The Future of Payments

GhostPay Inc. is a C Stock Corporation registered through the Division of Corporations in the State

of Delaware, in the United States of America.

Abstract

"The Future of Payments" the GhostPay tagline, is the payment platform providing (IaaS) which allows the client to choose in which cryptocurrencies they can deposit, house, transfer and purchase with at partnered locations. Once the new client fills in the data required for account activation they can then move their cryptocurrency via link address from 3rd party exchanges and trading platforms to their GhostPay wallet for spending. The next step is to download the smart-phone based application, which acts as its mobile successor and contactless payment device. There you have it, you now have a digital cash wallet on your phone to make purchases at select locations. The GhostPay wallet is protected through high-level encryption, with multi-level authentication made available to protect your funds. The application's primary purpose is to connect via IOT through existing QR code and NFC technologies to allow Cryptocurrency transactions on the go. The application will be available for both iOS and Android operating systems. Where, when, and how the consumer uses specific payment varieties is based on the market, preference in terms of coin, or lifestyle choice. This gateway eliminates most cards and their chips from the equation while promising anonymity of transactional history and location.

Current Issue in the Americas

The problem at point-of-sale purchase is privacy, quickness, and ease of use. GhostPay plans to offer an alternative, which directly fills this void. Currently, merchants accept very few payment methods leaving the consumer stuck with using the EMV chip, prepaid cards, Android Pay/Apple Pay/Samsung Pay linked to traditional credit or debit, or paying in cash. We often hear that governments want a cashless society. More recently there has been a negative connotation and or criminal aspect associated with paying in cash. This is nothing further from the truth, in fact by using cash you are exercising your right of privacy against an oppressive surveillance state. Governments and private companies take advantage of your naivety and sell out your information. Like John F. Kennedy, the 35th President of the United States said, "A society which respects civil liberty realizes that the freedom of its people is built, in large part, upon their privacy." At GhostPay our job is to protect your privacy by giving you oversight and access over your information allowing you to transact confidently knowing you are safe from prying eyes.

Some might argue that paying at the pump is outdated and could use a facelift. Federal regulations will require all pumps in the United States to adopt EMV chips at the pump by 2020. The last thing we need is an EMV chip slowing us down at the gas station. I think we can all agree that filling up is a pain, why not make payment quick and easy?

Another huge area for improvement is the metro lines method of payment. Foreign travelers would have an easy alternative to spending their foreign exchange fiat during travels, and everyday domestic users could have the option to reload and pay with the tap of a mobile device. The time it takes to load the machine with cash and change to load a card can be easily improved through a mobile application loading electronic money.

Worldwide Predicament- Banking Crisis

Most Americans have in one way or another been affected by the banking crisis of 2007-08. Minimal oversight, predatory lending, and shady dealings played a part in the financial collapse which crippled the world on an international scale. There soon after the Dodd-Frank Act was enacted, which halted most of these dangerous financial practices, yet throughout history and on the global level we have seen this time and time again. Do yourself a favor and type into a search engine "list of banking collapses worldwide", and you will be astonished at the length of the list.

The problem is the fractional reserve banking system, inflation, rising population, too much debt, and human nature. This piece is not to persuade you into being anti-establishment but to make you think and understand the complexity of the problem so that you can protect yourself. Most times when you understand a the

generalized problem you can do a few things: plan for error, fix the problem, or do nothing. For instance, if a river gets too much runoff and floods a bridge in time of heavy rain you can do a few things. One, you can build a bridge parallel to the roadway in higher elevation to provide a detour. Two, you can build a dam upstream to lessen the current water volume in theory eliminating the problem. Three, you can do nothing hope for the best and put a sign-up.

Dodd-Frank raised costs for banks and increased paperwork through regulations which in turn put people out of work, while interest rates rose and stock prices remained low after the crash. What reform did was a mix between option one and two above; created a new more complex path along with bailouts (expensive), while lessening the output of financial products due to demand (less revenue). This made the problem worse economically, given this usually happens when fixing problems but more recently we have seen banking regulations lessen to a place where bank returns and stock market valuation hasn't been in years. When looking at this predicament on a macro level you would be wise to ask yourself, "When is this going to happen again?" History shows financial collapses happen quite often and has for centuries if you did your homework.

The basic level of investing teaches to not put all your eggs in one basket, or to diversify your portfolio. Why not keep funds in a decentralized borderless bank? Even if these were reserve funds for the purpose of just holding or spending, you're covered. If the banking system falters your funds are not tied to FIAT currency with the exception of a few stable coins, leaving you with reserve funds. That coupled with the ability to spend at retail locations is what we call being financially proactive.

Value Proposition

The biggest difference from that of the competition is that the GhostPay wallet infrastructure is private and decentralized. The subsequent payments made are similar to a digital form of cash. Our job is to process payments to the merchant and keep your money, transaction history, and data private (to you only). We leverage mobile payments keeping things contactless, quick and easy.

Industry Challenges

Current industry challenges involve speed/bandwidth, price uniformity, and acceptance while accounting for regulation and compliance. It is not if, but when these issues will be improved; creating a trusted network of blockchain companies. Let's briefly talk about speed and bandwidth in the blockchain. As we know there are many blockchains some quicker than others but the top two in terms of market cap* are notoriously slow. One reason for this is mining new blocks and the other is due to congestion (too many people on the network). On the other hand, there are many blockchains that are less pronounced in terms of trading value and market cap but provide specific applications which promise high transaction volumes per second while remaining payment friendly. The only way to know for sure is through acceptance and high-volume beta testing in the market. If GhostPay launches a utility token for transacting, one of our biggest concerns will be this issue of bandwidth capability.

Next comes price uniformity which should be handled specially when it comes to conversion and transacting. If values are fluctuating from exchange to exchange and expect to be uniformly transferred over to wallets including GhostPay the issue lies in conversion. All we can accept is what price is sent to the wallet we in no way are responsible for the gap in valuation. How do we expect to price chart a currency with multiple valuations? This will prove difficult in each respectable E-wallet company when it comes to price determination especially if the wallet sources the point of sale.

Acceptance amongst the mainstream market is a big issue with Cryptocurrencies because just like most things blockchain technology has its pros and it has its cons. Silk road and international drug networks relied on blockchains as means of laundering and paying for drugs while finding a loophole in legal systems. Additionally, in recent years we have seen fraudulent ICOs and scams including many pump and dumps, which left a bad reputation for a market sector and many people out of money. Eventually, time will sort out the real

players from the bad actors leading to widespread adoption. These things take time, a specific company in 2019 noted in the competitor's section below seems to be a market entrant in payments; being backed a big player and a reputable partner provides a sample test to see if crypto payments are feasible in the real world.

Price volatility amongst coins also plays a part in why some people and companies reject implementing cryptocurrency payments. Although there are many applications run on the blockchain something that needs to be addressed is that during a transaction price valuation should be locked in and processed. Privacy coins solve this problem for the most part but as mentioned above the sample test proving the POC is not as stable as stability coins themselves (i.e. Tether, Rockz, etc.).

Taxation; the difficult part moving forward is widespread usage and paying tax. The systematic framework would need to involve a 3rd party state account to source and pay in which to operate when it comes to retail corporations accepting Crypto as a means of payment. The retail corporation could always pay the proper percentage after conversion.

Lastly, we look to regulation and compliance which serve as the curveball to the list. The reason being is that this is a new playing field and regulators are not exactly sure where, and how they want to regulate. On one hand, they want to promote financial technology and on the other hand they want centralized control and monitoring. The truth is that there is no hiding the potential advantages in Blockchain. Regulation has not come down too hard on folks even with many fraudulent ICOs. Time will tell, where we currently stand the SEC labels ICO tokens (fundraising from investors) as securities which fall under regulatory guidelines. Additionally, utility tokens, while providing value do not necessarily provide monetary exchange value in the form of an investment contract. In turn, leaving most exempt from regulation, if you would like to explore this deeper please see the Howey Test and https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets. Again, it is unclear how regulations will limit blockchain companies moving forward. Jay Clayton, chairman of the SEC made public statements highlighting guidelines in which to operate, also mentioning exemptions.

Competitive Landscape:

	ICO	Token Usability	Crypto Payment(s)	Privacy	Centralized	Founded	Cards	Mobile	Current Usage
GhostPay	Yes	Yes	Yes, Mostly Privacy Coin	Yes	Centralized-eventually Decentralized.	2018	No	Yes	No
Graft	Yes	Yes	Yes	No	Decentralized	2017	Yes	Yes	Alpha
BitPay	No	N/A	BTC BCH	No	Centralized	2011	Yes	Yes	Yes
Coinbase Commerce	No	N/A	BTC BCH ETH LTC	No	Centralized	2012	No	Yes	Yes
Coinpayments	Yes	Yes	1,100 Altcoins	Yes	Centralized	2013	N/A	N/A	Yes
Bakkt	No	N/A	BTC	No	Centralized	2018	No	Yes	No
CryptoHawk	Yes	Unsure	Yes	No	Decentralized	2017	Yes	Yes	Not yet launched
Beluga Pay	Yes	Yes	Yes	No	Decentralized	2014	Yes	Yes	Beta

Stack	Yes	Yes	Yes	No	Connected to Centralized Network	2017	Yes	Yes	Not yet launched
Crypterium	Yes	Yes	Yes, partnering with Apple Pay Samsung Pay and Android Pay	No	Decentralized technically	2017	Yes	Yes	Beta
Wirex	No	N/A	BTC, LTC, ETH, XRP	No	Centralized (Partnered with Visa)	2014	Yes	Yes	Yes
Stripe	No	N/A	XLM possibility	No	Centralized	2011	Yes	iOS	Yes
PayPal	N/A	N/A	No	No	3rd Party but Centralized	1998	Yes	Yes	Yes
Square	N/A	N/A	BTC	No	Centralized	2009	N/A	Yes	Yes
Mastercard	N/A	N/A	N/A	No	Centralized	1966	Yes	N/A	Yes
Visa	N/A	N/A	N/A	No	Centralized	1958	Yes	N/A	Yes

Each company has their specific pros and cons in each respective column. Speed and bandwidth seem to be the biggest issues in blockchain thus far. Crypterium will have the bandwidth by linking with companies mentioned above. Stack seems to have the processing speed issue down by using their token for payment while utilizing state channels. Square plans to track taxable crypto providing a 1099-B, and the goal at GhostPay is to provide users privacy in purchases and their history.

GhostPay specifically plans to protect users' monies by leveraging not only privacy coins but other measures to ensure anonymity while processing transactions. With the use of a VPN, the user can mask his/her IP address during purchase. GhostPay will protect user transaction history on its servers, in fact, the idea is to allow clients the choice on whether to hide this information from GhostPay representatives. We just ask that you please remember your login credentials. Ultimately, we are making transactions relatable to a digital form of cash and quick and also untraceable.

Why GhostPay

Although we are a new startup company (2018) we are entering the space at a good time without major Federal regulation amidst a fast-paced financial landscape globally. Although there are competitors in the space with existing market share we look at this as a positive. We can sift through our competition to find a more desirable alternative that benefits the consumer. By 2021 mobile payments are projected to reach $282 billion nearly triple the figure from 2016. More people will soon come to realize mobile payments can actually be safer and more convenient than the alternative leading to a higher adoption rate toward other developed nations worldwide. Although the rough estimate is that 8% of Americans operate in or own cryptocurrency we expect to see sustainable growth as people understand the opportunity digital assets can play across the globe. Our market should grow as a POC becomes solidified and our beta proves successful. All in all our service will prove to be very useful for commuters, foreigners traveling to the States and current Cryptocurrency holders.

"Our philosophy differs from that of the traditional Automated Clearing House (ACH) processes as well as other players in our direct competitive landscape. Although we are similar in some ways we are not a traditional bank, trading platform, or exchange."

We plan to establish and protect a B2C and B2B infrastructure allowing ghost-payments. We stray away from the idea of chip cards as that defeats the purpose of quick anonymous transactions (ghost-payments). Although that does not negate the possibility of providing cold-cards for purchases. We believe that consumers should have the right to bank and transact anonymously.

It is clear the majority of consumers prefer anonymity opposed to marketing agencies/governments collecting big data on purchases but might not have a viable alternative aside from traditional paper notes (Cash). Cash is great but it has its flaws. GhostPay plans to create an opportunity for the consumer and looks to pave the way in the Fintech sphere. Not only does this open the possibility of international usage at multinational corporations but will save you time and money along the way. ACH might be here to stay but the blockchain offers an impressive alternative with many applications. We hope to not only rid the negative stigma associated with digital currencies due to prior usage but to also educate on their possibilities in legitimizing a valuable asset that we can all benefit from.

Comparison Chart (ACH) vs. (Crypto)

Banking Process	Quickness (TPS)	Anonymity	Oversight	Sustainability	Settlement	Other
ACH (Visa, MasterCard)	Advantage over Crypto	None on the backend	Banks/Feds	Not Sustainable	1-3 days	Centralized
Blockchain (Crypto)	Varies but is improving	Public (transparent) or Private	Miners	Sustainable	Hours to 1 day (GhostPay)	Decentralized

The results speak for themselves: Cryptocurrency although still developing shows lots of promise to be the future in currency. Unmanipulated decentralized currency might possibly turn into one globalized coin, continental coins like we currently have through partnership unions (although this proves to be very complicated and oppressive) or through private corporations. Regardless less currency divide would make trade easier and could promote a merit-based system.

Payment Flowchart

Below is a payment flowchart showing the detailed view of a regular purchase made at the point of sale utilizing the current ACH processes and then this process alongside the blockchain technology process. If you are unfamiliar how this application and system will work refer to the chart below and follow the guide through the sale. Red is the current ACH process and flow, whereas Green is the GhostPay process which seems too quick and more reliable alternative in some applications. Start with the Oval shapes and end with the Cylinder shapes to complete the process. Please also note that "OR" describes situations when using GhostPay for instance if you were to "tap phone over terminal" at say the metro line you would skip the next process and go to GhostPay "Choose which cryptocurrency" and continue through this process. Please do not hesitate to reach out with any and all questions.

Payment Flowchart Visual
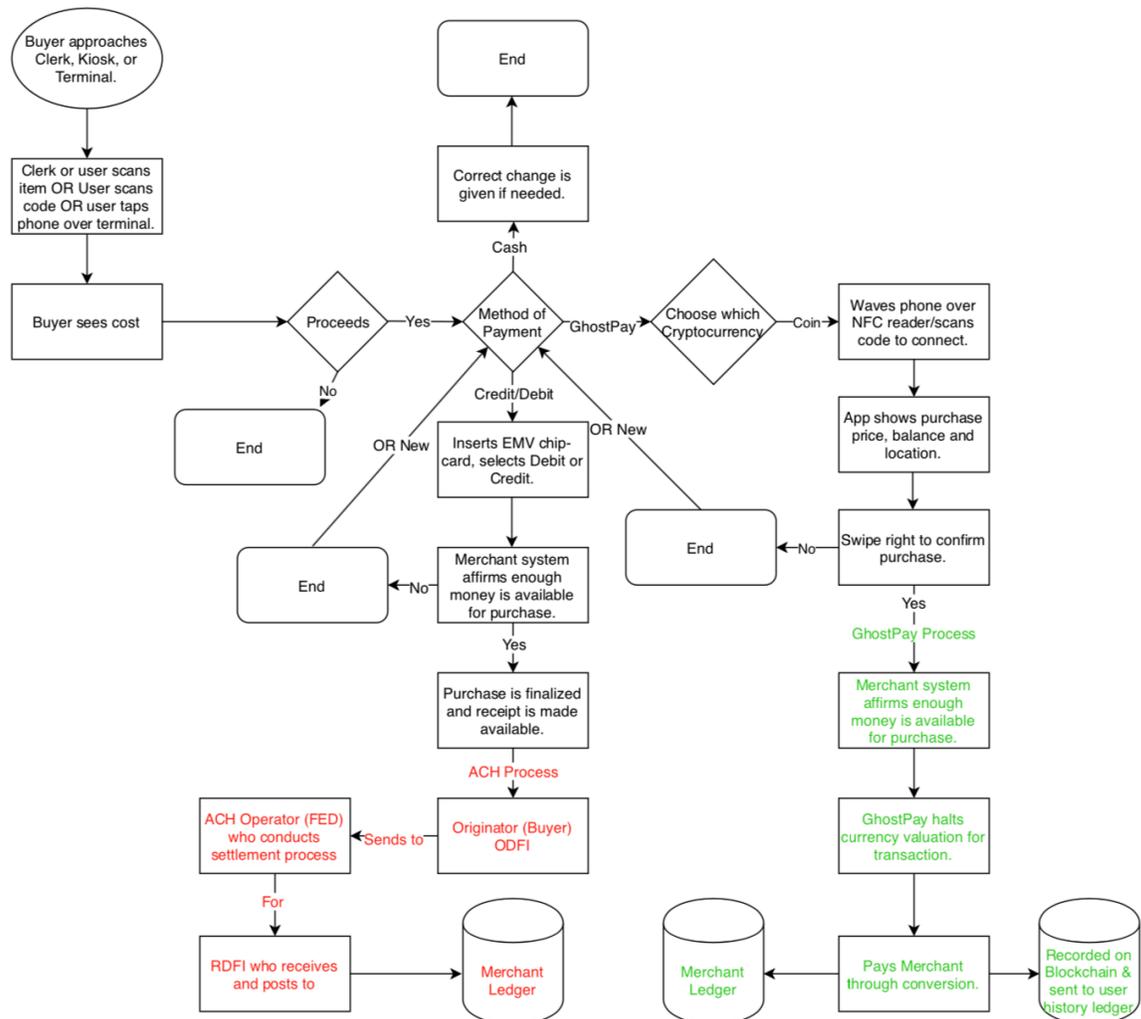
Point of Sale (Merchant)

The premise is to use current NFC and or QR code generation technology to connect to the GhostPay application made available through your phone providers app. store. This ideology is similar to that of existing Apple Pay, Samsung Pay, and Android Pay but unique in the fact that it incorporates blockchain technology as a ledger system for purchases made by the client and remains anonymous on the receiving end (merchant ledger system). The plan is for the purchase to come up as "GhostPay" for all user purchases in the merchant ledger which lets the merchant see the date, time, and amount but no other information such as name, billing address, and account balance leading you back the client (comparable to cash). We believe this is insignificant as long as the merchant is paid in full for their products and or services.

User Connectivity (IOT)

As mentioned in the above piece the connect aspect is depending on whether the merchant hosts NFC payments or QR codes through their payment reader or terminal. This will or will not change depending on whether the user pays at the pump remotely or pays at the merchant's electronic point-of-sale terminal in store as these two locations might host one or both of the options mentioned. The remote option gives the buyer choice as to their desired method of payment enabling the customer 24-hour access away from inclement weather. One thing will not change and that is that the user will have to own a smartphone with the GhostPay application or an authorized device mentioned below to use the service. The GhostPay application will generate a code to be scanned (in the case of McDonalds or Starbucks) or scan the QR code generated on the interface/electronic terminal to pair the user account to the merchant's system to process payment.

An additional form of connectivity can be processed by means of a "cold system" through connecting a cold-storage crypto wallet device or cold card to the terminal via USB. Currently, the point of sale reading devices do not allow for USB connectability but this could be a viable payment option down the road. The only difference in payment would be that the sending unit (Cold storage wallet) is offline and the receiver (POS terminal) would be online. A cold card could work the same way as the wallet described above but with pin numbers. Although these technologies are not new the process of housing a multitude of payment varieties based on lifestyle for use at brick-and-mortar locations, is.

Payment Processing:

If the user decides to use GhostPay and pay in cryptocurrency, one the user must know that transactions through the blockchain system are irreversible (only on Blockchain hosted coin) and vary in terms of processing time depending on the cryptocurrency chosen. Payments will be confirmed with an electronic confirmation code made available through the application at purchase and can also have the receipt sent to your email. If that is not an attractive option the user can screenshot the confirmation code just in case of a dispute. The transaction will also be stored in the internal GhostPay ledger for you and only you to see if you deem necessary (you can control these settings for account recovery and customer service specialists in case of dispute).

Merchant System:

The plan is to pay the merchant like they are normally paid via ACH. The only difference is the settlement time in which the money is transferred. Meaning our solution to the merchant is to provide a service offering that is not only innovative but that tailors to the needs of the company. If the merchant wants to receive payment in cryptocurrency we would be more than willing to provide that solution to the merchant. Otherwise, standard fiat is the currency in which the merchant will be paid for the given product or service offering they provide.

Disputes

Transactional disputes come with the business, as a company building on trust and reliability, planning is huge. Our plan for disputes is to provide clients with a customer service team that will handle inquiries regarding these disputes. As mentioned above, our clients have the option to make their purchase history internally private. Come dispute time this will be an issue for GhostPay representatives- so when the account is on discovery status we ask that you undo this privacy option for your own benefit. Otherwise, we will be unable to assist you in the dispute as we will not be able to see proof of the transaction. All merchant disputes will be handled by the GhostPay team.

Pay as you go (Prepaid)

As the client, you have the choice of creating an account to fund short term "travel usage" or even one-time use. Just note that an additional fee will be accounted for using this service offering to account for unexpected transactional fees and processing. There is a tiered offering availability in which the user can choose an extra layer of security. We're here for you, wherever your lifestyle takes you.

Subscribe

By subscribing on a yearly basis, the user gets the most out of the GhostPay offering through not only a breakdown in price but additional reward program incentives. The subscription covers the costs associated with transactional related costs and usage is unlimited. The rewards program shall refund you a percentage of your money that you spent. Whether you would like a check written out in your name, or spending credit is up to you.

Standard Subscription

Standard users can use the wallet to store and spend their cryptocurrency at partnered locations. With this subscription, the user still gets the benefits of anonymous payments and can view their purchase history on the encrypted network. As mentioned above, you have the option to completely eliminate GhostPay representatives from the equation in terms of payment history. Please be careful not to lock yourself out of your account as this would make account recovery very timely and more difficult for both parties.

Premium Subscription:

We've got you covered- whether you are using the "pay as you go" option or subscribing, you will have the option to pay for a premium offering. Premium users can enjoy a built-in VPN offering in the application, an alias with the option to chat with other members, and access to directly send money to one another via a P2P network. The difference between the premium "pay as you go" and premium subscription offering is that the ladder gets everything offered above while the "pay as you go" members just get the additional VPN service offering.

Technology and Application

GhostPay.io is in its early stages and will house accounts containing mostly private POS-friendly cryptocurrencies that transfer from trading platforms and exchanges via link address. We will collect the least amount of information required for account creation. The problem is that not everything works perfectly, and some people are dishonest we realize that. We will need to collect certain information for your benefit as our client. GhostPay.io will be identical to the GhostPay application minus some technical features and of course payment options.

GhostMode

The technology will include Cryptocurrency payments, a VPN and other masking software programs, along with the development framework to substantiate the payment-based platform for both vendors and consumers.

Market

The target market (B2C) is current Cryptocurrency holders/traders, early adopters, and innovators. After reaching out to industry leaders throughout the world in Financial Technology (Fintech) and the Blockchain field we received some great feedback. A notable response was "I would pay extra for this service and so would my associates" -Blockchain Developer (Hungary). The demographic market would be focusing on technological hotspots not only domestically but eventually internationally. The target market (B2B) is just about every convenience store for their internal and pump application, as well as other places where the concept would make sense. Local governments can also partner and use GhostPay capabilities to allow payments for metro

Market Segmentation and Growth

GhostPay plans to segment the market by offering solutions for not only retail locations (B&M) but also at the pump, methods of travel including metro stations allowing easy reloadable payment. Foreign travelers will easily be able to get around the city and spend their cash at restaurants and attractions rather than through public transit. As we know other countries are much more efficient and utilize public transit more so than here in the states.

This segment is a spot that is relied on heavily and can prove to be very useful as we continue. The future for decentralized payments especially for means of travel seems to have much potential.

Investors

Although an ICO offering is a great way to raise capital and provide token usability we would still like to offer standard funding methods to expand our network and get traction in a dense market. Seeing that GhostPay is a C-stock corporation we have the ability to provide preferred and standard stock to those interested in investing. Please contact GhostPayInquiries@ProtonMail.com if you would like more information or you are interested in investing in us.

Token

GhostPay plans to launch a stable utility token set to run on a private blockchain for friendly-usage at the point of sale. The token is really for consumers wanting to use the service and less about investment. The point is pre-paying for later usage through either a reduced rate or free trial period (See Consumers).

Consumers

We really hope to expand our network and get people excited about GhostPay, especially the clients using the application. Most companies want your money but we want your trust. We want to provide you with a method of payment that is not only quick and convenient but secure. Our job is not to sell your data or monitor your spending habits but to keep your personal data and private life, private. Essentially consumers would invest through the ICO to later use the service. We hope to keep in contact with this community throughout our development. Ironically enough, foreigners who travel to the United States would be able to use this service to get around towns negating the need for large foreign currency exchange. The idea is that our community would also get to test the concept through our Beta to see if they like the service provided and feedback. The point is to create a UX that is fit to your wants and needs. We will grow together as a community in providing a revolutionary change to the payments sphere and a new way to view data. Data is expensive, especially personal data. Why do people give it away for free to people or organizations we do not trust?

We need to prove that information and security of data is truly private, we can then directly market GhostPay to upper-level executives, celebrities, politicians, etc. while creating a safe way to pay via mobile, cold card or authorized device. Clearly, security and anonymity are very important subjects specifically to these subgroups mentioned above.

Merchants

After MVP our goal is to create partnerships with oil companies, ride share companies, home share companies, and local governments to allow GhostPay and set up merchant accounts.

Team

GhostPay is looking to fill many positions and grow moving forward into 2019. If you think you can contribute or would like to join the GhostPay team please send your Resume or CV to
GhostPayCareers@ProtonMail.com
along with a cover letter substantiating intended involvement in the team. Seeing that we stand behind decentralization we are also open to hiring for remote positions across the globe. That being said feel free to reach out with any questions or concerns as we move along. We will get back to you as timely as possible.

Media