MOZO

The Token of Discovery

Revision 5.1

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Abstract

Foot traffic is important to many types of businesses, particularly retail stores, as greater foot traffic should correlate to higher sales. Driving foot traffic to retail spaces has always been a challenge, however, loyalty programs seem to be an effective way to bring return customers back to the stores. A recent Nielsen consumer study [1] showed that loyalty programs help drive more frequent visits and a greater number of purchases. More than seven in ten global respondents (72%) agreed that, all other factors being equal, they would buy from a retailer with a loyalty program over one without.

While loyalty programs seem to be a promising tool for increasing sales, existing point-based loyalty programs do not work as well as they should. According to Bond Loyalty's Report 2017 [2], more than half of point-based loyalty program participants (57%) don't know their points balance and more than one in three of them (38%) are unaware of the value of their points, let alone how to use them. Single merchant membership reward systems are less effective and valued by consumers and hence not an effective tool for the intended purpose of increasing foot traffic. Hence, the search for a more effective earn-and-redeem loyalty program has been a challenge and subject of extensive studies in the retail industry for years. Now, the search is over.

Breakthroughs in Blockchain technology and IoT offer new ways to attract customers and promise to be the front runner in helping retail stores increase foot traffic and sales. Imagine you have (1) Mozo, a liquid, tradeable, and exchangeable cryptocurrency, at the heart of this new universal loyalty program network, a kind of token that adheres to the well-established and popular Ethereum blockchain network; (2) a digital wallet that can earn and redeem rewards globally and across merchants wherever the internet connects you; and (3) rewards that are offered and collected via a smartphone app that also allows you to discover products and services. With Mozo, consumers are turned into customers driven to retailers that offer and accept Mozo. With that, merchants will have the most effective and efficient loyalty program available, all under a business model that can be best described as the "Token of Discovery".

This paper explores a powerful way to couple human's innate curiosity and Mozo's incentive process to create a frictionless Token of Discovery system for the retail industry.

Problems with Present-Day Loyalty Programs

The main problem with present-day loyalty programs is that an overly large percentage of their points, coupons, and vouchers pile up but are never used. According to Bond Loyalty's Report 2017 [2], an estimated US$100 Billion equivalent in points are unredeemed by members in the USA alone. Therefore, loyalty programs are often under-valued by the program provider's target customers. In this section, we will discuss why such problems have occurred and how it negatively affects foot traffic. In particular, we will examine the basic pain points facing both the consumers using loyalty programs and the merchants running these programs.

Today, a typical consumer has too many single merchant point-based loyalty programs, in other words, too many plastic or paper cards. Further, loyalty points in those cards are far too often unredeemable across merchants. Over the years, the battle for loyalty has led to issuance of too many cards (credit cards, airline mileage cards, hotel loyalty cards, retailer's VIP member discount cards, to name a few) that seem to fatten one's wallet or purse until their lack of use relegates them to a drawer to collect dust. Research shows that an average consumer subscribes to approximately 29 membership programs.

While the number of loyalty cards grew quickly and thickened in the wallets and purses (this inconvenience being one pain point), consumers were not able to redeem their points across merchants due to differences in policy, terms and conditions of use, point valuations, and lack of coordination among merchants. What consumers really seek is, for example, to earn points at a hotel or restaurant and redeem them at a coffee shop or sportswear store, without strings attached. But this would be a nightmare to integrate all these loyalty programs together to satisfy this simple and reasonable customer demand. Attempts by certain coalitions has had some *limited* success, as reported by Colloquy [3].

Another pain point is that consumers cannot remember or easily check their point balances or when points will expire. According to [2], more than half of point-based loyalty program participants (57%) don't know their point balances. This is an intrinsic problem with the point-based loyalty program. Current loyalty programs sound good and their intended purpose has real merit, but the implementation does not work for most consumers. Each of the loyalty program providers sets its own policies, terms and conditions, and valuations that invariably differ from one another. Consumers will have to either remember or relearn their loyalty point balances by (a) calling the relevant card center, (b) searching for the next statement email in the computer, or (c) logging into a website to read the fine details associated with their reward points. Worse yet, often times they discover that the points have expired after an unused period.

Another significant problem with present-day loyalty programs is that consumers don't know what their points are worth. According to [2], more than one in three of loyalty members (38%) are unaware of their point(s) value, making redemption far more difficult. Simply put, loyalty points regularly accumulate but much less often get redeemed. As a consequence, point-based loyalty programs largely fail to attract incremental foot traffic to the stores of merchants offering such programs. One can explain that the point(s) value may be a complex equation when it comes to terms and conditions of redemption at the time the consumer wants to do so, so the redemption opportunity may not be available or the options not so attractive.

Most loyalty programs available in the market do not allow customers to transfer their points to another person. This feature is an obvious and persuasive selling point and would provide a material incentive for participating in such programs. This can also make shopping less attractive when two people shop together.

Some programs do allow some type of transfer, but they do not offer an exchange of points for cash (i.e., fiat currency). It is fair to say that exchange points into cash is a complex exercise both from an accounting treatment, as well as a technical standpoint. For instance, a loyalty member would not know the conversion rate since such rate is set by the loyalty program provider, which is a unilateral decision by the program provider, as there are no supply and demand market forces here. Second, when points are converted to cash, a retailer must account for this and it may affect their profit and loss statement. In summary, present-day loyalty programs are not set up to exchange points or rewards back into cash.

Maintaining a loyalty program is expensive, particularly if you are not a large brand with sufficient financial and human resources. From a technology standpoint, setting up loyalty program means having to create a membership system, to inculcate the membership program into existing marketing programs, and to integrate with customer relationship management, inventory, accounting, and pricing systems.

As some retailers realized that their loyalty programs weren't working out, they opted to pursue alternative advertising and public relation programs to get consumers' attention. The problem is that traditional ad campaigns, such as TV, print ads, are comparatively expensive. Study showed that the customer acquisition cost in traditional advertising is approximately US$100-US$300 and new media, such as email, social media can cost retailers US$10-US$50 for each customer acquisition [5]. There must be a better way to attract foot-traffic than this.

Partly due to the problems described above, merchants have failed to increase foot traffic to their stores and consumers have less motivation to visit offline stores. As a result, foot traffic at shopping malls and stores are on the decline, leading to a wave of mall and store closings. Landlords are scrambling to keep up with the changes. Retailers and landlords are willing to collaborate to find ways to fight downward trends in foot traffic. The key is to come up with a plan to give people a reason to walk around and enjoy the shopping experience instead of staying home and tapping "buy" buttons from a sofa. Physical stores must not only focus on strengthening their core competencies such as strong customer relations, personalized offerings, and expert advice, but also to increase foot traffic to their stores. Only then can they grow again.

New Possibilities

Breakthroughs in Blockchain and IoT technology offer new possibilities for merchants and consumers.

Blockchain is a digitized, decentralized, public ledger of all cryptocurrency transactions. Constantly growing as new completed blocks are added to it in chronological order, it allows market participants to keep track of cryptocurrency transactions in a distributed manner, without central record keeping. One of the most relevant examples is distributed computer networking technology, seen in the adoption of TCP/IP (transmission control protocol/internet protocol), which laid the groundwork for the development of the Internet. Blockchain technology, such as Ethereum, allows us to build peer-to-peer, low-cost, low-energy micropayment services between merchants and consumers, without third party approval (i.e. no middleman).

Imagine you had a token that is liquid, transferrable, and exchangeable cryptocurrency at the heart of this new loyalty program, a kind of token that adheres to the famous Ethereum blockchain global network described above. You basically have a medium of exchange that is far superior to the points in any present-day loyalty program. Suddenly, consumers can earn tokens as a reward instead of points, can redeem tokens at any stores for cash-back, discounts or other rewards, and can exchange for cash if they wish to do so. Now, consumers have motivation to mine the Tokens instead of the points. They will rush to your stores. You can now see a new way to attract foot traffic to your store so might even think about replacing not only your current loyalty programs with the new tokens, but also restructure your advertising budget to include tokens.

Next, imagine you, have a digital wallet that (a) collects tokens as rewards and (b) transfers tokens to any other wallets globally across Ethereum and *Solo* networks, and (c) redeems tokens across merchants in the network. If you are a merchant, you can use the digital wallet to buy tokens from exchanges, airdrop tokens into the wallets of your loyal customers as you see fit, and accept token as a means of payment for purchases. We have integrated such a wallet in two separate smartphone apps one for consumers, and one for retailers.

Our Retailer app allows merchants to decide how many tokens to reward consumers for their behaviors and actions. For example, merchants can reward the consumers simply for discovering products or services at the merchant's store, an action that motivates consumers to physically enter your store and "discover" your products and services. In the same way, mall operators can observe foot traffic flow in their environment to increase rent-yields, etc., to mentioned just one of the many game changing possibilities.

And finally, there is a built Offline-to-Online ("O2O") system which the Mozo team has developed internally and is available on GitHub, a kind of redemption marketplace where consumers can redeem their earned tokens for products and services simply by using the Consumer APP with a ready-made digital wallet. We call this the Mozo O2O system, which allows registered salespersons to upload products and services and make them available in a digital store (offline) or a virtual store (online). Merchants can set the prices of products and services in local fiat currency or tokens equivalent.

You now have a superior and transformative loyalty program, operating under a business model that can be best described as the "Token of Discovery" as proposed in this whitepaper. Throughout this paper, we shall use the collective term, Token of Discovery, as our concept. This concept can simply be thought of as follows. In retail, we can combine a consumer's curiosity and Mozo's processes to enable the Token of Discovery to serve as a breakthrough loyalty program that is cross-merchant, global, convenient, and optimized for both

consumers and merchants. In terms of technology, we can say that *Internet + Mozo O2O + Blockchain = Token of Discovery*.

Not only can the application of Project Mozo replace existing points-based loyalty systems, and bring foot traffic to stores and malls, Project Mozo helps to reduce customer acquisition costs (CAC), enhance customer lifetime value (CLTV), reduce churn rate (CR), and increase repeat purchase rates (RPR), these being the fundamental parameters contributing to a profitable retail business.

As exciting as the breakthrough in technology described above, the opportunities or size of the addressable markets by Project Mozo are as follows:

- *The worldwide loyalty market, estimated to be US$ 300 Billion, makes the opportunity presented by this technology even more interesting. To address such a large market, the goal for Mozo is to unlock this mammoth loyalty market, support the larger retail industry, and reduce customer acquisition costs and shift them away from advertising and discounting to Project Mozo.* ***A 20% distribution*** *of loyalty market to the Asia-Pacific region translates into* ***US$12 Billion*** *market opportunity addressable by Project Mozo.*

- *In Asia alone, McKinsey predicted that by 2020 there will be approximately 1.7 billion consumers using digital banking in some form [4]. Even more so than in Western countries, Asian consumers are highly motivated by promotions, discounts, vouchers, and the like. In short, monetary rewards motivate consumers to turn into a walk-in customer opening up possibility that Project Mozo will have a significant impact first on the Asia-Pacific retail market.*

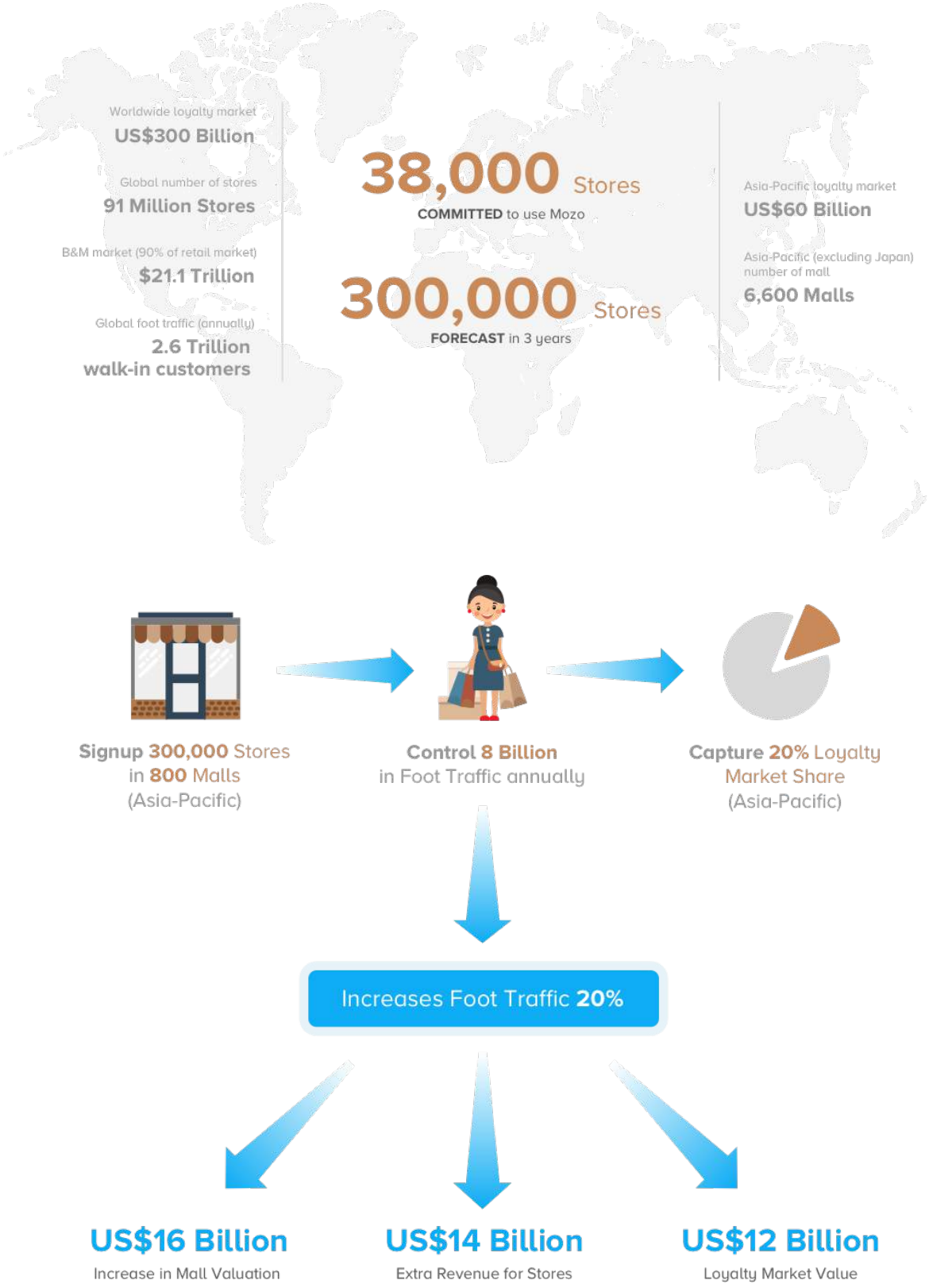
- *The addressable market related to annual foot traffic encompasses 2.6 trillion walk-in customers visiting 91 million physical stores globally, making average annual foot-traffic of 28,000 per store. A 30% distribution of the above figures to Asia Pacific region means 800 billion annual foot traffic and 27 million physical stores directly addressable by Project Mozo. Already, 38,000 physical stores have committed to use Mozo technology, i.e. we have just achieved a fraction of this addressable market. More to come.*

- *Majority of foot-traffic concentrates around shopping malls in our region. According to our own estimate, there are a total of 6,600 shopping malls in Asia-Pacific region excluding Japan [7-12], giving the total real estate value of shopping malls to be approximately US$660 Billion assuming shopping mall real estate value of approximately US$100 million each. A* ***20% increase in foot traffic*** *to these shopping malls (driven by more foot traffic generated by Mozo or equivalent), translates into* ***US$132 Billion increase in malls value****, which is also market opportunity for Project Mozo. It is this addressable market which is the largest value Project Mozo can bring.*

- *The Total Retail Sales was estimated to be $23,4 Trillion in the year 2017 [13], giving the B&M Market (90% of retail market) value to be $21,1 Trillion. For approximately 91 Million stores worldwide, the total sales will be $231,000/store. Our target is to sign-up around 300,000 retail stores in the next three years means that Mozo will have an opportunity to deal with $69,4 Billion of total sales value. A 20% increase in foot traffic to these stores will translate to over 14 billion extra revenue for store owners.*

Currently, we have signed up 38,000 stores which are committed to use Mozo upon launching. A 20% increase in foot traffic capability will result in US$16 Billion increase in mall valuation, US$14 Billion of extra revenue for stores and occupy US$12 Billion of loyalty market value.

Benefit from such a potential market, Mozo has addressed its targets and ready to disrupt foot traffic in shopping malls and retail spaces across Asia.



Mozo Concept

We started Project Mozo two years ago, backed by a US$1.0m private investment. During our first year of operation, we signed an MoU with Wanda e-Commerce Co., Ltd., part of China's largest shopping mall operator for the deployment of Mozo as an indoor positioning system and shopping assistant app. The following year, we signed an MoU for piloting Mozo as an O2O system and consumer app for 361 Degrees International Co., Ltd., a leading Chinese sportswear brand. These MOUs were driven by the shopping malls' and retailers' need to combat the rapid encroachment of their market share by online marketplaces.

Now, with the possibilities presented by blockchain technology as described in the previous section, consumers can earn and redeem Mozo tokens (use interchangeably with Mozo coins) across merchants, such as those in a mall, a shopping district, a city, or around the globe. This translates into a concept that reassemble a coalition loyalty platform or universal loyalty platform. Imagine, when you travel to a new destination, or arrive in a new country, you can simply use Mozo as you have done with Visa, Paypal, Alipay etc. without incurring high transaction fees.

Project Mozo's vision was to build a universal platform to attract foot traffic to physical stores. Mozo allows consumers to mine and collect a cryptocurrency, called a Mozo token, when they use Mozo APP to discover new products at physical stores (i.e. sales floors which are digitized by the Mozo system). Mozo tokens can be converted into reference currencies such as Bitcoin or Ethereum, used as discounts for products and services at Mozo-enabled stores, and redeemed at the Mozo Redemption marketplace; making it attractive to build a universal membership and reward system for merchants.

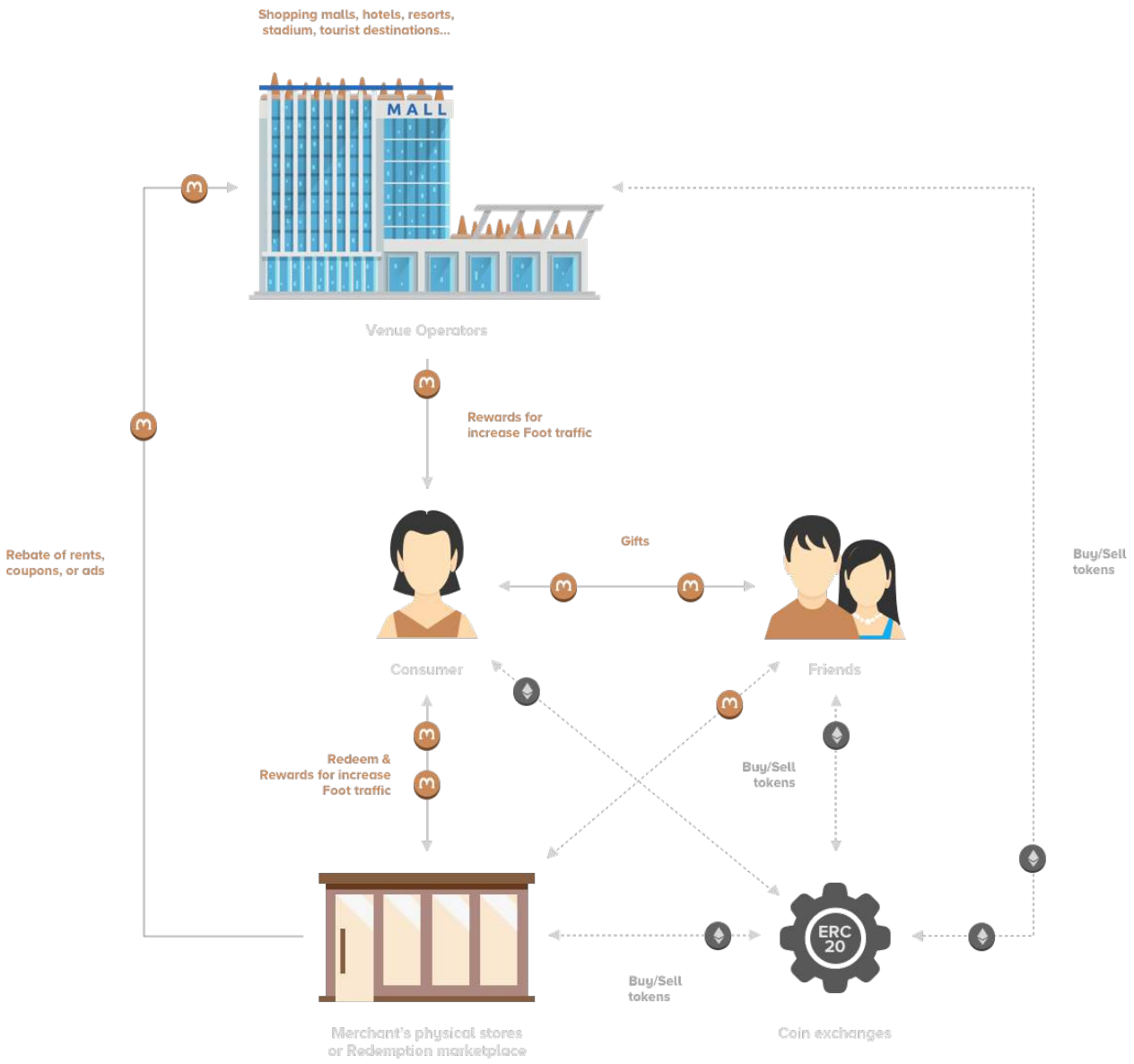
Pilot tests of Mozo software version 1.0 (Mozo 1.0) were conducted with at a Wanda Mall in Nanchang City, China which covered 50 retail brands as well as food and beverage stores for a one month period; and with a major sportswear brand at two operating physical stores over a three-month period. The results showed that Mozo contributed approximately 20% of these store's total monthly revenue. We combined the Mozo APP and IoT sensors *Bluetooth Low Energy* "Beacons" that were mounted on the ceilings of the physical stores and smaller sensors called "*iStickers*" that were tagged to the products. Mozo 1.0 allowed consumers to discover product information, compare product prices online and offline, and buy on the APP at these stores.

Mozo 1.0 also allowed consumers to discover product inventories and prices of not just sports goods, but also the product categories we often see displayed at shopping malls, such as electronics, and luxury goods, to name a few. With Mozo tokens, consumers will be highly incentivized to keep going back to the malls and shopping districts as they see the opportunity to mine Mozo tokens, discover in-store inventories and prices, and buy products they have not seen before.

We have since upgraded the software to Mozo software version 2.1 (Mozo 2.1) which we will use for demonstration at the Token Generation Event's presale and crowd sale stage. Mozo 2.1 includes capabilities to handle the new Mozo tokens presented in this whitepaper. In our quest to conquer the new blockchain-based retail sector, we plan to launch the Mozo version 3.0 ("Mozo 3.0") using the funds raised in this ICO exercise. Mozo 3.0 will run as an application on the global Ethereum blockchain network.

In our recent discussions with Suntec city, one of Singapore largest malls and real estate broker and property management company reveal that they are serious about exploring Project Mozo technology to achieve increase in foot traffic to shopping malls, enhance rent-yields and result in higher real estate value of

shopping malls. Therefore, we propose the following ecosystem for Project Mozo, where we see significant value to bring shopping malls, retailers and consumers as follows.



In the above ecosystem, Team Mozo has completed the implementation of Venue operators (such as shopping mall) in Mozo 1.0, and Merchant's physical store or redemption market place in Mozo 2.1. We need to tie these and the other parts of the ecosystem together software release Mozo 3.0 and subsequent releases. Now, let's dis discuss how Mozo concept can be implemented in real world.

Merchant Package:

Many merchants (malls and retailers) do not sign up for new programs due to time and cost constraints. Mozo solves this by giving every merchant a "Mozo-in-a-Box" package. Mozo 3.0 will initially provide a

certain amount of Mozo Tokens free of charge to registered merchants as well as our custom-made Beacons and Stickers (Mozo can also work with QR Code and Barcode). Mozo-in-a-Box will enable merchants to test revenue generating opportunities offered by Project Mozo before they commit any budget on regular use basis. The amount of free Mozo tokens, may be proportional to the merchant gross floor area.

Retailers and mall operators can mount Beacons on their ceiling or glue on the walls, if they want to reward consumer for entering their stores or malls. Retailers can also associate Stickers with products and services they want consumers to discover and to calculate how many Mozo tokens they reward consumers for doing so using the Retailer APP described in greater detail later in this paper. The same APP allows store staff to upload product marketing collateral, inventories and prices, allowing consumers to discover these products just by bringing their smartphones closer to the Beacons or Stickers mounted on or attached to those displays or products, of course, with a previously downloaded Consumer APP. Backed by a robust big data engine, the data collected from the Consumer APP allows the retailer to gain valuable insights into its customers.

Air-Drop for Consumers:

The majority of consumers do not sign up for loyalty programs due to the inconveniences described previously, and the time spent to complete registration. Mozo solves this by air drop. For consumers, Mozo 3.0 will air-drop some Mozo tokens free of charge, when they download the Consumer APP from Apple's App Store or Google's Play, as they walk into venue operators who are members of Project Mozo. Venue operator such as shopping mall, may advertise Project Mozo in their physical space as they want to increase foot-traffic. This provides an initial incentive for consumers to test Project Mozo's exciting offerings. Our offerings to consumers will include: Mozo token earning/mining tools that are organized in easily navigated maps; product and services categories; a search engine; and the ranking of highest earnings amongst other features and functions. Also, Mozo 3.0 will include a redemption marketplace where consumer's desires and merchants' products meet. A more detailed description of this is in a later section of this whitepaper.

Project Mozo brings significant benefits which should provide more than sufficient incentives to become walk-in customers again. The table below describes many of the reasons why Project Mozo is beneficial to consumers.

FOR CONSUMERS	Without	With
1.	No sufficient motivation to go to brick-and-mortar stores	Go to brick-and-mortar stores to earn Mozo tokens
2.	Do not see value in current reward systems	Transparent rewards and easy to use system applied across merchants
3.	Cannot touch and feel products online	Incentives to go to stores

We predict that early adopters of Project Mozo will be professionals, tourists, and tech savvy consumers. In this way, our go-to-market strategy will be orientated to this group of early adopters first.

FOR MERCHANTS	Without	With

1.	Fewer walk-in customers	Increase foot-traffic by 20% or more Increase rent yields or real estate value
2.	High customer acquisition costs (CAC)	Pass CAC equivalent to consumers in terms of Mozo tokens, and bypass Google or Facebook advertising fees
3.	Current, single-brand loyalty programs don't engage new and repeat customers	Be part of a global cross-merchant loyalty system that rewards consumers for discovering venues, stores and products
4.	Cannot track shoppers and their profiles in real time	Real-time tracking and CRM for customers who are in store

For Merchants, early adopters will be those willing to: offer tokens to increase foot traffic; modify their existing reward program; embrace cryptocurrencies as a means of exchange; and seek to be part of a global, cross-merchant reward system. Early indications are good, as [8] shows a US-based restaurant chain recently launched a successful new reward system using virtual coins.

Future businesses:

At this stage, Project Mozo is intended to build a universal loyalty platform as described above, which is a small part of the retail market. In the future, especially when the user base and its usefulness increases, Project Mozo's business model may evolve to incorporate commissions on sales, merchant membership fees, technical support fees and advertising fees.

Mozo Blueprint

Online e-commerce has been a successful first wave of growth for the retail industry, driven by the arrival of the Internet over the last twenty years. Going forward, we believe that the blockchain-based retail sector is on the verge of exponential growth and will form the next wave of growth. Project Mozo provides the missing building blocks needed for this new business segment to thrive:

1. Discover products or services through IoT based devices
2. Mozo, cryptocurrency to support loyalty program
3. *Solo*, a proprietary blockchain network for micropayments
4. System to bridge Online-to-Offline gap
5. Data-driven product recommendation and shopper personalization

Team Mozo has experimented with the O2O business model and these technology building blocks over the past two years; with field tests at both the shopping malls and individual retail stores. We are now integrating our Mozo software with the Ethereum blockchain network under the above Blueprint. Below are descriptions of the major components of our Blueprint, beginning with *Solo* and Ethereum blockchain integration.

Blockchain: Solo & Ethereum

Initially, Project Mozo will use the Ethereum blockchain network to support our transactions, and then switch to *Solo* when it becomes available. Our proprietary technology *Solo* is a new DAG type blockchain network that is designed to support peer-to-peer micropayment transactions (Retail, IoT, Microlending, Cybersecurity etc.). In the *Solo* blockchain network, each transaction initiated by a sending user is approved by the destination user and only the destination user itself, hence the name *Solo*.

Transactions are verified and accepted by random Data Nodes in the blockchain network and written in a distributed ledger. When conflict occurs (ie the transaction is not verified and accepted by a Data Node), the transaction is pronounced invalid and not written on the distributed ledger. The role of Data Nodes is henceforth designed to prevent double spending and hacking attempts.

Solo is structured to support a Region (which could be a geographically-defined area such as a city, state or nation, or an application area such as Retail, IoT, etc.). To enlarge geographical area, a *Solo* network can connect to another region via the global Ethereum network. As *Solo* supports ERC-20 and ERC-223 tokens (ERC stands for Ethereum Request for Comment (it should work smoothly across Ethereum which can transact ERC-20 and ERC-223 tokens as well). To generate ERC-20 and ERC-223 tokens such as Mozo, we shall use the Ethereum token creation tool. We also use Ethereum client software at each connecting Bridge with *Solo*. This is done so that when Ethereum client software upgrades, we just plug into our Bridge.

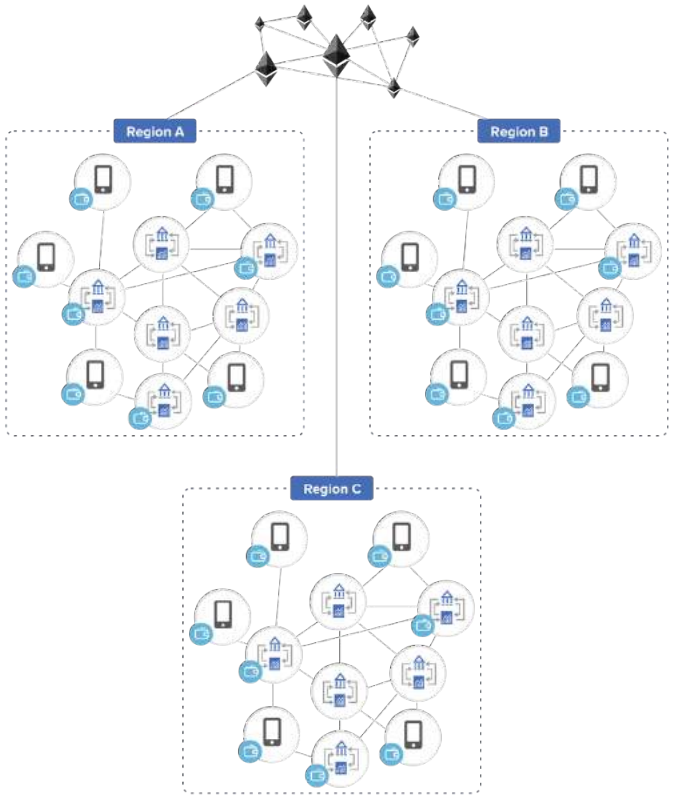


Figure 1: SOLO region

Within a *Solo* region, we will have a number of Data Nodes that store the distributed ledger for its own, and schedule the verification and acceptance of transactions in a random manner. Data Nodes can back up one another because they function as distributed nodes in the region with the same distributed ledger for the whole region. A Data Node should be a server either provided by Project *Solo* or a participating merchant. Such Data Nodes support a number of Mozo users, who may be either consumers or other merchants engaging in peer-to-peer transactions.

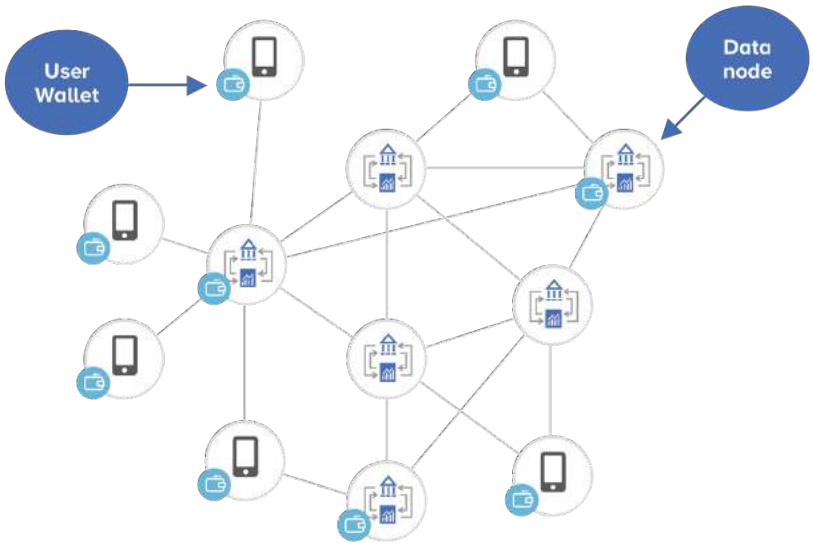


Figure 2: SOLO Data Node and User Wallet

Solo has massive parallel processing capability as transactions will be processed by millions of mobile phones and computer connected to *Solo*, and preserve a predictable transaction delay characteristic which is network transit delay, data node scheduling, and insignificant transaction processing delay. We can guarantee transaction will be completed in seconds within a region and orderly.

Users of *Solo* shall have a wallet identified by private key generated secretly by the user. Also, they should provide public key to *Solo* to verify their signature when performing transactions. Each user will have a unique address (mail address or phone number). Mozo App, which is a client software on *Solo*, uses this unique identifier to tie to a particular Data node. After the first successful handshake, it will tie with "n" nodes for failover switching and service recovery. This failover switching is part of *Solo's* main function.

When a user initiates a transaction outside of its *Solo* region, the transaction will traverse the Bridge, via the Ethereum network, and back to a destination *Solo*, unless it is an exchange from Mozo to Ethereum token, in which case, the destination will be a 3rd party exchange that supports the sale and purchase of ERC-20 tokens. In this way, the transaction cost is higher than within a *Solo* region because we must use Ethereum blockchain network.

Please note that the double-spent can be limited by using Ethereum blockchain technique, and perceptual hackers can be identified through data analysis at the Audit Data Node (aka Monitoring and Control) and be minimized by random checking of transactions with other Data Node(s). To minimize broadcast storms and save huge network bandwidth, we can accept an alternative to “decentralization” as *Solo* is designed for micropayments, the number of transactions is expected to reach massive scale. Multiple shards distributed ledger is considered as a candidate.

Mozo - Token of Discovery

Consumers can earn, buy, and redeem Mozo tokens by: walking into a physical store; "zapping" to discover product details; or purchasing products at the store.

The amount of Mozo tokens earned in this process of these activities by the consumer are pre-determined by the Brand Owner, Franchise or Retailer (collectively referred to as the "Retailer"). For example, if the Retailer wishes to reward the consumer one Mozo token for zapping (discovering) a new arrival product for a certain period of time, then the consumer can earn one Mozo token for doing that within the time period set by the Retailer.

Consumers can also buy Mozo tokens, either at any designated exchange to top up their digital wallets, or inside the Consumer App, by using ETH for example. Lastly, consumers can redeem their tokens at any of the Members of Project Mozo. Members of Project Mozo are registered Retailers that have our logo prominently displayed in front of their stores and throughout the physical area within the store.

To kick-start Retailer adoption, new Retailers will be credited with Mozo tokens as an incentive for usage and to facilitate onboarding. This free provision of tokens will be enough to pay for some amount of "Discovery" services. This will give Retailers the ability to test our services and options on the Mozo network at little cost to them. These Mozo tokens will be allocated from the "Merchant Treasury Pool". When the merchants are satisfied with Project Mozo services, they can purchase more Mozo tokens from any public exchanges where Mozo tokens are traded.

Mozo tokens form the backbone of the Mozo System. As such, Mozo tokens can be traded for products and services. They run on *Solo's* proprietary blockchain, and Ethereum ERC-20 tokens on the public Ethereum network. Mozo tokens will have the following characteristics:

- Available during presale and crowdsale
- Limited supply of Mozo tokens
- Circulate on the proprietary *Solo* blockchain and Ethereum public network
- Freely transferable and tradable on major exchanges
- Storable in all major client wallets
- The currency on the platform representing discounts or cashback
- All fiat currencies (e.g., USD/HKD/SGD) are convertible into Mozo

IoT Devices and Sensors

In this section, we are reviewing some traditional, as well as newer IoT sensor-based technologies that can be used to support "Token of Discovery" services in a retail environment, beginning with the Barcode.

Barcode was invented in the 1960's but it was not until 1974 that it was first used to scan a pack of Wrigley's chewing gum. UPC Barcode technology allows retailers to track product inventory and pricing. Since then, it has become a key technology in the retail industry. We can use UPC Barcode technology to enable Internet of Discovery, but this technology is not often used by smartphone users and susceptible to misuse, as one can email a picture of a UPC Barcode to consumers who could then zap the barcode without physically walking into a physical store.

The first patent to be associated with **Radio Frequency Identification (RFID)** was granted to Charles Walton in 1983. RFID offers some advantages over barcode. RFID tags can be read if passed near a reader, even if it is covered by the object or otherwise not visible. The tag can be read inside a case, carton, box or other container, and unlike barcodes, RFID tags can be read hundreds at a time. Barcode can only be read one at a time using current devices. The RFID tag can be affixed to an object and used to track and manage inventory, assets, people, etc. However, due to its complexity in production, manufacturers of consumer goods have not used RFID as widely as barcode.

QR Code was originally designed for the automotive industry in Japan by Toyota in 1994, but it soon became popular outside the automotive industry due to its fast readability and greater storage capacity compared to standard UPC barcodes. Applications include product tracking, item identification, time tracking, document management, and general marketing. QR code has been printed on train tickets in China since 2010 and now is a widely used technology for mobile services. QR codes can be used on various mobile device operating systems. These devices support URL redirection, which allows QR codes to send metadata to existing applications on the device. Many paid or free apps are available with the ability to scan the codes and hard-link to an external URL. QR code is fairly popular in China and Japan, and is beginning to become popular in Hong Kong and Singapore. Team Mozo also provides support for QR code as a way to enable "Internet of Discovery" concept. However, the stores must keep them secret, as QR code can be sent and distributed over the Internet the same way as Barcode and hence we may end up rewarding someone who has never set foot into the physical store.

iBeacon is a protocol run native in iOS operating system developed by Apple Inc., and introduced at the Apple Worldwide Developers Conference in 2013, allowing developers to activate apps to the foreground, that were running in the background or even in rest mode once the user passes in front of a beacon. Various vendors have since made iBeacon-compatible hardware transmitters – typically called beacons – a class of Bluetooth Low Energy (BLE) devices that broadcast their unique identifiers to nearby portable electronic devices, such as a smart phone. In this way, beacon makes an excellent IoT device to enable our "Internet of Discovery" concept. When consumers express their intention to discover a product, all they have to do is to bring their smartphones in the proximity of the beacon. Beacons can also be used with an application such as an indoor positioning system, which helps smartphone users to determine their location or context. This makes beacons more accurately detect a consumer's location via its phone, another excellent IoT device for rewarding walk-in customers at your store. Since then, Google has followed suit and released its open beacon protocol called Eddystone, which allow you to set and send four different advertising packets. Mozo team

supports both iBeacons and Eddystone, but throughout this Paper, we will use iBeacon for discussion purpose.

While RFID is the process by which items are uniquely identified using radio waves, **NFC** is a specialized subset within the family of RFID technology. Specifically, NFC is a branch of High-Frequency (HF) RFID, and both operate at the 13.56 MHz frequency. NFC is designed to be a secure form of data exchange and an NFC device is capable of being both an NFC reader and an NFC tag. This unique feature allows NFC devices to communicate peer-to-peer. NFC tags are passive data stores which can be read and, under some circumstances, written to by an NFC device. They typically contain data (between 96 and 8,192 bytes) and are read-only in normal use, but may be rewritable. Applications include secure personal data storage (e.g. debit or credit card information, loyalty program data, personal identification numbers (PINs), contacts). NFC tags can be custom encoded by their manufacturers or can use individual industry specifications. Team Mozo is investigating using NFC application as an IoT sensor in our "Internet of Discovery" model.

Other **IOT sensors** marketed to be used in stores scan for smartphones with their Wi-Fi turned on and scan for 3G/4G networks. But this class of devices is intrusive and hence may require permission from customers and WiFi/mobile service providers. The sensors would then make note of the device's MAC address (an address that's unique to each phone) and use it to identify and follow the device as it moves about the store. Information these sensors can obtain this way include (a) about how frequently that MAC address visits the store, (b) which departments it visits when it's in the store, (c) how long it stays in each department, and (d) how long it stays in the store. This is part of a movement by retailers to gather data about in-store shoppers' behaviors and moods, using video surveillance and signals from their cellphones and apps to learn information as varied as their gender, age, time in store and which area of the store and how long they stand in a particular area. Some are testing these technologies and using them to decide on matters such as changing store layouts and offering customized coupons or loyalty programs. Team Mozo is also investigating this class of sensors applicability into our system.

Li-Fi is a wireless optical networking technology that uses light-emitting diodes (LEDs) for data transmission. LiFi is designed to use LED light bulbs similar to those currently in use in many energy-conscious homes and offices. However, LiFi bulbs are outfitted with a chip that modulates the light imperceptibly for optical data transmission. LiFi's early developmental models were capable of 150 megabits-per-second (Mbps). Some commercial kits enabling that speed have been released. In the lab, with stronger LEDs and different technology, researchers have enabled 10 gigabits-per-second (Gbps). Drawbacks to the technology include the need for a clear line of sight, difficulties with mobility and the requirement that lights stay on for operation.

Facial recognition is being used to collect data about customers as they shop in stores, and track their movements. The data collected include "how many people are coming in, age, ethnicity, gender — it's all about knowing better who the store's customers are and trying to serve more appropriate offerings to those customers. Customer identities are kept anonymous and it might even enhance shopping experiences in the long run. However, there are limitations for retailers as to how the accumulated data is being used and protected. Technology is not the barrier to the systems being implemented, it is privacy and cultural concerns. The idea of having sensors and cameras to collect data about shoppers is a defining privacy issue of this era, explaining that retailers are investing considerable amounts of money into securing data and preventing data breaches. In light of news about recent data breaches, businesses have to be incredibly sensitive about the collection, use and storage of customer data. At the same time, customers are being increasingly careful about with whom they are entrusting their data.

CONCLUSION:

For now, Beacon has a Universal Unique Identifier (UUID), making it ideal to support our "Token of Discovery". The Mozo team has so far mastered the use of Beacons for product and service discovery as well as highly accurate user positioning. Although, Beacon is based on bluetooth, the Mozo Team believes that consumers will have ample incentive to turn on their mobile phone's bluetooth to mine Mozo tokens. Beacons technology require explicit action by the consumers, i.e. turn on bluetooth to mine Mozo tokens and hence this technology is not intrusive. In the near future, we may use other IoT sensors, which have potential for similar application.

Apps

Early adopters expect the Mozo user interface to be intuitive, fluid, high performance, responsive and frictionless. Therefore, to best serve these early adopters, we have built our Mozo apps to provide world-class services. If Mozo can satisfy this group of early adopters, we can provide the same level of service to others, with minimal modifications or additions. We have developed two (2) apps to enable interactive services offline and online: Consumer APP and Retailer APP. In this section, we shall describe these two Apps' general features and the level of interaction between them as they exist in Mozo software version 2.1. At the end of this section, we shall describe what to expect with Mozo 3.0, where our App becomes a Digital Wallet.

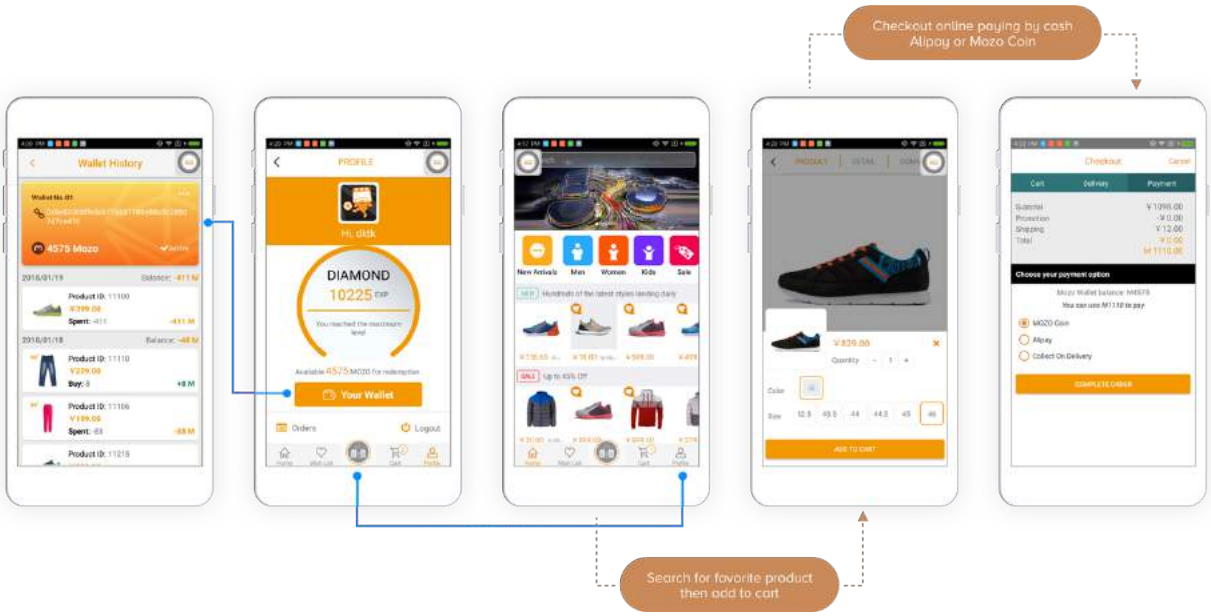
a) Consumer APP

Our Consumer App offers both online and offline modes, which are illustrated at the send of this subsection:

When the consumer is at home, work, or wherever the consumer smartphone does not detect any beacons (placed in merchants' locations), Consumer App will switch to online mode. In the online mode, Consumer App exhibits features similar to a typical e-commerce app (e.g., Tmall or Amazon), except that we support Mozo tokens and allow consumer to access his/her favorite store inventory (not just warehouse inventory). Team Mozo creates this unique way for consumers to access his/her favorite store inventory at the prices set by the controlling store to eliminate price differential between the Store and Warehouse, which is a unique O2O feature. We have named this as "Virtual Store". In addition, our App supports buy online and pick-up at store which is another O2O feature. We also include a showroom to allow viewing of "new arrival" products which are only available at physical stores, before consumers decide to visit and discover the products in person, the last but not least O2O convenient feature.

When the consumer enters a physical store, detected by our IOT sensor mounted on the ceiling or glued to a glass wall of a physical store, our App is automatically switched to offline mode. This switch is designed to provide frictionless services to shoppers. In offline mode, consumers enter a "Digitized Store" and can perform a number of activities including "ZAP", and "BUY". ZAP is the action to discover information about a product, and BUY is a feature that allows the consumer to buy on the APP. All of these actions allow consumers to earn Mozo tokens. Our app allows the customer buy warehouse inventory when the product size or color is not available, or simply out of stock at the store. In this way, customers can choose to have products delivered to their home, while they are making the transaction at store. Another needed O2O capability.

Redemption is available on both online and offline mode. Prices for redemption are expressed in both local fiat currency as well as Mozo tokens, using average weighted exchange rate from results on Mozo token exchanges, which are exchanges where Mozo tokens are listed and traded. In both modes described above, consumers can navigate the profile area to check its Mozo token wallet and historical orders.



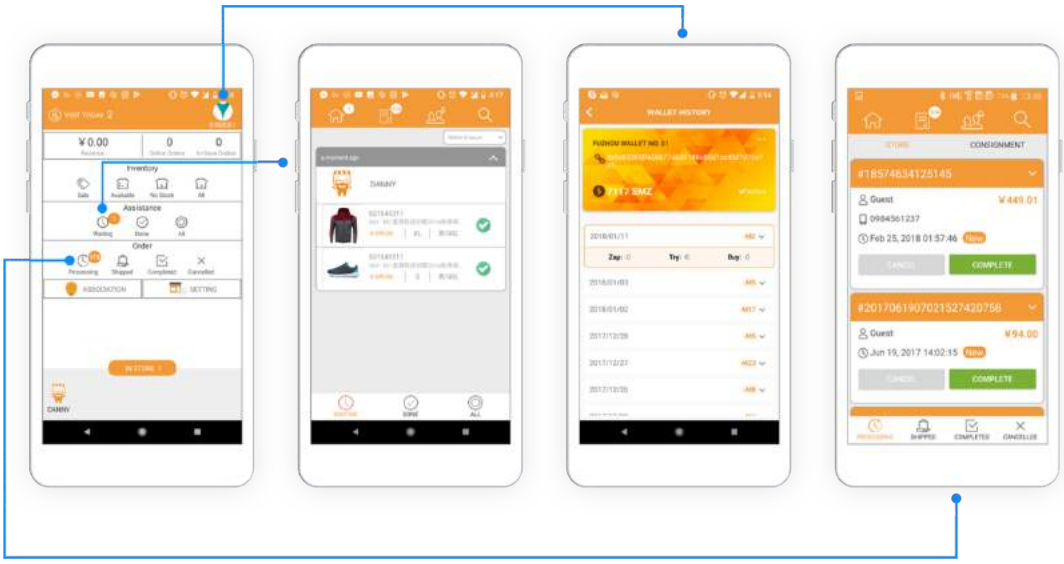
In the Mozo 3.0 release, our system will air-drop some Mozo tokens free of charge, when consumers download our APP from Apple's App Store or Google's Play as described in the previous section. This provides initial incentive for consumers to test Project Mozo's exciting offerings.

Our offerings to consumers shall include a new UX/UI look and feel for Mozo token mining tools that are organized in easily navigated global positioning system (GPS) maps, Indoor Positioning System (IPS) maps, product and services category, search engine, and ranking of highest Mozo earning opportunities, amongst others. Also, we will make the App easy to use for redemption, transfer between digital wallets inside and en-cash Mozo tokens at speedy transaction time and cost for the consumers.

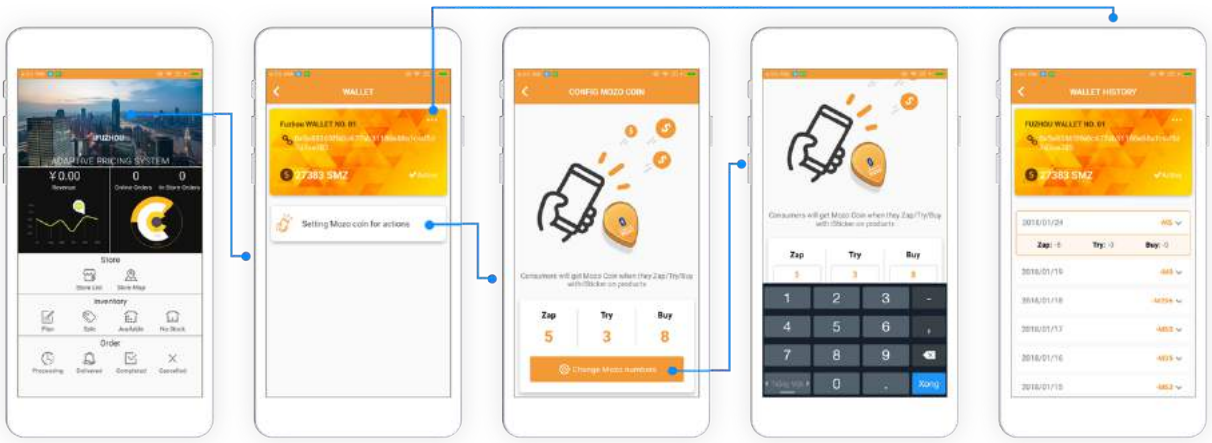
b) Retailer APP

Our Retailer APP can be used by either a Salesperson at an outlet, or as a Retailer, depending on their log-in privileges.

When logging in in the role of a Salesperson at a particular physical store, the APP upgrades the salesperson to smart person. One unique feature is the ability to detect loyal customers who come in the store through our custom-made beacon, his/her historical buying patterns, and physical endowments such as shoe and dress sizes. This helps salespeople to smartly engage and personalize services to consumers. Another feature, we intend to add in Mozo 3.0 is the ability for the consumer to select his/her familiar salesperson as the preferred service personnel for their particular favorite store. In this way, we bring personalization to the next level. In the salesperson role, the APP also allow salespeople to perform product association with Stickers to provide Mozo token mining/reward opportunities to consumers, enquire about inventory, and handle orders at store or pick-up at stores.



When log in as a brand owner, franchise manager, or simply store owner, the APP goes in the Retailer role. In this role, Retailer can set the Mozo tokens reward smart contracts for ZAP and BUY actions at each store under management from its digital wallet. In version 3.0, we will allow the Retailer role to buy and sell Mozo tokens in the open market/exchange. The APP also supports the addition of new products, application of marketing plans to products, the configuration of prices at both Virtual Store and Digitized Store, as well as tracking the order list of stores, and the management of product inventory. Finally, the APP provides store management features such as sales, orders, inventory reports for each store.



In Mozo 3.0 release, our system will air-drop some Mozo tokens free of charge to the Retailers as they join our universal loyalty platform, and other exciting features, such as new UX/UI look and feel for visualization and management of chain stores organized in easily navigated global positioning system (GPS) maps or list formats, management of inventory in product and services categories, search engine, ranking of highest Mozo earning stores, ZAP or BUY data to measure effectiveness of new programs, amongst others. Also, we

shall make the App easy to use for redemption, transfer between digital wallets inside and en-cash Mozo tokens at speedy transaction time and cost for the Retailers.

System: Online-to-Offline Retail

Mozo 1.0 has been built over the past eighteen months and is commercially ready for deployment (See Github). Mozo 1.0 is a solid Online-to-Offline product. Its servers ran non-stop (i.e. without any crash or bugs) in China for 30 days at two real stores of 361°, one of the largest sportswear retailers in China; had 400 downloads; and successfully made 132 transactions, contributing 20% to store sales during that period.

The two main issues for the Team 361° were first, we could not solve a pricing dilemma related the online prices being lower than offline. Second, we did not have a marketing program or budget that would bring consumers to their stores. Lesser concerns were related to consumers being hesitant to turn on bluetooth on their phones and to download our app.

Mozo 2.1 addresses all these issues. First, tokens will encourage foot traffic to the stores, and consumers will have an incentive to turn on bluetooth and download our app (to mine our Mozo tokens). Second, consumers can redeem Mozo tokens on our market place, at physical stores, transfer them as gift to their friends, or redeem them for products or services. We find these changes to be exciting because in one stroke, we now have solved all of the Team 361° problems. Right now, China is not opening up its market for use of cryptocurrencies. When they do, our system will be ready for Team 361° and other similar merchants in China.

As a system, Mozo 2.1 comprises six (6) modules:

Name	Description
Admin web server	Inventory management, customer relationship management
Application server	Retail activities, payment, logistics, social integration
Recommendation engine	Big data analytics & recommendation
Notification server	Real-time message notification
Search engine	Full-text search service

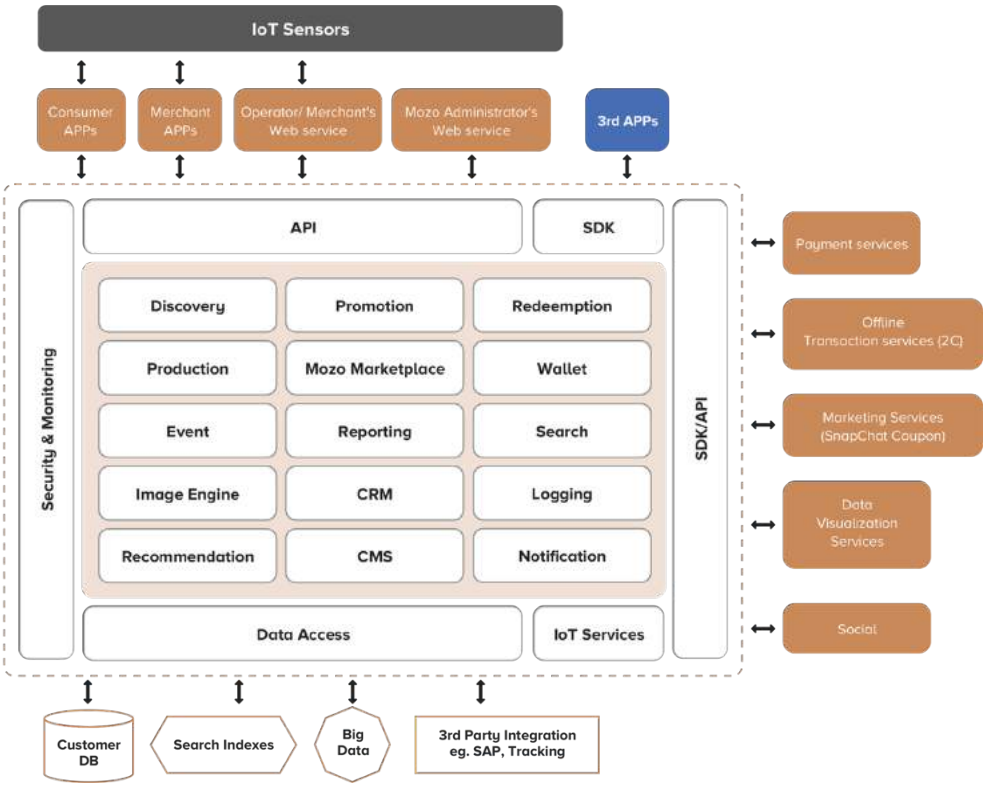
Below is a brief description of these component:

ADMIN WEB SERVER

This is the administrator graphic user interface, utilized for the purpose of loading the events, products and services the Retailer wants consumers to redeem, and also for monitoring and controlling different parts of the Mozo platform. We expect that administrators will use both personal computers and tablets to access the services provided here.

APPLICATION SERVER

Internet of Discovery



The Application Server is the main e-Commerce middle solution. At its heart, this server provides many functions which deliver the commerce services, ranging from browsing the product catalog, select and drop products in a cart, check-out, making payments and facilitating delivery. To ensure that the e-Commerce activities happen in real-time, we have developed relevant APIs to connect our services to external systems automatically, as shown on the right-hand side of the above illustration, and support the Consumer APP, Retailer APP, and operator web services. We also include a data access layer to enable the Application Server to access customer database, search engine, product recommendation, and place order through 3rd party system such as that shown on the lowest part of the above illustration.

RECOMMENDATION ENGINE

We recommend new products based on each consumer's profile and behavior.

As a shopper, whether online or offline, we display DNA-like characteristics that are unique, which can be referred to as our Shopper DNA. We browse, click, choose, buy, share... and our historical click streams can be reassembled onto unique data graphs. Mozo Platform's Shopper DNA App mines billions of observable activity data points onto data graphs (logs of user click streams) to work out individual user behaviors and preferences that are deemed independent of their demographics, for each and every application service, be it location, behavior, decision to buy, or socialization activities.

The combination of these profiles, behaviors, and preferences are collectively presented in a multi-dimensional matrix that is then interpreted as the resultant parameters of our shopper DNA. Such matrices can be used to support predictive applications such as product/service recommendation, targeted advertising, targeted sales, personalization engines etc. when using the Mozo Platform.

Prior to Mozo Platform's Shopper DNA, operators around the region used demographics information to base their online and offline marketing campaigns on. While this rather old technique is proven to work offline, demographics information is unreliable online because it assumes that all twenty-year old people behave the same way and prefer the same thing.

Mozo Platform's Shopper DNA is a superior choice for predictive applications, marketing programs and targeted sales for the new Social Media, Mobile Internet and Information Abundance era. The approach we use to build Shopper DNA App is akin to some of the most successful and popular tools in the fields of social sciences and psychometrics, such as project Myers-Briggs Type Indicator which was invented in the 1940s, commercialized in the 1960s and still widely used today.

In our case, instead of relying on a person's answers to a series of questions, we work on billions of observable activity data points. Instead of assigning a person to a limited number of clusters/profiles, we assign a person to more than one of hundreds or thousands of clusters/profiles along with an "affinity probability" for each assignment. In other words, we can analyze and then predict a shopper's preferences and behaviors at a much more "granular" level and a higher level of accuracy and provide that data to both the retailers and customers based on these customers' very specific purposes and needs.

NOTIFICATION SERVER

This is a service that provides notification or pop-ups on smart phones. It is essential for marketers, administrators, or even customer service representatives to alert shoppers about important events, coupons, and other promotions.

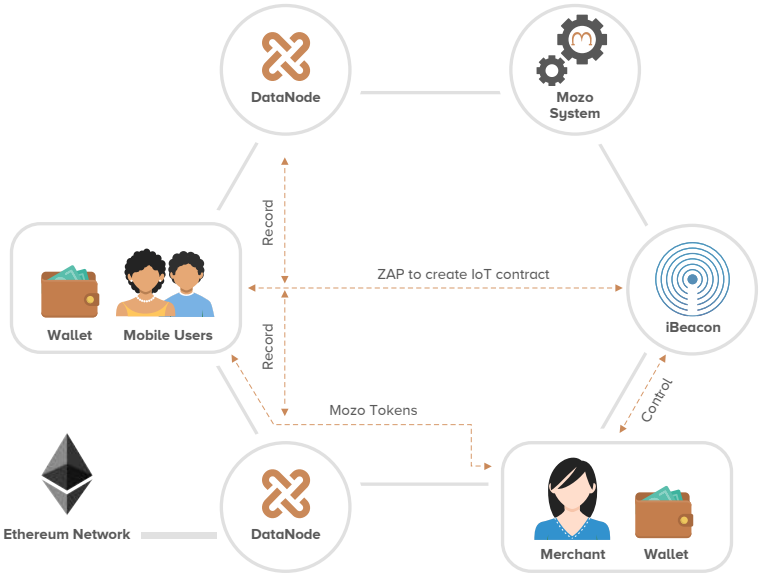
A notification box is shown separately as one of the logical front-end channels, because it is designed, scheduled, and provided on the shopper's desktop and app. To avoid being a potential nuisance to shoppers we limit notifications to a minimum so as to only provide them when we think absolute necessary or beneficial to shoppers.

SEARCH ENGINE

Our product searching and other search benefits are supported by the search engine which is already integrated in our system. Its major features include full-text search, hit highlighting, faceted search, real-time indexing, dynamic clustering, database integration, NoSQL features and rich document. Providing distributed search and index replication, it is designed for scalability and fault tolerance.

How Does Mozo Work?

Mozo works by using a "smart contract" which is tied to retail activities. This smart contract is established between the retailer's smartphone or IoT device (such as a Beacon) and the consumer's smartphone as they detect each other's device. The consumer's smartphone and retailer's smartphone can accept and process a transaction under consumer's command. In other words, the Mozo contract is a user-generated transaction that transfers control commands between user-device, user-user, or user-system. Hence, we create a smart contract where the object of the smart contract is to process the transaction on the blockchain network.



Before using Mozo, users and devices must first be registered with the Mozo System and the blockchain network through authentication procedures. In case the device (such as a Beacon or Sticker) is difficult to be registered by itself, the administrator must then first identify the unique ID (UUID) of the device and register that device. After that, the retailer's salesperson must associate the device with the product that the retailer wishes to sell. The method to identify the device in case of Beacon or Sticker is to use a Bluetooth scanner, which will return the unique ID of the device. However, if this is not the case, the tool should hash the unique response information so that the device can be automatically disconnected from the blockchain network and reported to the administrator whenever it has been tampered with. This is to protect the retailer's and consumer's interests.

If the user is the consumer, the consumer will download an App from Google Play or App Store or scan a QR code prominently displayed at the participating stores. The Mozo App includes a digital wallet that supports Ethereum ERC-20 and ERC-223 type tokens. Only the authorized user, through a two-factor authentication, will be able to access the blockchain network. The unique ID can be a unique phone number, email address, or a password (biometric authentication can be added). Verification is performed through either SMS or email. The UUID or MAC address on the phone are also unique, but they will not be available if the user loses his or her phone or purchases a new phone. So, UUID and MAC address can be used only temporarily. In the Mozo system, we prefer using an email address or a phone number.

Before using Mozo, the retailer must register as a business user through the www.mozocoin.io website. Registration includes the supply of the retailer owner's unique ID which could be a unique phone number or email address, the addresses of all the stores the retailer wishes to have participate, and the respective salesperson's unique ID for each of these store locations. Mozo provides a web service for the retailer to operate their virtual stores on the Mozo marketplace, as well as the mobile app. The salespeople and retailer must download the App from locations as directed by the Mozo administrator. When logging in as a retailer, the App includes a digital wallet that supports Ethereum tokens type ERC-20 for now, and potentially other cryptocurrencies at a later date. Digital wallets are not available to a salesperson. This is to ensure that only the retailer can operate and control the wallet, including the decision regarding the quantity of Mozo tokens offered for ZAP and BUY. Note that the digital wallet is equivalent to money. Retailers and salespeople will go through the same authentication procedure as consumers.

Upon registration of a retailer, the retailer will receive (a) a number of IoT devices (Beacons, Stickers) sent to each of the registered stores and (b) Mozo tokens into their wallet (number of tokens depends on the promotion set by Mozo at that time). The website has instructions on how to use the devices and wallets. To help improve retailer acquisition, new retailers will be, as mentioned before, credited with a small amount of Mozo tokens as an incentive to join and to facilitate onboarding. This will be enough to pay for basic token of Discovery services and gives the retailers the ability to test some of the additional services and options on the Mozo network for free. These Mozo tokens will be allocated from the "Merchant Treasury Pool". When the retailers are satisfied with Mozo services, they can purchase more Mozo tokens from any public exchanges where Mozo tokens are traded.

The retailer's web service, and salesperson's App have an easy-to-use tool to load product information such as video clips, images, and texts into the Mozo System and the selected products will be displayed on the Mozo Redemption Marketplace. The local fiat currency will be set by the retailer and automatically converted to Mozo tokens, using prevailing exchange rates. Mozo does provide a service to help retailers upload their product information (as a paid option) and to help integrate Mozo with their inventory and ordering systems.

Since a transaction must be performed in real time and there will be many users and devices, the network must ensure sufficient processing performance. Please refer to the previous section on performance expectations of the *Solo* network.

a) How to earn/reward Mozo

Merchants can reward consumers with Mozo tokens in many ways, each of which is a smart contract between user-device, user-user, or user-system as described previously. Reward, as defined here, means to give Mozo tokens. Specifically, consumers can be rewarded in five ways:

- Newly-registered consumers who have just successfully downloaded an App at a store, can be rewarded some Mozo tokens through a "SHAKE" action on their phone. This is the one-time reward as we assume that the user downloads only one time.
- Earn tokens every time the consumer arrives to the store (limited to one time a day). This may be an option for merchants who value consumer visits, such as a mall operator, hotelier, car dealer, or other merchants selling products or services.

- Customers can also be rewarded for the discovery of a new product, we call it a "ZAP". ZAP is an action when a user phone is brought near to a Sticker that has been associated with a product the retailer wishes customers to discover. Our Beacons have been pre-programmed with a Bluetooth pulse that detects to a distance of 10 cm or less. The nearer the better. We have also pre-programmed these Beacons with 400ms broadcast interval to ensure that the Beacon battery will last for more than 1 year, and hence this user action can be completed in a few seconds. A sound notification is sent to the customer's phone to confirm the discovery, and if he/she chooses to take a look, then we launch the product information including video clip promotional material on their phone. This is good for new arrivals, and also provides a valuable tool for increasing walk-ins.
- BUY products at the Digitized Store, or at the Mozo Redemption Marketplace using the Consumer APP, assuming the consumer will pay using fiat currencies, credit cards, or other payment methods. (For redemption, please refer to "Use Case c" below). When customers select BUY, Merchants can reward them with Mozo tokens for their next purchase as an option.

  The amount of Mozo tokens earned in this process of actions by customers is always pre-determined by the retailer. For example, if the retailer wishes to reward a customer 1 Mozo token for ZAP (discovery) a new arrival product for a certain period of time, then the customer can earn 1 Mozo token for doing so during said period. All of the above are options available to the retailer. If the retailer does not want to reward any action, they can simply set the reward equal to zero.

b) How to use/redeem Mozo

To use Mozo tokens for your regular transactions online or offline, simply select the payment option on the Consumer APP when checking out. The Consumer APP will calculate how many Mozo tokens will be deducted from the consumer wallet. This is done automatically, using the smart contract already integrated in Mozo system. Noted that the consumer's digital wallet has to hold enough Mozo tokens for this transaction to complete.

Redemption marketplace is also available on www.smartmozo.com website, for those consumers who have collected a sufficient amount of Mozo tokens. Such redemption can be in the form of a discount or cashback on product purchases (for example, BUY action redeem 20% or 30% Mozo tokens and 80% cash, or redemption of 100% product price on Redemption Marketplace only). Mozo 2.1 includes a Redemption Marketplace, where Mozo tokens can be redeemed. Again, such redemptions are supported by a smart contract integrated into Mozo system.

c) How to buy/sell Mozo

Consumers and Retailers can buy or sell Mozo tokens at designated token exchanges. After the ICO, Team Mozo will make applications for Mozo to be listed on one or more of virtual coin exchanges, such as those from Korea, Japan, or elsewhere. Note that the exchanges we have spoken to accept fiat currencies as well as popular tokens such as BTC, ETH, USDT etc. Consumers and Retailers can use BTC, ETH, USDT, other popular tokens, or fiat currencies to buy Mozo tokens at the prevailing rates at these exchanges.

When buying Mozo tokens, the tokens will enter the Consumer APP's digital wallet upon completion of the purchase, and are then ready to use. When selling Mozo tokens, Retailers can also buy and sell Mozo tokens

at these designated token exchanges the same way as consumers. Please refer to the process applicable of the 3rd party virtual coin exchanges.

Use Cases for Mozo

In this section, we describe two (2) consumer use cases, and two (2) retailer use cases.

a) Consumer A - searches online, buys online

An online marketplace is a website or app that presents products from many different sources. The operator of the marketplace does not own any inventory, their business is to present other merchant's inventory to potential customers and to facilitate transactions. eBay and Taobao are examples of an online marketplace, they sell everything to everybody. On top of that there are variations of online marketplaces, we call them online department stores such as Tmall and JD.com. Consumers don't like using apps from single retailers. They are much more likely to download an app that offers product ranges broader than one store can offer. That is one of the major appeals of a marketplace. Today, consumers go to these marketplaces and search for products they are looking to buy. The search function typically returns some results in a ranking and consumers would choose one of the top line searches. Consumers then choose and buy those products online.

Marketplaces have some downsides, however. Because products are being offered from many sellers, the information about them is often not comparable, especially on pricing. Consumers also aren't sure about the product quality because they can neither touch nor try on. Often, products are not easily exchangeable and the delivery speed of online sellers are not uniform. What if you have not just a marketplace but an Online-to-Offline marketplace that offers the convenience of searching for the product online but mitigates the downsides described above with physical stores, while at the same time, allowing you to use Mozo tokens to redeem products at the physical stores. Now that combines online convenience and product guarantee. So, our use case here is very simple:

CASE DESCRIPTION:

Alex is going to Mall A for lunch again today. As a working professional, Alex does not have time to shop around the Mall, so he usually goes online to search and buy products. As he walks into Mall A, he notices a new Mozo label on a shop. Curiosity compels him to walk in…since then, Alex has changed his mind and often shops at Mall A because he knows the new universal loyalty program, Mozo, works for him.

b) Consumer B - goes to store, tries, checks price, buys online

Consumers are motivated by cheaper prices. Often consumers will purchase items that are lower in price because of budget constraints. Consumers want to get as much as they can be based on what they can afford. Though it might be smarter to take into consideration the factor of depreciation, as often people do not consider this when making a buying decision because of the allure of something appearing to be less expensive. For example, a phone case made of plastic is much cheaper than a phone case made of leather. Someone who gets a plastic case might have to keep replacing it every couple of months, and someone who gets a leather case will have to pay more but will not have to replace it as often. The plastic case depreciates faster than the leather case, but many people will still buy it because it appears to be cheaper.

Right now, off-price is one of the few bright spots in multi-brand marketplaces. Major retailers, especially department stores, are finding themselves with too many square feet of retail space and no effective way to grow their business. They are expanding into the off-price market. Retailers can all see that customers want off-price and they will allocate more square footage for it in the future, not less.

Team Mozo has experienced this behavior in our field tests at both malls and in individual retail stores. We have observed customers who walk in, try, check the price and then say to themselves "buying online is cheaper". Online prices are usually cheaper than offline because the cost of operating an online store is lower than an offline store. This behavior will be negated by having the ability to earn and redeem Mozo tokens globally and across merchants. Consumers will be motivated begin to buy and redeem at stores again.

CASE DESCRIPTION:

Sally, a fashionable millennial, has always liked to buy online, but recently some of her purchases were not matching what was advertised on her computer screen. One day, she heard about Mozo and she wanted to give it a try. Sally searches on Mozo marketplace the same way she does with other marketplaces. Once she has found the product, Sally visits the nearest store address. Surprisingly, the store rewards Sally with Mozo tokens as she visits and discovers (ZAPs) new products at the store, tries on, and ends up buying several of the products she wanted at bargain prices. From now on, Sally knows she can get to try products before she buys and not get disappointed about the quality. Thanks to Mozo, Sally can search online, buy cheaper at the store and get rewards with Mozo tokens.

c) Merchant C - rent an expensive space at big mall or street corner

We know premium retail destinations, including New York's 5th Avenue, Hong Kong's Causeway Bay and London's New Bond Street, are highly sought after by international brands wanting to create engaging retail experiences that offer something new and exciting to highly crowded foot traffic areas. But for smaller retailers, rent can be the largest operating cost component in running the store, so they will often set up a shop in shared stores, galleries or event spaces, vacant street level retail spaces, avoiding costly shopping centers and malls. Whatever the choice, there is a cost-benefit trade off here. The store owner trades of high rent for foot traffic. What if there was a way to use Mozo tokens as a magnet to attract walk-in customers for retailers, without incurring high monthly rental fees?

CASE DESCRIPTION:

Sam is businessman who owns a franchise of sportswear stores in town, one of which is in Mall B. He thought that he could get better foot traffic into this particular store because, by right, Mall B can automatically attract a lot of foot traffic as it has the size and multi-brand tenant mix. Sam was wrong, Mall B is usually empty on the weekdays, with more traffic on weekends but mostly from families with kids coming to the Mall for food or entertainment. Knowing the situation, Sam uses his available marketing tools, trying to turn this situation around, including handing out vouchers, giving loyalty points, etc. As a businessman, he knows the store will be losing money if this trend continues. Having heard about Mozo, Sam decided to give it a try. His store finally attracts a lot of millennials and working professionals and the word also reaches families with kids as well.

d) Merchant D - advertise to get customers to the store

While your business needs to cultivate new customers, don't overlook your most reliable source of revenue. It has been estimated that acquiring new customers costs 5 to10 times more than retaining existing customers. So, you definitely want to encourage your existing customers to become loyal, repeat customers.

CASE DESCRIPTION:

Helen owns several stores offering cosmetic and personal hygiene products. She was an expert in the advertising industry before she signed the contract to run this business. It had been a few good years at the beginning for Helen because she was able to make use of Facebook and Google as new channels to bring customers to her stores. But as competitors got smarter, they too used Facebook and Google, so her advertising advantage vanished. Now comes Mozo, a new universal loyalty program based on cryptocurrency. Helen knows that she found a new, valuable marketing tool. She can use Mozo to reward her new and loyal customers for discovering new product arrivals, she will give Mozo tokens after purchases and her customers will keep coming back to her store for more…Mozo tokens.

Other Attempts

a) GatCoin

GATCOIN is a platform which allows the exchange of Merchant tokens. This adds liquidity to currently unused coupons and loyalty points. As they are digital tokens for a multitude of stores, brands and merchants, they can be carried on a smartphone, without the need to carry around paper coupons or plastic loyalty cards. Having them on a smartphone means a precise geolocation can be used to offer specific airdrops.

On top of the individual Merchant tokens, GATCOIN creates its own GAT, which is a new cryptocurrency that will be launched on the Ethereum network. Each merchant will be able to deploy their own Merchant token, which can be exchanged for other Merchant tokens through the GAT Exchange, utilizing GAT token which is based on Ethereum ERC-20.

Our response:

As described, there will be many Merchant tokens and one GAT as the "middleman". While GAT is traded in the open market; the Merchant tokens are not and hence it will be very difficult for Merchants to set their own token prices (as set prices are not determined by market forces) and for Consumers to accept and to exchange them through GAT. The exchange rates between GAT and Merchant tokens cannot be fairly determined. Even when there are bilateral deals between merchants for the purpose of price setting and exchange merchant tokens amongst them, as the coalition grows, bilateral deals will become unmanageable.

We also understand that GATCOIN depends on outsiders for key technologies with SK Planet for the e-commerce marketplace and its app (where retailers and consumers are participating), and Professor Tsai for the block chain technology. This is not the same as Mozo as we have developed in-house our own proprietary software. Dependent on outside technology will likely lead to increase costs and integration complexity for GATCOIN.

a) Loyyal

Loyyal claims to remove existing barriers from loyalty relationships to enable a more sophisticated custom incentification process. In other words, each business can setup their own loyalty program customized to their own unique needs while still using a loyalty program framework that already exists. Instead of having a rewards system that's individually branded, rewards can now be multi-branded. There can be an airline/bank co-branded rewards program, for example, or an airline/retailer/consumer rewards program.

Loyalty incentivization can now flow up the relationship network from customer to merchant as easily as it moves down, sideways, or other directions. So far, Loyyal has already partnered with PWC, Machine Colony, Deloitte, and other major names. Meanwhile, for blockchain technology, Loyyal is using IBM's Hyperledger project (or at least, they have plans to migrate to the Hyperledger Fabric in the future). IBM's Hyperledger may be one of the more promising enterprise-grade blockchain technologies available today.

Our response:

I find Loyyal technical implementation to be complex, because it has to integrate different merchant's loyalty programs and other systems such as SAP, Oracle, Microsoft, and others. Its blockchain is based on IBM Hyperledger which is also not an open platform such as Bitcoin or Ethereum.

b) Nucleus Vision

Nucleus Vision provides an IOT-based contactless identification system over blockchain, while providing a universal loyalty program using its own cryptocurrency nCash.

The platform uses blockchain, sensors, data, and intelligent analytics to create automated solutions that generate customer loyalty. For retailers, Nucleus Vision's IOT solution provides insights into customer behavior that were not previously possible, such as the ability to track customer visits, to aisles browsing and paths taken in-store, favorite products and brands, and predict future customer behavior in-store.

Our response:

Nucleus claims that their system does not rely on Bluetooth, WIFI, an app, or even facial recognition technology. But, as we understand its approach, the sensors they use will be very intrusive, because they catch and track the signal of the customers' mobile phones (i.e., intervene into 3G/4G data), an ongoing invasion of privacy even with an initial "opt in" by the customer. Their relationship with the mobile operators is not clear as to how they can obtain data related to mobile users over 3G/4G services.

Also, the 3G/4G uses a GPS-based system which does not provide position accuracy needed in an indoor environment. That's why Team Mozo was asked by the mall operator to provide indoor positioning systems with accuracy and response time of 1m 1s.

CONCLUSION: While other attempts do have some merits in their approaches, they are overly complex in their implementation. At the end of the day, if simplicity is the winner, then you can count on Project Mozo.

People

Mozo concept was first formulated in 2015 by Team Mozo in response to business requirements of Mall and Store Chain operators in Asia. While Team Mozo worked on the pilot projects, we observed surprisingly low walk-in customers in malls and brick-and-mortar stores on weekdays, and even on the weekend; and learned about the inefficiency of loyalty programs in the retail industry. Hence, we saw that this sector was ready for a change. The breakthrough in Blockchain and IOT technology in combination with the existing Mozo 2.0, the Team Mozo saw an opportunity to change the traditional rewards programs and to help bring walk-in customers by using Mozo's cryptocurrency as the Token of Discovery. The Team Mozo consists of highly qualified and dedicated experts, who have worked together to build the Loyalty program for Smart Malls and Smart Stores.

a) Core Team

CEO: Giang Phung

Giang has 28 years of experience in the technology industry. He is founding member of Project Mozo, and currently he is also co-founder of Future Data Group Limited (HKEx: 08229). Prior to that, Giang was co-founder and CEO of DMX Technologies Group Limited, a premier cable TV digitization company whose shares were SGX-listed company with a market cap of US$300 Million (SGX: 5CH). Before then, he served as CTO of Datacraft Asia Ltd., a computer network specialist and Internet infrastructure company whose shares were listed on SGX with a market capitalization of approximately US$3.0 Billion (SGX: DCFA). Giang started his career as Product Manager at QPSX Communications Ltd., a technology start-up whose shares were listed on the Australian Stock Exchange, an inventor of DQDB protocol which forms the basis for the IEEE 802.6 standards and packet segmentation and reassembly technique for Asynchronous Transfer Mode (both of which were OEM by AT&T Bell Laboratories, Alcatel, Siemens and Ericsson for deployment of high-speed data services across metropolitan areas). He was a member of ITU-T Study Group XVIII, IEEE 802.6 committee, ATM and Frame Relay Forum. Giang graduated with a Bachelor of Engineering degree with 1st class honors from University of Western Australia, Australia and receive an MBA from University of Louisville, USA.

CFO: Daniel Carroll

Daniel is founding member of Project Mozo. With over 30 years working in the technology and service industries, Daniel has served as CFO for several companies including Luminair Multimedia a production company in films, television, and online video production, Paragon Solutions a pioneer software outsourcing firm in Vietnam; TAK AG an enterprise software solution provider based in Switzerland ; Flying Food Group an food service company in the US, Pcubed, a project management consultancy with offices the US, Europe and Asia; and Blue Plate Catering, a food services company based in Chicago, USA. Daniel has worked as a management consultant in Asia for the past 8 years. He holds a BA from Dartmouth College, a JD from Boston University and an MBA from INSEAD.

CTO: Thang Ton

Thang has a passion for mathematics, and won some of Vietnam's national mathematics contests during high school. Thang was senior technologist at Petronas Vietnam and successfully built the Distributed

Reporting System project. He has worked in the semiconductor industry where he built a semi-automatic wafer processor to control the robot transferring a wafer among processing modules. Thang led several factory automation projects, including as the system architecture consultant for SCADA transportation system with Mitsubishi Heavy Industry. Most recently, Thang was CTO of a technology start-up company that offered Uber-liked logistic services based on motorbikes in Vietnam. Thang graduated with a bachelor degree in Computer Science from the University of Natural Sciences, Ho Chi Minh City, Vietnam.

CMO: Danny Do

Danny has over 20 years of experience of which three times as founder of Internet companies providing digital music (bennhac.com), video distribution (ugotfile.com), and online forum (mmo4me.com). Prior to joining Team Mozo as Chief Marketing Officer, Danny lead a joint venture with the Internet company VTC Online (go.vn), to develop and launch educational mobile apps for the Vietnam market. Before entering into VTC joint venture, Danny founded and ran KISS Concept, a successful software outsourcing company based in Saigon. Danny served as the as the National IT Director (deals.com.au), one the largest e-commerce websites in Australia with annual revenue of over AU$160 million.

CEO - Korea: Jake Byongsok Yu

Jake is responsible for Mozo business in Korea. Currently, he is CEO of DCG Korea, a company specialized in O2O fashion business in Dongdaemun and Namdaemun market. He is a hands-on leader, solving problems with pragmatic approach. He is also known and proven for achieving business objectives within given budget and time, by having a leadership style that fosters transparency, openness, mutual respect, & team building; Always set priorities decisively, delegate responsibilities and ensure accountability at all levels of the organization. Jake came on board at DCG, to make the operation profitable, by outsourcing some functions of the entity to reduce the cost and currently in process of securing Series A funding. Jake graduated with bachelor degree in Political Science from University of California at Berkeley in May 1988.

b) Digital Marketing Team

Product Manager: Trang Le

Trang first joined Mozo as project coordinator for our launch of Mozo 1.0 and 2.0 for the China market. Initially, she worked as Team Mozo's product presenter in Chinese language, later she became knowledgeable of our customer requirements and transformed herself into the role of product management. Prior to joining us, Trang worked for a media company in Xiamen, China. Trang holds a degree in Journalism and Communication from Xiamen University, Fujian Province, China.

Public Relations: Rebecca Chen

Rebecca has a wealth of international experience in advertising and marketing, having worked with some of the world's best-known brands including Ford, Unilever, Bosch and Vitasoy. She has also worked with a top (former) startup, Envato, the second-largest Australian startup after Atlassian. Rebecca currently consults to global and boutique brands in the food, entertainment, trade and online advertising sectors. Rebecca joined project Mozo to help researching, writing and distributing press releases to targeted media.

Digital Marketing - USA: Dylan Jorn

Dylan is a marketing and design professional with over 8 years of experience working with clientele over a wide diversity of industries. He joined Mozo to help coordinate and implement new digital marketing initiatives, including animated video clip, emailer, virtual currency discussion groups and blogs. Previously, he has worked as digital marketing manager and designer for various companies spanning higher education and digital communications to social media platforms and big data. Dylan is a graduate from University at Buffalo, in Buffalo, New York.

Digital Marketing - Korea: Beam Woo Choi

Choi has extensive experiences in consultative marketing, media relations and social communications channels with Siemens PLM, Bosch Korea, Jabra, and Riot Games, while working at the Briman Communications, making him a perfect digital marketing member for Project Mozo. As a marketing communicator for the Software Alliance; BSA (www.bsa.org), he also executed various activities to improve awareness on benefits of using legal software to businesses and consumers. He has conducted an integrated digital marketing and planning programs for numerous domestic and International companies such as Lotte, Amore Pacific, Univera, and Chong Kun Dang. Mr. Choi is currently busy setting up a marketing communications division at AdTech Group, Inc.

Digital Marketing - Korea: Hyun Min Roh

Roh is an international advertising executive, certified by the International Advertising Association (IAA), started both a digital marketing agency and an AD-Tech company and have been running them for eight years, making him a brilliant choice for digital marketing role at Project Mozo. Mr. Roh majored university study in Art Management and Marketing Communication and holds an ART MBA from the Graduate Business School at Kyung-Hee University. Mr. Roh performed more than 300 marketing campaigns for many customers, such as BC Card, GS Retail, and Dongdaemun Design Plaza (DDP). Mr. Roh works as CEO of ALLRARA Media Commerce Group, including its affiliates, such as Asia Model Creator Group, Asha Entertainment, and Creator HRD Dang-talk at present.

c) Software Team

Big Data Scientist: Que Tran

Que is a founding member of Project Mozo. Que led the software development team for Mozo software version 1.0 and 2.0, Indoor Positioning System (1m 1s) as well as the software development team for LavaLamp, our big data engine. Prior to joining us, Que served as a senior project manager for Global Cybersoft Inc., one of the largest software outsourcing companies in Vietnam. During her tenure there, Que led several projects for a data analysis system, a railway integrated SCADA system and a fault detection solution. Que also served as the technical lead on an equipment controller system and an online data analysis system. Que won the 1st prize in computer science, Tien Giang Province competition, and earned her Bachelor of Engineering degree from University of Technology, Ho Chi Minh city, Vietnam.

Core Developer: An Tran

An is one of our core developers, who has ten years of experience in software development. He was the core member of various projects focusing on building back-end web services, big-data processing pipeline, Indoor Positioning System (1m 1s) for Project Mozo. Before joining us, he was the member of team developing the iris scanning and authentication solution that won the contract of India government and some US government agencies. An holds a Bachelor of Computer Science and Engineering degree from University of Technology, Ho Chi Minh city, Vietnam.

Core Developer: Tuan Truong

Tuan is one of our core developers, who has ten years of experience in software development. He was the core member of various projects focusing on large-scale and high-performance database system with million records, specialized in financial sector. Before joining us, he was the manager of software department of Phu Hung Securities, Technical Team Leader of Cosatech and Senior Java Developer at StartHub. Tuan holds a Master of Computer Applications degree from National Natural Sciences University, Ho Chi Minh City, Vietnam.

Core Developer: Toan Tran

Toan is one of our core developers, who has 18 years of experience in software development. He was involved in development of the SAP ERP interface for 361 Degrees at Project Mozo. He has strong software development and project management know-how with broad understanding and in-depth experience in implementing and managing full life-cycle software development. Before joining us, he was the project manager of GCS. Toan holds a Bachelor of Computer Science from University of Technology, Ho Chi Minh city, Vietnam.

Core Developer: Truc Thai

Truc is one of our core developers, who has over eight years of experience in software development, and contributes the core Indoor Positioning System (1m 1s) for Project Mozo. He has practical experience in desktop application, client/server application and distributed system with in-depth experience in big data concept and platform. Before joining us, he was senior software engineer of Hewlett Packard Enterprise, Harvey Nash and GCS. Truc holds a Bachelor of Information Technology from University of Natural Sciences, Ho Chi Minh city, Vietnam.

Blockchain Developer: Danh Ngo

Danh is our blockchain development team lead, who has over 12 years of international computer engineering experience. He is one of a key contributors of Project Mozo, responsible for building the core of the new retail system and www.smartmozo.com . Prior to joining us, Danh has worked in SSMC, one of the largest semiconductor factory in Singapore. During his tenure there, Danh was awarded by the company in his contribution for a trade secret pattern which saves approximately US$1 million. Danh holds Bachelor of Engineering degree from University of Technology, Ho Chi Minh city, Vietnam.

Blockchain Developer: Vu Nguyen

Vu has over 4 years of professional software engineering experience, building and shipping high performance and scalable systems and services. He has worked in the online gaming industry where he

built some Slot game engines, game monitoring and banking payment systems in Spiralworks technologies, Philippines. Prior to that, Vu has worked as a software engineer at Nashtech Vietnam. Vu earned Bachelor of Engineering degree in Information Technology from the University of Technology and Education, Ho Chi Minh city, Vietnam.

Blockchain Developer: Thai Phan

Thai has over 4 years of professional software engineering experience in windows and web development with Microsoft technologies using C#, ASP.NET, SQL Server, Entity Framework, Share Memory, etc. He has worked with MVC and been involved in maintaining versions of source code using TFS 2010. He also has deep understanding of HDMI SDK, CUDA SDK, Winnov SDK, FFMPEG, DirectShow which related to capture video stream. Prior to joining us, he has worked as software developer in RiComputing LTC. Thai holds a Bachelor of Computer Science from University of Information Technology, Ho Chi Minh city, Vietnam.

Mobile App Developer: Dang Ngo

Dang is our App developer for Mozo's Consumer App. Dang joined Team Mozo bringing along with him a demonstrated history of working in the computer software industry. He has a skill in Graphics, User Experience, and User Interface Design. Dang holds a Bachelor of Science (B.Sc.) degree in Computer Science from the University of Natural Sciences, Ho Chi Minh city, Vietnam.

Mobile App Developer: Tuan Mai

Tuan is our prime App developer for Mozo's Retailer App, and developer of our www.mozocoin.io . He joined Team Mozo after he successfully developed a Bluetooth Low Energy sensor controlled App for a Japanese smart watch, which fits right into the heart of Team Mozo sensor development plan. Tuan is investing different kind of IoT sensors for our future use. He holds a Bachelor of Computer Science (B.Sc.) degree with specialty of Computer and Embedded System, from the University of Natural Sciences, Ho Chi Minh City, Vietnam.

Web Developer: Tuan Nguyen

Tuan has more than 7 years of professional experience in software development and more than 2 years of experiences in UX/UI. Prior to joining us, Tuan has worked in IBS Vietnam Co., Limited as senior Software Engineer. He holds Bachelor's degree in Information Technology from Asia e University, Malaysia.

Web Developer: Thuc Anh

Anh has more than 3 years of professional experience in front-end development. Currently, she is the key developer of our www.mozocoin.io. Prior to joining us, Anh has worked in Synova solutions – a tailored business solutions and creative digital outsourcing company. She has professional skill in HTML, CSS, DOM, Animation and JavaScript implementation. Anh holds Bachelor' degree in Computer Science from Industrial University of Ho Chi Minh.

UX/UI Designer: Tam Truong

Tam has over 6 years of UX/UI experience, having worked as a UX/UI designer for a number of technology companies including Cyberspace-Viettel, Vietnam largest mobile operator JV, IMT Solutions which is Vietnam's second largest software outsourcing provider, Propzy US-based real estate operator, Tinypulse a leading employee engagement platform in the USA, Zita Texas-based real estate operator, as well as working as a graphic designer for Yellow Flanders. Tam holds a bachelor's degree and master's degree from FPT University, Vietnam.

UX/UI Designer - Korea: In Hyuk Jeong

Jeong has over 23 years of UX/UI experience, having worked as a UX/UI designer for a number of technology companies including Samsung Electronics, Hanwha Life Insurance, Korea Expressway Corporation, Hitachi Ltd, Ryomo System Lts, etc which are large companies in Korea and Japan. He is now working as Design/Development Consultant at Tobesoft, Korea's largest UX/UI Company by market share. Jeong joined project Mozo with the view to enhance the look and feel as well as user experience of Project Mozo's app, web and IoT services.

UX/UI Designer - Korea: Kyu Ho Lee

Lee has over 22 years of UX/UI experience, having worked as a UX/UI designer for a number of technology companies including Mirae Asset, Shinsegae, Samsung Electro-Mechanics, Kookmin Bank, E&C, Nomura Research Institute, Hitachi Ltd., which are large companies in Korea and Japan. He is now working as Design/Development Consultant at Tobesoft, Korea's largest UX/UI Company by market share. Lee joined project Mozo with the view to enhance the look and feel as well as user experience of Project Mozo's app, web and IoT services.

d) Advisory Team

ICO Advisor: Avishai Ziv (Israel)

Avishai is Senior Manager in the High-Tech Practice team (the largest in Israel) at Ernst Young. He provides Ernst Young services to hundreds of businesses from start-up to multinational level over an 8-year period, whilst gaining a real education as a part of one of the largest accounting firms worldwide. As a Management Consultant, he has been able to provide clients with services - Growth/profitability, corporate structure, strategic planning, corporate level fundraising and development services at start-up and SMB level. He also aided in numerous IPO's on the NASDAQ as well as numerous European Indices and the Tel Aviv 35. Avishai is also CEO of Alignment Group, which has become the largest collective of Blockchain technology/Crypto innovation and facilitator companies worldwide, covering all aspects of any given ICO/TGE process. He has the ability to apply his experience and knowledge in to the technical revolution. He believes that if the IPO is the past and future is the ICO, we will have the chance to remake the world with real technology that will improve our day to day living.

Fund Raiser: Chong Kuan Yew (Singapore)

Kuan Yew has over 20 years investment experience in Asia. He was previously the head of a Vietnam-focused fund based in Singapore whereby he was responsible for numerous private-equity investments in

Vietnam since 2007, having invested over US$123 million, across 11 companies in Vietnam involving agriculture, technology, healthcare, consumer goods, and building materials.

Fund Raiser: James Phung (Singapore)

James is currently executive director of Bank Julius Baer. He is a seasoned banker with over 23 years of experience in the financial services industry, including the last 20 years in Singapore as a qualified investment adviser to Ultra-High-Net-Worth-Individuals (UHNWI) and private corporations, where he has helped them to invest multiple billions of Singapore dollars into financial products over the past years. He has been providing private banking services and representing Westpac Banking Corporation of Australia, American Express of the USA, UBS Wealth Management of Switzerland, and HSBC Banking Corporation of Hong Kong. James holds a BA degree with a double major in Finance and Accounting from Curtin University of Technologies in Australia.

Blockchain Specialist: Chi Ngo (Belgium)

Chi is our blockchain technology advisor, who has experiment blockchain proof of concepts in Healthcare, Supply Chain, and Agriculture using Ethereum blockchain network and Microsoft's Bletchley architecture. Chi has over 40 years of experience in software research, development, and delivery. Currently, he is the CEO of Global Cybersoft Inc., a subsidiary of Hitachi Consulting USA, and a leading software outsourcing firm located in Vietnam, where he oversees more than 1,000 software developers serving 120 customers in 18 countries world-wide. Prior to this tenure, Chi was the General Director of Saigon Software Development Company, a JV between Spacebel BA, IOIT and Saigon Postel. Chi had previously served as the R&D Manager for Spacebel in Belgium and also founded ACT, an IT company based in Belgium.

Big Data Expert: Daein Jeong (Korea)

Jeong has over 15 years of research and development experience in reservoir engineering, resulting in problem solving experience in various oil fields. He has specialist skills in reservoir modeling and simulation, history matching and uncertainty quantification, application of academic knowledge to develop practical software in petroleum engineering, and leading multiple research projects from Government & Research institutes of Korea. Jeong has developed 3 predictive analytic applications for reservoir engineering and registered them as intellectual Property in Korea, published 6 papers on international journal (SCI) and 15 presentations in international and domestic conferences in energy and petroleum area. Jeong holds a Doctor of Philosophy in Petroleum Engineering Korea and Bachelor of Science both of which from Seoul National University, Korea.

Internet Startup Guru: Steven Moustakas (USA)

Steven is based in Silicon Valley and has more than 30 years of executive management experience across a broad range of information technology companies. He is a skilled individual familiar with building and growing technology start-ups into successful businesses. Steven's experience includes technology commercialization activities at the Australian Defense Science and Technology Organization (DSTO) through venture capital firm Starfish Ventures and Managing Momentum, a technology-consulting firm that he founded. Steven was acting Chief Operating Officer for Starfish Ventures-funded start-up iCiX. Before Managing Momentum, Steven served as CEO and Director of the Board of Sigtec, an Australian mobile communications company. Prior to Sigtec, Steven held a number of executive level positions in Silicon Valley

at Internet equipment manufacturers including Extreme Networks, Sun Microsystems, FlowWise Networks, Bay Networks and SynOptics Communications. Steven started his career at Siemens Corporate Research Labs in Munich, Germany. Steven holds both a bachelor's degree and PhD in electrical engineering with an emphasis on data transmission over optical fiber from the University of Western Australia.

Business Advisor: Lee Mun-Young (Korea)

MY Lee joins Project Mozo as business advisor for Korea market and Asia-pacific region. Currently, MY Lee is Chairman & CEO of Tobesoft, Korea's largest UX/UI Company and largest shareholder of DCG. MY Lee has more than 27 years of experience in IT industry and 20 years working in senior management position, such as CEO and Chairman. Over the past years, his business records are in sales and operations with business achievements across Asia-pacific geography, for SGX-listed companies such as Datacraft Asia (now Dimension Data) and DMX Technologies (now KDDI). He has greatest contributions in overseeing and executing company strategy for global business concept in Asia Pacific region, set long term and middle term strategic plans through both organic growth and M&A, develop business plans & company policies to determine strategic direction of company. He is an asset in strategic thinking, team building and execution with proven business track records.

Token Sale

A fixed supply of Five Billion (5,000,000,000) Mozo tokens will be created for the operation of Project Mozo. Thereafter, no further tokens will be created. From this total supply of Mozo tokens (type ERC-20), the distribution will be as follows:

a) Distribution

- 25% (or 1,250,000,000 tokens) will be sold to the public in two (2) tranches:

  The first tranche of 700,000,000 tokens will be sold at US$0.09 each, in a private sale, commencing on May 8, 2018 until July 22, 2018, and a crowd sale from July 23, 2018 to July 30, 2018. The hard cap this tranche will be US$42 million.

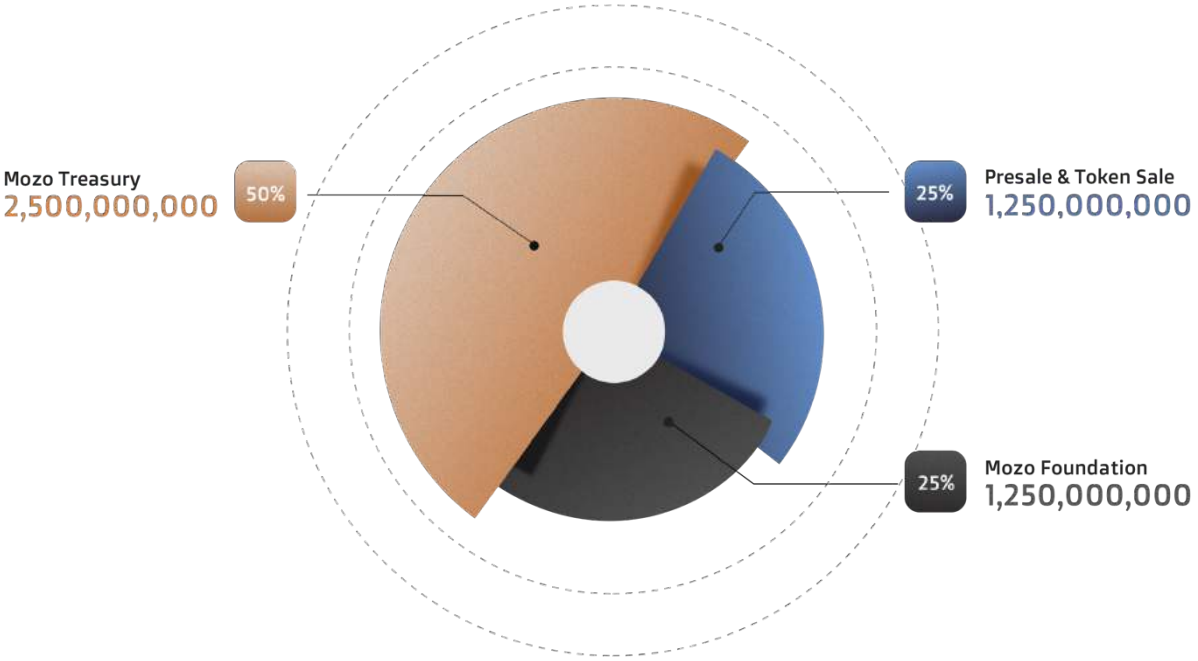
  The second and final tranche of 550,000,000 Mozo tokens will be sold at US$0.12 minimum, targeted for Q4 2018. The hard cap of this tranche will be US$46 million.

  The total hard cap for these two (2) tranches will be US$88 million.

  Details of these offerings, schedules and bonuses can be found on our website at www.mozocoin.io

- 50% (or 2,500,000,000 tokens) will be allocated to the Mozo Treasury for merchant & mall acquisition and for initial rewards by airdrop to consumers that download the Mozo APP. We plan to use this Merchant Treasury to support consumer airdrops for 38,000 retail stores already committed as of the date of this whitepaper, and to grow our Merchant base to 300,000 retail stores and 800 malls globally in the next three years.

- 25% (or 1,250,000,000 tokens) will be allocated to the Mozo Foundation (vested over two years), and Advisors, Partners & Brokers (vested over 6 months). The Foundation includes our founders, existing technical staff who built and will build Mozo software versions 1.0, 2.1 and new technical staff who will be hired to build Mozo 3.0, 4.0 and so on. Advisors, Partners, & Brokers are the retail, financial and technology experts we employ in assisting us throughout Project Mozo. Included in the Advisory list are the ICO advisors who assist us until the completion of the ICO. Partners are those having strategic relationships with Mall and Retail operators, who are responsible for securing the registration of these Malls and Merchants with Project Mozo. Brokers are those who help us in our presale activities.



b) Use of proceeds

Assuming the fund-raising goal is reached, we plan to use the proceeds as follows:

Cost Allocation		Description
Research & Development	30%	Development costs include retaining the current core team, as well as hiring more blockchain developers, App developers, machine learning data scientists and UX/UI specialists.
Sales & Marketing	40%	Marketing costs include promotion of Mozo operations, retailer acquisition, market outreach, strong social media presence, regional marketing efforts.
Operations	30%	Finance, accounting, hiring of new talent, providing operations support, public relations, staff training and administration, and professional fees
Total	100%	

Research & Development

Team Mozo will expand the existing Mozo system software and Mozo 2.1, with research and development efforts to turn those into Mozo 3.0 which will then be ready for the commercial launch. Our software development efforts will focus on (1) improving the UX/UI of our APPs, (2) integrating the Mozo system 3.0 with the Ethereum blockchain in order to support ERC-20 type of tokens, and (3) add machine learning to improve the collection of valuable customer data to turn them into personalization and product recommendations that closely match the consumer's life style and preferences. In addition, we shall deploy a portion of the funds to build Mozo 4.0 which will be integrated into our own blockchain network, *Solo*.

Sales & Marketing

Currently, we have signed up 38,000 stores which are committed to use Mozo, and we are confident we can sign up many more. Our target is to sign up approximately 300,000 retail stores in 800 malls, or 12% market share in Asia-Pacific region. This translates into annual foot traffic under our control of 8 billion.

Our plan for commercial launch starts in Singapore, Hong Kong and Korea. We are using Singapore as our foundation and Hong Kong as our operating base to support further roll out in the region. Hong Kong is a top shopping destination for Chinese consumers, whereas Singapore plays the same role for countries in the South.

Team Singapore, Team Hong Kong and Team Korea will be responsible for merchant acquisition & service, consumer acquisition & service, social media presence, and investor relations. Our founders understand the different cultural, language, and religious inclinations and lifestyles of the diverse population in Asia, so we are confident we can build a sound infrastructure to support the Mozo service across the region. We are also positive about our various connections throughout the region, we believe we can quickly set up effective teams in Singapore, Hong Kong and Korea for the purpose of launching the Mozo service in those countries.

Operations

In operations, we focus on managing and delivering Mozo as a cloud service and building the infrastructure to support both our internal base (our merchants and partners), and our external user base (consumers). Note that we have 38,000 stores committed to use Project Mozo and will sign up more, so we will need to build and support an operation of significant size. This involves ensuring peak performance and maintaining constant availability in order to satisfy the needs and expectations of our customers and partners by meeting the necessary service level agreement standards.

Specifically, we shall use Amazon's cloud service provider to host our Mozo software system, Apple's App Store for our Consumer APP, and Google Play to host our Consumer APP and Retailer APP. Initially, we shall support Beacons, Stickers and QR codes for discovery of products, and later we shall support new types of IoT sensors as they become available. Included in these costs will be any ancillary hardware and software costs, and other day-to-day operating expenses.

Likewise, our finance, accounting and human resource functions will also be supported by Software as a Service in the cloud. Our finance and administration functions shall be carried out in Singapore.

Roadmap

Project Mozo started with the incorporation of Smartmozo Limited (the "Company") in Hong Kong in 2015 with US$1.0m paid-up capital represent funding from Jinshu Capital Limited, ePro Connection Limited and Biglabs Pte. Ltd. (the "Foundation").

In the same year, the Company signed a memorandum of understanding with China's Wanda e-Commerce Co., Ltd. (a JV between Wanda (70%), Baidu (15%) and Tencent (15%)) for a field test of our indoor positioning system at Wanda's Nanchang Mall. Team Mozo passed all of the 113 random test points measured on Wanda's test app, and achieved 1 meter accuracy, and 1 second response time. The Company also signed a memorandum of understanding with Dasin Mall, for a field test of proprietary indoor positioning system, online-to-offline marketplace, and smart mall app all developed by Team Mozo in Zhongshan, China in early 2016.

The 3rd proof of concept was through a signed a memorandum of understanding with 361 Degrees International Co., Ltd for a pilot test of our smart store system and app at two of its retail stores in Xiamen, China. Mozo 1.0 were brought into Xiamen for testing at the end of 2016. We had a solid system working non-stop for 30 days without disruption or bugs, supporting a total of 400 downloads and made an approximately 20% contribution to the two stores' revenue. As a result of feedback from the field test, we have upgraded Mozo software to Mozo 2.1 to solve pricing differences between online and offline.

In our work at the Malls and Stores, we observed the pattern of foot-traffic and saw an opportunity. The rise of blockchain and virtual coins, we saw that we could apply Mozo to increase walk-ins to the Malls and Stores everywhere, by disrupting the existing loyalty system. In 2017, the "Token of Discovery" concept was born. In parallel, we have upgraded Mozo system software and apps to Mozo 2.1, which is now available on GitHub, to showcase our concept. At the same time the White Paper was also made available also on GitHub. Please see our website **www.mozocoin.io**.

In 2018, we have also entered into memorandum of understanding with DCG Korea and Suntec City Singapore that upon successful of this ICO, Mozo shall be deployed at these location as launched customers. The total committed stores are 38,000.

We are ready to launch our ICO. Details of the ICO is on our website stated above.

As indicated there, our fundraising will go through a few stages including presale and crowdsale. After the clock stops, or when the hard cap is reached, we complete the selling phase of this exercise. After that, we will generate the tokens and transfer them to the respective ICO holders, the foundation, advisers, and the rest will be sent to treasury for merchant and consumer acquisition.

The one of the key incentives for merchants and consumers to join Project Mozo is the ability for Mozo tokens to be exchangeable with Ethereum, Bitcoin, etc., through one or more publicly available exchanges. The Mozo Team will make applications to be listed on these exchanges and will publish results of these in due course. Also, within the Project Mozo, we will have an exchange function, that allows merchants and consumers to transfer their tokens amongst themselves, using Ethereum initially and *Solo* blockchain eventually. The next step will be for us to deploy some of the funds raised through this exercise to upgrade our Mozo software. This includes the integration with the Ethereum blockchain, improvement of the UX/UI and the functionality of the Apps, and enhancement of our Machine Learning engine.

In parallel, to achieve the milestone of launching Project Mozo in Korea, Singapore and other markets, we will work with our partners to secure endorsements and expressions of interest to join us from merchants and malls in Hong Kong and Singapore. According to our discussion with Mall operators and partners in Singapore, there is already a willingness to work with us when we ready to launch. We intend to launch Mozo services in Singapore, Hong Kong, and Korea. When China shows an openness to blockchain and virtual currencies, we will be ready to launch in China as well.

Mozo 3.0 (8 January 2019)

Since Mozo core system software version 1.0, 2.0 and 2.1 have been tested and perform well in the field giving us confidence to now focus on delivering upgrades to our Consumer and Retailer Apps which will integrate with new digital wallets that run on Ethereum blockchain test bed and will ensure smart contract transaction accuracy, security and relative performance. We anticipate that Mozo 3.0 will accomplish the following (not necessarily in chronological order):

- An “Airdrop” smart contract which holds the amount of Mozo tokens airdropped to consumers when they download and activate the Consumer APP for the first time
- A “ZAP” smart contract which holds the amount of Mozo tokens as rewards to consumers when they discover products and services at store
- A “BUY” smart contract which holds the amount of Mozo tokens as rewards to consumers when they purchase products and services through app
- An “Airdrop” smart contract which holds the amount of Mozo tokens airdropped to merchants when they download and activate the Retailer APP for the first time
- Upgrade UX/UI to include tools for consumers to earn Mozo tokens, which will be organized in location-based maps, Product categories/listings, search engine, and ranking

- Upgrade UX/UI to include tools for consumers to redeem Mozo tokens, transfer them to friends, and exchange them for other tokens
- Upgrade UX/UI to make it easy for merchants to join our coalition, receive the previously described Merchant Packages
- Upgrade UX/UI to include tools for retailers to set up smart contracts described above, set up redemption rates, and buy and sell Mozo tokens

Our ICO distribution smart contract will use the ERC-20 format, henceforth all of the above smart contracts will adhere to the same format to ensure that Mozo tokens work seamlessly throughout.

Mozo 4.0 (30 June 2019)

Team Mozo will deliver Mozo 4.0 system, Consumer APP and Retailer APP, which will be integrated with the global Ethereum network and migrated from the local Ethereum test bed. In addition to this key objective which is necessary for the launch, Team Mozo will also enhance our system to scale up its capabilities, to include cyber security measures to prevent hacking attempts, and to provide CRM capabilities that offer better quality of services to merchants and consumers at large. We anticipate that Mozo 4.0 will accomplish the following:

- Improve services provided by www.mozocoin.io website, which is currently used for launching this ICO, to allow for merchant registration, to handle Merchant Packages and to provide CRM support
- Improve services provided by www.mozocoin.io website to include a slack channel so that people can contribute their ideas or feedback to our foundation
- Support for multi-vendor redemption marketplace particularly on www.smartmozo.com website, which is currently used as a marketplace for our Mozo O2O system, as well as on our app
- Improve UI/UI of www.smartmozo.com website, to make it easier for consumers to navigate our redemption marketplace, as well as on app
- Include CMS capabilities which allows multiple retailers to build their own redemption virtual stores.
- Improve cyber security capabilities, at the perimeter level to deter DDOS attacks and other hacking attempts

Future Features & Mozo 5.0 (3 January 2020)

Assuming we receive positive responses from merchants and consumers, our next step should be to make the Mozo system even smarter by using Machine Learning and AI techniques. In particular, we plan to tap our technology advisors' cumulative knowledge to help us conceptualize future enhancements including and not limited to the following:

- Apply Machine Learning and AI techniques to recommend products and services to consumers. This represents improvements to our existing big data engine
- Apply AI technique to personalize services provided to our consumers
- Integrate with *Solo*, our proprietary blockchain network to improve efficiency and cost of transactions
- Adopt AI technique and new IoT sensors to provide frictionless services to consumers
- Provide better operational data visualizations to merchants, consumers and our own Team Mozo.

Disclaimer

This technical whitepaper has been prepared by Team Mozo for the sole purpose of introducing the technical engineering aspects of the Mozo System, its associated platform components, and its underlying blockchain protocol Ethereum. This document does not constitute any offer, solicitation, recommendation or invitation for, or in relation to, the securities of any company described herein.

The whitepaper is not an offering document or prospectus, and is not intended to provide the basis of any investment decision or contract. The information presented in this whitepaper is of a technical engineering nature only, and has not been subject to independent audit, verification or analysis by any professional legal, accounting, engineering or financial advisers. The whitepaper does not purport to include information that a buyer of Mozo might require to form any investment decision, and, in particular, does not comprehensively address risks of Mozo, which are numerous and significant.

Team Mozo (along with its directors, officers and employees), do not assume any liability or responsibility whatsoever for the accuracy or completeness of information contained in this whitepaper, or for correcting any errors herein. Furthermore, should you choose to participate in the initial sale of Mozo tokens does not assume any liability or responsibility whatsoever for any loss of market value of Project Mozo.

The content of this whitepaper is technically challenging and requires a high degree of familiarity with distributed ledger technology in order to comprehend Mozo and its associated engineering risks.

Recipients of this document are encouraged to seek external advice, and are solely responsible for making their own assessment of the matters herein, including assessment of risks, and consulting their own technical and professional advisers.

Disclaimer "forward looking statements"

This whitepaper and material uploaded to www.mozocoin.io contain statements related to our future business and financial performance and future events or developments involving Mozo token that may constitute forward-looking statements. These statements may be identified by words such as "expect," "look forward to," "anticipate" "intend," "plan," "believe," "seek," "estimate," "will," "project" or words of similar meaning. We may also make forward-looking statements in other reports, in presentations, in material delivered to shareholders and in press releases. In addition, our representatives may from time to time make oral forward-looking statements. Such statements are based on the current expectations and certain assumptions of Team Mozo, of which many are beyond Mozo's control. These are subject to a number of risks, uncertainties and factors, including, but not limited to those described in this whitepaper. Should one or more of these risks or uncertainties materialize, or should underlying expectations not occur or assumptions prove incorrect, the actual results, performance or achievements of Mozo token may (negatively or positively) vary materially from those described explicitly or implicitly in the relevant forward-looking statement. Mozo token neither intends, nor assumes any obligation, to update or revise these forward-looking statements in light of developments which differ from those anticipated.

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Glossaries

Mozo	An assistant
Beacon	A Bluetooth Low Energy class of device conforming to Apple's iBeacon and Google's Eddystone specifications
Sticker	A lower cost Beacon
Mozo token, Mozo Token	Our cryptocurrency which is based on Ethereum Request for Comment No. 20 (ERC-20 token)
Consumer App	Our user shopping app
Solo	Our proprietary blockchain network
SHAKE	An action to shake a smartphone to get some Mozo tokens, when user download our App
ZAP	An action to discover a product to get some Mozo tokens, by lowering the smartphone to a proximity of a Beacon or Sticker
BUY	An action to purchase a product (and get some Mozo tokens, if any)
Redemption Marketplace	Our marketplace for the purpose to support redemption by consumers
Retailer App	Our App designed for brand-owner, franchisee, or retailer
Foot Traffic, Walk-in	An action to go into a brick-and-mortar store, or mall
Loyalty Program	A reward program designed to encourage loyal consumers who keep coming back to a store