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B-Line Sustainable Urban Delivery: Can Last-Mile Bicycle Delivery Survive The E-Commerce Minefield?

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B-LINE SUSTAINABLE URBAN DELIVERY: CAN LAST-MILE BICYCLE DELIVERY SURVIVE THE E-COMMERCE MINEFIELD?

Prof. Madeleine Pullman (Portland State University), Prof. Jacen Greene (Portland State University), Prof. Wanying Shi (Portland State University), and Stephan Kaplan (Portland State University)

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B-LINE SUSTAINABLE URBAN DELIVERY: CAN LAST-MILE BICYCLE DELIVERY SURVIVE THE E-COMMERCE MINEFIELD?

Abstract

As the population of cities in the western United States continues to boom, the demand for retail and wholesale food has followed suit. To deal with the accompanying increase in traffic and congestion from population and business growth, the city of Portland planned to increase bikeways and reduce the use of single-occupant vehicles to less than 30% of total commuters by 2026. Despite efforts to decrease dependence on vehicles, traffic congestion in Portland continued to increase, and traditional vehicle delivery in the urban area became less and less efficient. As ride-sharing services and online retailers increased their presence in the food delivery business, these activities contributed even more to congestion. Consequently, there was a pressing need for alternative methods of business-to-business delivery options in the food business. B-Line, a certified B Corp, was created to address traffic congestion and decrease vehicular carbon emissions by using cargo tricycles to deliver local food and other products to businesses within the Portland city center. Started in 2009 by Franklin Jones, B-Line offered sustainability-oriented food companies a comprehensive logistics service including warehousing, fulfillment, advertising, and even office space. However, nine years after their first delivery, the company faced challenges from competitors such as Amazon Prime Now, other bicycle delivery firms, and traditional last-mile delivery firms. This case explores the challenges and opportunities of having a sustainability mission in the last mile delivery space.

Case

Introduction

Franklin Jones rode his bike into the warehouse and noked at the empty space, a daily reminder that he needed more clients. As a last-prile viewele delivery company, his business had grown over the years alongside a grouter emphasis on low-carbon transportation, and recently he had expanded his workspace to take on more business delivery clients. Unfortunately, the market had recently transformed as e-commerce firms began offering last-mile delivery by motor vehicles for interesting. He weighed his options on how to combat the competition, and contemplatenchis next steps.

Nearly a decade after a line made their first delivery by tricycle, the company had come to a strategic crossroada. For the first six years, B-line followed a sustainable growth model guided by their mission. Nowner, B-line needed to expand more rapidly to capture increased demand spurred by fast growing residential and commercial urban districts. With the Portland area's economy and population growing rapidly, the commercial sector of Portland needed room for growth will.¹ In order to gain market share, increase profits, and stay true to their mission, p-ineficed several questions that could determine the future of the company:

- How could B-line scale their business model and stay true to their mission while growing to servicing areas outside of downtown Portland?
- How could B-line increase their cash flow and capital needed to expand operations?
- How should B-line compete with Amazon and traditional delivery methods in the lastmile market?

Last-Mile Delivery

Last-mile delivery, the movement of products between a distribution center and the end customer, was the most expensive part of the logistical chain, consuming more than 28% of total delivery cost.² Once bulk products find their way to a regional distribution center, last-mile delivery, which could be a few blocks or more than 100 miles, covered taking individual items to their consumer destinations. Last-mile delivery was generally considered inefficient due to factors such as continuously changing delivery routes and individual item deliveries rather than bulk delivery.³

Continuously Changing Delivery Routes

Unlike upstream logistics, where companies shipped thousands of products in bulk to several distribution centers, last-mile delivery struggled to achieve economies of scale. Last-mile delivery was harder to predict and plan, as final customers did not order as consistently as bulk manufacturers, who often ordered large batches at regular time intervals. In rural areas,

individual package destinations could be many miles apart, creating higher costs for each delivery, as demonstrated by U.S. Postal Services losses on rulal, first-class mail delivery.⁴ The inefficiency of sending a truck into a rural area for a few denomies (i.e., low delivery density) increased the cost of transportation per unit that companies had to absorb. In urban areas, losses from traffic congestion could negate manyof the advantages of multiple, close proximity drop-offs.⁵

Increased Demand for Performance

Today, companies are expected to fill distomer deliveries faster, reduce costs, and still meet sustainability expectations and unsomer satisfaction requirements.⁶ The maximum time customers were willing to van for their package in 2018 was 4.1 days, down from 5.5 days in 2012.⁷ Additionally, more than 64% of customers expected delivery within 1-3 days, and with the introduction of the maximum prime, customers expected increasingly faster and free shipping.⁸ More than 50% officustomers wanted at least next-day shipping without having to pay additional shipping fees.⁹ Because of this trend, businesses were expected to increase shipping volume while still shipping individual parcels to areas with only a few delivery locations per stop and ften without passing extra costs to consumers.

Driver Shortage and Changing Fuel Prices

Other factors affecting last-mile delivery included a decreasing supply of qualified truck drivers and fluctuating fuel prices. After deregulation of the trucking industry in the 1980s, wage stagnation decreased the opportunity for truckers to earn a middle-class income, resulting in a turnover rate of 90%.¹⁰ As a result, the United States had a shortage of 50,000 truck drivers by 2017, a number that was estimated to reach 174,000 by the end of 2026.¹¹ To attract more qualified drivers, trucking companies had to offer competitive wages and benefits to employees, which increased their operating expenses, costs that were later passed on to customers or absorbed by the business. Trucking costs were also affected by fuel prices. Any price fluctuations affected the profitability of transportation services, especially last-mile delivery. For short-term fluctuations, companies often had to absorb the increase in operating costs. For longer-term fluctuations, companies had to decide if they would change their pricing structure, leading to increased prices for customers.¹²

Implications for Other Modes

Because of these challenges, rather than using trucks, bike and car delivery had become a viable option since they could move smaller loads with reduced or no fuel. Additionally, on-demand car delivery tapped into an existing pool of drivers and vehicles from ride-sharing companies such as Uber or Lyft. Some companies were even exploring the use of drones for last-mile delivery. However, strict laws and regulations concerning the use of drones had not yet made this a viable option.¹³

Company History

Franklin Jones founded B-Line Sustainable Urlan helivery in 2009 in an attempt to serve Portland, Oregon's urban core by offering business 10-business (B2B) delivery services within a 3.5-mile radius of the city center (see Exhibit 1). Instead of traditional truck fleets, the company utilized a fleet of electric, pedal-assisted, three-wheeled bicycles called "trikes," with a load capacity of 600 pounds each. (Exhibit 2). By 2018, B-line delivered products to more than 100 destinations within the bord and metro area.¹⁴

The inspiration to us pricices to overcome delivery issues in congested urban areas came from a 6,000-mile bicycle tripUones took from Japan to Ireland. As he rode across Eurasia, he was able to see how basinesses in other countries used bicycles to deliver goods such as bread and mail. Bike use was especially prominent in areas where infrastructure was not developed enough to upport vehicular deliveries. For example, in India, Jones witnessed bike-operated ricksnaws making deliveries for industries that American businesses still relied on inefficient tructs to service.¹⁵ After his trip, Jones saw an opportunity in Portland, Oregon to implement his own logistical network using bicycles as the main mode of transportation.

In a city designed to be people friendly, Jones noticed the city's infrastructure was not sufficient to support the increasing load of local truck deliveries. While the city of Portland was designed for alternative modes of transportation, the high level of vehicle traffic and increasing economic growth had led to severe congestion. By 2016, the city had more than 350 miles of bikeways and 7.2% of commuters used bikes, giving Portland the highest percentage of bike commuters among large American cities. Additionally, Portland's city plan aimed to have 70% of commuters use bicycles 25% of the time, with less than 30% using single occupant vehicles.¹⁶ Jones noticed that despite the city's plan for reducing congestion, B2B deliveries were predominately made by vehicles such as cargo vans and semi-trucks for long hauling, as well as midsized delivery trucks. Many trucks were making deliveries with half–empty loads or toting small parcels that created significant waste such as excessive carbon emissions, traffic congestion, and lost time. Within Portland's central eastside, home to 1,200 businesses that all needed materials to operate, relying on large trucks to efficiently deliver goods was something Jones' concept would circumvent.¹⁷

Jones' sustainable delivery model was first pitched to Portland Roasting Coffee in the form of a bundled service where B-line would not only provide local delivery of goods, but also advertising space on the side of the tricycles. Their model was not necessarily based on cost savings, but offered clients a sustainable alternative to traditional logistics options as well as a good story for sustainability marketing. "For us, sustainability is a huge part of our history and current business, and that is very appealing," said Pata Gilles, Vice President of Operations for Portland Roasting.¹⁸ Though Portland Roasting baid note for B-Line's services then through their own delivery modes, "that 20% premium is easily worth the value we get from knowing we are doing the right thing." These social value added services not only aligned with Portland Roasting's mission, but with the average of 30 deliveries per week that B-Line provided to Portland Roasting, they avoided 986.5 pounds of CO2 and 1,123.2 miles per year of travel compared to traditional delivery netwods.

Business Model

B-Line was a diverse logistics company, not only providing alternative modes of delivery through the use a tricycles, but also providing other services to their customers. With a staff of 20 employees and a fleet of 14 trikes, with seven active at any given time, B-Line offered their customers delivery services, warehousing fulfillment, and advertising. More recently, B-Line had begun to offer leased office space in their warehouse to allow small clients a place to conduct meetings and administrative work (see Exhibit 3 for complete pricing and service oherings).

Delivery

The use of tricycles as B-line's main distribution method allowed them to circumvent the traditional challenges of last-mile delivery and avoid the inefficiencies of traffic congestion within the urban area. Each EcoSpeed trike offered a 600-pound load capacity and more than 55 cubic feet of storage space. The bike's EcoSpeed drive system used dual lithium batteries that provided a range of 40 miles using only one horsepower. This made them "electrically-assisted bicycles" under local law, which allowed them to be used in bike lanes and to take advantage of flexible parking options.¹⁹ Each B-line rider loaded their own trike after each route and rode through downtown Portland utilizing bike lanes to deliver directly to customers' doors, eliminating the need for large truck bays (see Exhibit 4 for trike delivery cost versus traditional delivery costs).

In addition, B-line delivery could avoid complications associated with weather, allowing them to deliver to customers even in severe conditions. All employees were provided with high-quality rain gear, and the design and stability of the trikes allowed deliveries to continue even in winter months.²⁰ B-line only shut their doors four days out of the year, during major holidays.

Advertising

B-line also offered unique advertising and promotional comparises. Each B-line tricycle carried eye-catching advertising space on the side of their cargo bixes (Figure 5). As B-line couriers rode through the streets of Portland, advertisement displays could be seen while stops were being made, allowing advertisements to reach customers directly. Additionally, these advertisements were often used as campaigns for companies utilizing the courier service themselves. B-Line arrived at events and passed out customers' products as part of promotional advertising. Even some companies that did not utilize B-line's fulfillment or delivery services exclusively used 8-line for advertising.

Fulfillment Services

Part of B-line's molel was to offer a modular approach to traditional logistics services for emerging food startups (both traditional food models and social enterprises). B-line offered these businesses warehouse space, including cold storage, and fulfillment services on a simple pay-fo-us model. Their 18,000-square-foot warehouse was managed under a traditional tenant-lesse relationship with the Redd, which was owned by Ecotrust, a sustainability-oriented nonprofit headquartered in Portland.²¹

If a smaller business only needed space to store their products, B-line offered individual pallets within the warehouse for dry good or cold storage. If companies decided that they needed help with other aspects of logistics, B-line could add on delivery and advertising services, as well as aggregated delivery services. As part of their Green Wheels program, B-Line aggregated more than 80 small vendors that supplied a local sustainability-oriented supermarket chain, New Seasons Market. This aggregation avoided the need for each vendor to deliver to multiple New Seasons locations, and allowed B-Line to deliver once per location.

B-Line also offered disaggregation services for larger companies, separating large truckloads into smaller deliveries. For example, Organically Grown Company, an organic produce wholesaler, used B-Line's delivery services for their smaller customers so they didn't have to use less-than-full truckloads to drop off small deliveries.

Sustainability

The use of a trike fleet allowed B-line to fulfill customer delivery needs while reducing their impact on the environment. B-Line measured their success using a metric of *Cost Avoidance,* accounting for diverted vehicle deliveries. By 2018, B-Line diverted an estimated 150,000 vehicle deliveries annually throughout their operations. This directly related to B-line's carbon

emissions reduction metric. In 2015, B-line's use of tricycles avoided an estimated 44,800 lbs. of carbon emissions.²² In addition, B-Line's model allowed cultomers to access their products more quickly with a just-in-time model, delivering to some charts two times per day, allowing them to keep their inventory low and run a more sustainable business.

B-shares

B-shares was a social service activity of bLine that served nonprofit customers such as Sisters of the Road Café, a charity that fed and employed people experiencing homelessness. B-Line partnered with local markets ant organizations within the regional food industry to collect unsellable products (for instance, lightly damaged produce or food just past its "best by" date) and deliver the still-unable materials to their nonprofit customers at a reduced price. For \$20, customers could bur "P Share" that provided two meals as a donation to a person in need and supported B-line inoperating the B-Shares arm of the company. In such a competitive industry, B-line arriggled to sustain their social impact endeavors while still trying to grow their main delivery and fulfillment services. However, coordination with these services allowed B-Line to react their trikes full on the backhaul.

3-Corp Certification

Be line was a certified B Corp. This third-party certification, overseen by the nonprofit organization B Lab, was granted to companies that achieved the highest standards of social and environmental performance as well as public transparency of their activities. The certification covered a three-year period. To obtain the certification, companies had to change their articles of incorporation or governing documents to include a social or environmental purpose, successfully pass the rigorous B Impact Assessment, pay a certification fee, and commit to ongoing transparency and reporting around their social and environmental impacts. More than 2655 companies across 60 countries had achieved certification by 2018 (see Exhibit 6 for certification requirements).²³ B-Line had a total score of nearly 97 points, with their highest score in the "environment" category, one of five major assessment categories that also included "community," "goverance," "workers," and "customers."²⁴ B-Line was also an honoree in the Best for the World Governance category in 2017, demonstrating global leadership in that area.

Key Partners

B-line's mission and operational model created strong partnerships with many organizations. Some of these were tenant or advertising clients, others were both a client and collaborative partner, and one was their landlord and collaborative partner. All of these partnerships influenced B-line's strategy and decision-making in some way.

Ecotrust / The Redd

led in 1991 to "inspire fresh B-line's landlord partner was Ecotrust, an organizati fou thinking that creates economic opportunities, social equity, and environmental well-being" and focused on a geography they called "Salmon Nati n, comprising the historical river runs of Pacific Salmon.²⁵ Ecotrust had both nonprofit for-profit arms of the organization: the nonprofit arm was concerned mainly with research to identify key social and environmental problems, while the for-profit arm invested in programs to address those problems.²⁶ Their projects covered food and farms, foresy, water and watersheds, built environments, oceans and fisheries, as well as climate change. Ecotrust had two commercial buildings, collectively et, that were created as part of their programs aimed at called the Redd on Salm supporting the region conomy. \mathbf{d}

Ecotrust developed the Redd after their research found that midsized farms had trouble getting their produce to institutional buyers. Nathan Kadish, Ecotrust's Director of Investment Strategy, somenarized the issue as follows: "it is easy for individuals to get their hands on local food and learder for big buyers to get their hands on local food." Ecotrust's goal with the Redd was to create a hub for regional farms, ranches, and fisheries to have access to warehouse space, office space, and a location to help them succeed in the food economy.

The Redd comprised a two block, 80,000 square foot campus with two buildings, the West Building and the East Building.²⁷ The West Building included leasable office space, three commercial kitchens, and a warehouse and distribution center. B-Line managed the 18,000 square foot warehouse and distribution center to provide a one-stop center for businesses looking for warehousing, aggregation, and last-mile logistics. As the primary tenant, B-line provided space for more than 40 other companies to store, fulfill, and advertise their products.

The project was originally meant to support regional food companies' connections with the institutional sector. Because they had a tenant relationship rather than a subsidiary relationship with Ecotrust, some aspects of B-Line's client choices did not completely align with Ecotrust's mission. While mid-size food companies such as Carmen Ranch, Iliamna Fish Co, Organically Grown Company, and Table Farm fit the Ecotrust mission, other B-line clients like Office Depot, an office paper and supplies company, would be considered tangential to the mission.

City of Portland

At its inception, B-Line received a loan from Prosper Portland (formerly the Portland Development Commission) which allowed them to purchase three new trikes. Additionally, the nts, Office Depot. The City of City of Portland introduced B-Line to one of their main acu Portland's procurement office submitted a request for proposal in which the city sought an alternative, sustainable delivery source for some of the robice supplies. When questioned what Depot a list of companies that would meet methods would be applicable, the City g ve Office st. Ad itionally, the City was very supportive of Btheir requirements; B-Line was on that Line and their work. They had an understanding that B-Line could use bike lanes, park on the sidewalk, and stay out of loading locks and in return, B-Line riders would run into very few issues from the City. "Where in some other cities, I am sure we would have a ticket any time very little harassment," said Jones. we parked anyplace, [

Delivery Clients

B-line delivered to more than 100 locations in the Portland city center for a varying number of clients. Some vare large clients, such as Office Depot, while others were small and growing companies (a complete list of clients can be seen in Exhibit 7). Carmen Ranch and Office Depot were enables of companies using B-line for various services.

arman Ranch

Carman Ranch was a grass-fed beef company with sales in the Portland and Seattle areas. Their mission was to support regenerative agriculture in the hopes that food grown in the right way could contribute to the ecology of the land as well as those who consume it.²⁸ Carman Ranch had recently moved to distributing their beef to larger customers using HLC, a logistics company. They had previously used B-Line for all of their distribution needs, but due to the lack of inventory management at B-Line, Carman Ranch had been forced to manage all of their own inventory. "It was a nightmare," said Cory Carman, owner of Carman Ranch. "B-Line was always great at deliveries, we just didn't have the capacity to manage our own inventory."²⁹ Carman still relied on B-Line to deliver some of their smaller accounts, as they could provide the services for \$15 per drop compared to HLC's cost of \$30. Carman Ranch also used B-Line for office space in Portland.

Office Depot

Office Depot was a client outside of B-line's typical focus, as they were not part of the food economy. However, Office Depot was one of B-line's larger accounts, representing 5,023 deliveries in 2017 alone.³⁰ When compared to Portland Roasting Coffee's estimated 1,500 deliveries per year as B-Line's second-largest customer, Office Depot represented a critical revenue stream for B-line.

Market Competition

Though the bike delivery business was not an industry of it, own, B-line faced competition from motor vehicle last-mile delivery companies, other bits delivery companies such as Portland Pedal Power, and large corporations such as a mazon.

Courier Industry

The courier industry in the U.S. was boken into two segments: larger couriers and local delivery services. In the large courier industry, the major players were United Parcel Service (UPS) and FedEx Corporation, each holding 54.8% and 23.2% of the market, respectively.³¹ Recently, UPS had begun experimenting with tricycle deliveries in urban areas.³² Independent couriers also offered delivery and item pick up services while providing transportation for goods to individuals; instructions, and businesses. They typically used independent contractors, often workers already part of the local delivery industry, such as those who owned their own delivery vans or trucks.

By contrast, only 1.3% of the \$92 billion industry was considered local deliveries.³³ Here contrasts offered delivery within a limited geographic area to local businesses. This segment diamot service individuals nearly as frequently as the courier industry, but did provide additional services such as warehousing for the B2B model. However, in this model, most warehouses purchased goods from a company, resold them, and delivered them. By contrast, B-Line did not own any of the product they delivered. This segment used a variety of vehicles, depending on transportation needs, and traditionally transported small goods such as groceries and prepared food.

Both segments of the industry serviced different markets, but consumer spending and increased competition influenced both markets. A growth in consumer spending drove individual demand and overall industry revenue, and dropping fuel prices helped maintain low costs to customers. Competition from the United States Postal Service, which offered competitive rates, covered a vast geographical area, and had government support, created additional pressure to hold down costs and threatened the industry when other costs rose.³⁴ More importantly, the introduction of e-commerce retailing created increased demand and competition due to players such as Amazon.com.

Amazon

With Amazon Prime and the introduction of same-day delivery and free two-day shipping, Amazon put major pressure on the courier and local delivery industry to reduce prices in order to maintain their market share. Additionally, Amazon, once a major client of FedEx and UPS, had increasingly internalized their own logistics services.³⁵ Amazon competed not only in the courier industry by acquiring their own fleet of air cargo vehicles, but also in the last-mile delivery operations by hiring its own drivers and contract employees to deliver their packages. This shift was especially threatening to local delivery constanties, since Amazon utilized contractors such as Uber drivers and their own emproves to deliver last-mile packages. The added environmental costs of low-volume deliveries in numerous vehicles was not captured in their business model, and utilizing individual drivers as contractors, rather than employees with benefits and protections, generated idditional social externalities.

Portland Pedal Power

Founded in 2009, Portland Rower (PPP) was a Portland-based local bike delivery company. The difference B-Line and Pedal Power was their target end customers. Been Line delivered B2B, wh e PRP was a delivery service focused on delivering catered goods to end consumers. Petal Power partnered with 68 grocers, restaurants, and retailers to deliver structional and individual customers.³⁶ In addition, Pedal Power offered products to de of their bikes, similar to B-Line. Pedal Power had 14 bikes operating in advertisin wntown Portland (see Exhibits 8 & 9 for PPP Delivery Areas). Though the two the stree of d re started at the same time, Pedal Power had not struggled with expansion nearly as much as B-Line, and was well-positioned to move into the B2B space.

Challenges

Despite support from partners and the community, B-line faced several major challenges as they sought to expand their business.

Undercapitalization

Initially, B-Line grew slowly and operated within their ability to meet local demand for lastmile deliveries with funding from the founder, loans, and convertible notes. After almost ten years, this financing model proved to be a challenge for B-line, especially as demand for alternative delivery increased in the Portland area. B-line struggled to obtain growth funding, perhaps affected by Jones' focus on remaining local. He had even provided advice to potential competitors starting up in other cities. Investments for new bikes and other capital goods were less of a challenge, because B-line could use equipment as collateral. However, the lack of investment for working capital created issues for B-line as they tried to expand their market share.

Growth

Looking to expand their market, B-Line carefully considered the impact of certain growth decisions on the company's mission. In order to expand past their current delivery area, B-Line would have to find another distribution warehouse, upgrade their tricycles, or rely more

heavily on traditional delivery vehicles to meet customer expectations. B-Line could focus solely on finding more customers within their current area or find ways to expand their delivery radius. In July of 2018, B-line's warehouse was 65% full. The estimated a need to hit 85% capacity to be profitable.

Driver wages

As other bike delivery companies enterenthe Potland area and their businesses grew, B-Line faced competition for employees, specificany suitable bike riders. As other companies increased demand for riders, B-Line had to offer more competitive wages to retain their employees, costs later passed prior customers. B-Line was concerned about retaining employees and was considering highing incentives for new employees.

Technology

B-Line's technology systems had developed at a relatively slow pace. As most of B-Line's retained orpitation to labor and operations development, their software and technology systems eid not receive adequate investment. B-Line had begun to integrate a system software to it to adjust with larger companies such as Office Depot and a local university. These larger companies would not take paper invoices like their smaller customers, so B-Line had to haplement e-invoicing systems to serve them.

Partner Relations

Though Ecotrust was technically the landlord for B-Line with a traditional tenant-lessee relationship, at times the two organizations faced conflicting business and mission imperatives. As the Redd was created strictly to provide mid-sized regional food companies access to larger institutional customers (see Exhibit 10), they expressed a dislike for B-Line's use of "boutique Portland foods" to fill warehouse space. "It was never our intention to fill the warehouse with kombucha, coffee, and chai" said Ecotrust's Director of Investment Strategy. "The challenges of the project make it so if B-Line has a kombucha person that wants four pallets in the cooler they're absolutely going to sell (the space) to them."

Conclusion

As Franklin put his bicycle helmet on after a long day at the warehouse, he knew his upcoming decisions would define not just the future of his company, but the impact it would have on the community, the environment, and the overall mission of B-line. He knew B-line needed to expand its market presence in order to compete in the last-mile industry, but he wasn't sure how without sacrificing their environmental and social sustainability values. Should he refocus his business just on delivery and advertising, or was there a way to be profitable by increasing the warehousing, office businesses, and start-up incubator space? How could he compete with

companies such as Portland Pedal Power, who didn't specifically focus on sustainability? What would future strategy changes mean for current stakeholder especially for the relationship with Ecotrust?

Though the answers were not obvious, Franklintelt supported by the strong relationships he had with his employees, clients and partners, the community, and even the city in which he operated. Whatever the future of the last nile industry, Franklin was sure he could find a way to stay sustainable and stay profitable, one CO₂ mitigating delivery at a time.

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Exhibits



Exhibit 3: B-line Pricing Structure



B-line Simple Delivery Cost Breakdown				
Rider Wage (Per Hr.)	\$	14.00		
Routes per day per rider		2.5		
Deliveries per route		7		
Miles per route		12		
Fuel Prices	\$	-		
Days in operation per year		361		

Traditional Truck Delivery Cost Breakdown				
Driver wage	\$	20.42		
Fuel prices (per gallon)	\$	3.20		
Avg. miles Driven		84		
Avg. hours Driven		8		
Total packages	\$	120.00		
Avg. miles per gallon		10.2		

Exþ



Exhibit 5: B-line Advertising and Promotional Events

Corp Certification Requirements

B-Corp Certification Requirements			
Requirement	Description		
B-wnpact Assessment	Companies must complete 200 question assessment based upon company size, sector, and market. The assessment determines what a company does and how they do it. A score of 80 percent is required to be a B-Corp.		
Best Practice Guide	Companies are required to use best practice guide to create goals and a roadmap to improve performance and positive impacts		
One Year of Operations	Assessments require one year of activity to complete		
Disclosure Questionnaire	Companies must complete assessment that identifies negative impacts of material and practices as well as any fines/sections related to the company and partners. These responses do not affect B-impact assessment score but could require companies to report with more transparency		
Meets B-Corp Legal Requirements	 Gives legal protection to directors and offices to consider the interests of all stakeholders, not just shareholders, when making decisions; Creates additional rights for shareholders to hold directors and officers accountable to consider these interests; and Limits the expanded rights to shareholders exclusively. 		
Recertification	Companies are required to recertify every 3 years		
Transparency	Companies are required to publicly share their impact reports online		

Exhibit 7: B-line Client List

B-line/Redd Clients and Partnets					
444 Beverages	Fishpeople	Margalaxy	Pozole to the People		
Airbnb	Flying Fish Co.	Maric / Ach	Quin		
Alexis Foods	GladRags	Mart in Ram n	Rallenti Pasta		
American Soul Brothers	GloryBee Foods	in sla	Real Beauty Foods		
ApotheCraft / Portland Ashwagandha Farm	Goodnuss / Milk Your Nut	Matt Mex pre's	Rising Springs		
Apples to Applesauce	Goodwolf Feering Co.	Milerost 65	ROAM Oatmeal		
Associated Buyers	Grand Central Jakery	Momentum Procurement Group	Rose City Pepperheads		
Betsy's Bar None	Ground Up	New Avenues for Youth	Sacred Summit		
Blue Bus Cultured Foods	Hannah Wallace	New Deal Distillery	Sisters Fruit Co.		
Brady Weber	Hawley Banch	New Seasons Market	Sisters of the Road		
Camas Country Mill	Healt I-Ac. Kombucha	Northwest Cider Association	Souper Natural		
Campfire Farms	Hot ünter	Northwest Food Solutions	Starvation Alley Cranberry Farms		
Carman Ranch	may a Foods	Office Depot / Dynamex	Sunshine Division		
Cattail Creek Lamb	Iggy Foods LLC	One Stripe Chai Co.	Sweet Creek Foods		
Cellar Door Coffee	llian ia Fish Company	Oregon Growers	Tony's Chocolonely		
Clearly Kombucha	Ilwaco Landing Fishermen	Oregon Sea Farms	Tony's Coffee		
Divine Pie	Improper Goods	Oregon Water Kefir / Driftwater	Transistor Beverages		
Douglass Alchemy	Interworks	Organically Grown Company	Treehouse Chocolate		
Dreamboat Coconut	Jacobsen Salt Co.	Our Table Cooperative	Tre-Fin Foods		
Eagle Protect	Julie's Organic	Piraqua Drinks	Trifecta		
Ecotrust Forest Man to lient	Lickety Pops	Portland Paleo	Wild Seafood Exchange		
Eliot's Adult National Stee	Lucky Rabbit Snacks	Portland Roasting Coffee	Yin Yang Naturals		

Artist & Heat Map of Portland Pedal Power Deliveries





Exhibit 9: General Delivery Area for Portland Pedal Power

Exhibit 10: Ecotrust's Mission to Support the Regional Food Economy with the Redd on Salmon



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