



White paper

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* <https://www.statista.com/statistics/237769/value-of-the-us-entertainment-and-media-market/>

1.0 EXECUTIVE SUMMARY

The online world has brought a range of opportunities to merchants and creators, but there are still significant issues with the systems involved in getting their products to consumers.

One of the most prominent is the lack of trust on the internet, which often leads to fraud and other scams. Where there are trust systems in place, it takes time and resources to get a rating that shows an entity is reliable, and the ratings aren't transferable to other marketplaces. This means that a business that desires to move to or expand to a new market must go through the arduous process again and again.

Another stumbling block in online transactions is the expensive, slow and complicated payment process. Fees can be high, particularly for international transfers. It can also take from two days to two weeks for funds to end up in a merchant's account, which can create cash flow issues. On top of this, many merchants are lagging behind when it comes to accepting mobile payments, because traditional payment gateways often make it too difficult for them to do so.

Typerium aims to change this by bringing about smoother transactions and a better online experience for both buyers and sellers. Its platform will leverage the Ethereum blockchain and smart-contract functionality to create a universal and decentralised trust and reputation system. This will give each party more information when they conduct transactions, help to reduce fraud and make it easier to resolve any conflict. On top of this, Typerium will have a seamlessly integrated mobile payments solution that takes advantage of the latest technology developments.

The Typerium application will also bring a host of improvements to the lives of creators. It will include intuitive design software that makes it much easier to create visually stunning work, as well as its own marketplace where users can buy and sell content. It will even allow creators to register their intellectual property on the Ethereum blockchain to help prevent IP theft.

The Typerium Creative Marketplace will use its own wallet and currency, the TYPE Token, and feature the trust and reputation system, as well as the integrated mobile-payment solution mentioned above. Over time, these systems will be expanded to third party retailers so that they can also take advantage of the increased functionality and lower costs that come from using the Typerium system.

Typerium will support its operations by charging a transaction fee of just 1.5%, which is significantly less than merchants currently pay.

The marketing strategy of the Typerium service involves taking full advantage of the network effect, as well as ensuring that Typerium is available in as many outlets as possible through a partnership system. The TYPE Token will be available through a crowd sale in 2018.

2.0 CURRENT PROBLEMS IN THE ONLINE MARKET

The online market has brought a wealth of options to creators and merchants, giving them many new avenues to connect with potential customers. Despite this, there are still a range of problems:

2.1 Trust & Transparency

If creators want to exchange their work for money, or merchants want to sell their products, they need trust and transparency to facilitate the process. For the most part, this is currently done through centralised marketplaces such as Shutterstock or Amazon.

Reviews and rating systems provide a way for customers to evaluate the legitimacy of a merchant or a creator, so that they can decide whether they want to make a purchase from them.

According to EConsultancy, 88% of customers read online reviews before they decide on their purchases, while figures from Search Engine Land, show that 88% of customers trust online reviews as much as personal recommendations.

Despite how useful reviews can be, they also pose challenges to merchants. One of the main problems is, that reviews and ratings are generally restricted to each central marketplace, and it can take significant time and resources to build up a good reputation. If a merchant has great reviews on Amazon, these don't really help them if they choose to expand or switch over to a new marketplace. They will have to start all over again, and expend the necessary time and resources to achieve good reviews and high ratings in the new marketplace.

While current marketplaces may give information on the seller, many don't offer the same details for the buyer, which leaves the opportunity for fraud wide open. According to a Nilson Report, credit card fraud will cause \$31.67 billion in losses globally by 2020. The LexisNexis 2016 True Cost of Fraud Study states that e-commerce and m-commerce merchants lose 1.4% and 1.7% of revenues respectively to fraud, which significantly cuts into the profit margins of many online businesses.

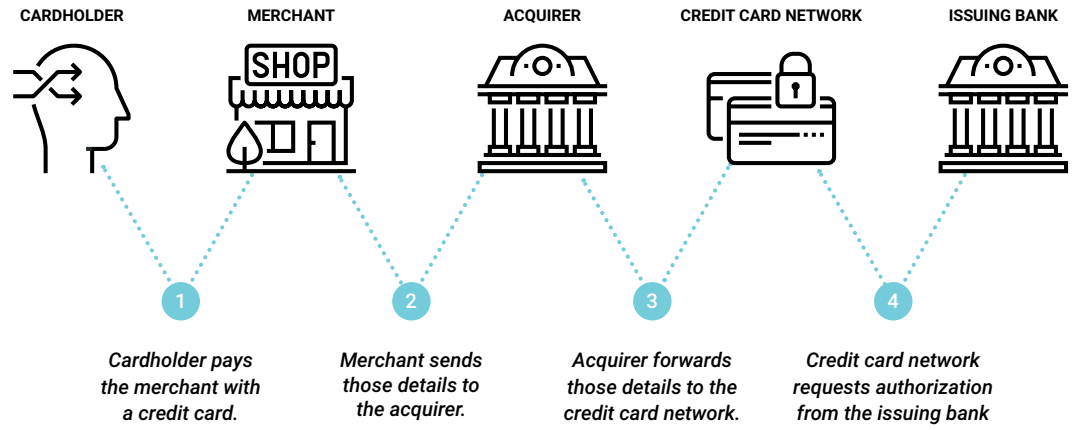
2.2 Expensive, Slow & Complicated Payment Processing

In the current market, online payments are complex, inefficient, untimely and have unreasonably high fees. A range of different payment options are employed, but all of them make the process unnecessarily complex and expensive.

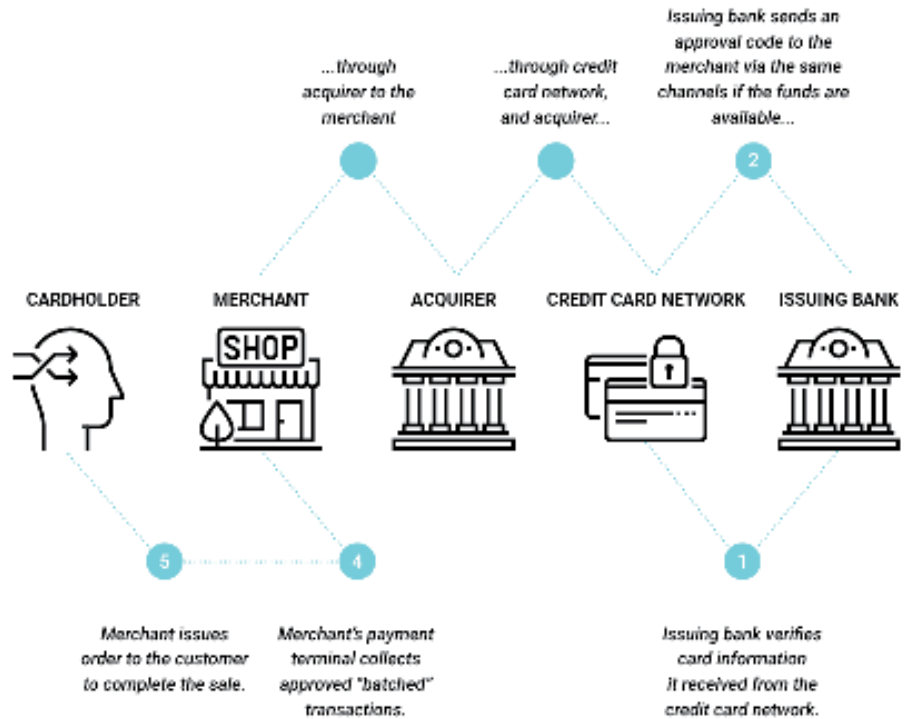
2.2.1 The Arduous Process of Transaction Settlement

Transferring money from a customer's bank account into a merchant's account can take up to 16 steps, regardless of whether it is for an in-store purchase, e-commerce or m-commerce. These images show just eight of the steps in the process of authorisation, authentication, clearing and settlement:

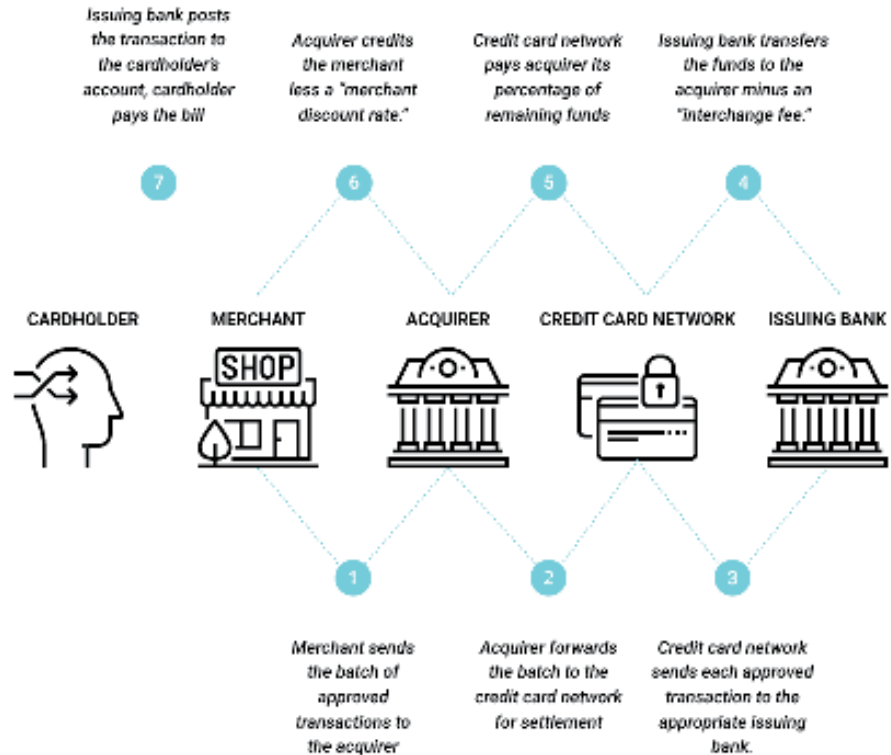
1 Authorisation



2 Authentication



3 Clearance & Settlement



2.2.2 High Fees

Traditional transfers can have up to fifteen different types of fee, which significantly cut into the profits of businesses. Transaction fees are usually between 2-6% per transaction, plus a fixed fee of between US\$0.1-0.7. For example: every time someone makes a transaction for US\$10, the merchant pays an average of:

$$10 \times ((0.02 + 0.06) / 2) + ((0.1 + 0.7) / 2) = \text{US\$ } 0.8$$

Which means that 80 cents of that ten dollars goes from the merchant to banks, credit card associations, payment gateways and processors. Transferring money across international borders also results in high fees. For funds received from outside of the U.S., PayPal charges merchants a transaction fee of 4.4% plus a fixed fee (depending on the currency), while it charges 2.9% plus \$0.30 for funds coming from within the United States. Some payment gateways and processing companies also keep their fee structure hidden or totally incomprehensible to the average merchant, which makes it hard for them to discover how much international transfers will actually cost them.

How much does PayPal charge for international transactions? ^

Selling is 2.9% + \$0.30 per sale.

Sales within the US	2.9% + \$0.30 per transaction
International sales	4.4% transaction fee plus a fixed fee based on currency received
PayPal Here™ card reader	2.7% when you swipe a card or 3.5% plus \$0.15 for manually entered transactions

There are also terminal fees, which retail merchants pay for the terminals; PCI fees, which are paid to the payment card industry for compliance; annual fees; monthly fees; IRS reporting fees; network fees; address verification service (AVS) fees; voice authorisation fees (VAF); batch fees; NFS fees and more.

2.2.3 Long Transaction Times

Moving money from one bank account to another involves many separate parties and it can take up to three days to settle a transaction. The added complexities of international payments can cause them to take a week or more. During these times, payment gateways hold the money, which can cause cash flow problems, particularly for smaller merchants. These delays are inconvenient and costly for all businesses.

2.2.4 Mobile Payments Are Not Universally Integrated

As our society gravitates more toward mobile usage, more customers are expecting to be able to use their phones for payments. Despite this growing desire, mobile payment solutions aren't uniform or universally available. The solutions that payment processors offer for merchants to accept mobile payments can also be difficult to implement.

One of the main reasons for these issues is that payment gateways and terminals were originally developed for physical credit cards. At their core, they are not mobile-friendly, which has made integration more complex.

2.3 Traditional Contracts & Licensing Are Slow & Expensive

A lot of business processes require contracts and licensing, particularly when it comes to creative works. This adds significant expenses, particularly for smaller businesses, because almost all contracts and licenses require the assistance of a lawyer. This also tends to drag out the process substantially, which is even more time that the merchant is delayed from their core tasks.

2.4 Centralised Markets for Creative Works Are Ineffective

According to the IPSE, freelance work is growing, particularly in the creative industries. While freelancing offers the individual more freedom over their schedule, it brings them the additional complications of having to run their own business, doing their own marketing, accounting and licensing. These aspects can take up large portions of the creator's time, so many tend to outsource these tasks to centralised markets.

These markets have a tendency to pitting creators up against each other and also forces down the royalties they are paid. It ends up being a race to the bottom, with creators struggling to feed themselves.

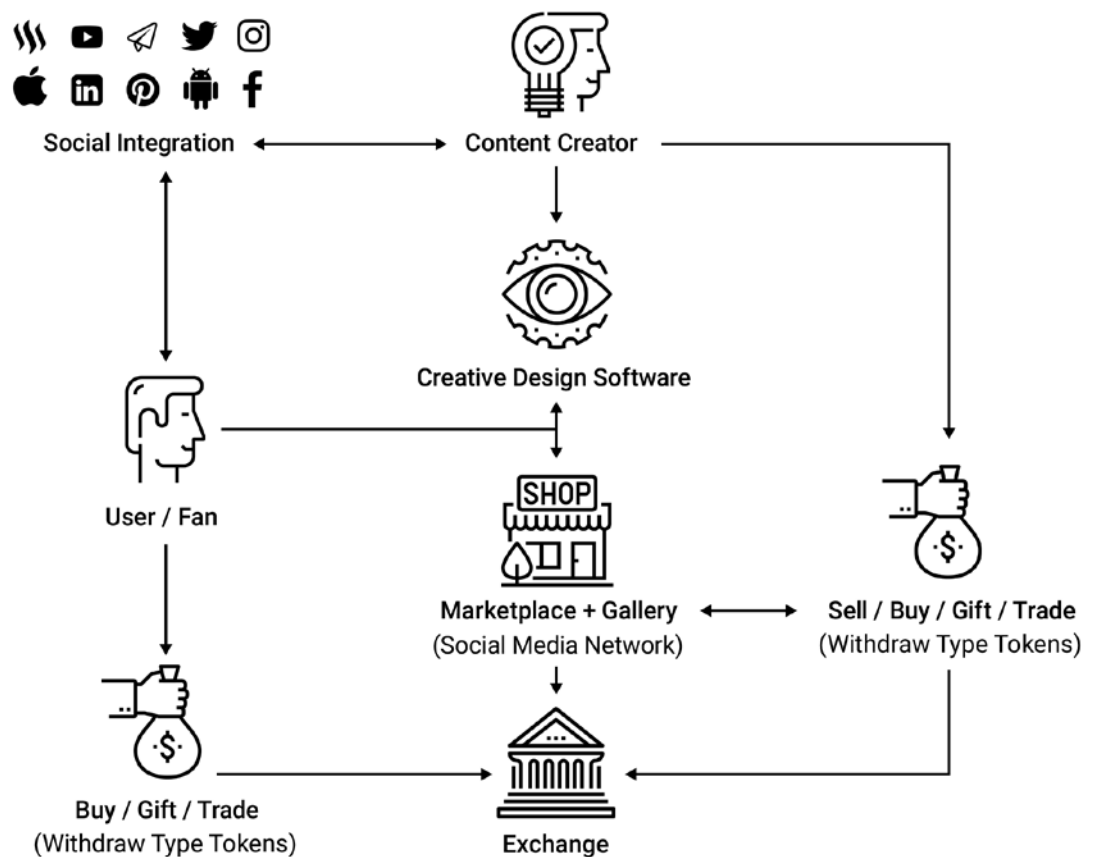
3.0 The Typerium Application

2.5 It's Difficult to Prove Ownership of Intellectual Property

Intellectual property laws are complex and they tend to vary around the world. There is no central registry where creators can catalogue and authenticate their works, which makes it much easier for third parties to use their works illegally, without proper attribution or payment. This is a huge challenge for creators that has a serious impact on their livelihoods.

3.0 THE TYPERIUM APPLICATION

All of these problems will be solved by the Typerium application. It is a multi-layered platform that brings together creative design software and a marketplace to, buy and sell creative content, as well as intellectual property (IP) protection, a reputation system, a payment gateway, a token and a wallet, all based on the Ethereum blockchain.



3.0 The Typerium Application

Initially, the Typerium trust and reputation system, payment gateway, TYPE Token and wallet will be used in the Typerium Creative Marketplace, but the technology will then be expanded to third party platforms so that they can also take advantage of its benefits.

These systems will leverage the latest technology to:

- bring more trust to the marketplace and reduce fraud
- significantly reduce fees and transfer times
- allow creators to authenticate and track their intellectual property
- decentralise power, giving creators and small businesses more control and security

3.1 Design & Content Creation Software

Typerium's software will help to build the bridge between everyday people and stunning visual design. By suggesting typographical layouts, image pairings, font pairings, filters and more, users will be able to create beautiful pieces of content without any prior design experience. It will be easy to use, allowing budding creators to publish their content to major social media networks within seconds. Because it is decentralised, users will also be able to download the content to their computers, upload it to websites, use it as part of their blog, as headers, as images and more.

3.2 The Typerium Creative Marketplace

The Typerium platform will also include a marketplace where creators can distribute their content. It will essentially give creators their own shop where they can sell their content for TYPE Tokens, Typerium's own cryptocurrency.

Creators will receive 85% of the commission for their sales, with the remainder being used for the operation of the platform and other related structures. TYPE tokens can be used to buy font packs, image packs, filter packs and more, and they will also be exchangeable for Ethereum, but only by third-party exchanges not connected to the Typerium platform.

The marketplace will be easy for buyers to use as well. They will be able to find great content by browsing through the 'Best Selling', 'New' and 'What's Hot' sections and then either purchasing what they like or licensing it out.

The marketplace will use Typerium's own blockchain-based trust and reputation system, payment gateway, token and IP protection to bring a host of benefits to its users (see section 3.4 for details).

3.3 Social Media Network

One of the central aspects of Typerium is its social media network. This works together with the other elements to provide a cohesive and holistic system that makes it easy for users to create, share, buy and sell content.

3.0 The Typerium Application

The Typerium app is fast and easy to use, allowing creators to share their content to linked social media accounts within seconds. All they have to do is create the content, click publish, select whichever social media network they want, and it will be published there straight away.

The social media network will help to build a creative community, where users can follow, like, comment and share with others. They will also be able to chat privately about creative ideas or just to catch up. All of these elements will bring users together, providing a community that uplifts, motivates and inspires both content creators and consumers.

To encourage the growth of a thriving and positive social network, Typerium will reward users for high quality contributions. This will drive creators to help each other and produce even better content.

3.4 Intellectual Property Protection

Typerium's blockchain technology will provide another advantage to creators, allowing them to timestamp their creations and intellectual property. This will provide authentication and certification that verifies the content's owner, allowing them to track their content and keep it safe from intellectual property thieves.

It does this through the concept of Proof of Existence, which allows users to store the hash of a file that is linked to both the times that the file was submitted and when it was created. It is done securely and anonymously, allowing users to publicly prove that they possessed a certain file or data, without revealing their identity.

Typerium's Proof of Existence system uses the Ethereum blockchain to store the file's hash in an immutable data structure. The advantage of this is that there is no need for a central authority, so users can maintain their complete anonymity.

If a creator wants to protect one of their creations or some intellectual property, they can use Typerium to store the file's hash on the Ethereum blockchain. This will enable them to prove that they were the original creator without publicly identifying themselves, and there will be no doubt about the ownership of the file.

3.5 The Typerium Solution: More Trust, Faster & Cheaper Payments, Proprietary Wallet & Token

The Typerium platform is a multi-layered system, and some of the key aspects are its universal trust and reputation system, payment gateway, TYPE Token and wallet. All of these systems will utilise blockchain technology to provide an ecosystem with more security, greater efficiency and lower fees.

At first, these aspects will be developed for use within the Typerium Creative Marketplace, but over time they will be used by third party online retailers (such as Shutterstock or Amazon) so that they can also reap the benefits.

3.0 The Typerium Application

3.5.1 A Universal & Transferable System for Trust & Reputation

Typerium will have its own blockchain-based trust and reputation system for use in its marketplace, as well as for third party platforms. This system will be universal, transferable, self-executing, free from control by a central authority, and it will work flawlessly alongside the Typerium payment solution.

The trust and reputation system will give more control and transparency, and also reduce the incidence of fraud between Typerium's creators and buyers, as well as third party users. All transactions will be recorded over the Ethereum blockchain, and smart contracts will be used to automatically update ratings based on the performance and history of buyers and sellers, which will be available for all to see.

Typerium's system will have an automatic conflict management system, as well as reviews, which will help all parties to make informed decisions on who they do business with (see section 4.1 for more details on how the system works).

3.5.2 A Blockchain-based Payment Gateway

The payment gateway will be used for transactions within the Typerium Creative Marketplace at first, but eventually the technology will be available for third party retailers to use alongside other payment methods, such as PayPal and credit cards. Typerium's payment solution will have many advantages over traditional methods. These include:

- one step transactions instead of up to 16
- transactions that are up to 700 times faster (just 15 minutes instead of up to a week for international transfers)
- a single fee of 1.5% (traditional payment methods can have international transfer fees of 4.4%, chargeback fees and more)
- making it easier to accept mobile payments
- making chargeback fraud impossible

These benefits will apply to both the content creators who sell via the Typerium Creative Marketplace, as well as to third party merchants who integrate Typerium's technology as part of their payment systems.

The Typerium payment gateway is decentralised by using Ethereum's smart contracts, and will be able to accept Ethereum-based cryptocurrencies. This means that creators and customers can participate in global, decentralised commerce with total trust.

3.5.3 Integrated Wallet & TYPE Tokens

The application will also include an integrated mobile wallet that can be used to transfer TYPE Tokens across the Typerium Creative Marketplace. In the future, TYPE Tokens will also be used to buy and sell goods in third party marketplaces. There will be mobile, desktop and app wallets that will show the user's balance, transactional data, any earnings and more.

Users will be able to convert TYPE Tokens to Ethereum on third-party exchanges. The applications and wallets will be developed with the highest level of security, so your TYPE tokens will be kept safe and can only be accessed with your private key.

4.0 HOW TYPERIUM WORKS

Typerium's blockchain-based systems will work exactly the same, whether it is for content creators and buyers, or for third party merchants and their clients. The trust and reputation system, mobile payments and smart contract wallet all record data to the blockchain whenever a transaction is made, increasing transparency, automating processes, reducing fraud and much more.

4.1 The Universal Trust & Reputation System

The trust and reputation system will allow clients and merchants to file and solve claims, rate each other and more. The smart contract will automatically change the trust level of each party after a transaction is made; as well as whenever a claim is registered, solved or unsolved; or when a review is written. Default trust ratings will be set up for both merchants and clients that are using the Typerium ecosystem for the first time. A trust rating will be assigned to a specific wallet address.

4.1.1 The Merchant Trust Rating

Once a merchant starts accepting Ethereum-based currency payments through Typerium, a default trust-rating will be created. Smart contracts will automatically change the trust-rating based on the actions of the merchant. These include:

- whether the merchant reacts to claims from clients
- if they react quickly to claims
- how clients rate the merchant for delivering products as promised. Were they on time, as advertised and in good quality?
- whether the merchant has good reviews from clients

Each factor will have a different weighting, and the overall trust-rating will be clearly visible in either the footer of the merchant's website, or the mobile app. The only way the merchant can increase the trust-rating is by providing products or services as advertised and in good condition.

4.1.2 The Client Trust-Rating

The client trust-rating will help to reduce the likelihood of fraud. Once a client buys something from a merchant using Typerium for the first time, the default trust-rating will be automatically created and linked to their wallet address. The client trust-rating will then be updated automatically by the smart contract, based on how they behave. Different weights will be assigned to different actions. For example:

- Does the client have a history of claims?
- How many claims have they made? Have they been resolved?
- Purchase history: behaviour, frequency, etc.

The trust-rating of the client will be available on the blockchain, in a user-friendly interface that merchants can see once the purchase is made, and also in Typerium's mobile app. In the rare case that a client acts inappropriately, this allows the merchant to rate them negatively, warning future merchants to be wary of doing business with them.

4.0 How Typerium Works

4.1.3 Claims, Reviews & Conflict Management

Typerium's system will save every transaction on the blockchain, along with all of the important data. The following information will be available:

- The merchant will have records of transaction times, the receiving and sending wallet addresses, warranty conditions, delivery times and more. Data will be kept for every past transaction in their profile on Typerium's system.
- The client will be able to see all of their purchases, as well as the details mentioned above. The information will only be available in their profile on the Typerium mobile app.

Based on this information, parties will have the opportunity to file and resolve claims, as well as review and rate each other. Smart contracts will automatically decrease or increase the trust-rating based on the actions of each user. Conflict resolution through smart contracts will help each party to deal with situations faster, easier and with lower expenses (merchants won't have to pay chargeback fees).

4.1.3.1 Use Case: Claims

Once a client makes a purchase, all of the necessary information is saved to the blockchain, which the client can view in the Typerium app. When the client logs in, they see all of the purchases they have made with their wallet address over the Typerium payment gateway.

If there is an issue with a particular purchase, the client can select it and initiate a claim by providing the details and circumstances for the claim. For example, if they have received a product that isn't as it was advertised, the client can file a claim, which will immediately decrease the merchant's trust-rating. This incentivises the merchant to solve the problem as quickly as possible.

The merchant will receive a notification about the claim and they can contact the client off-chain. The client and merchant can then come up with a solution, after which, one of the parties will initiate a resolution by pressing the "Claim resolved" button in the mobile app or the merchant system.

Details of how the situation was resolved (if the product was changed, the money was returned, etc.) must also be provided, and they are saved to the blockchain. The other party will get the notification, read through the details and can then agree by pressing "Claim resolved". Once the claim is resolved, the trust rating is instantly increased for both parties.

4.1.3.2 Use Case: Reviews

Clients and merchants will be able to write reviews about each other. Written reviews will carry more weight on trust-ratings than transactions without reviews. Clients will be able to see the merchant's past reviews in the mobile app, while merchants will see the reviews that clients have written about them in their system. All reviews will automatically affect the trust-rating of the client and the merchant.

4.0 How Typerium Works

4.1.4 Sales Contracts

Typerium can also be used to enforce sales contracts. If a merchant chooses to offer a 15-day return policy with no questions asked, a smart contract can be used to implement it. These kinds of policies can be used by merchants to separate themselves from their competitors. The smart contracts will ensure that merchants and consumers are respecting their commitments to each other, while the rating system will reflect their past actions.

4.1.5 Fraud

Typerium's trust-rating system will be a key driver in reducing fraud on the platform. With everyone's ability to view the purchase histories, reviews and ratings of each party that they deal with, any individual who has previously acted inappropriately, will be easy to spot. This allows all parties to make informed decisions about their transactions and provides a safer e-commerce environment for everyone.

4.2 The Typerium Payment Gateway

Typerium's system will be available to third party platforms to use for payments, just like PayPal or credit cards. Its underlying technology will provide a range of advantages to the merchants that implement it.

4.2.1 How Typerium's Mobile Payments Work

When clients shop online, they will pick their items and add them to their cart like normal, but when they go to pay, they will select the Typerium gateway instead of the other available options, such as credit card or PayPal.

The payment amount will be converted from traditional currency to the selected Ethereum-based token in real-time. A QR code will then be generated, which the client scans with any crypto-wallet on their mobile app and presses "send". The transaction will show on the blockchain within five minutes and will normally be confirmed in fifteen minutes. Once it is confirmed, the tokens will arrive in the merchant's wallet. The confirmation time all depends on how busy the Ethereum network is, although there are a range of projects that aim to help Ethereum with scaling, so that it can handle more transactions per second.

The merchant can then use a crypto exchange such as Kraken to convert their TYPE Tokens to their desired currency (ETH, BTC, USD, EUR etc.). Merchants will be able to choose how often crypto tokens are sent to third-party exchanges, the local currency they want them exchanged to, when the money will be sent to their bank account, and more.

4.2.2 How Typerium Reduces Payment Fees & Transaction Times

Typerium is easy, fast, cheap and guaranteed by smart contracts. The picture below shows how blockchain technology changes the method of payment. The transaction will go directly from the client to the merchant, ditching the intermediaries, which saves merchants a huge amount of time and money. The merchant will no longer have to close or settle anything, because it happens at the same time as the transaction. There is only one step instead of 16.

4.0 How Typerium Works

Because the payment goes directly from the client to the merchant, it arrives after about fifteen minutes, instead of the two weeks that it can sometimes take for traditional transfers. Instead of having to pay up to 15 different fees through standard payment gateways, merchants that use Typerium will only have to pay one: a flat fee of 1.5%.

Typerium will also put an end to the unfairly high chargeback fees that merchants sometimes have to pay. If there is a situation where the merchant agrees to send the money back to the client, they just send it back and only pay the 1.5% transaction fee. Typerium's fee structure is transparent with no hidden fees or loopholes in the fine print.

4.3 How the Typerium Wallet Works

A merchant's Typerium wallet acts like a bank account, storing funds and enforcing security. The biggest difference is that with Typerium, the account is only controlled by the merchant, as opposed to normal bank accounts where the bank has control. Banks run the databases that show your account's status and whether money is available for a particular transaction, so when you use them, you have to trust the bank for the safety of your money. Typerium shifts this balance of power. Because it is decentralised, it will not be able to suspend, hold or prevent any transactions. Instead, Typerium creates permissionless transactions that will be instantly guaranteed by smart contracts. Typerium removes the uncertainty associated with not knowing where money is and why it's being withheld.

4.3.1 Case Study: How Typerium's Merchant Fees Work in Practice

Steve is the owner of a small e-commerce store that sells T-shirts for \$10. He has always been frustrated by the high transaction fees that he has had to pay banks and other intermediaries. One day, he found out about Typerium through a financial news article and decided to try it out. It only took him a few minutes to get started and now the transaction money goes directly from the buyer into his account. Steve can now accept mobile payments and also pays significantly less for his transactions.

Steve used to pay 2-6% of the purchase price in fees, plus a fixed rate of between \$0.1 and \$0.7 for each transaction. Now he pays just 1.5% with Typerium, which averages out at about five times cheaper.

4.3.2 Case Study: Typerium's Improved Transaction Times

For 12 years, David has had an online business that sells various home appliances to customers from around the world. The delay between the sale and the funds showing up in his account frustrates him, since there is no genuine reason for such an inconvenience. If the client is local, the funds show up in his bank account within three days. If the client is from the other side of the world, it may take up to a week. He has to trust the client and the banks because he ships the product before he receives the funds, and the funds could also be held up at the payment gateway for a week. Because of the time it takes for him to receive the money, he often experiences cash flow problems and is not able to pay his suppliers. One day, David's friend told him about Typerium and how it only takes about fifteen minutes to receive the money after a purchase is made. With Typerium, David can also accept mobile payments. He no longer has to trust banks or payment gateways, which has solved his cash flow problems. He receives the funds, can ship products instantly and can order more products without the fear of not being able to pay his suppliers.

5.0 PRODUCT ARCHITECTURE & DEVELOPMENT TIMELINE

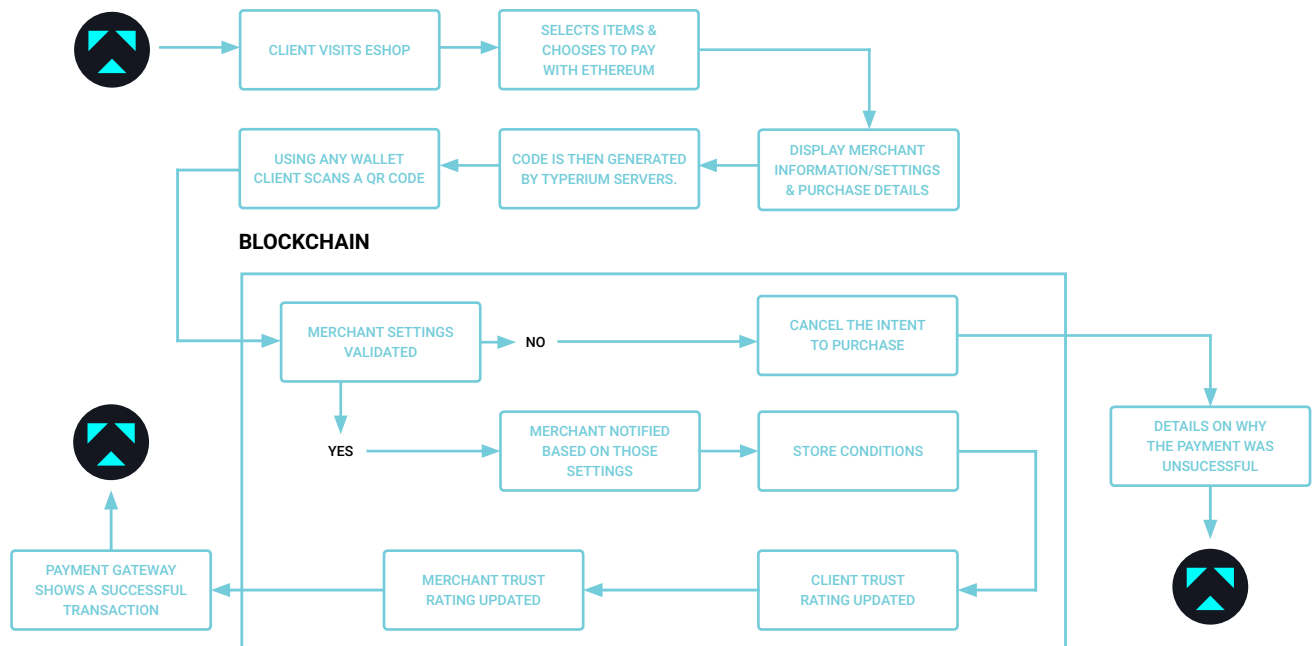
Typerium's application features a range of different elements, including its content creation software, marketplace, social network, reputation system, payment gateway, token and IP protection. These will be rolled out in stages, focusing first on applying the technology to Typerium's own marketplace before integrating its solutions with third parties.

5.1 Smart Contracts & Workflows

Typerium's payment solution and reputation system will work together on top of the Ethereum blockchain. The number of smart contracts, a more detailed structure, and further information on functionality will be finalised during development.

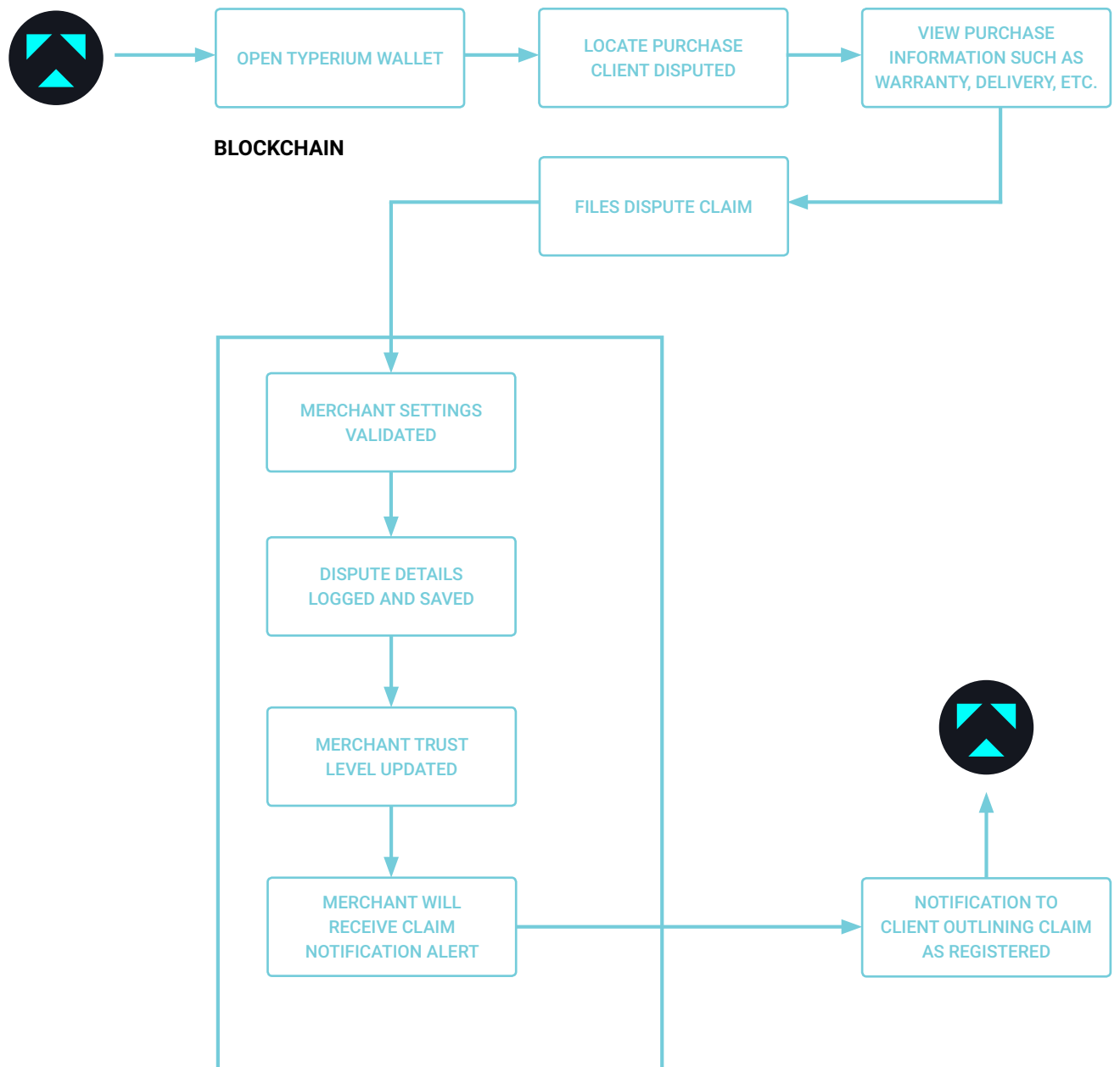
To illustrate the intended functionality, we have created sample workflows that illustrate the purchasing and claiming processes, as well as how they affect the trust-rating for both parties.

The client makes a purchase:

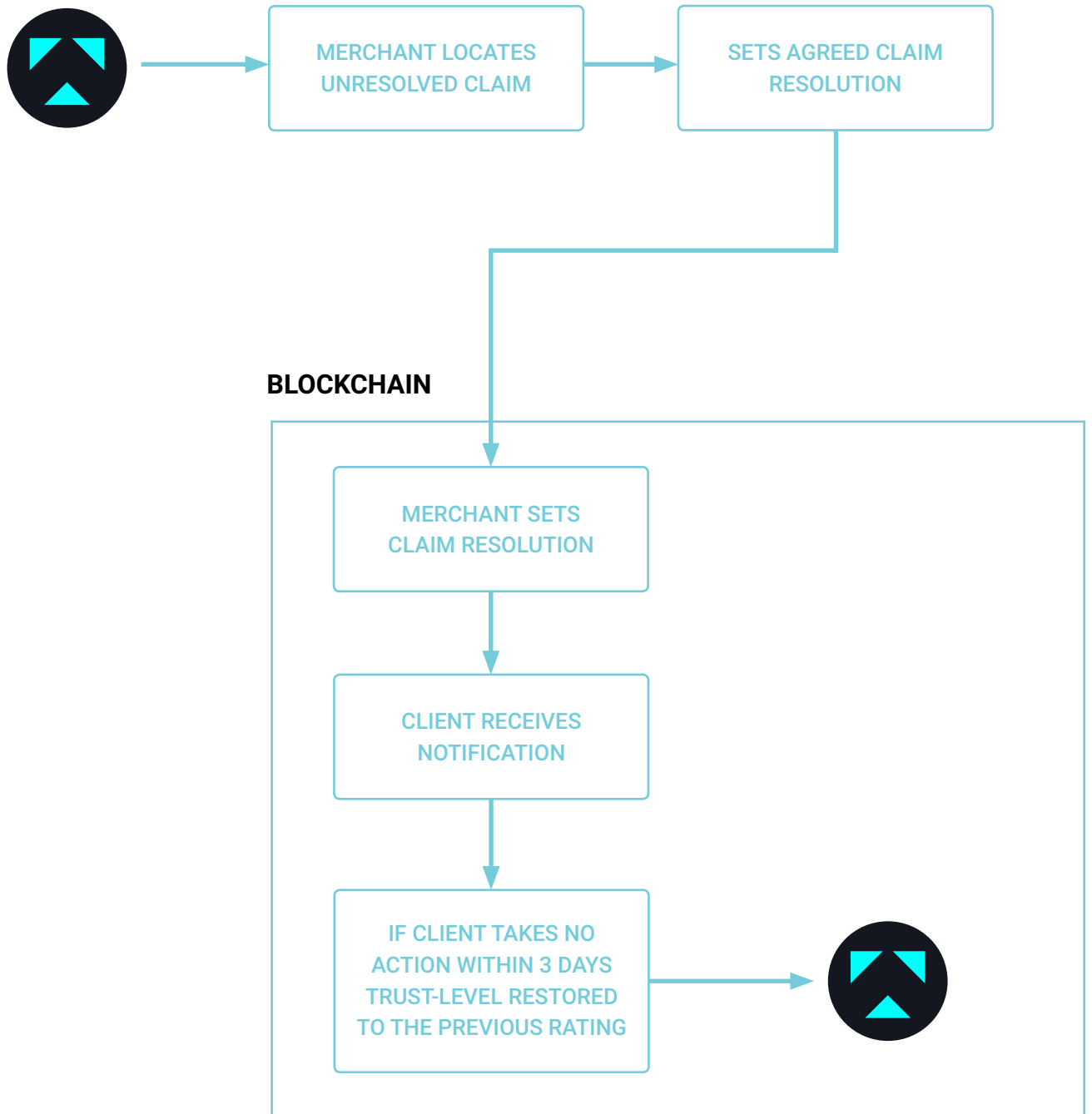


The sample workflows shown below demonstrate what happens when the client initiates a claim, which is then resolved together with the merchant. We will introduce incentives for merchants and clients to handle the claims quickly and keep the trust level high for both sides.

The client files a claim:

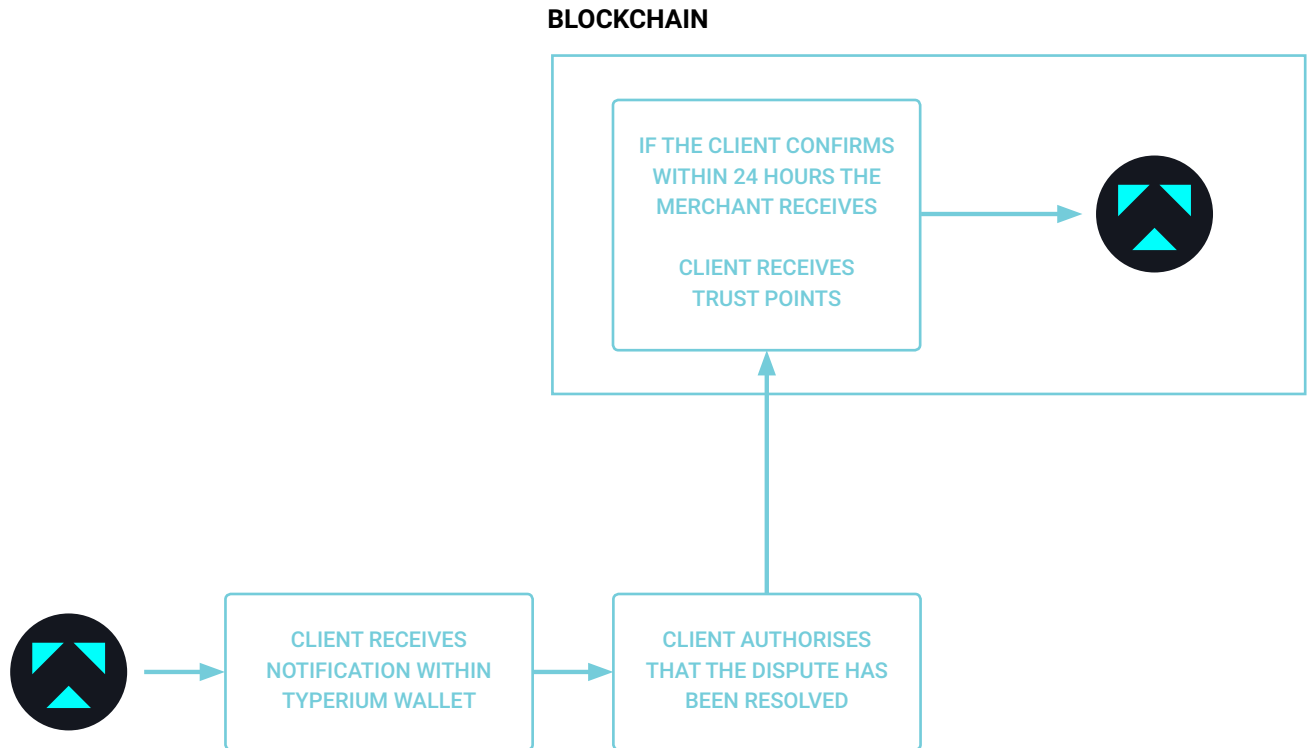


The merchant responds to the claim, finds a solution with the client and provides the resolution details:



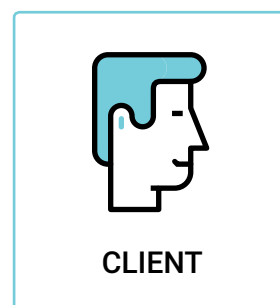
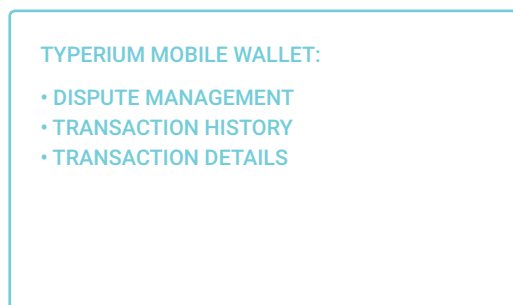
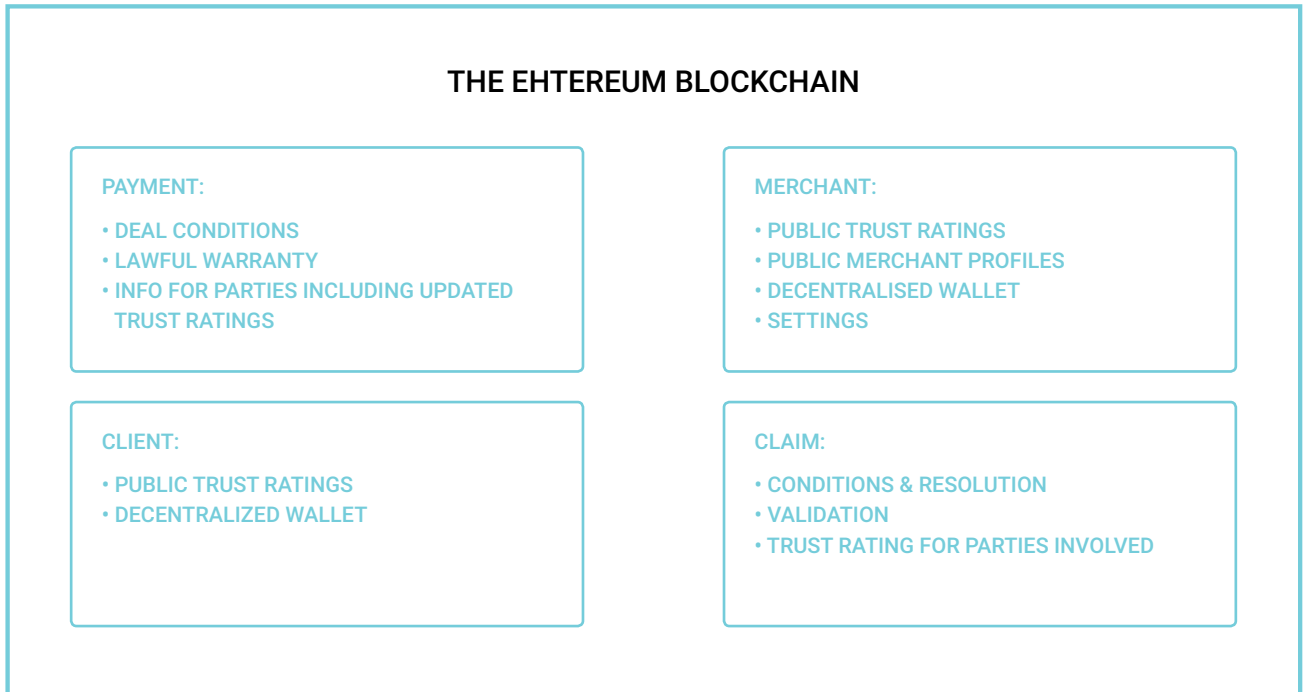
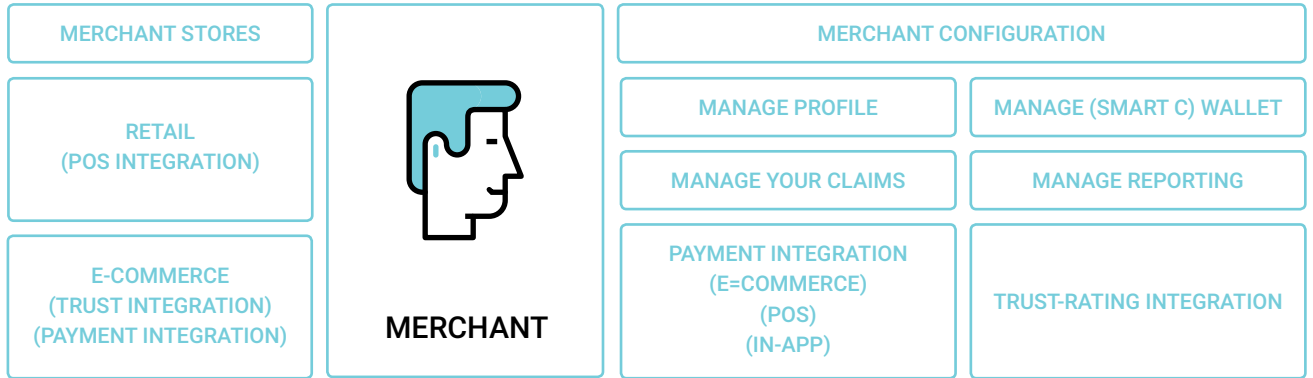
The client and the merchant then resolve the claim “offline” or through Typerium’s off-chain messaging system. After both parties agree on the resolution terms, the merchant enters them (such as returning the money, shipping out a new product, etc.) into their user interface. The resolution terms are saved on the blockchain. The merchant then waits for the client’s confirmation.

The client then confirms the resolution:



If the claim is resolved quickly, the merchant will get a larger boost to their trust-rating. The client's trust rating is also upgraded once the claim has been resolved.

5.2 Intended Product Architecture



5.3 Product Development Roadmap

This product development timeline may not be final and it is subject to change, depending on the feedback we receive from our initial customers.

Phase 1: TYPE Protocol

This is the technology that powers the Typerium ecosystem and the app.

Phase 2: Typerium Wallet Development

The Typerium wallet will allow users to store and send TYPE tokens.

Phase 3: Decentralised Typerium Application Platform Alpha

The Alpha version of the Typerium application will demonstrate the overall functions, allow testing and give us time to fix any bugs.

Phase 4: Decentralised Typerium Application Platform Beta

The Beta version will be a more refined and updated version of the application that is ready to roll out to the market.

Phase 5: Multi Platform Development

This will include direct social media integration and a desktop downloadable version.

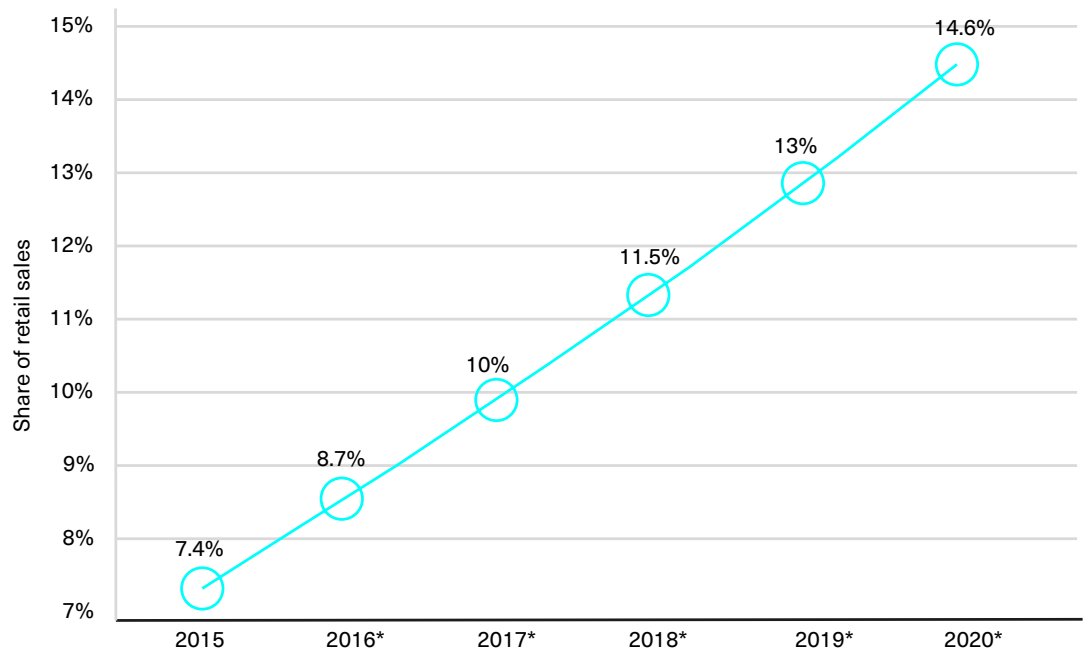
Phase 6: Integrate TYPE Tokens as a Global Payment Method

Typerium will begin offering TYPE Tokens as a payment method for online content platforms.

6.0 MARKET OPPORTUNITY

Typerium's multi-faceted approach comes along at a time when many market forces are extremely favourable. There is a genuine need for many of the solutions that Typerium provides, with the capital and technology ready to support it.

6.1 The Rapid Growth of e-Commerce



According to Statista, retail e-commerce sales were worth US\$1.33 trillion throughout the world in 2014. They are projected to increase to US\$4.058 trillion by 2020. These high levels of growth are also illustrated by the number of shops created on the Shopify platform. An EiraCube report shows that in 2013, there were 84,000 shops, 144,000 in 2014, 243,000 in 2015 and by the end of 2016 there were almost 378,000. That's growth of about 450% over a 3 year span.

According to other Statista figures, the number of people buying goods or services online will increase from 1.46 billion in 2015 to over 2 billion in 2020. These figures show that there is tremendous potential in the market for Typerium's payment solution.

6.2 The Explosive Growth of Mobile & Digital Payments

According to The Boston Consulting Group, the payment industry is about to experience a huge shift due to a range of technological developments. Cryptocurrency and blockchain technology, smartphone penetration, easier digital payments, the Internet of Things, cloud computing and biometrics are all technologies that are changing the way that consumers pay for their goods and services.

6.0 Market Opportunity

According to The Financial Times, Chinese mobile payments were almost 50 times more common than US mobile payments in 2016. This is because WeChat and Alipay users only have to scan a QR code that appears on the retailer's terminal to provide payment. When the US adopts a similarly simple system, we can expect to see widespread adoption of mobile payments there as well.

Much of this growth is expected to be due to the added convenience and acceptance of in-app payments and proximity transactions. Typerium's mobile payment solution will only add to this convenience, so it is ready to take advantage of the opportunity in the market.

6.3 The Booming Digital Asset Economy

A World Economic Forum report estimated that 10% of global GDP will be stored on blockchain technology by 2025, which is an astronomical amount. One of the key platforms in the blockchain community, Ethereum, has also been growing at a huge rate, which you can see in the graph below:



This exceptional growth is based both on the value of Ethereum itself, and the many Ethereum-based tokens that are being used in a range of applications. Typerium will be built on top of Ethereum, to take advantage of both its cutting-edge technology and the rapid rise of the platform.

Some major players in the cryptocurrency sector, such as Roger Ver, suspect that Ethereum will soon overtake Bitcoin as the top cryptocurrency, because it facilitates the creation of an ecosystem that Bitcoin cannot match. The transaction times and costs per Bitcoin transaction are also too high for everyday use.

7.0 BUSINESS MODEL

7.1 Revenue Model

Typerium will charge merchants a transaction fee of 1.5%. Typerium's flat transaction fee is significantly lower than traditional payment methods, which charge around 0.25% of the total plus US\$0.10, on top of the 4.4% for international transfers. When something is sold on the Typerium Creative Marketplace, the seller will receive 85%, with the remainder being used for the operation of the platform and other related structures.

7.2 Charity

Typerium wants to do more than just provide convenient and cheap solutions to creators and businesses. As a responsible company, it sees itself as having a role in helping to make the world a better place. In accordance with this attitude, the Typerium Foundation will be donating 3% of all raised funds and future profits to charities and other organisations throughout the world. The Typerium Foundation will do this with a two year structure that will allow the company to make donations each quarter. After the two initial donations, Typerium will reach out to its users to help select the causes that they want to help. The community will then come together and vote on whether they want the money assigned to help the homeless, animal rescue, mental health or a variety of other causes. The more Typerium grows, not only will it be able to help more people with the solutions that its technology provides, but the more money it will be able to donate to legitimate and good causes worldwide.

7.3 Marketing & Strategy

7.3.1 The Network Effect

The marketing strategy focuses on creating a network effect with Typerium's decentralised trust and reputation system. The bowling pin strategy will also be used, starting off with a niche market (the existing cryptocurrency community), then moving to other niches and broader markets.

Stage 1: Supply Side

The marketing strategy focuses on creating a network effect with Typerium's decentralised trust and reputation system. The bowling pin strategy will also be used, starting off with a niche market (the existing crypto community), then moving to other niches and broader markets.

Stage 2 : Education

In this stage, the main goal is to educate the initial client base in the crypto community. The main value propositions of Typerium are its decentralised trust system, reduced fees and lack of spending limit.

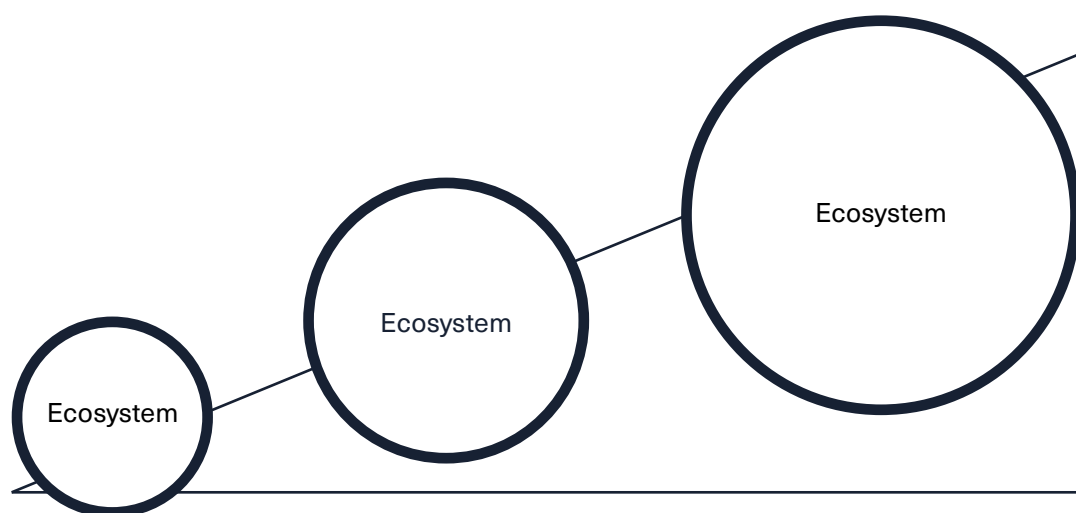
Stage 3: Broader Market Adoption

1. Just like in its initial stages of expansion into the crypto community, Typerium will focus on the supply side first and work to become accepted in even more locations globally.

2. It will then focus on educating the general public. Supply will increase exposure and people will be more willing to try it through trusted merchants.

3. Once more consumers are willing to pay with their mobile phones at trusted merchants, more merchants will join the network so that they don't lose out to their competitors.

The chart below shows how the Typerium ecosystem will grow:



7.3.1.1 How the Network Effect Works

The marketing strategy focuses on creating a network effect with Typerium's decentralised trust and reputation system. The bowling pin strategy will also be used, starting off with a niche market (the existing crypto community), then moving to other niches and broader markets.

By focusing first on the supply side, Typerium will be making its network significantly more useful. Once its product achieves a certain scale of utility, users will realise its benefits and demand will soon come to meet supply. As more users join in, the network will become even more valuable and the effect starts to drive itself. The diagram below shows how the network effect takes hold.

7.3.2 Loyalty and Rewards

Typerium has plans to create schemes to reward TYPE token holders for their support, and to support merchants in rewarding their loyal clients, in order to encourage a network effect and create a thriving ecosystem for the Typerium token. Typerium is currently working with its service providers on creating a structure that will support this to happen. TYPE tokens do not and will not represent a right to future commissions.

8.0 CROWD SALE DETAILS

The Typerium crowd sale and the corresponding token creation process will be issued by Typerium Limited and be organised using smart contracts running on Typerium-Ethereum. Participants who wish to support the development of the Typerium Project, can do so by sending Ether currency to the designated address.

ISSUER	TYPERIUM LIMITED
LEGAL QUALIFICATION	UTILITY TOKEN
SOFT CAP	\$2,000,000 (Fixed 3,750 ETH (\$533))
HARD CAP	\$40,000,000
TOTAL TYPE TOKENS	2,000,000,000
% OF TOTAL TYPE FOR CROWD SALE	50.00%
% OF TOTAL TYPE FOR RESERVES	20.00%
% OF TOTAL TYPE FOR TEAM	15.00%
% OF TOTAL TYPE FOR ECOSYSTEM	9.00%
% OF TOTAL TYPE FOR CHARITY	3.00%
% OF TOTAL TYPE FOR BOUNTY	2.00%
% OF TOTAL TYPE FOR ADVISORS	1.00%
START DATE OF PRE-SALE/TOKEN SALE	21 May 2018/26 June 2018

- The “soft” cap will be set at 5% of the crowd sale goal, this equates to roughly \$2,000,000 USD worth of Ethereum (fixed at 3,750 ETH(\$533.33)) being received from purchasers. This amount is subject to change.
- The crowdsale period will endure for no longer than 70 (seventy) days, or until the “hard” cap (\$40,000,000 USD worth of Ethereum) is reached, whichever is sooner.
- If the “soft cap” is reached prior to the end of the 70 (seventy) day crowd sale period, additional purchases of TYPE tokens by purchasers will be permissible of up to 1,000,000,000 TYPE tokens being sold in total. This is 50% of the total TYPE tokens in existence.
- Should the contributions received during this 70 (seventy) day period be deemed insufficient to cover the operating and development costs (“soft” cap), 100% of purchaser funds will be returned as per the Ethereum smart contract.

8.0 Crowd Sale Details

- ERC-20 tokens that are not sold during the crowd sale period will be burned automatically, as per the Ethereum smart contract.
- The purchasing rate of TYPE Tokens is reflective of the market price of ETH/USD.
- The minimum purchase contribution is \$10 worth of Ethereum.
- The ERC-20 tokens purchased will be sent to the purchasers wallet immediately.
- 50% of each purchaser's tokens will be locked up for four months by the smart contract to help combat volatility. As an example, if a purchaser buys 1,000 TYPE Tokens, they can freely sell and trade 500 of them, but the other 500 will be locked for a four month period. Once this period ends, the purchaser can sell or trade them as they please.
- In the bonus program, a purchaser will receive a percentage of bonus TYPE Tokens in addition to the sum they have purchased, according to the percentages listed above.

8.1 Pre-Sale Details

Typerium's has plans to create schemes to reward TYPE token holders for their support, and to support merchants in rewarding their loyal clients.

Pre-sale: May 30, 2018 -June 25, 2018

Tokens to sell: 300,000,000 TYPE

Bonus program: Round 1 (5%), Round 2 (10%), Round 3 (15%), Round 4 (20%), Round 5 (50%). Based on ascending order.

Initial price: 1000 TYPE = 0.0195 ETH

Token delivery date: Up to 30 business days after the token sale

8.2 Token Sale Details

Token sale: June 26, 2018 - July 23, 2018

Tokens to sell: 700,000,000 TYPE

Bonus program: The bonus program is for the pre-sale only

Soft cap: 300,000,000 TYPE

Blockchain: Ethereum , ERC20

Token Ticker: TYPE

Token Delivery Date: Up to 30 business days after the token sale

8.3 Token Economy

8.3.1 Pre-Sale

The Pre-sale will only remain open for the amount of time it takes to sell out. This could be day one, or it could be the full five weeks. Please bear this in mind if you are looking to invest at a later date.

8.3.2 Exchanges

Once the token sale has reached its soft cap, Typerium will concentrate on applying for the list of TYPE Tokens on multiple exchanges. Typerium will not host or create an Exchange. Exchange activities must be conducted with third party Exchanges. Funds received from the token sale will be set aside for this process, because we understand how important this is for purchasers.

8.0 Crowd Sale Details

8.3.3 TYPE Tokens

TYPE Tokens are the exclusive method of payment for the services on the TYPE Protocol. The token's utility will be created via its usage by Typerium customers through the Typerium platform. TYPE Tokens are ERC20 compatible, ensuring the highest degree of security and integration within the TYPE Protocol ecosystem and decentralised Typerium platform. All tokens that are not sold through the token sale will be burned.

The Typerium Token will be an Ethereum-based token. Ethereum-based tokens rely on the well-established Ethereum infrastructure, benefiting from several advantages:

- Security and predictability (as opposed to running an independent blockchain network).
- The use of robust and well-supported clients (Ethereum-based tokens can be managed with official Ethereum clients).
- High liquidity (interchangeable with other Ethereum-based tokens or Ether), easier listing on third-party exchanges with infrastructure already in place. Our Ethereum-based token contract complies with the ERC20 standard. More detailed info about the ERC20 standard can be obtained [here](#).

8.4 Budget

Field	Portion of Budget	Activities
Product development	40%	Product development
Operations	20%	Management, Salaries, Contractors, Outsource.
Legal	4%	Establishing the company, legal advice, jurisdiction, contracts, etc.
Contingency	3%	For incidental expenses
Foundation	3%	Fund allocated for charity

9.0 LEGAL

9.1 General Information

The Typerium token does not have the legal qualification of a security, since it does not give any rights to dividends or interest. The sale of TYPE Tokens is final and non-refundable. Typerium tokens are not shares and do not give any right to participate to the general operations or management of Typerium. Typerium tokens cannot have a performance or a particular value outside the Typerium Platform. Typerium tokens shall therefore not be used or purchased for speculative or investment purposes. The purchaser of Typerium tokens is aware that national securities laws, which ensure that purchasers are sold purchases that include all the proper disclosures and are subject to regulatory scrutiny for the purchasers' protection, are not applicable. Anyone purchasing Typerium tokens expressly acknowledges and represents that she/he has carefully reviewed this white paper and fully understands the risks, costs and benefits associated with the purchase of Typerium.

9.2 Knowledge Required

The purchaser of Typerium tokens undertakes that she/he understands and has significant experience in cryptocurrencies, blockchain systems and services, and that she/he fully understands the risks associated with the crowd sale as well as the mechanism related to the use of cryptocurrencies (incl. storage). Typerium shall not be responsible for any loss of Typerium tokens or situations making it impossible to access Typerium tokens, which may result from any actions or omissions of the user or any person undertaking to acquire Typerium tokens, as well as in case of hacker attacks.

9.3 Risks

Acquiring Typerium tokens and storing them involves various risks, in particular the risk that Typerium may not be able to launch its operations and develop its blockchain and provide the services promised. Therefore, and prior to acquiring Typerium tokens, any user should carefully consider the risks, costs and benefits of acquiring Typerium tokens in the context of the crowd sale and, if necessary, obtain any independent advice in this regard. Any interested person who is not in the position to accept or to understand the risks associated with the activity (incl. the risks related to the non-development of the Typerium platform) or any other risks as indicated in the Terms & Conditions of the crowd sale should not acquire Typerium tokens.

9.4 Important Disclaimer

This white paper shall not and cannot be considered as an invitation to enter into an investment. It does not constitute or relate in any way nor should it be considered as an offering of securities in any jurisdiction. This white paper does not include or contain any information or indication that might be considered as a recommendation or that might be used as a basis for any investment decision. Typerium tokens are just utility tokens which can be used only on the Typerium platform and are not intended to be used as an investment. The offering of Typerium tokens on a trading platform is done in order to allow the use of the Typerium platform and not for speculative purposes. The offering of Typerium tokens on a trading platform does not change the legal qualification of the tokens, which remain a simple means for the use of the Typerium platform and are not a security.

Typerium is not to be considered as an advisor in any legal, tax or, financial matters, or a provider of investment advice.

Any information in the white paper is provided for general information purposes only, and Typerium does not provide any warranty as to the accuracy and completeness of this information.

Typerium is not a financial intermediary according to Swiss law and is not required to obtain any authorization for Anti Money Laundering purposes. Acquiring Typerium tokens shall not grant any right or influence over Typerium's organisation and governance to the Purchasers.

Regulatory authorities are carefully scrutinizing businesses and operations associated to cryptocurrencies in the world. In that respect, regulatory measures, investigations or actions may impact Typerium's business and even limit or prevent it from developing its operations in the future. Any person undertaking to acquire Typerium tokens must be aware of the Typerium's business model, the white paper or terms and conditions may change or need to be modified because of new regulatory and compliance requirements from any applicable laws in any jurisdictions. In such a case, purchasers and anyone undertaking to acquire Typerium tokens acknowledge and understand that neither Typerium nor any of its affiliates shall be held liable for any direct or indirect loss or damage caused by such changes.

Typerium will do its utmost to launch its operations and develop the Typerium platform. Anyone undertaking to acquire Typerium tokens acknowledges and understands that Typerium does not provide any guarantee that it will manage to achieve it. They acknowledge and understand therefore that Typerium Limited (incl. its bodies and employees) assumes no liability or responsibility for any loss or damage that would result from or relate to the incapacity to use Typerium tokens, except in case of intentional misconduct or gross negligence.

9.5 Representation & Warranties

By participating in the crowd sale, the purchaser agrees to the above and in particular, they represent and warrant that they:

- have read carefully the terms and conditions attached to the white paper agree to their full contents and accept to be legally bound by them
- are authorized and have full power to purchase Typerium tokens according to the laws that apply in their jurisdiction of domicile
- are neither a US citizen or resident
- live in a jurisdiction which allows Typerium to sell Typerium tokens through a crowd sale without requiring any local authorization
- are familiar with all related regulations in the specific jurisdiction in which they are based and that purchasing cryptographic tokens in that jurisdiction is not prohibited, restricted or subject to additional conditions of any kind
- will not use the crowd sale for any illegal activity, including but not limited to money laundering and the financing of terrorism
- have sufficient knowledge about the nature of the cryptographic tokens and have significant experience with, and functional understanding of, the usage and intricacies of dealing with cryptographic tokens and currencies and blockchain-based systems and services
- purchase Typerium tokens because they wish to have access to the Typerium platform;
- are not purchasing Typerium tokens for the purpose of speculative investment or usage.

9.6 Governing Law & Arbitration

Any dispute or controversy arising from or under the crowd sale shall be resolved by arbitration in accordance with the UK Rules of International Arbitration in force on the date when the Notice of Arbitration is submitted in accordance with these Rules. The arbitration panel shall consist of one arbitrator only. The place of the arbitration shall be London, UK. The arbitral proceedings shall be conducted in English.

10.0 TEAM

10.1 Typerium Team

Alex Haigh
Chief Executive Officer

Alex is the founder of the UK's leading online font technology development and licensing business, HypeForType. It now provides more than 35,000 fonts to 13.8 million users in 165 countries. HypeForType has developed technologies that bring type to screen, consumer products, user interfaces and provide substantial commercial value for the world's leading brands. These include Adidas, Apple, Disney, Google, Loreal, Nestle, Nickelodeon, Nike, Selfridges, Sky TV, Starbucks, Sony and Vogue.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Vitaly Marinchenko
Senior Blockchain Developer

Vitaly is an experienced Senior Blockchain Engineer who was an integral part of the team at Accenture, a company that partners with more than three-quarters of the Fortune Global 500 to drive innovation and improve the way the world works and lives.

Jonathan Davoine
PR & Investor Relations

Jonathan has a broad range of experience in handling investment assets for high net worth individuals such as entrepreneurs, celebrities and royalty. With a strong network of existing relationships, Jonathan will help drive Typerium forward through investment, public relations, acquisitions, and sponsorship.

10.0 Team

Preston Collins

Independent Forex Consultant

Michael Murphy

Independent Liquidity Consultant

Rick Banks

Brand Design Lead

Dean Robinson

Community Manager

Jeff Ulrich

Independent Charity Consultant

10.2 Advisory Team

Ming Ooi

Growth Advisor

Ming has managed startups that have launched tech platforms in the medical, real estate and consumer sectors. Each was a “blue ocean” technology that was brand new to the space. He has also helped to develop and launch consumer products at MindsInSync for major retailers such as Amazon, Costco, Target and Walmart.

Jose Laureano

Blockchain Advisor

Jose is a blockchain technologist with extensive knowledge and experience in the design and development of enterprise grade software architecture. He has experience in developing solutions for the Dow Jones and continually improves the overall synergy within organisations. Jose and his team of developers were a key part of delivering the Wraith Protocol for the Verge Currency project.

Frank Martinez

Legal Advisor

Frank has had a distinguished career across many different sectors including art, design and patent examining. He served as a Design Patent Examiner at the U.S. Patent and Trademark Office and an associate at several law firms, before founding The Martinez Group PLLC in 2008. Frank has worked closely with designers, engineers and entrepreneurs, having drafted licences and other documents for use by companies such as Google, Apple, Facebook, Microsoft, Honeywell, AT&T, RIM, Orange, Nike, American Express, BBC, Samsung, Sony, Bloomberg and British Telecom. Frank earned an MBA in 2017 and is now taking advanced management courses at Harvard Business School's HBX Program. Frank is also learning to code in Python at Code Academy and has studied cryptocurrency technologies in Princeton University's Coursera program.

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London, England
United Kingdom

Thank you