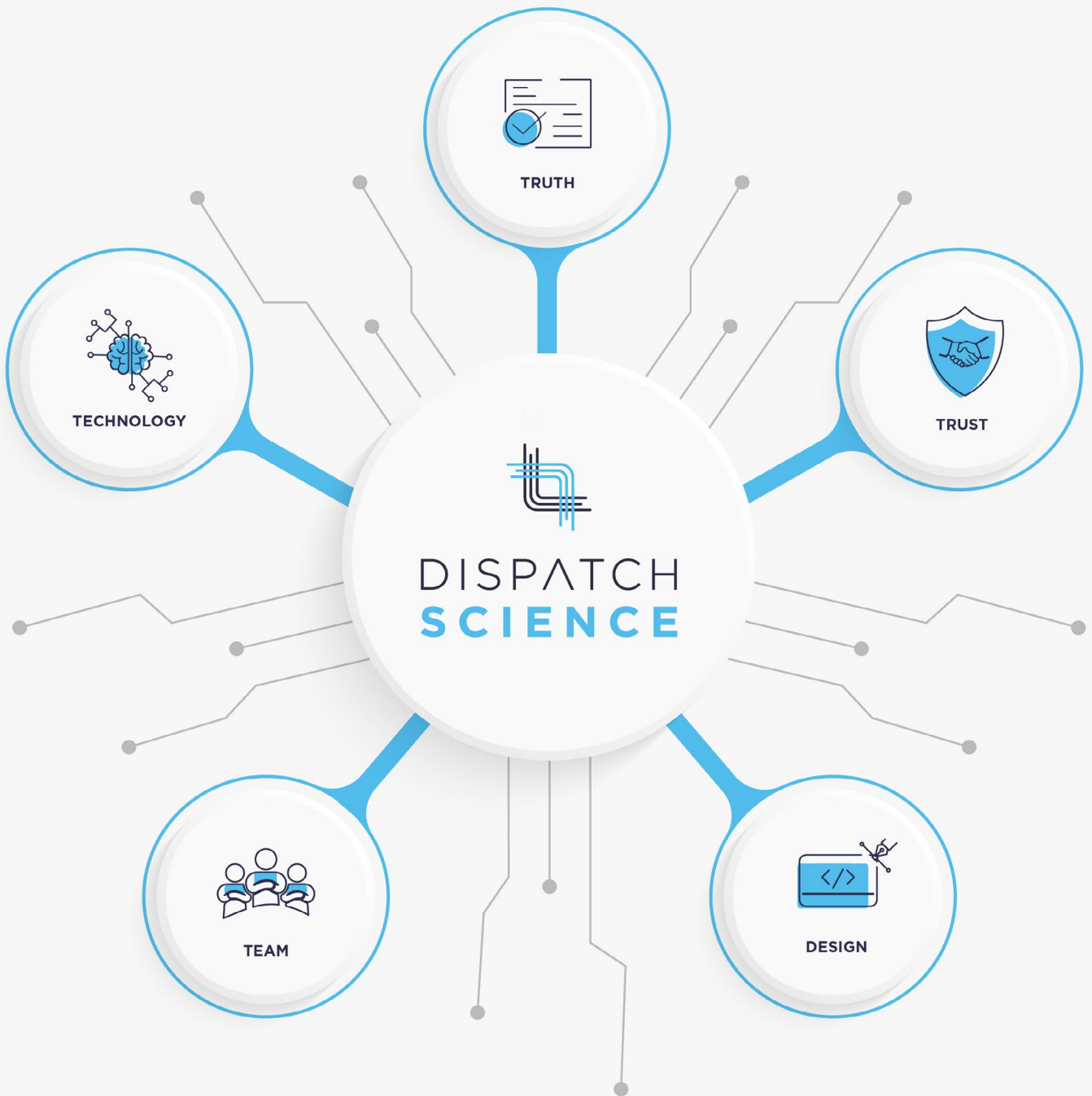
Many couriers and carriers – particularly last-mile and same-day delivery services – rely on outdated, poorly connected systems to fulfill deliveries while simultaneously trying to adhere to heightened service demands (live package tracking, ETAs, delivery notifications, etc.), resulting in a constant struggle to keep operations efficient and error-free.

After six years of continuous growth developing the first true-cloud, multi-tenant delivery management system, we (Dispatch Science) took a long, hard look at our successes and failures to ensure future success. We distilled every value, belief, and capability into 5 fundamental tenets that are at the heart of who we are, what we build, why it matters, and why we show up to work each day.

In working with Dispatch Science clients, we learned that these are the same fundamentals that parcel delivery companies must adopt to survive and thrive in today's ultra-competitive, driver-starved, explosively growing delivery business.

Do you own or operate a delivery business? Have a look and let us know your thoughts.

The Fundamentals of Dispatch Science



TECHNOLOGY

Organizations continue to fall short by using outdated and poorly optimized systems which can no longer handle the high-volume, complex nature of the delivery industry, especially with its demand for real-time information and the need to unify data onto a single platform.



THE POWER OF THE CLOUD

The global cloud arena largely falls under **four groups**; Amazon AWS, Microsoft Azure, Google Cloud Platform (GCP), and everything else. While any server accessed remotely can be considered “Cloud”, only AWS, Azure, and GCP offer the full spectrum of redundancy, security, scalability, analytics, machine learning, data center locations, application migration, cloud-native development and a host of key services that make them global leaders. It takes a cloud-native delivery management system such as Dispatch Science to utilize the full spectrum of cloud benefits.

UNLIMITED SCALABILITY

Locally hosted applications are at the mercy of their fixed CPU and memory allocations. Increased data traffic will cripple a system that is not ready for sudden changes in resource demands, such as online holiday shopping. Times like these will create surges that will bottleneck an inflexible and unprepared system. Conversely, on slower days it would be a waste of energy to run systems at full capacity. This dynamic and elastic ability of the Dispatch Science platform is crucial for such a volatile industry.

RECEIVE ORDER DATA INSTANTLY

Mobile applications, web dashboards and portals are critical tools that allow people to place and track their delivery orders without hassle. Today's users demand quick and easy ways to place and manage orders, receive accurate ETA's, and view real-time order information. Without these capabilities it is impossible to satisfy customer expectations.



POWERFUL TOOLS TO ENHANCE THE DELIVERY PROCESS

API

A robust Application Programming Interface (API) is the secret sauce that elevates delivery management from an isolated system to an interconnected network linking together all aspects of your delivery business, including clients, drivers, and agents. The API can do things like automatically load your shipper's delivery orders onto your dispatch board, report barcode scan statuses and ETAs back to your client as they occur, and even push driver settlement details to your payroll provider.

ROUTE OPTIMIZATION

Anyone can figure out the best way to get from point A to B if given enough time. However, it takes a specialized algorithm to figure out the best way to route hundreds of orders per day, especially when they have different parameters such as appointment times and capacity constraints. What's more, delivery services often receive and must process, dispatch, and deliver orders on the fly. Dispatch Science's route optimization responds to your own requirements and works for you.

There is an important difference between a standalone route optimizer and one that is fully dialed-in to your specific deliveries, drivers, and appointment times. The internet is littered with hundreds of route optimization applications that require you to upload your data, wait for them to propose a stop sequence, and then gymnastically export back for your operations team to track. Intelligent and integrated route optimization in real time is the only way to ensure driver efficiency and provide all your delivery stakeholders with accurate ETA's and appropriate alerts.

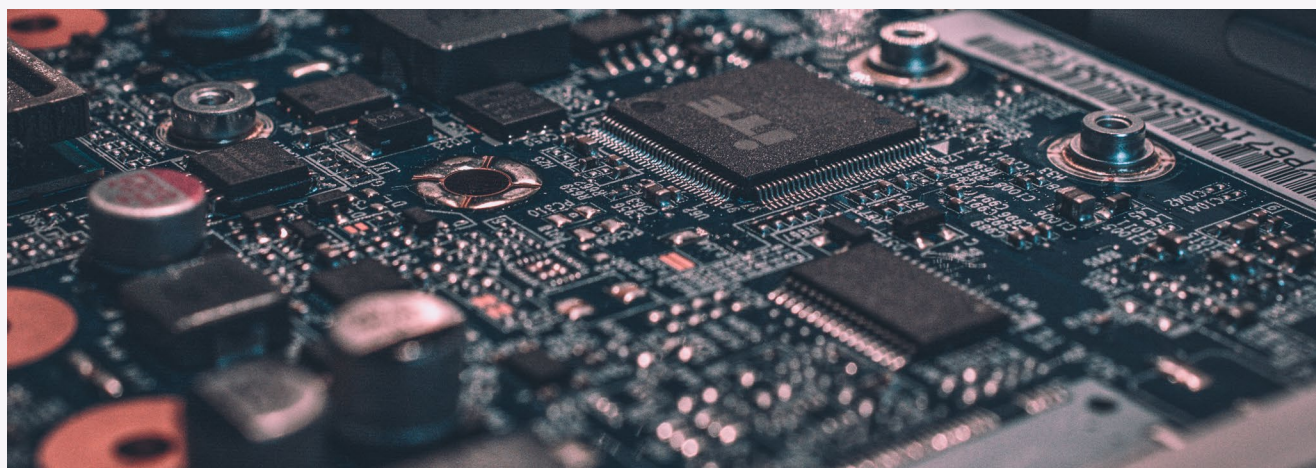
DRIVER APP

Designed for simplicity and functionality, the Dispatch Science Driver app is a mission-critical piece of the delivery process that is fully connected and integrated with the cloud platform, enabling drivers to efficiently complete their daily routes with minimal hassle. Routes are optimized automatically (as configured) for them and sent straight to their phones, where they can also accept other orders sent to them throughout the day. The app also makes it easy for drivers to take pictures, scan documents, and obtain e-signatures as proof of delivery (POD) that are automatically uploaded back to the cloud.

AUTOMATED DISPATCH

Automatic or suggestion-enabled dispatch allows for lightning-quick order assignment to drivers for on-demand delivery environments. Intelligent algorithms evaluate the complete workload of all orders, considering weight and volume, vehicle requirements, current and future positions of drivers, appointment times, and much, much more. This means that the system does the hard part of figuring out the logistical details of dispatching, while you have control over making the final decision.

Automated dispatching is the key to scaling a same day delivery business because it allows the transition to an exception-based approach rather than continuously hiring more dispatchers.



TRUTH



Truth in information and data has become a critical global imperative expected by consumers, businesses, and everyone involved in digital interaction. For the transportation and delivery industry this means that delivery services such as couriers and carriers, even those using fleets of independent contractors or layers of agents, must offer levels of transparency previously thought impossible.

Truth comes in many forms and is expected by everyone involved in the delivery process. The table below describes the truths expected by each stakeholder in the delivery process.

STAKEHOLDER	EXPECTATIONS
Parcel Recipient	Also called consignees, parcel recipients expect real-time data about every order, including order tracking, ETAs and status updates, access to their invoices and transactions.
Shipper	Ability to communicate electronically, push information from their systems without manual intervention, on-time performance reporting, a frictionless experience for their consignees.
Dispatcher	Ability to easily communicate and track drivers and orders, ability to ensure route assignments are efficient, not having to juggle phone calls between parcel recipients and drivers to coordinate ETA's.
Driver	To maximize earnings and minimize their efforts; optimized route sequences for orders assigned to them, highest possible stop density, visibility on new orders or changes to their routes, and simplified communication from dispatchers or other drivers.
Operations	Efficient ways to process new orders or inquiries, live tracking of orders and drivers, real-time and granular reporting for complete insight and problem-solving.
Management	Access to all levels of reporting, analytics, and audit in areas such as finance, profitability, driver performance, service KPIs (% of on-time deliveries, % of late deliveries, wait time, etc.).

Each piece of data contributes to a company's overall level of transparency and visibility to their employees, partners, and customers. The more consistently accurate their data, the better overall trust in information that an organization provides.



TRUST



Trust is not a one-time award; it is a continuous pursuit. An intangible feeling that is built and shaped over time. All it takes is one bad experience for trust to be broken. That's why consistency is crucial in maintaining long-term relationships with customers and partners. It does not matter if you're a carrier, courier, or shipper – top level service is expected of you. If someone opts for same-day shipping, they expect it will arrive that day. If a courier has a route with scheduled appointments, their drivers better be there on time. If an order is delayed, the necessary parties must be notified immediately. Achieving these markers of trust is essential in maintaining professional relationships.

SECURITY AND COMPLIANCE ADHERENCE

With information leaks and cyber-attacks making headlines every day, safeguarding data is a pre-requisite to gaining trust. Unfortunately, many companies do not have the necessary technical resources to ensure that their IT systems run securely and in compliance with ever-evolving safety protocols. This exposes the business to connection issues, security risks, outages, and downtime. Dispatch Science securely encrypts all data at rest and in transit, and even offers sophisticated data scrubbing features to meet and exceed even the most demanding security requirements.

Dispatch Science has direct experience in maintaining regulatory and compliance standards which apply to many organizations, including Personally Identifiable Information (PII) and Occupational Safety and Health Administration (OSHA).

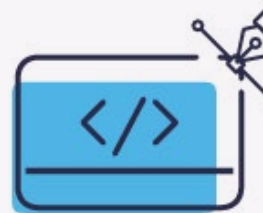
Other industries, such as healthcare, are also concerned with Protected Health Information (PHI), Health Insurance Portability and Accountability (HIPAA).

A TRUSTED PARTNER

The objective of Dispatch Science is to be the technology provider and trusted partner of same-day and last-mile delivery companies. Whether you're an e-commerce shipper delivering last-mile packages, a medical courier delivering life-saving pharmaceuticals, or moving truckloads of pallets across the country, we have the technology and know-how to put you at the forefront of your domain. Since 2018, we have ensured the safe and timely deliveries of millions of parcels across industries such as healthcare, critical parts, route-work, and many others. We complement our technology offering with a logistics consulting practice that offers clients assistance with all their implementation and integration needs.



DESIGN



The last decade of digital development has left consumers and businesses alike with the heightened expectations that applications should be self-explanatory, intuitive, and visually appealing. This has even given rise to new fields of study that focus on the concept of the user interface and the user experience (UI/UX). Together, these elements seek to understand what each user is trying to accomplish at each stage of their interaction with a system, with an emphasis on how they feel while doing it. Organizations that understand the importance of providing all users with a design that is well-suited to their goals and requirements will be rewarded with repeat interactions.

DESIGNED FOR USERS BY EXPERTS

Designing modern software requires a contextual understanding of what each user is trying to do. In the transportation and delivery industries, gone are the days of laying out every option in a cluttered interface that tries to do it all. When you try to accommodate for everything, you just confuse everyone. Today's digital users expect the intuitive design and efficiency they experience from their daily devices and platforms. Your service is judged by the overall experience it provides, and that starts with how easy it is to understand and navigate your software.

While there is accessibility on the Dispatch Science web-platform to everything from order management, dispatching, invoicing, payables and analytics; sections are organized and cleared of unnecessary clutter. This helps the user flow through their objectives and minimizes the number of clicks it takes to complete actions. The software is designed to appeal to the average user, without the need for preparatory training or study.

CONTINUOUS IMPROVEMENT BEATS THE SILVER BULLET

The Dispatch Science platform is continually getting better and has been rigorously designed and tested. The team releases consistent monthly software updates, gradually improving the platform over time. This iterative approach to development does not shock its users but helps solidify their understanding to ensure they get the most value from the software.

“To put ourselves in the shoes of our users and to understand how they use our platform, we are continuously prototyping and testing new and different ideas on both the mobile and web platform to improve usability and functionality.” - [Alex Proteau](#), Dispatch Co-Founder and CTO.



TEAM

“Dispatch Science’s team is the glue... the key element that brings technology, truth, trust, and design together. When you have a team that is a cohesive unit – one that is continually learning, building, and seeking new ideas – everything else will follow. Dispatch Science is a team of thinkers, collaborators, and doers. Our goal is to make the world more efficient and less stressful with software.” - [Arthur Axelrad](#), Dispatch Science Co-Founder.

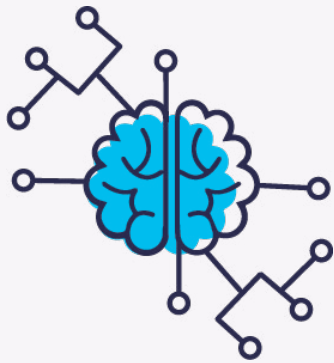


PEOPLE

Working in the greater transportation and delivery industry, especially developing, and leveraging complex logistics software, one begins to understand the need for great people. Each member of the team has an important part to play, whether it’s having conversations with customers, responding to support inquiries, writing lines of code, or rigorously testing a new feature to make sure it works. While not the biggest team, the interdependence and cohesion of Dispatch Science enables us to do things like consistently release software updates every 3-4 weeks, implement advanced integrations for specific customer use cases, and have fun doing it!

Dispatch Science is operated by a group of twenty-five developers, consultants, and other staff dedicated to solving challenges for customers, building a quality platform, and collaborating effectively. The team is diverse and constantly looking for new and creative ways to work with each other and customers to perpetually push the envelope of what is possible.

Stick to **the Fundamentals:**



TECHNOLOGY

We're in the age of technological change and upheaval. The race to conceive, create, deploy, and leverage the best possible technology is the difference between transformative growth and fossilized irrelevance. Dispatch Science develops software that truly leverages the latest tech, from cloud computing to sophisticated algorithms to simple APIs.



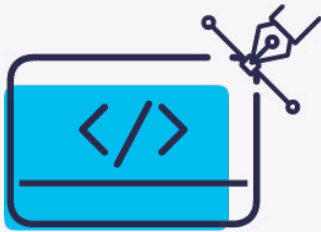
TRUTH

Whether you're shipping widgets, coordinating a fleet of independent contractors, or writing next-generation code, vital pieces of data are flying around the world. In this age of media and information overload, more than ever people need to hear and be reassured of the truth. Dispatch Science is the foundation of truth in data for every employee, customer, and person involved in the delivery process.



TRUST

Trust goes beyond the immediacy of accepting information relating to some current interaction or transaction but to a broader trust in the efficient organization and execution of delivery operations. Dispatch Science ensures that your circle of customers and vendors trust your ability to complete the delivery journey flawlessly.



DESIGN

We're surrounded by shorter attentions spans and a ubiquitous expectation of exceptional digital experience. Everyone now expects the software and interfaces they use at home or work to be intuitive, self-explanatory, and just make sense. Dispatch Science is delivery management software made beautiful; easy to look at, easy to use.



TEAM

A cohesive team is critical to the success of any business. Everyone from the human resources team to the software developers to the finance team and the pets that keep them sane. A great team is a collaboration of diverse humans, each with their own part to play. Dispatch Science combines the skills of its people to offer logistics companies the software to reduce stress, grow their business and improve lives.

In implementing the Fundamentals of Dispatch Science:



*Efficiently fulfill a high volume of delivery orders
AND adhere to **high service expectations**.*

This fulfillment leads to:




***Establishing an iron-clad operational foundation.**
Unparalleled delivery visibility: real-time order
data transmission (package tracking, ETAs)*

And ultimately:



***Unleashed customer growth and value.**
Uninhibited company scale and efficiency.*

A full-page background image featuring a bird in flight against a light sky, with a mountain peak visible in the distance. The foreground is dominated by a dark, textured asphalt road with a white dashed line running down the center.

Without the right fundamentals, orchestrating the delivery process is like playing chess blindfolded. Due to the dynamic and perpetually fluctuating nature of the delivery industry, leaders must continuously rethink beyond their daily delivery operations to **the core fundamentals that position their organization for transformative growth.**