MAX: Kickstarting Last-Mile Logistics in Lagos

Anna Waldman-Brown and Georgina Campbell Flatter

One measure of your success... will be the degree to which you build up others who work with you. While building up others, you will build up yourself.

– James E. Casey, Founder of United Parcel Service

In July 2017, Adetayo “Tayo” Bamiduro wove through the crowded streets of Lagos, Nigeria, on a sleek black motorcycle, bypassing the honking cars, buses, and street vendors selling snacks from baskets on their heads to commuters stuck in traffic. Amidst the constant din of the city, Bamiduro contemplated his upcoming meeting with senior management and the presentation he would make on his company’s strategic direction.

Ambition to improve the world had been instilled in Bamiduro from an early age—his father was a professor who leveraged data to address poverty, and his mother was an investor and social advocate. Bamiduro had made it a life goal to develop critical, sustainable infrastructure for the African continent. Through his motorcycle delivery startup MAX (Metro Africa Xpress), Bamiduro and co-founder Chinedu Azodoh, also a Nigerian, were beginning to realize that goal in Lagos.

MAX was paving the way for an ecommerce boom in Lagos by disrupting a decades-old postal system and creating the first reliable way for customers to request same-day delivery of their packages. By providing end-to-end pickup and drop-off, and using their on-demand mobile platform to match motorcyclists with packages for delivery, MAX was solving the most difficult last-mile fulfillment challenges in Lagos, while creating new opportunities for small businesses and motorcycle drivers.

By July 2017, MAX had 25 full-time employees and 66 contract drivers. With US$1–2 million in projected revenue for the year and more than 500 deliveries per day throughout Lagos, the company’s revenue and total number of trips/deliveries were growing at over 20% month over
month. Furthermore, MAX’s motorcycle drivers—strategically branded as “MAX Champions”—had flexible working hours and a reliable full-time income of around US$300 per month. That amount was three to four times the average earnings for independent motorcycle couriers who, lacking MAX’s platform, had to waste far more time driving around to find gigs.

For Bamiduro, MAX’s greatest accomplishment was that the firm had directly created 230 full- and part-time jobs and had enabled the creation of more than 6,000 jobs overall. These employment opportunities came from the fledgling ecommerce firms, cottage food industries, and retail stores that could never have started without MAX’s logistics services. It was also significant that many of these small firms were run by women, given that women rarely had the same opportunities as men when attempting to grow businesses in Lagos.

As Bamiduro bumped along the pockmarked road toward his office, he wondered how MAX could scale up without diminishing its success. He had to decide whether to keep focusing on MAX’s delivery offerings and its new motorcycle taxi business or to branch out into other services. For instance, MAX had developed proprietary standards for mapping locations in Lagos and licensing its drivers—should Bamiduro consider diversifying his business model by licensing these services to the Lagos government or to other private firms?

In addition to defining MAX’s value proposition as the company scaled, Bamiduro also wondered whether it was best to keep these efforts focused in Lagos or to expand into new regions. Was the MAX team ready to grow across Nigeria, across West Africa, and beyond, and to finally build the multinational transportation networks of their dreams? Or would it make more sense to focus on MAX’s strengths and keep growing the business within Lagos, a market they knew well and had yet to saturate?

**Tayo Bamiduro’s Journey**

Bamiduro had long held a passion for both entrepreneurship and digital connection platforms. While studying computer science at the University of Ibadan in Nigeria, he founded the software development firm Trinitech Systems. After graduating in 2005, Bamiduro developed one of Nigeria’s first mobile asset-tracking platforms, which allowed companies to remotely track and disable vehicles. He then spent some time as a consultant, and eventually became a product manager at Nigeria LNG (Liquid Natural Gas), where he launched a process control platform to help scale operations.

Despite his personal successes there, Bamiduro felt frustrated by the oil and gas sector. His company’s mission was to “build a better Nigeria,” but Bamiduro believed that most of the revenue they generated wound up in the hands of inefficient government officials who failed to actually build the infrastructure Nigeria sorely needed. According to economist Yusuf Opeyemi Akinwale’s analysis of Nigeria’s “resource curse,” the oil and gas sector accounted for 95% of the

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country’s export revenue and 76% of its overall government revenue, reflecting the bonanza that started in 1958 when Nigeria’s first oil field sprang up. Unfortunately, the increase in national wealth did not lead to a corresponding leap in national development. Since the 1970s, Nigeria has consistently ranked among the world’s richest 30 countries by GDP, and yet as of 2016 it still ranked 152nd out of 188 countries in the United Nations Human Development Index.

Bamiduro recognized that the key barrier to Nigeria’s development was not a lack of money, but rather a failure to leverage the wealth derived from natural resources in ways that created more, and better, opportunities for Nigerians. Rather than staying to help build a better Nigeria, the most successful Nigerians tended to invest their profits and pursue new business ideas abroad. In contrast, during the 1970s governments and entrepreneurs in resource-poor countries were forced to invest in human capital—and in developing products to serve the local population—because there was no other source of national wealth. The Singaporean government, for instance, invested heavily in education, housing, and other social services while channeling state funds into new businesses, such as shipbuilding and banking, which could provide a regional advantage.

Bamiduro realized that to have a direct impact on Nigeria’s national development, he would have to leave his lucrative job and start his own company. With that goal in mind, and to acquire the entrepreneurial and business skills he needed, in 2013 Bamiduro began a two-year MBA program at MIT Sloan School of Management.

**Ideation and Team Building**

While he was keen on starting a technology business, Bamiduro had not decided on which sector to pursue. His top choices were energy and infrastructure, which he saw as the two biggest challenges impeding Africa’s economic development. During his first year at MIT Sloan, Bamiduro learned everything he could about entrepreneurship, seizing on mentorship resources and other opportunities through hubs like the Martin Trust Center for MIT Entrepreneurship. He also joined an energy startup operating out of the Legatum Center for Development and Entrepreneurship at MIT, a hub for student-entrepreneurs focused on developing-world challenges.

When his wife became pregnant with their first child, however, Bamiduro felt pressured to make more money for his family, so he began interviewing for consulting jobs rather than pursuing more entrepreneurial endeavors. That summer, Bamiduro interned with both the global development consultancy Dalberg in South Africa and the burgeoning ecommerce firm Konga in Lagos. “I did development consulting because I wanted to help solve development problems at scale,” Bamiduro said, “but I found out I’d rather solve problems directly than teach others how to do it.”

While conducting research for Konga to support the development of a framework for last-mile delivery, Bamiduro’s desire to found his own company was reignited. He realized that last-mile delivery

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delivery was a “compelling problem and big opportunity” for scalable innovation and disruption. It struck him as a critical infrastructure need that was “preventing online business growth across every sector.” Additionally, since Nigeria’s small business economy was largely cash based, ecommerce firms also struggled to reconcile online purchases with cash payments upon delivery.

What would happen if all these retailers—mostly small, family-run businesses—could join the global ecommerce boom? Bamiduro saw enormous potential to bring new retailers online across the country, which he later described in a MAX blogpost:

Africa’s leading economy is Nigeria with over US$510 billion in GDP, 170 million consumers, and at least 70 million internet users [about 38% of the overall population]. Nigeria’s retail industry accounts for up to 20% of GDP and is now rapidly moving online, following after the USA, Europe, and Asia. Over the past few years, Nigeria’s online retail industry has topped US$500 million, and is on course to hit US$9 billion by 2020. This growth is being driven by a fast-growing middle class that accounts for almost 28% of the population. This emerging middle class is tech savvy, brand conscious, and happy to shop online. A Terragon Group study from June 2014 showed that 66% of Nigerian internet users had purchased at least one item online [in their lives], and up to 2 million people had shopped on local ecommerce platforms.

This “perfect storm,” Bamiduro concluded, meant that the local fulfillment industry in Nigeria was expected to exceed US$1 billion by 2020.

By the time he returned to MIT Sloan for his second year, Bamiduro’s startup vision had crystallized. He decided against finding a stable consulting job and devoted all his time to building a new company. Having identified the opportunity, he now sought a team to help him figure out the product and business model. Bamiduro pitched his idea to classmates in the Development Ventures course. He also won a Fellowship at the Legatum Center which provided him tuition, travel, and prototyping support, as well as access to mentors and advisors with developing-world experience and the peer support of an incubator-like community. Bamiduro also found other entrepreneurship classes and hackathons to be helpful recruiting grounds where he could survey people’s competencies, skillsets, and working styles.

The key player in Bamiduro’s early team turned out to be fellow Nigerian Chinedu Azodoh, an engineer in the MIT Sloan Master of Finance program. When they first met, Azodoh was already working on his own ecommerce startup, so Bamiduro approached him strategically. “Have you already thought about logistics and last-mile delivery?” Bamiduro asked. “You can’t start a company like Amazon if you don’t have UPS delivery.”

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8 Ibid.
Azodoh considered this carefully. “How about I start off with you,” he suggested, “and then launch my own company later?”

Bamiduro agreed, delighted to have an “absolute winner” like Azodoh onboard who could build financial models in addition to helping with software engineering. Despite his initial aspirations of leaving at some point to start his own company, Azodoh would become the only member of Bamiduro’s starting team to stay on with the company after graduation; he continued serving as the CTO through 2017.

Bamiduro and Azodoh built up their initial team at MIT throughout the fall of 2014, bringing on graduate students Adeyemi Adepetu (Systems Design and Management) and Lillian Chen (MIT Sloan MBA), and undergraduate software engineers George Ezenna and Philip Abel. This team created a full business model and a minimum viable product to connect motorcyclists with customers in need of delivery.

By the time of Bamiduro and Azodoh’s graduation in June 2015, MAX’s team had received mentorship from MIT entrepreneurship faculty in product development, launch strategy, and founder agreements. They also applied to a number of U.S. accelerators that could provide their startup with seed capital, traction, publicity, and connections to funders. MAX ultimately received a US$4,000 grant from the Mastercard Foundation through the Legatum Center, and was accepted into several accelerator programs. They settled on TechStars in New York City, where MAX became the first African startup to participate.

Acceleration and Team- Rebuilding

After graduation, Bamiduro and Azodoh headed to Lagos. TechStars would run from September through December, which gave them a few months on the ground to get their business started before they had to move back to the United States. By August, they had raised US$85,000 in early funding from their friends and family to launch MAX, and they continued to run their new company until September. Then, the founders hired two trusted Nigerian consultants to manage the company on the ground while they headed to New York City for 13 hectic and productive weeks of TechStars. Through this accelerator program, they encountered a global network of entrepreneurs and an enthusiastic investor community. With help from their TechStars mentors, Bamiduro and Azodoh raised US$1 million in 2016 in their first formal seed round.

While at TechStars, potential investors repeatedly told Bamiduro and Azodoh that they considered three things when deciding whether to invest: “Team, team, and team.” Yet, when Bamiduro and Azodoh returned to Lagos, their first few hires did not work out as hoped: The software developers they found were smart guys, said Bamiduro, “but too mercenary.” They were not mission-driven in the same way as MAX’s co-founders, and attempted to maximize personal profits by overcommitting to side projects rather than keeping their focus on MAX. After the founders returned to Lagos, they struggled for several months until finally deciding, in April 2016, to fire their entire engineering core and rebuild the team from scratch. For such a young startup, this was a costly move, though it ultimately proved to be the right decision.
From January through August, Bamiduro and Azodoh managed everything themselves. They even had to learn how to drive motorcycles so they could deliver packages when there were not enough drivers available (Bamiduro still performs occasional deliveries so he can better empathize with his Champions). In addition to package delivery, the co-founders worked to expand their team, recruit motorcyclists, create a new system for training and motivating their drivers, finish the platform development, and drum up business.

Early Challenges

One challenge for the young company was that many of MAX’s earliest delivery customers did not value high-speed deliveries, and so were unwilling to pay extra for MAX’s unique ability to bypass Lagos traffic. Bamiduro and Azodoh decided to focus more of MAX’s efforts on a sector that did care about speed: on-demand food delivery. An early, critical decision was to use some of MAX’s seed funds to acquire the Nigerian food delivery company Easy Appetite. This purchase facilitated the rollout of MAXEats, MAX’s on-demand food delivery arm. Food delivery soon formed the bulk of MAX’s business, and by 2017 they were working with over 30 different restaurants to consistently deliver on their 30-minute delivery promise.

Bamiduro felt that his greatest challenges during that first year of business were mental. Even when things were going well, he said, “I worried about the one percent that wasn’t going well, no matter how good it seemed on the outside.” Bamiduro was tempted to try to solve all the problems at once, rather than prioritize them and concentrate on the most critical. He was eager to see faster growth, but realized he needed to demonstrate more patience. “We don’t all get the hockey-stick graph like Facebook or Google,” Bamiduro lamented.

The Lagos Delivery Landscape

Lagos was notorious for its traffic. It could take three to four hours (and occasionally up to 12 hours) to drive a mere 20 km across the city. Lagos was not a large city by area, but it was urbanizing fast; with 21 million citizens, it competed with Cairo for the most populous city in Africa. As more Nigerians moved into Lagos from rural areas, government-provided infrastructure failed to keep pace. Many of the city’s highways were just as narrow and poorly maintained as they had been before the city’s population boom. Many Lagos bus commuters would wake up before 5am to avoid the worst traffic and then catch up on sleep while their bus chugged along.

The lack of delivery services that could reliably navigate these rivers of traffic was one of the biggest struggles facing small and medium retail firms in Nigeria. Increasingly, delivery challenges plagued ecommerce firms as well. According to Bamiduro’s research, many small firms wanted to sell online but could not depend on the available delivery services, nor could they afford their own fleet to ensure last-mile delivery. Bamiduro pointed out that there was barely enough road to go around as it was, so the prospect of hundreds of small ecommerce companies driving their own delivery fleets would have been a nightmare for everyone anyway. Besides reliable

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delivery, these small firms also faced a related challenge—they did business in cash, and had no way to accept remote payments.

Major courier services, which operated asset-heavy models that were expensive to scale, were only interested in large customers with large bank accounts. That meant the only option left for micro and small retailers was informal delivery, a highly fragmented industry with hundreds of small players, most of whom lacked the operational and technological support required to deliver consistently. Motorcycle delivery in Nigeria was not new—their gas mileage and ability to weave through traffic provided a significant advantage over larger vehicles—but there were incredible inefficiencies in the existing system. For the small-business owner in Lagos, if finding a deliveryman who was both reliable and available proved impossible, the next best option was often to hop onto the back of a motorcycle taxi and make the delivery oneself.

*Figure 1. Traffic in Lagos, Nigeria*

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10 This image was originally posted to Flickr by satanoid at https://www.flickr.com/photos/72476440@N00/4576790507. It was reviewed on September 18, 2014 by FlickreviewR and was confirmed to be licensed under the terms of the cc-by-2.0.
MAX's Business Model

To revolutionize delivery service in Lagos, MAX optimized navigation through intelligent routing algorithms, offered a unique combination of cash and digital payments to suit various customer types, and deployed highly trained and vetted motorcyclists to maneuver safely, but speedily, through traffic.

MAX spent about US$200,000 on developing its own technology platform, which included a customer-facing app and web portal, a Champion app featuring maps and optimized routes through the city, and an admin console. MAX used an external platform called Zendrive for its core technology, although MAX owned all the data it generated. The Champion app combined a Zendrive software development kit with maps and routing from Google Maps. Like Uber or Airbnb, MAX was a two-sided platform marketplace. Customers consisted of the companies and individuals who needed packages delivered on one side, and MAX Champions who provided delivery services on the other side.

MAX collected up-to-date location and acceleration data from all its Champions, which was stored and analyzed by their tech team. This data helped to optimize routes, confirm deliveries, and monitor drivers’ locations to ensure safety and compliance. Most city maps of Lagos were incomplete, and some neighborhoods were what Bamiduro called a “complete black box… you don’t even know which routes are legal!” As a result, MAX decided to develop its own street maps of Lagos and collect GIS (geographic information system) data from all its motorcyclists through sensors in drivers’ smartphones as they used the MAX app. Every time a Champion made a delivery, MAX mapped the chosen route to that location along with traffic conditions, allowing MAX to compile a more accurate map and database of the inconsistent Lagos postal address system. Due to the city’s lack of standardization, housing addresses and street names often changed from one Lagos map to another. MAX used the data it collected to invent more standardized street addresses in order to optimize deliveries. “We’re mapping Africa,” Bamiduro said.

Even from the earliest days of MAX’s development, Bamiduro and Azodoh knew that they wanted to incentivize deliveries through a contractor, commission-based model rather than salaried jobs. This way, less motivated drivers would not make as much as those who worked extra hours or delivered safely and quickly. In fact, due to MAX’s success, Bamiduro began to see several other Nigerian logistics companies copying this model. Also, instead of following the traditional practice of letting deliverymen and delivery customers haggle over fees, MAX introduced predetermined pricing that was completely transparent to both parties. Delivery customers could get pricing estimates on MAX’s website; a package delivery all the way across Lagos, for instance—from northern tip of Alimosho to Victoria Island in the southeast—cost about 2200 Nigerian Naira or US$6.12.

Drivers kept 60–70% of the revenue they generated, and all parties knew that the rest of the revenue went to cover MAX’s operating costs and overhead. By way of comparison, Uber reported that its contracted drivers received 75% of revenue generated in 2017, but Uber drivers noted that high
variable fees and gas charges regularly brought this down to 40–60%, depending on the city and when drivers had signed up.\textsuperscript{11,12}

MAX promised respectability to both sides of its market: Motorcyclists got the social prestige of a respectable job and professional identity (complete with snazzy uniforms), and business customers received reliable and professional service. The company’s stated core values were transparency, integrity, and partnership. MAX’s website promised business customers: “We deliver grade A service to your customers because we know how important they are to you.”\textsuperscript{13}

**Vetting, Branding, and Empowering Drivers**

“If you have the drivers,” said Bamiduro, “the business will come.” Prior to MAX, anyone who needed to make a delivery had to schedule a pickup in advance with one of the thousands of unlicensed couriers who operated throughout Lagos, since there was no way to access delivery jobs on-demand. Customers had no reliable way to keep track of their deliveries, so they often had to guess which drivers would actually deliver packages to their destinations rather than running off with the goods. According to Bamiduro, motorcyclists, or *okada*, were typically considered among the “lowest citizens of Lagos.” They had a reputation of flouting local traffic laws, most lacked formal driving training, and motorcycles were often used as getaway vehicles for crime.

To gain its customers’ trust, MAX needed to brand its deliverymen as respectable professionals before it could sell delivery services—after all, MAX’s Champions were literally the face of the company. MAX advertised that its drivers “don’t just come in off the street,” and used aesthetic branding and delivery uniforms to highlight the professional nature of MAX Champions.

Bamiduro knew motorcycle delivery was a tough job. It required focus, attention, and discipline to efficiently deliver five or six packages in up to eight hours of non-stop driving through congested streets. The MAX team had committed to making the delivery process as safe and painless as possible for its drivers. They also strove to provide competitive wages and to cultivate a sense of professional pride. MAX paid Champions per delivery, with pricing based purely on distance traveled. Champions typically came from poor backgrounds, often from outside of Lagos, and many were fleeing the violence of Boko Haram in the Northeast or escaping from poverty in southern Nigeria.

Champion Jacob Joseph, for example, hailed from Chibok—the town where, in 2014, a group of 276 female students were kidnapped by Boko Haram insurgents. Like many of his neighbors, Joseph had fled his home in search of safety and economic opportunity for his family. He had landed a part-time delivery job in Lagos, but the company closed down their delivery services, so he applied to work at MAX, passed the rigorous evaluation, and after a week of training joined the growing fleet of Champions. Bamiduro and Azodoh quickly grew impressed by his exceptional attitude and work ethic, as he had been recognized as Employee of the Month several times. Jacob

was especially grateful for the mentorship he received from Bamiduro and Azodoh, who “groom you to make the best version of you. I can now afford basic life amenities and take care of myself and my family. This is why I am a MAX Champion.”

*Figure 2. Featured MAX Champion Jacob Joseph*

Anyone interested in becoming a MAX Champion went through a rigorous screening process and training program. Only 10% of drivers passed MAX’s hour-long psychometric test, which gauged reliability, professional attitude, and trustworthiness through questions about motivation and customer service. MAX used machine learning techniques to continuously improve its psychometric test, ensuring that the company was rating personality traits that directly mapped to driver performance and safety. Those who passed this test then had to complete a two-day training program on MAX culture, customer interactions, safety, traffic rules, and personal grooming, after which they would become full MAX Champions and be eligible for delivery contracts. MAX provided smartphones to all its drivers as well as training in proper use of the MAX app.

MAX needed to ensure both safety and legality of vehicles in order to maintain its reputation, especially since (as Bamiduro noted) over 98% of motorcycles driven around Lagos would not have met government standards for business use. Many Champions joined MAX with their own bikes, which had to be vetted and occasionally refurbished before business use. Since a motorcycle was one of the best ways to travel around Lagos, even outside of work hours, Bamiduro determined that all drivers should eventually own their bikes for personal use, rather than borrowing company vehicles just for the working day. MAX implemented an interest-free asset-financing scheme for Champions who joined without their own bikes. As a result, most Champions owned their motorcycles after 12–18 months of working for MAX.

Bamiduro decided against the convention of bulky, permanent boxes on MAX’s delivery motorcycles, a practice which would have limited drivers’ personal use of the motorcycles outside of deliveries and reduced their incentive to eventually own them. Instead, Bamiduro used some of his initial grant funding to commission stylish MAX delivery bags for his Champions. He also helped create uniforms with a futuristic superhero vibe (partly inspired by the sci-fi movie *Tron*), including padded black leather jackets and bright red helmets. Bamiduro said these backpacks and
uniforms turned out to be so eye-catching that pedestrians would often stop Champions along their routes just to take photos with them.

According to MAX Champion Joseph, this powerful branding was no small point of honor among drivers: “My name is Jacob Joseph. My job title is ‘Champion.’”

*Figure 3. A uniformed MAX Champion*

Source: MAX.

When MAX first launched, its drivers earned about US$20 per month. By 2017, the average was over US$300 per month, more than four times the average income of other motorcycle deliverymen in the city. This far exceeded Bamiduro’s initial goal. He had wanted Champions to generate twice the average income of drivers in Lagos which, in his estimation, would enable them to send their children to better schools and improve their family’s future. The number of hours that Champions worked varied, but MAX strove to provide the equivalent of full-time hours to anyone who wanted it. According to Bamiduro, the average informal motorcycle deliveryman, by contrast, was only employed at about 50% capacity.

Although Champions were hired on a contractual basis, MAX treated them more like full-time employees. Unlike the minimal insurance and health coverage typically given to contracted drivers through services like Uber, MAX’s drivers received full healthcare plans and insurance packages. According to Joseph, the Champions valued the safety and security MAX provided its employees. “There was a time my wife fell sick,” Joseph said, “and [Azodoh] sent some money to

me [and] said I should take care of my family.” Another time, when Joseph had an accident, MAX covered the entire medical bill (as was company policy) and sent someone to the hospital to check on him. “It made me want to work harder and harder,” Joseph said. MAX also provided all its workers with complete motorcycle and theft insurance to protect against accidents or robberies. To keep Champions motivated, MAX gave rewards to anyone whose tenure with the company reached six months, one year, and other milestones. Loyalty awards were more commonly associated with white-collar jobs, so MAX Champions felt especially proud to be recognized within their profession.

Bamiduro believed that the company’s housing, food, and support increased MAX drivers’ safety, productivity, and camaraderie. The MAX “campus” featured cleaning services, 24/7 electricity, high-speed internet, and a subsidized cafeteria. MAX also provided occasional beds on campus during the week for its drivers. Since it could take some motorcyclists up to three hours to get home after a full day of work, the availability of dorms reduced the risk of accidents caused by overly tired drivers.

Bamiduro also supported his Champions by personally building relationships with law enforcement officers. Due to the high levels of motorcycle-facilitated crime, MAX’s drivers would occasionally get arrested on false suspicions. Whenever a Champion was arrested, Bamiduro would meet the cop in person to tell him about MAX and explain that the motorcyclist in question was a highly trained and vetted driver. Bamiduro would befriend many of the cops that he met, and would contact these allies whenever he needed help appealing to other police officers who were less familiar with MAX. Bamiduro said he did this “thousands of times,” and built up quite the contact list of Lagos cops. He stressed that all relationships with law enforcement were legal and aboveboard, and that MAX took a very firm stance against paying or accepting bribes.

The longer he worked with MAX Champions, the more Bamiduro appreciated the value of mutual loyalty. In August 2016, Champions increasingly complained to Azodoh and Bamiduro about one particular delivery customer whose employees cursed at drivers and generally treated them poorly. Unfortunately, this customer also made up about 25–30% of all MAX’s deliveries at the time. Initially, Bamiduro did not feel MAX could afford to drop the customer, so he told his Champions to try and not take the poor treatment personally, that it was “just business.” He also tried speaking to the customer directly, in an attempt to improve the situation. Despite unwavering professionalism from the Champions, the abuse persisted. Seeing the demoralizing effect this abuse had on his drivers, Bamiduro finally decided to drop the customer and deal with the lower delivery volumes. It was difficult at first, but Bamiduro insisted he had no regrets. “It’s not just about the people who need your service,” he said, “but also those who will respect your values!”

Such loyalty from their leadership was a source of great pride to the Champions. For instance, one of MAX’s better-educated Champions turned down an opportunity to make more money at a different job, partly because he did not want to lose the flexibility he had with MAX, but mostly because he valued MAX’s dedicated interest in his personal development.

As of June 2017, all but a few of MAX’s Champions had stayed on since being hired, and only seven out of 25 full-time employees had left; Bamiduro noted that MAX’s retention rate was unusually high for a Nigerian technology company. Some of MAX’s software engineers could
have easily found higher-paying jobs working for traditional companies like banks and multinationals, but they chose to stay with MAX because they believed in its mission. In addition to creating jobs for drivers and small businesses, Bamiduro wanted to create job creators, and inspire future Nigerian entrepreneurs to build high-impact businesses. Despite MAX’s high retention rate, Bamiduro hoped that many of MAX’s technical employees would quit after a few years to pursue their own entrepreneurial ventures, and then join MAX as business partners in building up Nigerian infrastructure.

Diversifying Customers and Services

The early decision by Bamiduro and Azodoh to direct more of MAX’s resources and efforts toward on-demand food delivery—a sector that highly valued MAX’s delivery speed—seemed to be paying off, and by 2017, 80% of MAX deliveries came from restaurants and made-to-order food companies. The other 20% of deliveries were split between business-to-consumer (B2C), which were generally one-off errands, and business-to-business (B2B). MAXGo for personal transportation was also just getting started. Since MAX’s platform was scalable, the company could provide both B2B and B2C services with only minor modifications. MAX’s services to businesses and to individual consumers are detailed in Table 1 below.
### Table 1. MAX’s customers

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<th>Business to Business (B2B)</th>
<th>MAXEats</th>
<th>Restaurants and made-to-order food companies</th>
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<td>MAXEats</td>
<td>provided on-demand, real-time deliveries of food throughout Lagos (see Figure 4 for the customer portal). The MAX team preferred that customers use MAX’s mobile app, but they also used WhatsApp and SMS for restaurants and customers without internet. To improve MAXEats’ service offerings, Bamiduro even helped some restaurants install internet routers and set up Wi-Fi. Food could get cold or soggy quickly, so MAXEats promised 30-minute deliveries. MAXEats also helped informal food providers grow their businesses in a new way; since starting a full restaurant was capital-intensive and risky, it was easier to begin by selling food from one’s own kitchen, then scaling up as demand grew. Café Neo, for example, was a coffee chain that contracted with MAX for deliveries throughout the city.</td>
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| Ecommerce contracting bulk deliveries | Firms selling goods online (Bamiduro called these “Amazon clones”) needed a system to intelligently match delivery orders with Champions. Most of these firms contracted directly with MAX and used the MAX Business online portal to manage deliveries (see Figure 5). MAX would send a team of Champions to pick up all the packages for the day from some central location, before delivering them directly to end consumers. For this service, MAX guaranteed three-hour rush delivery for anywhere within Lagos. |

| Brick & Mortar/ Home Businesses requesting on-demand deliveries | The bulk of this customer segment consisted of healthcare providers who contracted with MAX to move goods from their suppliers to pharmacies and hospitals. Small firms interested in ecommerce also used MAX to perform their own deliveries, since building and running a small shop could be very expensive for home businesses. Instead, it was often cheaper for small firms to advertise online and then sell in bulk through a delivery provider like MAX. Some companies also preferred producing goods to order rather than stocking inventory, which could be facilitated through ecommerce. |

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<th>Business to Consumer (B2C)</th>
<th>MAXGo Transportation services</th>
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<td>One-off deliveries</td>
<td>MAX could take care of any individual who needed something picked up and delivered within Lagos on demand. MAX champions securely carried important forms, forgotten packages, and even wads of cash around the city (see Figure 6 for a screenshot).</td>
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| MAXGo Transportation services | Given the time it takes to travel in Lagos via bus or car, catching a ride on the back of a motorcycle was an appealing option for people who needed to move quickly around the city. All Champions who provided MAXGo rides had to be particularly cautious drivers. According to the MAX blog, these particular Champions would bring along an extra helmet, hand wipes, and a hairnet for “the slay queens (we don’t want you messing up your hair).” |
Figure 4. Easy Appetite screenshot for customers (now powered by MAXEats)

Source: MAX.

Figure 5. MAX’s B2B portal launch page

Source: MAX.
To protect delivery customers, MAX provided them with complete theft and property insurance as well as guaranteed delivery times. If a delivery failed to arrive on time, it was free and MAX would eat the expense. Although insurance raised the costs of deliveries considerably, customers were willing to pay extra for MAX’s reliability and reduced risk.

MAX solved the difficulty of working with the cash-based small business economy through an unusual combination of cash and digital payments. Through its online portal, MAX charged B2B delivery customers in advance, with prices pre-determined based on location and bulk. Many signed long-term contracts with MAX, and agreed upon prices far in advance. MAX’s B2C customers typically received price quotes as soon as they requested delivery, and paid with cash upon receiving goods. Champions turned over all cash to MAX headquarters at the end of the day, and then got paid for their services digitally. For refunds, MAX used an e-wallet system.

Maximizing Impact: What’s Next?

Bamiduro biked around a dense bottleneck of honking cars to arrive at MAX headquarters. He hopped off his bike, lowered his kickstand, and tucked his helmet under his arm. Now that MAX was successfully revolutionizing logistics and empowering people at the local level, how could Bamiduro’s team remain successful as the company expanded? Walking up to his office, Bamiduro considered the options he would present to his executive team, which consisted of Azodoh (MAX’s CTO), the head of growth, and the head of engineering.

In Bamiduro’s words, MAX’s core mission was to become “a profitable business that empowers people.” If MAX achieved profitability without lifting people out of poverty or creating sustainable
value for Nigeria, Bamiduro and Azodoh would both consider their venture a failure. This mission was reflected in MAX’s internal impact metrics, which included the number of Champions, full-time and part-time jobs created (across both Champions and small businesses), company profitability, employee and contractor retention, and the number of packages safely delivered. Bamiduro had once said in an NPR interview, “The only way to eliminate poverty is to give people an opportunity to earn their money, not get handouts or freebies.”

To create more economic growth for MAX’s delivery customers and Champions, Bamiduro would have to keep growing his company. He wanted to continue building logistical infrastructure for the African continent through whatever products and localities made the most sense for MAX. Bamiduro described his goals to Disrupt Africa: “to unlock hyperlocal retail across Africa, and operate in 50 African cities with a network of 20,000 drivers, delivering packages for one million businesses and 100 million users by 2020.”

But what was the best way to achieve this scale? Were food deliveries, retail, and personal transportation the right sectors, and could MAX continue to target all three at once? Bamiduro and Azodoh had identified a few options for new business propositions, including selling MAX’s mapping data and motorcycle licensing services to the Lagos city government.

Also, where should MAX focus its efforts geographically? Bamiduro’s team had already received representatives from Senegal, Egypt, Morocco, and Côte d’Ivoire, all of whom were eager to hear more about MAX’s business model so that they might implement something similar (or perhaps even partner with MAX) in their own countries.

The challenge for MAX as a delivery company was to ensure that demand and supply scaled simultaneously. Onboarding new, reliable Champions only cost about US$30 (excluding gear), but finding good drivers was a difficult and time-consuming process. MAX regularly had more requests for deliveries than it had Champions. In fact, Bamiduro recently had to move his sales team from large-scale ecommerce platforms to SME growth, because they’d been too successful at marketing MAX’s services and drivers were unable to keep up with rising delivery requests. No matter which option they chose, Bamiduro and his team would need to focus efforts on expanding MAX’s network of drivers before they could onboard new delivery customers.

Bamiduro shed his leather jacket and walked into his meeting, straightening his tie. Despite the heavy choices ahead, he felt his team was well positioned for success, whether they decided to focus narrowly or expand into new regions and new verticals. Across Africa, ecommerce firms were continuing to grow at record speeds, and all these businesses would need trustworthy logistics in order to build a better continent.

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15 Malaka Gharib, “Neither Rain nor Snow nor Lack of Address Will Stop These Deliverymen,” NPR’s Goats and Soda, April 1, 2016.
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Contact Us for the Free Teaching Note

Are you considering teaching this case? Please contact us at legatum@mit.edu (put “case study” in the subject line) to receive the free Teaching Note that accompanies this case study. The Teaching Note provides detailed questions and frameworks to guide group discussion, for example, “What were MAX’s options for scaling operations?” It also reveals some of the scaling decisions that MAX eventually made.

Finally, we’d love your feedback! We may write case updates in the future and appreciate fellow teachers’ input.