

SHIPCHAIN

INTELLIGENT. DECENTRALIZED. SECURE.

THE WHITEPAPER

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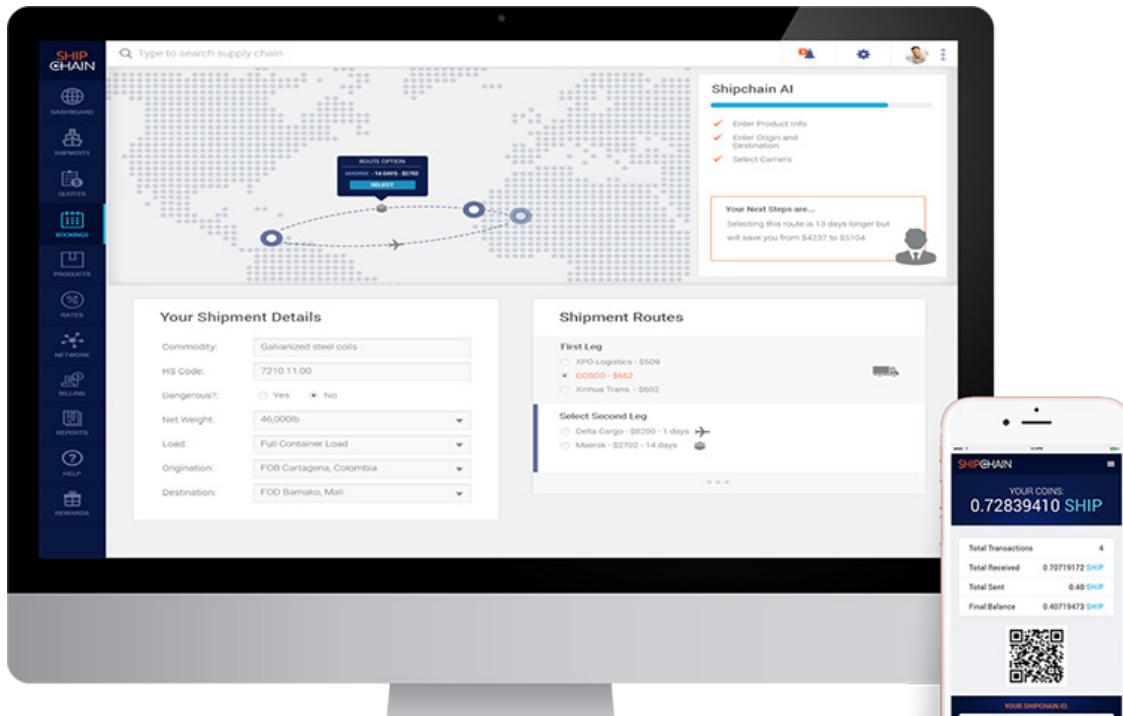
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ABSTRACT

Consider the magnitude of the logistics industry. Looking back through history, the wheel is essentially the cornerstone of modern civilization. It brought us transportation, and transportation afforded us the systematic transfer of goods. From farm to market, and from market to table, the movement of products in bulk has been the single most important adaptation of the last 10,000 years.

Trade, in turn, is our second oldest and most important pivot. From long-distance trading, our economies were established, which allowed modern civilizations to thrive. The oldest coin-based currency can be thought of as a proxy for trading values greater than two hands can carry, or for trading commodities that aren't physically available nearby, and so currency itself necessitates logistics. Together, trade and logistics form the backbone of human achievement.

Despite the revolution brought on by the advent of the cart, the ship, the engine, and the airplane, the shipping industry as a whole has been one of the slowest markets to adapt and evolve over the past century. The Information Age has disrupted nearly every major workforce on the planet. Globalization has opened new trade routes, technology has changed the way we shop and spend, and so naturally, the demand for shipping has reached an all-time high. It's no wonder that most shipping customers are shocked and dismayed to find their brokers still relying on artifacts like paper records, written manifests, and spoken words to get cargo from point to point. It's time for a breakthrough in how we handle freight.

Blockchain technology is often characterized as "disruptive" because it can revolutionize the way we interact as a society. Distributed ledgers are disruptive for ancient business models in the same way email disrupted the mailbox. Applied correctly, a blockchain will facilitate the digitization of record-keeping processes related to the trade of assets, even in scenarios when intermediaries and brokers are incentivized to resist revolution. The blockchain can improve the transportation of commodities in every country, across the entire globe, and beyond. We're launching ShipChain to make that leap possible.

OVERVIEW

The movement of goods impacts daily life for people around the world at a staggering scale. For additional perspective, here are some stats:

- The market's global value was \$8.1 trillion in 2015, and is expected to grow to \$15.5 trillion by 2023 [\(1\)](#), making it one of the largest industries on the planet.
- 55 billion tons of freight was transported in 2015, with expected growth to 92 billion tons by 2024.
- In the United States, freight and logistics spend in 2015 totaled \$1.48 trillion, nearly 10% of the country's GDP [\(2\)](#).

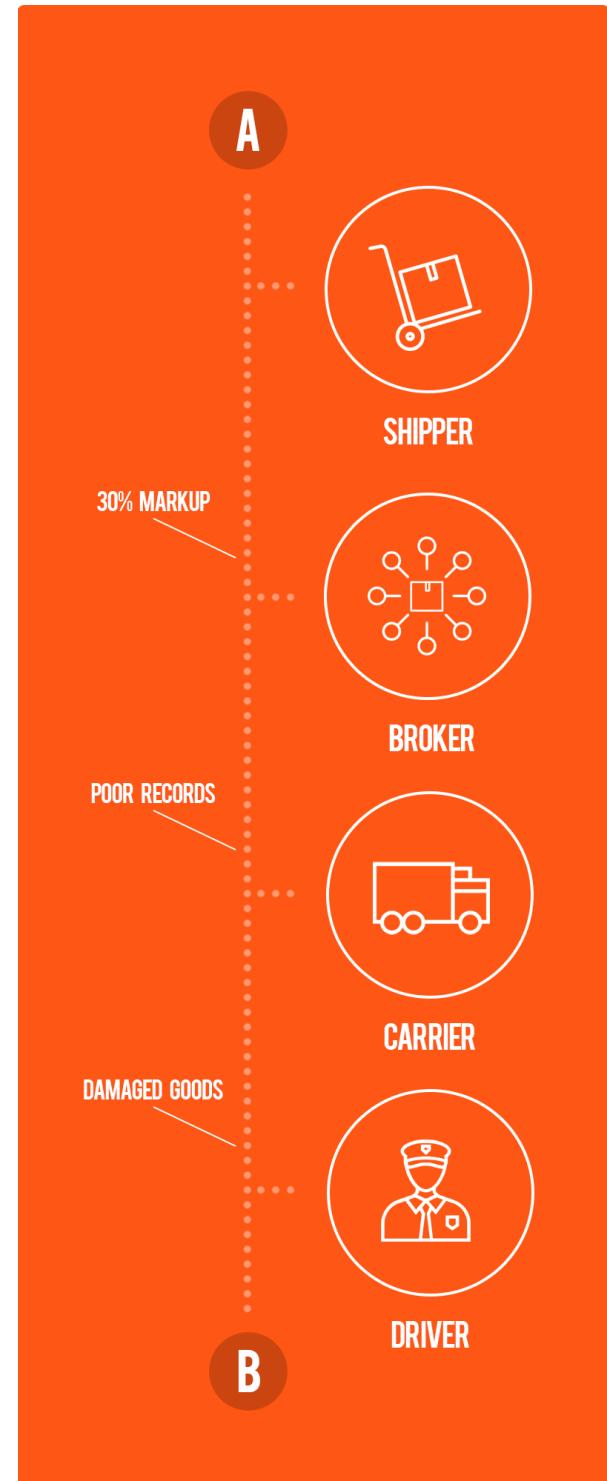
Unfortunately, the supply chain has major bottlenecks. The lack of a unified communication platform prevents the various players from interacting efficiently. Most land transportation providers, carriers, governments, customs brokers, and freight forwarders have outdated ways of keeping track of their goods. According to

KPMG, 40% of global manufacturers lack information and material visibility across their supply bases [\(3\)](#). In some cases, companies are still using paper ledgers to track their products. Given that upwards of 65% of the value of a company's products or services is derived from its suppliers and its supply chain [\(4\)](#), utilizing older highly ineffective systems results in tremendous amounts of wasted time, resources, and money.

But as freight volume increases, so do customer expectations. Both industrial and individual customers expect faster shipments with more flexibility, more transparency, and lower prices. Shippers can find it challenging to handle all the complexities of booking, tracking, tracing, and regulatory compliance, unless they hire teams of full-time, experienced staff. This puts smaller shippers at a disadvantage, and makes larger shippers extremely inefficient.



HOW IT WORKS TODAY



The process of shipping freight can occur across many channels, including air, sea, rail, or truck. Four major entities make up the lifecycle of any shipment, regardless of the channel being used.

Shippers are the customers of the logistics services; they are the actors who have freight and need it transported.

- Shippers don't want to coordinate multiple drivers
- They don't want logistics headaches
- They want a predictable price
- Shippers want freight accountability

Brokers coordinate carriers to organize multimodal orders

- Brokers act as the gatekeepers of the industry
- They choose combinations of reputable carriers
- They get payment from shippers and insure goods
- They often provide some basic tracking services
- Brokers charge a high middle-man markup

Carriers provide freight transportation services

- Carriers may be rail, air, sea, truck, or other
- Most carriers only handle one segment of a trip
- Usually, a multi-leg trip involves several carriers
- A carrier usually owns a fleet of delivery vehicles
- Carriers often have poor transparency and records

Drivers are the operators of a single vehicle in a fleet

- Some are "owner-operators" acting also as Carriers
- Sometimes handoffs lack accountability
- Tracking fleets of drivers can be hard
- Drivers don't have incentives to save gas
- Drivers can lose or damage goods

PROBLEMS

1. Bad Tracking. For end-users, the regularity and reliability of shipping status updates is the primary factor in the perceived quality of a shipping experience. If a package is slow or late, but has regular updates, customers are less likely to complain or file chargebacks against merchants. But the shipping industry has not kept up. Tracking across multiple carriers is extremely fractured, and tracking provisions vary between modes of transportation. Tracking problems lead to confusion among carriers, failed handoffs, failed deliveries, and even lost shipments. Economically, this is a disaster. Lost efficiency, wasted fuel and time, and missing products combine to cost the shipping industry billions of dollars per year—costs that brokers rarely cover and are ultimately passed on to shippers.

2. Lack of Transparency. Bad tracking is both the cause-of and caused-by equally harmful gaps in transparency. While tracking issues are systemic and inherent to the task of moving goods, the failures of transparency are largely due to bad data handling practices (or worse, due to parties being incentivized not to share accurate data). Often, due to fragmentation, uncertainty, or to protect the exclusivity of their arrangements, brokers can't or won't tell a shipper exactly what carrier and driver are carrying their freight.

3. No Accountability. The US Federal Bureau of Investigations estimates annual cargo theft losses exceeding \$30 billion USD in 2016 and rising, with an average theft value of \$190,000 (5). Cargo theft raises prices across the industry approximately 20%, negatively impacting all customers of the shipping industry—nearly every person on earth. The combination of tracking and transparency failures together lead to a lack of account-

ability. As brokers withhold information on who is moving which cargo and fragmentation amongst carriers causes uncertainty about where the cargo actually is at any given time, shippers often have no way of knowing who is responsible for the cargo. Handoffs are one of the largest sources of error in freight, with neither side wanting to take responsibility for a container that didn't make it from the ship to a truck.

4. Middleman Markup. Brokers and forwarders are largely to blame for all of the above issues, acting as gatekeepers to the industry and incentivizing poor transparency and tracking practices, and yet they typically charge a significant premium—sometimes 30-50%—for their claim of making freight easier to manage and ship. In reality, they are high maintenance, increasing the cost of freight and decreasing what carriers get paid.

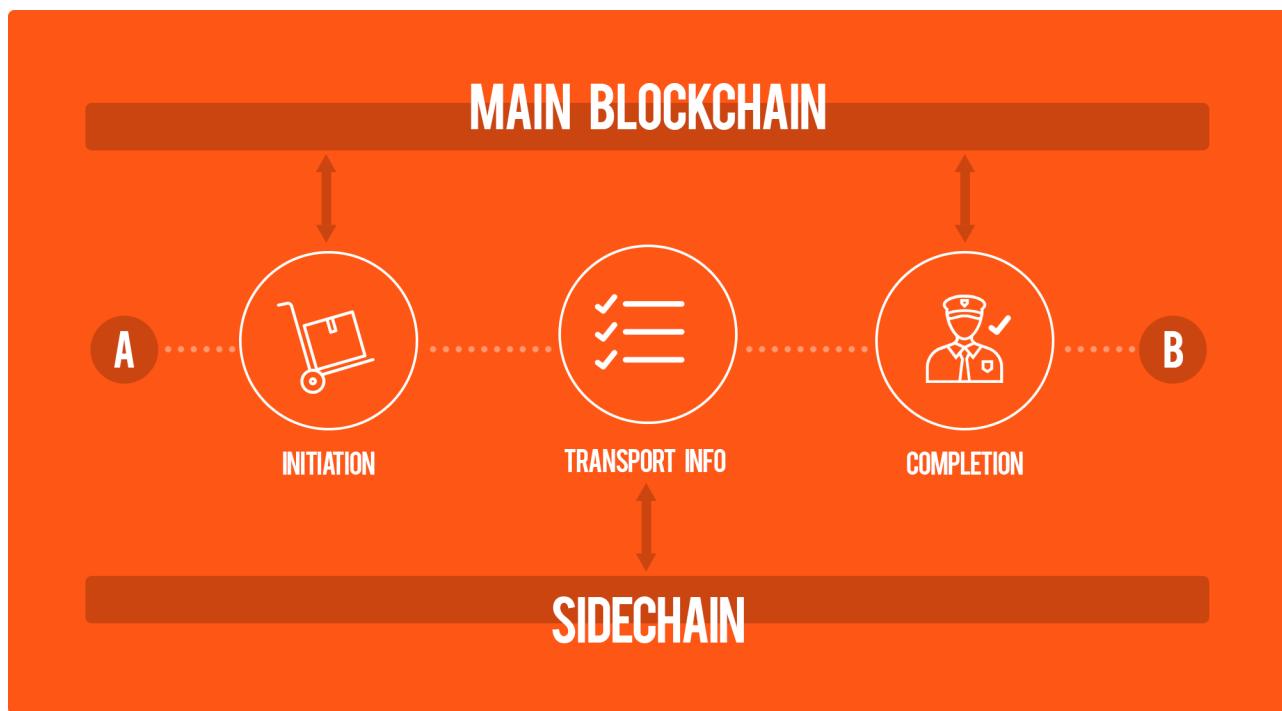
5. Misaligned Incentives. The above issues can be summarized simply as a problem of misaligned incentives. It behooves carriers to provide poor tracking because they gain deniability in the case of lost or damaged freight. There's negative incentive for brokers to be honest about the whereabouts or handlers of a shipment because they need to protect their exclusive relationships and always be able to shift the blame. Drivers are incentivized to carry using unsafe practices that may risk damage to goods. Everyone gains from dishonesty to the next party and to break laws or safety regulations. Shippers and customers are thus incentivized to find a better solution.

OUR VISION

ShipChain was founded with the mission of solving the greatest problems facing the logistics industry today. Our solution requires deep technology, but our vision is quite simple. Imagine a fully integrated system across the entire supply chain—from the moment it leaves the factory, field, or farm—to delivering the finished product to the customer's doorstep; federated in trustless, transparent blockchain contracts. This is ShipChain, the future of shipping.

Tracking & Transparency

We will unify shipment tracking across the Ethereum blockchain, using our ShipChain side-chain to track individual encrypted geographic waypoints across each smart contract. With this system, the meaning of each waypoint will be encrypted, accessible for interpretation by only the parties involved. This will give shippers more visibility across their supply chain and allow carriers to communicate with ease, reducing delays and miscommunications. Information about loads, geo-waypoints, and basic compliance information will be recorded and publicly validated within the sidechain. Upon delivery and confirmation, the contract will be completed and recorded on the main blockchain, releasing any payment escrows.



With the upcoming Electronic Log Device (ELD) mandate from the United States Department of Transportation [\(6\)](#), ShipChain will work with the most popular ELD developers to integrate directly and march toward our first goal: completion of Track & Trace technology. The initial step of working with these providers will allow us to integrate immediately into the largest network of US-based trucking freight companies, giving our platform a full network of freight movement without the arduous requirement of connecting to individual freight companies (or even individual Owner-operator trucks) one at a time.

Similarly, there is an opportunity for us to integrate with the major US railroads, global ocean freight providers, and major airlines, one-by-one, to tie in and create our multimodal blockchain-based tracking system. The internal tracking of each carrier will be the first step in unification, with their internal confirmations being fed to the blockchain. Individual pallets or crates will be tied to the address of the container they are on, and containers will be tracked as a whole. Over time, business development will assist these carriers with the replacement of their base internal tracking with the ShipChain system, allowing a greater level of visibility across all of their multimodal shipping partners.

Decentralized Brokerage

In the current system, freight brokers exist to facilitate the transactions of loads from shippers to carriers; they are typically asset-light and focused on sales. Brokers find loads, mark them up, and sell them to a carrier, which increases the cost of shipping and reduces profits for carriers and their crew. The ShipChain blockchain will supplant the need for brokers by allowing carriers the ability to find shipments and intelligently route their team for multimodal transportation based on factors such as distance, traffic, weather conditions, fuel use and more. This load system will generate a smart contract upon pick-up and will hold payments in escrow until conditions for release are met while using the main blockchain and side-chain for tracking and cargo security monitoring.

Asset Security

Deploying blockchain technology into the freight industry to encode geographic data will increase cargo visibility, and thereby dramatically decrease theft. By using barcodes or hardware RFID integration, assets can be automatically verified each time electronic logs are reported, increasing security and providing peace-of-mind for all parties. Permissioning, immutability, and encryption are inherent benefits of blockchain technology, allowing select individuals to access, examine, and add critical transport data, but no one will have the ability to change or delete existing data. By bringing accountability to every step of the process, the blame game between carriers, brokers and shippers is mitigated.

Trustless Incentives

By encoding and encrypting waypoint information and data about which loads belong in a shipment, digital escrows can be used to fairly assess whether goods actually arrived in a particular shipment. Conflicting accounts of the whereabouts of goods are eliminated, and individual players can be rewarded for their participation in a system that operates without trusting any particular party's story about what happened. In future iterations of the platform, we plan to provide driver rewards for obeying speed limits, behaving safely, and observing green fuel economy practices.

Unified Management

Subsequent to the implementation of blockchain federation of the fair and secure transportation of goods, ShipChain will build a unified management platform for leveraging the smart contracts to provide modern and usable services across the shipping industry. ShipChain is dedicated to building to an open ecosystem, and although ShipChain Web will be the first application, our Smart Contracts will be a building-block that thousands of other platforms can freely build upon to solve shipping issues, big or small. The decentralized brokerage will be an open marketplace connecting shippers to carriers, and ShipChain will provide the first app for cargo booking; shippers will be able to log on and place an

order from "Point A" to "Point B" using suggested routing and shipping methods based on cost, time in transit, and contents.

The screenshot displays the SHIPCHAIN platform's user interface. On the left, a vertical sidebar menu lists various features: DASHBOARD, SHIPMENTS (selected), QUOTES, BOOKINGS, PRODUCTS, RATES, NETWORK, BILLING, REPORTS, HELP, and REWARDS. The main content area includes a search bar at the top and a summary bar with metrics: 5 QUOTES, 2 AT ORIGIN, 10 IN TRANSIT (highlighted in red), 3 AT DESTINATION, 1 EXCEPTIONS, and 759 COMPLETED. Below this is a world map showing a shipping route from Cartagena, Colombia to Bamako, Mali. A callout box for 'COL-INT TECH' indicates it arrived on Sept 28, 2017 and is currently on customs hold. The central panel shows the shipment details: SHPCHN-9981, COL-INT TECH, Cartagena, Colombia-> Bamako, Mali. The status is 'Customs Hold at Arrival Port'. Below this are three timeline events: 'Booking Confirmed' (Sept 08, 2017), 'Arrived at Origin Port' (Sept 12, 2017), and 'On Customs Hold' (TODAY). To the right, there are four summary boxes: COMMERCIAL INVOICE AMOUNT (\$62,123.45), TOTAL FREIGHT SPEND (\$7,987.10), TOTAL CUSTOMS SPEND (\$1,321.67), and a blue button labeled 'VIEW FULL DETAILS'.

SHIP CHAIN

Search

5 QUOTES 2 AT ORIGIN 10 IN TRANSIT 3 AT DESTINATION 1 EXCEPTIONS 759 COMPLETED

COL-INT TECH
ARRIVED SEPT 28, 2017
EST DEPARTURE OCT 1, 2017
CUSTOMS HOLD

SHPCHN-9981
COL-INT TECH
Cartagena, Colombia-> Bamako, Mali

STATUS:
Customs Hold at Arrival Port

SEPT 08, 2017 Booking Confirmed

SEPT 12, 2017 Arrived at Origin Port

TODAY On Customs Hold

COL-INT TECH Factory
Pick up: Sept 11, 2017
Drop Off: Sept 12, 2017

Regional Port of Cartagena
Departure: Sept 13, 2017

Port of Dakar, Senegal
Arrived: Sept 28, 2017
Customs Hold: Sept 29, 2017
Est. Departure: Oct 1, 2017

COMMERCIAL INVOICE AMOUNT
\$62,123.45

TOTAL FREIGHT SPEND
\$7,987.10

TOTAL CUSTOMS SPEND
\$1,321.67

[VIEW FULL DETAILS](#)

INTRO

ECOSYSTEM

PLAN

TECHNOLOGY

Contracts & Side-Chains

The ShipChain Contract is an Ethereum EVM smart contract that can be duplicated and used by anyone to orchestrate a shipping escrow on the distributed ledger. The overall shipment completion will be stored on the main Ethereum blockchain, and to keep costs low, individual tracking waypoints and load data can be stored and verified in an associated side-chain operating on the ShipChain Protocol (fork of Ethereum software), such as the one ShipChain Foundation will implement and maintain called "ShipChain Prime." Large partners will be able to operate their own ShipChain Protocol side-chains, with (or without) aid from ShipChain Foundation.

When a shipment order is placed, a smart contract will be initiated. That contract will include a hash sum signature of the delivery information for the shipment, including beginning address, final delivery point, carriers used, number of items in shipment (as granular as preferred with an address for each item being possible), weight, dimensions, quantities, HS codes, intermediary data, and more. Anyone with a valid copy of these values can verify the signature and assert the validity of the contract on the main Ethereum blockchain. The data itself can optionally be encrypted and stored in a sidechain for more specific point-by-point and piecewise package tracking. In result, this essentially provides a more detailed Bill of Lading.

That contract will be completed on delivery, with validations and waypoints recorded to the blockchain along the way. If all waypoint validations are affirmed, the contract will be executed (and each contract will be able to specify its own terms for how any disputes will be resolved, including third party arbitration). The full cargo validation system will be in place alongside the tracking system. Carrier partners will be able to pull data from the ShipChain tracking system and post to their systems and websites for wide use, creating a unified tracking system that eliminates the need for internal P.R.O. numbers or multiple tracking numbers.

ShipChain Web

The decentralized brokerage system will be comprised primarily of an open marketplace connecting shippers and carriers. ShipChain will allow open access to its blockchain marketplace, but also build the first platform of services upon it, ShipChain Web Platform, a centralized system for booking and managing freight shipments across many carriers and modes of transportation.

If for example, the shipper has five full shipping containers of shoes coming from China to the United States, the system will recognize that a sea carrier, rail carrier, and final truck carrier will be the best optimization for cost and speed based on the size and type of shipment. The shipper will then be able to see the capacity on each leg, book their own routes, see estimated delivery times, and have full control over their supply chain without the need for a broker.

Carriers will be able to post capacity for their shipping vehicles and lanes, dynamically set pricing based on supply/demand, adjust for estimated fuel cost, and have cargo booked to their routes automatically.

Customs brokers, if needed, will also be granted account rights to assist with paperwork filing. With all necessary information held in a smart contract, this process will be quicker and easier than ever before. Regulatory compliance may require ShipChain to be licensed in freight brokerage, freight forwarding, and have an internal customs brokerage. While shippers will book their own routes, ShipChain may need to be the official booking agent for freight, for compliance purposes.

The screenshot displays the ShipChain Web Platform's user interface. On the left, a vertical sidebar menu lists various features: SHIP CHAIN (highlighted), DASHBOARD, SHIPMENTS, QUOTES, BOOKINGS (selected), PRODUCTS, RATES, NETWORK, BILLING, REPORTS, HELP, and REWARDS. The main content area includes a search bar at the top, a world map showing shipping routes, and several panels:

- Shipchain AI:** A sidebar with a progress bar and three checked items: "Enter Product Info", "Enter Origin and Destination", and "Select Carriers". Below it, a callout box says "Your Next Steps are..." followed by a note about selecting a route.
- Your Shipment Details:** A form with fields for Commodity (Galvanized steel coils), HS Code (7210.11.00), Dangerous? (Yes/No), Net Weight (46,000lb), Load (Full Container Load), Origination (FOB Cartagena, Colombia), and Destination (FOD Bamako, Mali).
- Shipment Routes:** A panel showing "First Leg" options: XPO Logistics - \$509, COSCO - \$552 (selected), and Xinhua Trans. - \$602, each with a truck icon. Below it, "Select Second Leg" options: Delta Cargo - \$8200 - 1 days (airplane icon) and Maersk - \$2702 - 14 days (ship icon). Ellipses indicate more options.

Our target rollout date for the first version of the ShipChain Web Platform unified tracking system is Q3 2018. Maintenance and continued carrier integrations will be an ongoing process for the tracking system.

THE SHIP TOKEN

INTRO

ECOSYSTEM

PLAN

Usage, Purpose, Supply and Demand

Ownership of at least 1 full SHIP token grants "ShipChain Membership Status." This is required to access the blockchain for both the purpose of tracking shipments, as well as the purpose of booking freight.

Transactions on the blockchain for freight shipments will be paid in tokens, and settled in tokens. The ShipChain Web platform connecting to the blockchain will allow users to pay either directly in tokens they hold, or purchase tokens from ShipChain for booking freight (allowing, for example, USD, EUR or cryptocurrency payment). ShipChain will work to enter into listing agreements with exchanges to allow for ease of liquidity and settlement of SHIP tokens into other currencies.

Tokens valued at up to 20% of each freight transaction will be given to the driver/carrier as "gamified" incentives for safe and timely deliveries, as well as environment focused such as reduced idle time. From there, drivers will either be able to sell their tokens on exchanges, or redeem those tokens via partnerships ShipChain will form for various rewards, such as gift cards, fuel discounts, and more.

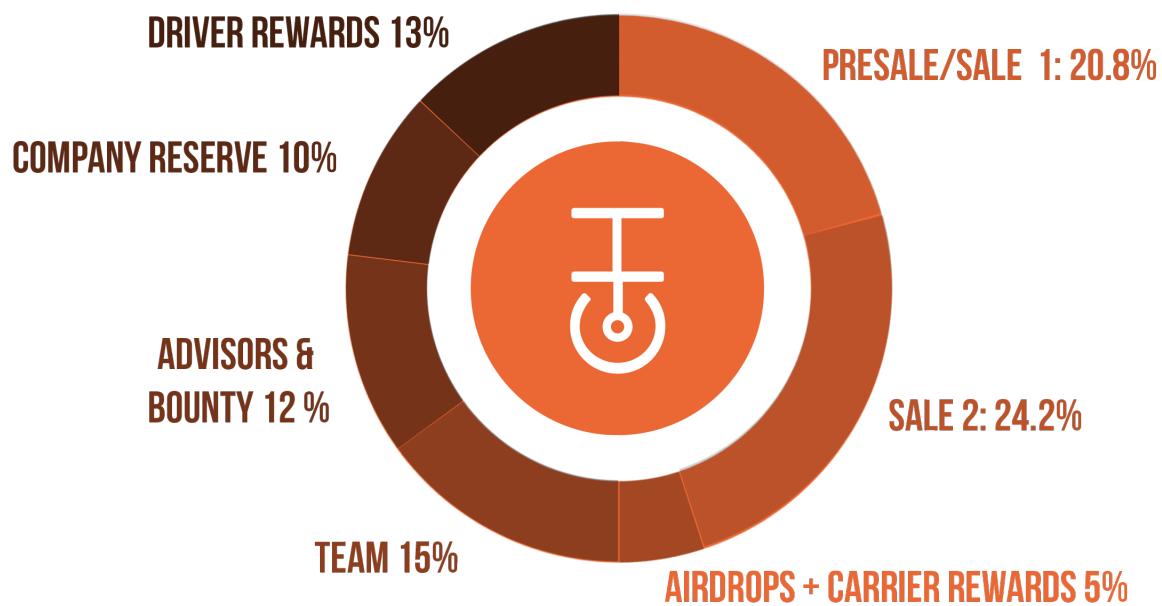
Initial Token Generation Event

The problems ShipChain will tackle are systemic to a multi-trillion dollar industry, one historically slow moving and resistant to change. We have plans for delivering our offering on our current funding, but bringing our full vision to life is a huge endeavor and would be best served by opening ourselves to outside funding. Therefore we are running a Token Generation Event or "TGE" to sell an initial supply of our tokens in order to jumpstart the ShipChain economy and supplement funding to help us deliver the best product possible.

This 'TGE' will occur in multiple phases, including Pre-Sale, Sale 1, and Sale 2. Pre-Sale and Sale 1 will occur immediately, ending after January 2018. Sale 2 will occur upon the completion of several milestones, including the live use of our web platform, version 1.0 of our full tracking system, and generation of live revenues with real client shipments. We anticipate Sale 2 will occur between 1-2 years after Sale 1.

	PRE-SALE	SALE 1	SALE 2
WHO?	Private	Public	Public
WHEN?	November 2017	January 2018	Upon milestone completion
HOW MANY?	Up to 75 million SHIP	29.17 million SHIP	120.83 million SHIP
RAISE AMOUNT(USD)	Up to \$20 million	Approximately \$10 million USD in ETH	As determined by auction/market price at time
PER-PARTICIPANT LIMITS	\$25,000 up to \$5 million	\$10 up to \$1 million	\$10 up to \$1 million

Anyone interested in participating in our crowdsale must undergo typical screening processes to comply with KYC/AML "Know Your Customer" and "Anti-Money-Laundering" regulations.



Good Driver Initiatives

ShipChain is committed to making the world a better place and protecting the environment from the harmful effects of greenhouse gas emissions. Our plan includes a retainer of 13% of the total supply of tokens to be distributed over 5 or more years as incentives for ecologically responsible driving at safe speeds. By offering these rewards, we ensure that the safe and timely delivery of goods is the top priority for everyone.



EXAMPLE USER STORIES

In order to illustrate some cases where ShipChain might be most useful, we've invented a few fictional stories about made-up companies – based on real problems faced by thousands of similar businesses across the world. Any similarities to actual brands and trademarks are either innocent coincidences or systemic commonalities

The Major Food Production Company

Chik-A-Burg Meats is facing increasing regulatory burden from the USDA and FDA with harsh fines and penalties for non-compliance, requiring end-to-end tracking of anything that touches the food supply. New rules in the Food Safety Modernization Act say that livestock feed must be traced from farm to trough, food products must be tracked throughout the supply chain, and all transport trailers need audit logs of their prior loads and cleaning histories. Larger third-party freight companies are hesitant to comply, which forces Chik-A-Burg to hire mostly independent drivers who feel overburdened by this new litany of checks and measures.

Enter ShipChain: a novel blockchain solution that allows Chik-A-Burg to instantly find and connect with drivers and carriers who meet their regulatory needs. The loads previously carried in their trucks can be verified as not hazardous waste, medical equipment, nor other non-compliant materials – without revealing sensitive information about previous clients – validating that the loads would comply with food supply chain safety mandates. Using the ShipChain Prime side-chain for granular tracking, RFID and barcodes can be combined with ELD integrations allowing full traceability and visibility of supply, literally from farm to table. Retailers, carriers, and customers alike can all validate the source farm, lot number, distribution center, port information, and even individual trailer on a burger-by-burger basis. If a closer audit is needed, regulatory authorities can be provided a set of private encryption keys allowing them access to the full history of a given trailer's loads and hauls.

The eCommerce Retailer

AmazingSocks.club needs to ship a container of fleece footwear from the supplier in China to their warehouse in Chicago, but they won't use a broker because of bad experiences with dishonest intermediaries charging 50% fees just to lose their shipments. Instead, they have hired Steve, full-time (plus nights and weekends) staff member whose only job is to research carriers and plan the logistics of moving socks around the globe. Steve is a highly skilled logistics professional, but due to the time involved in planning ships across the ocean, consulting with customs at the port, and negotiating with independent owner-operators, his role is now the bottleneck preventing AmazingSocks from scaling up to meet the Christmas rush and have a record Q4. Now management needs to hire a second Steve, which will push logistics to over 12% of sock company's payroll.

ShipChain can help. Using ShipChain Web, Steve can fill the role of a mega shipping broker, using our advanced interface to search and filter compatible sea freight, customs agents, and schedule handoffs between multiple drivers. He can quickly find and match any combination of drivers and freighters to meet his needs based on pricing, speed or freight class – or he can request bids from operators not on

the marketplace. Once Steve is satisfied with all the data available on the website in front of him, he clicks "Create Contract And Pay", charging the company credit card and placing the full manifest on the blockchain. Now one Steve can do the job of four, moving more socks faster and eating dinner with his family instead of waiting on hold.

The Freelance Freight Broker

A co-op of a dozen owner-operators in the southeast has grouped together to handle booking and coordination of freight amongst themselves, eschewing carrier. After several years of informally calling one another to ask about availability and scheduling, a broken leg accident took Alice off the road, and she began organizing handoffs from a hotel room in Atlanta. Having her as a broker was quickly decided to be a crucial improvement to their partnership.

Today, Alice uses ShipChain to manage her associates' hauls. She can oversee all the drivers in her co-op, match new work to the best available drivers, and she always has access to compliance and regulatory paperwork whenever necessary. Everybody knows where they're going and what they are hauling. If there's a problem with a driver, or they need to schedule time off, Alice can find supplemental trusted drivers in the ShipChain marketplace to fill in the gaps or take over a route. Even better, Alice is now able to identify problems in the team by insights into historical data, and can help encourage everyone to drive safer and slower, not only to extend their lifespan but also to maximize profitability from the ShipChain Safe Driving Rewards.

The Clever Mega-Broker

Box2U is one of the leading European shipping brokers, they deal with hundreds of carriers that manage thousands of drivers, delivering millions of containers (worth billions of dollars) each year. Aware of shrinking margins, obligations to customers demanding faster and cheaper deliveries, and the problems inherent with the tracking systems used by many of their partners, Box2U began development on an advanced Web 2.0 platform for shippers to keep better track of their assets. The bad news? They started building it 4 years ago, and today the system is only barely ready to use. Drivers and carriers aren't voluntarily submitting accurate data, and the whole project seems like a dead end and sunk cost.

Box2U knows it is not a software company. After sinking millions of dollars into a problem that is rapidly proving to be out-of-scope for their business model, management notices a use-case just like this described on the ShipChain website. The ShipChain API is a fast, cheap and secure ledger for storing all their shipment data, plus trustless escrow contracts and ELD integrations – it's everything Box2U has been trying to build and more. Since the whole system is built using blockchain technology in a free and open manner, even a competitor like Box2U is able leverage ShipChain technologies to power their own branded interface for managing freight.

TEAM



John Monarch - Chief Executive Officer

John is the founder and CEO of Direct Outbound, one of the fastest growing fulfillment/3PL companies in the country, and one of the largest in the Southeast United States. He is intimately familiar with the logistics industry in all aspects, from postal logistics and parcel private carriers to air, sea, and intermodal land freight.



Lee Bailey - Chief Technical Officer

Full-stack developer, blockchain consultant and entrepreneur for 11 years. Lee has experience architecting, securing and deploying distributed processing systems, including analytics toolsets for high budget advertising agencies, smart contracts for a variety of decentralized applications, and a high speed cryptocurrency trading platform.



Brian D. Evans - Chief Marketing Officer

Brian is an Inc. 500 Entrepreneur, the founder of the 25th fastest growing advertising and marketing agency in America, and the founder of Influencive.com. Brian has spent over 15 years in online advertising and directly helped multiple top-10 apps acquire millions of users. He was ranked as one of the top influencers in the world on Forbes, and as the 4th most influential business journalist in the world with columns on Inc, Huffington Post, Influencive, and Forbes, which are read by millions monthly.



Sam Rusani - Chief Revenue Officer

As a serial entrepreneur, blockchain advocate/investor, and talent manager, Sam has worked with some of the biggest brands in the world, such as Sony, Fender, Virgin, Universal Music, Ogilvy, Heineken, VISA, and Mercedes. He has also advised international companies and negotiated trade deals on their behalf.



Roger Crook - Chief Strategy Officer

Roger is the former CEO, and Global Head of Sales and e-Commerce at DHL Global Forwarding. He is an entrepreneur, disruptor and independent strategist in FinTech, LogisticsTech, and Logistics including blockchain/cryptocurrencies. He was employed in the Deutsche Post DHL Group since 1988 and has successfully worked in North and South America, Europe, Middle East, Africa and Asia. Roger was the innovator behind many important customers and business units at DHL. He is also currently the CEO of Capital Springboard.

**Magnus Dufwa - Lead Developer, EU**

Magnus is a senior C#, SQL and Solidity developer with over 18 years experience developing enterprise projects. He has built and managed financial processing systems that handle more than 4 million transactions per year and developed smart contracts for ad auction projects and ICOs.

**Clinton Senkow - VP of Partnerships**

Clinton is the co-founder & COO of Influencive, a media outlet that attracts millions of readers every month. He's held top roles in partnerships, sales, and marketing at various funded startups where he worked with private, public, and Fortune 100 companies. He is also a former financial advisor and a two-time member of the G20 Young Entrepreneurs Alliance, representing Canada.

**Julian Zegelman - Legal Counsel**

Julian is a corporate attorney and a SuperLawyers® award recipient. He co-founded Rolith, Inc., and is currently a Managing Partner at Velton Zegelman PC, a boutique corporate and securities law firm with worldwide offices. Julian's practice focuses on corporate law, securities, VC, and cryptocurrency law. He counsels numerous high-profile token sales and is also a co-founder of BitFin Capital, a blockchain focused VC fund.

**Dallas Meier- VP of Operations**

Dallas comes from the marketing and advertising world, where she handled digital marketing for Skechers, and operations for the Los Angeles based agency Modus Operandi.

**Cherie Aimée - VP of Community Management**

Cherie is a social media strategy advisor, entrepreneur, and former tech CEO. She has over 15 years experience in digital marketing as a lead developer and project manager for startups. She has built and managed projects for some of the biggest brands in the world such as Unilever, Mars, and Heineken. Cherie currently sits on the Executive Advisory Council for the Board of Directors, Columbia University Medical Center. She is also VIP Partner to Influencive and Contributor to Thrive Global.

ADVISORS

To modernize one of the largest industries on the planet, we have recruited a hands-on advisory board who will actively contribute their expertise along with our core team members.



Chris Perdue

Chris is a 4th generation family owner and spokesperson for Perdue Farms, and the Director of Inventory Management at Perdue Agribusiness. Perdue Agribusiness ranks among the top grain companies in the United States, with annual sales in excess of \$6 billion. Chris has funded and advised a variety of startups, and spent nearly a decade in the Advertising and Marketing industries.



Kevin Harrington

Kevin is the inventor of the infomercial, original Shark on Shark Tank, and pioneer of the 'As Seen On TV' industry. He has launched over 500 products, resulting in more than \$5 Billion in sales worldwide with iconic brands. Kevin is also a co-founder of EO (Entrepreneurs Organization), and currently operates a private consulting firm where he helps companies increase distribution, analyze opportunities, build celebrity relationships, and effectively market across all channels.



Al Pettenato

Al is a change-minded leader with proven success in driving best practices across all areas of the supply chain. He has been the Vice President of XPO Logistics since 2012. Al previously served as the Senior Vice President of North America for DHL, and was also the Co-founder and Vice President of AMP Global Services. He has over 20 years of diverse management experience.



Steve Schoch

Steve is a proven finance and operations leader for major corporations. He formerly served as the concurrent CEO and CFO of Miramax Films for five years, through January 2017. Prior to joining Miramax, he served as the Corporate Controller and divisional CFO at Amgen, Inc., the world's largest biotech company, where he drove revenue from \$4bn to over \$15bn. Steve also previously served as CFO of eToys, Inc., leading the company to a successful IPO.

**David McCarville**

David is an attorney with prior professional experience managing multi-modal international shipments of nuclear material and sensitive cargo, such as planning transportation and disposal of nuclear waste for the U.S. Department of Energy's Yucca Mountain Project. He has worked in the logistics and transportation Industry in Washington, D.C., Nevada, and Arizona.

**Brandon T. Adams**

Brandon is a motivational speaker and serial entrepreneur, owning a stake in a number of businesses. He is Co-Host and one of two Executive Producers of Ambitious Adventures, recently nominated for an Emmy Award. Brandon is the V.P. of Business Development and an Associate Producer for Think and Grow Rich: The Movie. Brandon is a crowdfunding, branding, PR, and digital marketing expert.

**Derin Cag**

Derin is the founder of Richtopia and has attracted a notable audience including names like Richard Branson and Guy Kawasaki. He is a guest lecturer at INSEEC Group / University of Monaco and an advisor to many blockchain technology startups including Humaniq.

**Bryan Larkin,**

Bryan is a results-driven professional with extensive experience in both Systems and Network Security, Intrusion Detection, DDoS and Active Threat Response Mitigation. He is the Co-Founder of Faction One, a "Cyber Bodyguard" service for VIP's and individuals that are considered "Digital High Value Targets."

**David Andre**

David is a scientist, inventor, and entrepreneur whose work emphasizes the role of machine learning. He co-founded Cerebellum Capital, Inc., where he serves as CEO and CTO. David also advises early-stage companies, especially with respect to artificial intelligence. He has a B.S. in Symbolic Systems from Stanford University, and a Ph.D. in EECS with a focus on Artificial Intelligence from U.C. Berkeley.

**Justin Wu**

Justin is an Information Architect & Growth marketer that has worked with companies such as The Wall Street Journal, Samsung, NASA, and Intel. He is also the founder of Growthly, a growth agency that helps companies build a community around their brand.

**Fred Von Graf**

Fred is a seasoned technology expert who has managed mission critical applications and global teams at a fortune 50 company, led business development at a fortune 20, and founded the ASU Startup Accelerator. He is also the founder of the very successful W3M.io software development firm.

**Joel Comm**

Joel is an Internet pioneer, New York Times best-selling author, professional keynote speaker, social media marketing strategist, technologist, brand influencer, and futurist. He has more than two decades of experience harnessing the power of the web. Joel's fascination with cryptocurrency led him to create a top 100 business podcast with marketing technologist Travis Wright.

**Travis Wright**

Travis is a top marketing technology strategist, author, consultant, keynote speaker, blockchain entrepreneur, data & analytics geek, tech journalist, and growth hacker. He is the former global digital and social strategist at Symantec for the Norton brand. He was a Russian linguist in the US Army Intelligence. Wright is the cofounder & CMO of CCP.Digital, a digital ad & content agency. Travis cohosts a top ranked blockchain podcast, The Bad Crypto Podcast, and VentureBeat's podcast, VB Engage.

**Irish McIntyre**

Irish is a technology veteran with over two decades of Product Management expertise in collaboration, CRM, information security, and taxation software. As VP of Product Management for Thomson Reuters, Irish leads the product team responsible for the ONESOURCE software suite used by Fortune 500 corporations and the Big-4 accounting firms worldwide, spanning global direct taxes, indirect taxes, and global trade management.



Xavier Kochhar

Xavier is a structured data and AI expert. He is the Founder of The Video Genome Project (acquired by Hulu), the personalization engine and largest and most granular structured database of video content metadata. Prior to The VGP, Xavier was Managing Partner at MediaLink, where he helped build the firm into the leading advisory services company in media, advertising, and technology. He was also a senior executive at The Walt Disney Company, the William Morris Agency, and L.E.K. Consulting.



Justin Garcia

Justin is a blockchain project consultant and crypto market analyst. He has over 12 years of experience in the field of eCommerce, digital marketing, and consulting, with expertise in the importing of goods, digital product marketing, and branding. He has a long history of organizing and guiding development and design teams to build successful businesses around imports of electronics and textile products from multiple regions overseas.



Jesse Tevelow

Jesse is a two-time bestselling author, and the co-founder of LaunchTeam, a company that manages marketing campaigns for 7, 8, and 9-figure entrepreneurs. Prior to founding Launchteam, Jesse went through the inaugural class of Techstars and co-founded a game company that leveraged digital currencies to generate millions of dollars in annual revenues.



Simon Bogdanowicz

Simon is a blockchain investor, growth stock investor, and the co-founder of LaunchTeam. He's worked with Fortune 500 companies across a number of industries, including Netflix, UnitedHealth Group, FedEx, Office Depot, Viacom, World Fuel Services, and Raymond James. Simon also worked as a top-tier M&A investment banker for the Royal Bank of Canada.

PARTNERS



Perdue Farms

Perdue Farms is the parent company of Perdue Foods and Perdue AgriBusiness, based in Salisbury, Maryland. Perdue Foods is a major chicken, turkey, and pork processing company in the United States. Perdue AgriBusiness ranks among the top United States grain companies. Annual sales exceed \$6 billion. ShipChain and Perdue Farms will work on a pilot project to implement blockchain technology through key parts of Perdue Farms' supply chain.



Direct Outbound

Direct Outbound Services LLC, is a full service warehousing and fulfillment center headquartered in Greenville, SC. Founded in 2012, the focus is to affordably increase the quality of care for clients. Direct Outbound's focuses include E-commerce, Healthcare, Government, direct to consumer, B2B, retail, and industrial third party logistics services. Direct Outbound has grown into several hundred thousand square feet of warehousing space, ships hundreds of thousands of e-commerce and retail packages per month, and assists numerous government agencies with their shipping and bulk mail needs.

INFLUENCIVE

Influencive

Influencive is a media outlet read by millions of millennials every month, focusing on unconventional thinking, entrepreneurship, marketing, and blockchain. It was recognized by Forbes as "a rapidly growing media empire," and is "one of the fastest growing online publications for millennial entrepreneurs," according to the Huffington Post.



Sweetbridge

Sweetbridge sponsors the development of blockchain-based economic protocols and applications to transform high-friction global supply chains into Liquid Value Networks. The Swiss-based non-profit foundation is gathering interested industry technologists, blockchain projects, and open-source contributors from around the world to form a blockchain alliance. The shared goal is to transform brittle, industrial-era commerce through decentralized industry ecosystems that create a faster, more fair value exchange, unleash working capital, better utilize resources, and optimize talent for the benefit of all participants.



BiTA (Blockchain in Trucking Alliance)

BiTA was formed by technology and transportation executives to develop common standards around blockchain applications in the freight industry. The alliance also promotes education of blockchain technologies and offers a platform for collaboration among influential entities. BiTA's goal is to bring together leading companies in the freight technology industries that have a vested interest in the development of blockchain technology. BiTA members include UPS, FedEx, C.H. Robinson, Coyote, Bridgestone, and others.



Crypto Valley

The Crypto Valley Association is an independent, government-supported organization located in the Swiss canton of Zug. Their mission is to build the world's leading ecosystem for blockchain and cryptographic technologies in Switzerland. Crypto Valley's main focus is in developing and executing a community-driven program targeted at establishing and growing their ecosystem. Crypto Valley is also working to be a bridge between Crypto Valley and the global cryptographic technologies community – building on their already active connections to international centers of blockchain innovation in London, Singapore, Silicon Valley, and New York.

FUNDING & BUDGET

We are committed to spending our funding responsibly. Below are our plans for properly allocating the assets to deliver the best possible solutions, as quickly as possible. We are limiting the total contributions in the crowdfunding to \$30 million USD because we feel taking more money would not be responsible and wouldn't lead to a better product any faster. Below is a preview of our best estimates of what we'll do with any money we raise in the TGE.

Research and Development

ShipChain will be at the cutting edge of blockchain technology, including a full development team for Solidity, as well as our web platform for UI/UX, Frontend, and Backend. We will also bring on hardware and IoT developers to further advance the amount of data that can be tracked. Research into sidechain tech will be done, and the team will consider the acquisition of an existing logistics/trucking company in order to accelerate both the physical development and adoption of the platform.

Operations

Operations and development teams will begin within the United States, but also to support the Perdue pilot program, South America, as well as Asia and Europe to further partner with additional carriers. Support teams to operate hardware and troubleshoot issues will be necessary, and field integrations with legacy systems. Cloud and server infrastructure will be necessary with the web platform.

Marketing Strategy

The ShipChain Foundation is forming alliances in the logistics space with large corporations, small businesses, freight companies, truckers, brand evangelists and other partners, much like the Enterprise Ethereum Alliance did for Ethereum and corporate partnerships. This initiative is an important piece of our strategy, not only from a marketing perspective, but to bolster widespread support of the ecosystem we're building. In the coming months, ShipChain will announce partnerships that will support this effort.

ShipChain's core team and advisors have a combined century of experience in marketing and public relations, many with decades of history advertising for large brands and social media influencers. The team is uniquely equipped, both directly and through relationships, to execute marketing campaigns that will spread our message and secure our brand as a dominant player in the shipping space. ShipChain will advertise on relevant platforms to reach the right people in the shipping and logistics industry.

We will handle P.R. and communications both internally and via 3rd parties, keeping our community constantly updated about developments, initiatives, and new relationships. Our communications strategy consists of press and marketing, but also community engagement through our core team.

Business Development

We will attend both US-based and international conferences to build our network and find new leads. We'll focus more on private 1-on-1 development with US transportation firms. ShipChain will host educational evenings in different cities to attract local business owners and invite them to join our platform.

We will also focus on finding strategic partners internationally, both on a corporate and a political level for quicker implementation and mass adoption. We will have team members on both coasts of the U.S.

To maximize our business development on top of all other efforts, we will also hire at least one team member in Europe to cover a larger geographical area. The team will be able to cover conferences all over the world, meet with more potential strategic partners and customers, and build more relationships.

Legal

Legal is an important aspect for ShipChain. We will retain outside counsel with extensive experience in the transportation industry to begin developing framework for best practices and compliance.

Expanding ShipChain Intellectual Property portfolio as well as the acquisition of key technologies is pivotal. We will retain counsel for Food Safety and Modernization Act review and create proposals for approaching key partners in the industry. We will work with strategic partners to encourage government and administrative bodies to utilize the platform for Proof of Concept testing.

Retaining key personnel to work with the Food and Drug Administration to encourage adoption of blockchain technology is an additional step we will take. We will also continue to develop strategic partnerships with domestic and international partners to help with the proliferation of the platform at both the government and corporate level.

Eventually, we will hire a dedicated lobbyist to encourage adoption of the platform as the industry standard and overall proliferation of blockchain. We will develop additional license agreements for the platform as well.

REVENUE MODEL

ShipChain will employ a two-fold revenue model, focusing on both the Small and Mid-size Business market (SMB), as well as Enterprise platform development. This includes the following:

ShipChain Web

ShipChain's web platform will enable shippers to connect directly to carriers, without the traditional brokerage model. Fees will be a low percentage of the cost of shipping, and ShipChain will avoid having to hire typical telemarketing brokers, keeping the cost of selling at a minimum. This base percentage fee will be the primary income source for ShipChain Web, followed by partnerships for Cargo Insurance, as well as partner value-add services upsold on top of shipments. With a transparent fee system, ShipChain will show shippers the actual cost from the carrier, and how much they save versus the traditional brokerage model. Instant booking will be done, versus the traditional 3-4 day wait period.

ShipChain Enterprise

ShipChain will also develop custom sidechain solutions for large enterprises that need to utilize different data sources and information. ShipChain will do this as a development contractor, with all new side-chains still tying into the main blockchain. This will be custom quoted per client, but will be on the scale of large ERP implementations that routinely run over seven figures.

ROADMAP



FUTURE DEVELOPMENTS

Self-Driving Vehicles

The self-driving revolution is coming, and ShipChain will be prepared for it. Currently, drivers facilitate the handoff and delivery of loads, allowing for a carrier-level security verification at each event. We propose a novel method for preventing cargo theft or mishandling is a combination of RFID tagging, 2D barcoding, plus cargo trailer sensors that communicate with the blockchain. The unauthorized unloading of cargo by receivers will be noted and combined with the geographical data. This information will be publicly verifiable. This method holds receiving and shipping parties accountable for any mis-handled, lost or stolen goods.

Transparency

ShipChain plans to significantly increase the level of transparency in the blockchain space. With community managers working with supporters in public chat and forums, our team also plans to release scheduled quarterly progress reports detailing software development progress, as well as progress on all plans detailed in this whitepaper. These quarterly progress reports will be scheduled after the initial token sale, and include statements from the development team, statements from the operations team, executive overviews, updated timetables, and other pertinent information to the progress of the ShipChain project.

Support of a Common Goal

ShipChain plans to support and encourage a better environmental policy in the freight industry. We strongly support a shift away from heavy polluting “bunker fuel” in sea freight to cleaner natural gas or even electric container ships, the encouragement of freight rail for its high efficiency, the use of fuel economy improving technology and gamification of fuel efficiency in the trucking industry, and the use of AI to reduce fuel usage. Protecting our environment is critical, and the freight industry should constantly work to improve its carbon footprint.

Learn more by visiting shipchain.io

Questions or comments? Email us at hello@shipchain.io