



CONFIDENTIAL

# Beep Xtra Ltd

THE RIGHT WAY TO ACHIEVE ADOPTION OF  
BLOCKCHAIN & CRYPTOCURRENCY IN EVERYDAY LIFE!

## Whitepaper

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# Introduction

## Introduction



*There is not one but two holy grails in the blockchain industry. The first is the search for a coin that can buy goods and services in any store on the planet. The second is having transaction speeds that can cope if every store on the planet used it. We have solved both which makes this whitepaper perhaps the most exiting you will ever read.*

# Executive Summary

## Opportunity

### Summary

This whitepaper is the conglomeration of BeepXtra, the BeepCoin and Beep Steroid 4.0 Multi-Chain technology. The individual component parts are compelling, yet combined they create an extraordinary potential to disrupt the market.

Here is the solutions to some of the biggest challenges facing the blockchain and cryptocurrency in general:

- People complain that cryptocurrencies can't be spent in everyday stores. BeepXtra own the ePOS cash registers in stores so now anyone can purchase any product or service in a Beep store.
- Blockchain transaction speeds (typically from 20 to 2,000 transactions per second) constantly hold coins back from everyday use, because to be effective in everyday life the retail world today requires at least 25,000 transactions per second. Beep has created it's own blockchain Beep Steroid 4.0 Multi-Chain technology, with speeds of at least 100,000 transactions per second.
- The general public often find it difficult to obtain cryptocurrencies. With BeepXtra stores each ePOS is a customised BeepCoin mining rig, a real world first smiling mining shopkeepers.

Beyond these main points this whitepaper will also outline where many challenges in everyday use, implementation, mining, and factored growth are resolved.

### Project Background

BeepXtra and its coin, the BeepCoin, is ideally positioned to become one of, if not The coin, of mass adoption, introducing blockchain technology seamlessly to everyday life.

Beep Xtra was formed in 2013 as a decentralized global loyalty provider. It's primary function is to connect unrelated businesses anywhere in the world. Customers receiving loyalty rewards in any country can redeem them at the same store or any other store, in any currency, anywhere on the planet.

The rewards are given in cash equivalent currency and not points or vouchers. The central base currency was originally chosen to be the US Dollar. The Beep software checks every currency in the world four times an hour, so a cashback awarded in any local currency - for example Euros in Europe, can travel the world and when redeemed in another country - let's imagine The Philippines, it converts to the local currency, the Filipino Peso.

To facilitate the above, Beep Xtra designed it's own ePOS and gives it free to stores using the Beep loyalty platform. It also has online terminal software for use on any internet enabled device. The Beep platform can integrate with almost any existing ePOS with its API and can seamlessly integrate with all online businesses.

Over 500 stores have already begun to use the Beep Xtra service worldwide, while the current concentration is on clustering together stores in specific areas. The Philippines is the area chosen to focus these efforts.

Beep Xtra intends to develop 30 main regions around the world with 50,000 stores in each region, giving a global goal of 1.5 million stores using its service.

Beep Xtra is predominantly a software company and it was a natural development to look at the emerging technology of blockchain in 2016. Because Beep Xtra owns the ePOS systems in stores and the cash systems already integrate with every global currency, it is ideally positioned to swap the central base currency (the US Dollar), to its own cryptocurrency. The Beep Xtra coin, the BeepCoin, can become the global coin of mass adoption for this reason alone, and given it's trade-ability with other cryptocurrencies, it is a means of seamlessly converting "store of value" coins to everyday purchases.

Beep Xtra has gone way beyond this initial step to create the most compelling ICO.

The Beep platform has been developed over 5 years of pre-trials. Over 50,000 people have expressed an interest in over 192 countries, and over half a million Beep Xtra cards have already been circulated.

### **Solutions to Problems**

#### **Adoption and use in everyday life**

When people (especially those outside of the IT arena) first look at the subjects of Cryptocurrency or Blockchain technology, they complain that the coins can't be spent by normal people in everyday stores.

Bitcoin was developed to be a coin of mass adoption; it has become more of a standard store of value today and the limitations on transaction speed have further hindered its original purpose.

The BeepCoin can be used in stores anywhere in the world today. It is positioned to become the coin of mass adoption.

Beep Xtra own the software inside the cash registers (ePOS) and the Online Terminal Software.

Beep Xtra software can already instantly convert the BeepCoin into any local currency. This is used at the point of sale for any goods and services anywhere in the world.

For the first time customers can purchase almost any product or service with BeepCoin.

Store owners are incentivised to encourage other store owners to join the Beep Xtra loyalty platform making adoption more viral.

## **Transaction speed**

A major factor preventing mass adoption of any cryptocurrency is transaction speed and verification time. Current merchant processors for Fiat money in stores around the world have transaction speeds of around 25,000 transactions per second (tps). Verification can take up to 30 seconds, which is a long time for both customer and cashier to wait to proceed with any sale.

BeepCoin starts with transaction speeds of 100,000 tps and verification time of 3 seconds making it four times faster than all merchant processors today. Many cryptocurrencies only dream about reaching these speeds however the BeepCoin has this as its inception.

BeepCoin is ready to be adopted globally in any store or online service.

## **Technology**

The developers at Beep Xtra identified that to solve a considerable amount of existing limitations a new technology would need to be created, which would also allow miners to grow with the system using both CPU and GPU processing power.

Beep Xtra has created its own specific rig that can be used anywhere.

### **SMS (Smiling Mining Shopkeepers)**

A world first is a cash register (ePOS) that is also a mining rig.

Store owners switch on their ePOS systems and mining starts. Now as the ePOS waits to ring up sales for customers the software is busy mining BeepCoins for the store owner.

If no customers come into the store the store owner still makes revenue.

Store keepers are incentivised to sell BeepCoins to their customers not only because they are running mini mining farms on their counters, but because Beep pays the store keeper a commission for selling the BeepCoin.

Store owners can mine and thus create the very cashback they are giving to their clients.

The resulting BeepCoins can be redeemed for good and services anywhere the Beep Xtra system is in use. Beep Xtra can be established in stores in less than one hour.

## Investment

### Private Sale

In the Private Sale there are three main ways to become involved.

#### **1. Purchase BeepCoins at a considerably lower price than the ICO set price of 10 cents.**

50,000,000 BeepCoins will be available at the early bird price of 6.3 cents (\$0.063) with a minimum investment is \$25,000.

#### **2. Purchase a Master Node or group of Master Nodes.**

There are two types of Master Node the SCore and the Sc5 Nodes. The Sc5 nodes serves the SCore nodes. Generally the SCore makes 2.5 times the income of a miner and the Sc5 1.5 times the income of a miner depending on volume processed. Any potential investor would naturally prefer the SCore however for security the whole group, Master nodes alternate their functionality to operate as either SCore or SC5. Therefore any purchaser of a Master node actually has both types of node.



Each Master node comes with its required 250,000 coins stake. We will deploy the server node at a data-center around the globe and set it up, plus it will be prepaid for 60 months.

(After this, the monthly fee falls back to investor, approximately \$50~80/month paid to the server provider).

Sc5 Master Nodes are used to control miner's activity and delegate rewards. Master Nodes always keep a share of each transaction processed plus share of the block reward).

SCore4.0 Master Nodes are used to control Sc5 activity and delegate work. SCore4.0 Master Nodes always keep a fee for any request (Transaction, retrieve, token deploy, smart-contract, token transfer, Final Balance request).

Each Master Node is available for \$25,000. The supply of Master Nodes is limited to 60 in the private sale and for at least the first 12 months of public sale. At some time beyond 12 months of public sale the information will become open source and more Master nodes will be allowed however these will be at a considerable higher price than during the private sale, and significantly affected by the BeepCoin price at the time.

### **3. Purchase a Mini-Mining Rig.**

Early adopters will generate a guaranteed 30,000 BeepCoins. The first 200 to 500 Mini-Mining Rigs will be guaranteed to produce between 30,000 and 50,000 BeepCoins. The difficulty rating will increase and the price will increase.



Mini-Mining Rigs can be purchased for \$1,300. They will earn a high yield during the initial period, with a very short ROI period and a life-span of 2-5yrs.

The Steroid 4.0 code and the connections to the private mining pools will not be open source for a period of time to be decided by the directors and not before each original Mini-Mining Rig has produced at least 30,000 BeepCoins, and the network is secured.

## Public Sale

The difficulty rating naturally increasing, creates its own soft cap on total availability of BeepCoins which is calculated at 10 Billion BeepCoins.

500,000,000 BeepCoins will be pre-mined and these will be made available for the private sale, the ICO itself, held for node distribution, and for airdrops and promotions.

In the public sale BeepCoins will be available for sale at a minimum of \$200 entry investment and a maximum of \$50,000

The tiers are as follows:

Tier	Coin % of supply	Price	Total Coins	Total Value
Pre-Sale	-	\$0.063	50,000,000	\$3,125,000.00
Tier 1	10%	\$0.074	25,000,000	\$1,851,851.85
Tier 2	15%	\$0.080	37,500,000	\$3,000,000.00
Tier 3	20%	\$0.087	50,000,000	\$4,347,826.09
Tier 4	55%	\$0.100	137,500,000	\$13,750,000.00

# Steroid 4.0 Technology

## Problem & Solution

Despite the popularity and traction gained by cryptocurrencies since 2017 and the number of blockchain development projects, none of them successfully fulfills the market needs in terms of capacity, scalability and features offered. When the idea came to life, back in 2016, to conjoin our loyalty card with a tokenized dynamic asset instead of a digital number on a database, we have intensively studied many of the available technologies until late 2017.

The decision was clear that we had to innovate and disrupt the market in order to fulfill both our own needs and the global retail industry.

The growth of most blockchain projects is limited by the technical capabilities of the existing blockchain / operators / networks etc. So instead of following the trend of a closed nature blockchain, that suffers from low speed and the inability to interact with other chains, we started thinking outside the box and put together the Steroid 4.0 MultiChain ideation.

## The Technology

### Introduction



## **Steroid 4.0 Technology**

*Steroid 4.0 is the first of its kind multichain technology with smart-apps support and a focus on transaction speed, security, privacy, and geographic scalability around the B2C industries.*

Steroid is a combination of 3 popular blockchain protocols, governed by an external, also decentralized AI Algorithm. The 3 consensus protocols employed are POW, POS and POC.

### **Clarifications**

**POW** provides the absolute decentralization and network security, with DDoS protection and network integrity enforcement. A well tested and proven protocol, however it is limited to slow throughput and energy constrained expansion.

**POS** is a more scalable solution with much higher throughput, while being less secure than the completely decentralized POW algorithm.

**POC** is an experimental protocol using disk space for its consensus propagation and processing.

### **Steroid Recipe**

Steroid uses a multi-chain consensus system with the 3 blockchain protocols working in conjunction and synchronicity. Starting with a hybrid POC algorithm at its core (SCore4.0), Steroid utilizes the disk space protocol for more than just processing but also storing large amounts of data. Beyond the core, Steroid uses a DPOS system (Delegated POS - SC5) that further strengthens the security and manageability of the internal operations and external POW network. The DPOS protocol is built on top of the SCore network and uses the POC as

the central storage, mounted onto each node. The communication between POC and POS is only internal and controlled by the algorithm itself (No external connections allowed). The POW thereafter (SGeo) is the only public access to the entire network and is responsible for all the inbound traffic and initial transaction validation. The entire network is synchronized via a 4th independent blockchain that solely records network logs and utilizes the data with an AI Protocol (Sci4) to predict network events and reallocate hashrate where needed. This is achieved by moving miner connections from node to node and conjoin the processing hashrate of the said miners with the POS minters according to network load and transaction capacity, avoiding this way potential network congestions while achieving a "by location" scaling capability.

Each node is considered a segregate at its geographical location and reach, though it needs to be in consensus with delegates of the DPOS in order to operate. A very similar concept to the Bitcoin Lightning network but in a decentralised and autonomous manner.

The encryption algorithm used by the POW network and throughout several parts of the multichain, is a rewrite of the original CryptoNote, with the added capability of smart-contracts.

### **Steroid DApps - Smart/Sub-Contracts**

Steroid implementation of smart-contracts expands to a newly introduced concept to blockchain called "Sub-contracts" where traditional smart-contracts can utilize data, triggers, and receive commands from several sub-contracts. We call this combination of smart/sub-contracts, "Steroid DApps". Steroid DApps run in real-time and very similar to web services while APIs are available in many popular programming languages, such as PHP, C++, Golang, Java, solidity etc.

Additionally Steroid DApps extends the capability of storing data by availing to developers the ability to define many additional data types and fields within, making it this way a powerful decentralized database engine.

Moreover, the DPOS protocol, allows for the deployment of specialized nodes, explicitly for the use of a specific Steroid DApp by delegating the node itself.

### **Steroid Incentive Block Rewards**

Given the major differences of the Steroid Multichain, a somewhat different approach to block rewards is also enforced. Blocks are issued by the POC Protocol. Transactions are recorded and processed by the DPOS network, while the initial transaction validation, submission and data retrieval is handled by POW. The block rewards are handled by Sci4 which records the contribution of each participant of all 3 protocols, and distributes the reward according to network growth needs. E.g. if more storage is used, it becomes more important and gets a larger margin of block rewards. The same happens with transaction load, smart-contract processing, retrieval etc and a fair share adjustment is built-in to Sci4.

Additionally, Sci4 also allocates more margin of block rewards by geo-location, meaning it will reward contributors nearer to the workload more. This promotes more network expansion in high load areas while discouraging the use of proxies, centralized pooling, and other practices that slow down the propagation, while on the other-side it will increase the transaction fees for loads generated in low hashrate areas, further attracting more network expansion in such areas, given there is usage and utilization in the said geographical span.

### **Our Advantages**

To summarize Steroid4.0 features:

- 3 Synchronized Consensus Protocols.
- Decentralized Apps.
- Additional Data Types support.
- Larger Blockchain storage capacity.
- Privacy Focused.
- Geographic Scaling Protocol.

- DDoS Resistant by isolation.
- A 51% Attack is near impossible.
- AI Protocol with Hashrate delegation functions.
- Fair block reward allocation.

## Plans for the Future

Initially the Steroid 4.0 code repository will remain private and on a need to know basis.

Beep Xtra will sponsor the network growth and provide incentives for external investors to participate in both the core network and the BeepCoin DApp network, until the Steroid Core network size and usage is self-sustained and secured.

Eventually, both the code and access to APIs will be given publicly, to further encourage the decentralisation and development of the technology along with the deployment of other Steroid DApps.

During the first stages of deployment, the Beep Xtra IT Department will be the sole ambassador, able to deploy nodes and miners. When Steroid is delivered to the public, full documentation will be provided for node deployment, mining software developers and other integrations alike.

# BeepXtra Use Case

## Operations

### Technology

Beep Xtra will launch the first use case of the Steroid Multi-chain with it's own Steroid DApp and specialized token, the BeepCoin, for use in the existing loyalty platform.

As described above, the BeepCoin DApp will have it's own specialized nodes on the Steroid Network, and will be a "mine-able" asset.

The BeepCoin will then be integrated into the loyalty platform as the base currency, and also the central data storage of transaction and accompanying data.

### Locations & Facilities

Beep Xtra from its parent company in the Seychelles has physical offices in three locations the United Kingdom, Cyprus and the Philippines.

The United Kingdom office is where the Managing Director operates from controlling all sales, marketing, finance and administration of the company.

The Cyprus office is where the IT Director operates from the cryptocurrency mining farm and office.

The Philippines office is for development of stores in that region.

### Existing Applications

To enable integration of the Beep Xtra software into stores there are various existing applications.

The Beep ePOS is a free point of sale solution that can completely run any business. ePOS systems often cost store owners a lot of up-front payment or monthly rental. Beep Xtra provides this for free.

Beep Xtra has a third party integration system via its API which enables any store owner to contact their existing ePOS supplier and instruct them to include the Beep Xtra platform on their system. We will also work with large ePOS providers for integrations and/or provide modules for these systems ourselves.

Beep Xtra provides an Online Terminal Software to be able to record all transactions if the store owner either wants to keep their ePOS separate or does not want/need an ePOS. The Online Terminal Software works on any internet enabled device including smartphones, laptops and desktop pc's.

Beep Xtra has its own Beep App for use on smartphones. This App for customers replaces the need for a physical plastic card. The plastic card remains for customers who don't wish to use the App. The App will also be extended to be used as an integrated Steroid 4.0 smart-wallet.

## Marketing & Sales

During the development phase Beep proved its concept had a huge demand by the fact it registered over 50,000 people registered as interested in the project, 500 stores and more than half a million cards circulated.

To introduce Beep Xtra to stores requires training for the sales team and a separate team of sales support and integrators.

Beep Xtra will employ full time professional sales representatives throughout 30 regions which is 70 countries to reach its 5 year medium term goal of 1.5 million stores. All the sales representatives will have their appointments made internally via the sales support team in

the Philippines who work on three shifts 24 hours to match local working times of store owners.

When each store registers with Beep Xtra the internal sales support and integrators will ensure the correct Beep system is applied and the work in tandem with the local sales representatives to ensure the stores are starting to use the Beep system properly.

Beep Xtra will be built in close knit clusters around the world using top down marketing provided by its co-branded cards. Any local organisation that has a membership can apply for a co-branded Beep Xtra membership card for its own purposes. The Beep Xtra full time sales representatives will build a cluster of stores in the local vicinity to the organisation which can be for example a sports club or a charity. This concept has been proven to work already and is now at the stage of waiting for revenue from the Beep Xtra ICO to roll it out for two years until 1,500 sales representatives are employed globally; their distribution will be according to population density.

Local stores now benefit from hundreds or even thousands of local people who now have a vested interest in shopping in their stores, because they are using the membership card of their local sports club or charity that is important to them. The same customers using the co-branded membership card receive cash back discounts in these stores and can now have this cash back as BeepCoin cryptocurrency.

BeepCoin can now be easily stored on customers Beep cards or Apps and converted to any currency in the world in an instant, seamlessly through the Beep Systems mentioned above.

Customers can exchange BeepCoin for goods products and services in any Beep store.

Any store online or offline can register with Beep in a few minutes for free.

The sales representatives will show the local store owners that they have a proven verifiable database of local customers who are actively looking to support their local sports club or charity by shopping in their store, this is the basis of "top-down marketing". This is exactly what store owners are looking for, customers who are local and who want to use their business repeatedly.

There is considerably more to the sales and marketing strategy which is commercially sensitive. The directors of Beep Xtra are extremely confident that with the funding provided by the ICO that the company will become a global brand in 2 to 5 years. To achieve everything in this whitepaper is literally about time and money.

## Milestones & Metrics

Milestone	Due Date
Launch Philippines Pilot	August 31, 2018
Public ICO	January 07, 2019
Steroid Testnet	February 01, 2019
Mainet & Platform Launch	April 01, 2019

# Company

## Overview

### **Ownership & Structure**

It was formed by Lyndon Farrington Managing Director and Angelos Hadjiphilippou IT Director.

Beep Xtra is a cloud based loyalty program that can supply this service to any store in the world, hence it registered initially in the British Virgin Islands so that it could supply globally from an offshore parent entity. It has physical operating offices in the United Kingdom, Cyprus and the Philippines.

### **Company history**

Beep Xtra (BVI) Ltd was incorporated on 20th September 2013. It moved its operations to Beep Xtra (Seychelles) on the 21st of April 2016

Lyndon Farrington created the concept of a combining a global loyalty system with free and viral sales methods, using the internet as the supply platform and an offshore base.

Angelos Hajiphilippou already had a proven and complete IT team in place and when approached by Lyndon Farrington proposed the idea of providing the retailers with an EPOS system that would facilitate the loyalty system and run their whole business also, gaining extra loyalty from the business owners.

The combination of the skill sets of Messrs' Farrington & Hajiphilippou has fuelled Beep Xtra (Seychelles) Ltd from an idea to a global phenomenon.

## Team

### Management team



LYNDON FARRINGTON

#### Managing Director

Lyndon's career started as a mining engineer, he was also in the armed forces. He has been in business for 25 years. An accomplished public speaker with a very technical engineering education from two universities whilst gaining a wealth of knowledge from the corporate world mixed with years of international free enterprise experience.

Lyndon has taken three separate businesses from zero to a multi-million pound turnover. He has ability to simplify complicated scenarios and put them to work with the least time and effort to bring a new business to market, faster than others thus gaining a competitive edge. He operates with a diplomatic approach but can be very direct when necessary.



ANGELOS HADJIPHILIPPOU

#### IT Director

Angelos Hadjiphilippou is an entrepreneur in the field of technology and the largest industry available today, the online world.

Studied Accountings initially, but then followed with applied sciences in the fields of Software Architecture, Communication Protocols and Networks, Hardware Assembly, Automation systems etc, and continued higher with Quantum Mechanics and ThermoDynamics.

Been involved in many open source developments such as Joomla!, Drupal, Centos(Unix) and many more. Has founded many successful Technology businesses, such as Exevior Technologies, JoomOne!, ClickAHost etc, and has issued many online publications around the Technological Evolution.

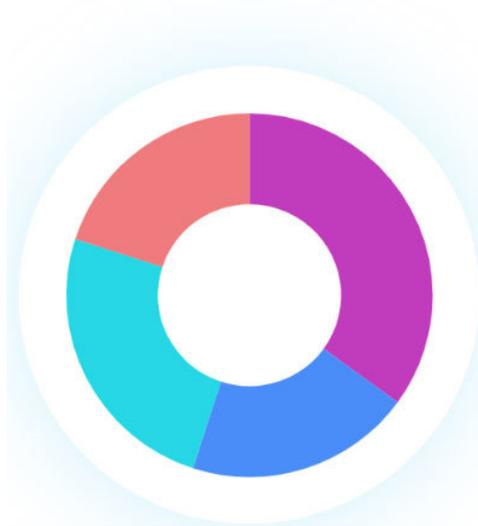
**Advisors**

To be announced!

# Financial Plan

## Financing

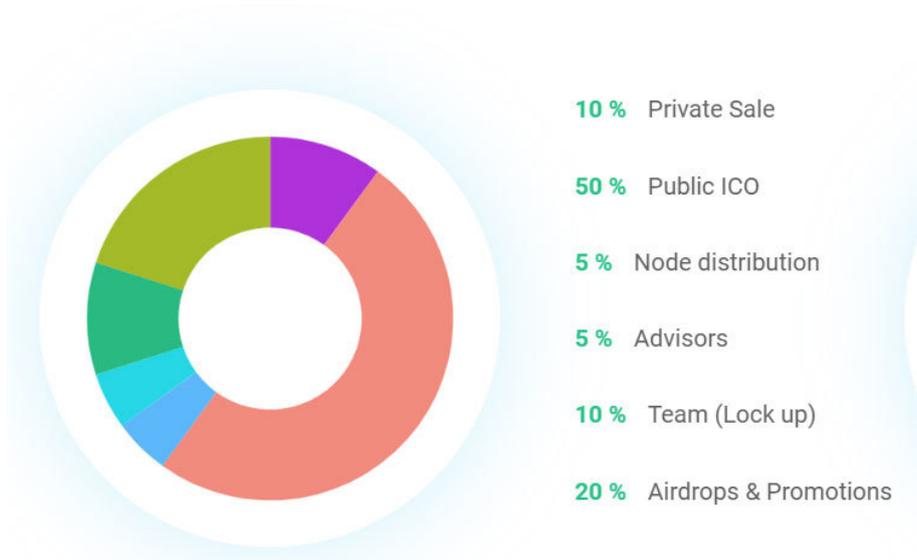
### Use of funds



- 35 % Product Development
- 20 % Operations
- 25 % Marketing
- 20 % Compliance/Legal/Others

ICO Fund Distribution

### Pre-mined Coin Distribution



Pre-mined Distribution