



<https://xtblock.io>

WHITEPAPER

XTblock is a high-performance blockchain network that can transform every industry, and create a bold new decentralised Bot and AI computing economy.

V1.0

[Latest Update: 19th July, 2021]

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Introduction

Several blockchain platforms already exist, so why build another one? Because this endeavour would be immensely valuable if the problems that have continued to plague blockchain, such as low transaction speeds, lacklustre computational power, limited scalability and high latency could be solved.

XTblock's unique time sharding architecture, as well as several other enhancements, have been designed and developed to solve precisely these problems.

Let's look at why this is important, by way of a simple analogy. If you consider a computer network – in this case a blockchain network – to be a 'brain', it would follow that a healthier brain has better connections and greater processing power. And while the human brain is similar to, but not necessarily the same as, a computer network, the premise is fundamentally the same: That information (i.e. data) fed to a more capable blockchain network allows that blockchain not only to verify blocks of information, but also to perform powerful computing operations.

Delivering a high-performance blockchain such as this has massive positive implications for every industry: It would take the key advantages that characterise a blockchain network, such as immutability, security, transparency and decentralisation – and greatly enhance this proposition with high computational power, low latency and rapid scalability. This means that the best of both worlds – the benefits of powerful centralised networks and the advantages of blockchain – can now be delivered through a single, even more capable platform, like never before.

Importantly, XTblock will also power two critical and high-potential realms of technology: Decentralised Artificial Intelligence and Bot computing.

Decentralised Artificial Intelligence

Artificial Intelligence (AI) technology in its present state is largely centralised, which means it is limited by the power, mobility and connectivity of its host network.

"Distributed Artificial Intelligence (dAI), also called Decentralised Artificial Intelligence, is a subfield of [artificial intelligence](#) research dedicated to the development of distributed solutions for problems. dAI is closely related to, and a predecessor of, the field of [multi-agent systems](#)" [Source: [Wikipedia](#)]

Decentralised Artificial Intelligence (dAI) is the next leap forward for Artificial Intelligence and is an approach to solving AI's complex learning, [planning](#), and decision making problems – especially if they require large amounts of data, by distributing the problem to autonomous processing nodes (agents). It exploits large scale computation and spatial distribution of computing resources. These properties allow it to solve problems that require the processing of very large data sets.

As explained in a paper by Don Tapscott and Anjan Vinod, the Blockchain Research Institute and Blockchain at Berkeley, “Imagine a massive number of nodes pooling their data, contributing to a data commons of sorts, rather than dealing with the very siloed and centralized pools of data that exist now.”

They go on to say, “As people and things generate more data, storing those data in a decentralised manner can be challenging. Public blockchains are very expensive for storing vast amounts of data; and beyond the cost, quickly retrieving the data can be computationally intensive. Computing systems will need to retrieve, analyze, and compute algorithms in a very short period... Current blockchain solutions do not offer the scalability required for such types of aggregation and computation”

This is where XTblock is different. It presents cutting-edge possibilities in AI through the creation of a new type of distributed architecture that runs on our blockchain network.

It is the intersection of two technologies that are individually revolutionary, but which can change the course of business, industry and the world at large.

By solving the problems of scalability and performance, XTblock aims to realise this vision for Distributed Artificial Intelligence in a manner that is truly viable.

For more information, please read about our dAI architecture in our presentation on XTblock's blockchain network: <https://github.com/xtblock/dai-research-development>

Decentralised Bot Computing

A report titled '[The Underground Bot Economy: How Bots Impact the Global Economy](#)' ([imperva.com](#)) states “Data from our “[2015 Bot Traffic Report](#)” reveals that bots account for nearly half of all internet traffic (49 percent). That’s an amazing statistic when you consider the fact that there are more than 3 billion internet users in the world. Some of the [bots best known to the general public](#) power search engines like Google, Bing, and DuckDuckGo.”

In a simple yet helpful description of bots on their website, Botnerds explains that “Bots are software programs that perform automated, repetitive, predefined tasks. These tasks can include almost any interaction with software that has an API. The tasks can range from making dinner reservations to getting an update on a support request, to checking competitors’ prices on their websites. You’ll notice that the definition of bots does not necessarily include the concepts of artificial intelligence (AI) or machine learning (ML)”

This is the era of hyperspecialization, for both, humans and technology. In technology terms, we are focused on empowering specialised bots by allowing them to access the massive computational capabilities of our blockchain network.

Here’s another simple analogy to explain this concept: Just as a doctor uses his education and experience to treat patients, a bot uses its algorithms to perform certain specialised tasks. The doctor, however, relies on complex diagnostic equipment to help with diagnosis; i.e. he relies on the rapid data processing capabilities of the equipment to generate results that help him make quality analyses, decisions or medical recommendations. The more powerful the equipment and the greater its capabilities, the better the results – and the more informed he is when it comes to analysing, deciding and recommending.

In the same way, XTblock will enable bots to compute with large data volumes by leveraging its considerable computing power using, potentially, hundreds or thousands of nodes on the decentralised network. This will allow the bots to execute even complex tasks in parallel, and in a timely manner.

This also applies to blockchain oracles, which will be able to take both on-chain and off-chain information to process it on XTblock.

Find more information on bots here:

[What Are Bots? Understanding the Bot Landscape | botnerds.com](https://botnerds.com/what-are-bots-understanding-the-bot-landscape)

Further reading – Good bots and bad bots:

[What Is a Bot? | Bot Definition | Cloudflare](https://www.cloudflare.com/learning/what-is-a-bot/)

A brief background and XTblock's core premise

Blockchain technology is a type of distributed ledger that was originated with the intention of obviating the need of trusted intermediaries, given that these intermediaries often exploit the information of the ledger, use it inefficiently, or corrupt it; instead of relying on these trusted intermediaries, all participants of the network are allowed to maintain their own synchronised copy.

Today, blockchain infrastructure is huge and uses high-performance computers (CPU/ GPU/ RAM/ Storage/ Network) which are also good for algebraic calculations and fit for computing requirements for AI; however, existing blockchain implementations only use blockchain nodes and networks for the simple purpose of block verification.

XTblock's core premise is that the same architecture, miners and infrastructure can be used for distributed problem solving (DPS), like AI computing services and Bot computing services.

As part of the results we aim to generate, by providing Decentralised Bot Computing (dBot) and Decentralised AI Computing (dAI) services, we also aim to create valuable Bots with distributed computing solutions, variably with or without AI solutions on our blockchain platform. We call this "**The dBot Economy**".

At its core, what we are building is a hyper-capable network. To facilitate the functioning of this network, a group of bots, i.e. a 'bot set', will help to create a wide variety of applications and services. This could vary from a high performance blockchain network to peer-to-peer video streaming services, AI computing services, bot computing services... the possibilities are virtually limitless.

Table of contents

- 1. Executive summary**
- 2. Solution and Business Model**
- 3. Use Cases**
- 4. Incubation**
- 5. Achievements**
- 6. Tokenomics**
- 7. Competitive Landscape/Market**
- 8. Growth Opportunities**
- 9. Roadmap**
- 10. Marketing**
- 11. Fund Distribution**
- 12. The Team**

1. Executive Summary

Blockchain is powerful and has great potential, and the validated market size and growth rate are very promising, but the CapEx and OpEx are still too high, which prevents its widespread adoption (in addition to other issues related to scalability, speed, latency etc., which continue to challenge current blockchain solutions).

We have developed a multi-chain, high-performance, scalable blockchain technology that effectively addresses the key issues facing blockchain today, such as speed, scalability and latency. Our blockchain is made available through a subscription-based shared and variable blockchain speed business model. Importantly, this also solves the high-cost problem of deploying and maintaining blockchain applications.

As mentioned earlier, blockchain infrastructure is massive and widespread, and uses high performance computers (CPU/ GPU/ RAM/ Storage/ Network) which are also good for algebraic calculations and a good fit for distributed computing requirements. Therefore, there is little sense in using blockchain networks merely for block verification – with the same architecture and the same miners, we can use this infrastructure for AI computing services, such as distributed problem solving, federated training and distributed functioning. The potential, therefore, far exceeds the current use of blockchain networks today, with near-limitless possibilities on the horizon.

Below are the factors required for distributed problem solving in general, and specifically for AI computing, that must be kept in mind – and which, importantly, XTblock aims to fulfil:

High computing capacity

Organisations need high performance computing resources, including CPUs and GPUs, to explore the possibilities of AI. As experiments are still underway in most of the organisations exploring AI, the general approach is to build a strong CPU-based environment to handle basic AI functions. But currently, the existing CPU-based computing might not be enough to handle the multiple large initiatives as required by the deep learning process. To deploy scalable neural network algorithms and manage the high-performance networks and storage, computing capacity and density of data handling need to improve.

Storage capacity

Storage capacity is the fundamental requirement for any AI infrastructure, as there is a need to scale storage as the volume of data grows. But an organisation needs to ascertain the level and extent of storage they would require, for planning their experiments with AI. Companies need to handle their expansion plans and manage their storage capacity to be able to make real-time decisions, as AI applications can help to make better decisions when they're exposed to more data.

Networking infrastructure

Seamless networking is an essential component of AI infrastructure. As scalability is a high priority, an organisation would require a high-bandwidth, low-latency network. Deep learning algorithms depend on communication, and as AI experiments progress and expand, network systems need to keep pace. For this expansive service, it is necessary to have an expert infrastructure provider who can handle the service wrap and technology globally, and also ensure that the stack is distributed and consistent in all places.

Security

As AI is used to handle sensitive data in sectors such as healthcare, finance and beyond, securely maintaining the personal data becomes a bigger challenge. These pieces of information are extremely vulnerable in nature; and if not managed well, it can be detrimental to any organisation if exploited by malicious actors. Besides, if any unwanted and unnecessary data are added to the AI system, it would lead to incorrect decision making and detrimental inference. Hence, highly secure AI infrastructure is

required to ensure that the data is protected.

Cost-effective solutions

This is just the beginning of AI model development, as research progresses slowly across the world. AI will become more complex, and the associated development costs will correspondingly be very expensive. Organisations must work to ascertain the most cost-effective solutions to continue with their process and growth. As organisations using AI must maintain their momentum and growth, they have to depend largely on improved networks, servers, and storage infrastructure to enable the use of this technology. The whole process is prohibitively expensive. Therefore, it would be incumbent upon them to choose service providers carefully and thoughtfully – providers who can offer cost-effective dedicated servers of a high standard. This would help them to effectively capitalise on the opportunity for high performance, and help them to plan, decide and invest intelligently in AI infrastructure.

[Source: Technology-innovators.com](https://Technology-innovators.com)

2. Solution and Business Model

XTblock's core proposition is a high-performance, easily adoptable blockchain platform to revolutionise every business and industry

For those who primarily operate in any of these industries or sectors...

- Banking, Financial Services & Insurance
- Energy & Utilities
- Government
- Healthcare and Life Sciences
- Manufacturing
- Telecom
- Media & Entertainment
- Retail & Consumer Goods
- Travel and Transportation... (etc.)

These are some of the biggest data and computing challenges:

Data Security – Average cost of a data breach in 2020 is \$3.86 million*, with several breaches costing over \$50 million

Data Processing and Storage – Very significant CapEx and OpEx amounting to billions of dollars is spent each year

Scalability – Centralised systems are hard to scale (up or down), and require considerable investments and technical resources

Data Traceability and Transparency – Centralised IT systems are not immutable, so records can be altered or falsified

Source: **IBM and the Ponemon Institute*

Blockchain is a far superior way to address many of these issues, because:

- It makes it difficult or extremely hard to change, hack or cheat the system
- Data cannot be held hostage for a ransom
- Blockchain also effectively addresses issues related to network disasters, human error, and software bugs

So what is stopping many industries and enterprises from adopting blockchain?

BMW, Credit Suisse, De Beers, Honeywell, HSBC, Nestlé, Samsung and others have already adopted blockchain, based on its current capabilities.

However, current blockchain platforms have certain limitations:

- Cannot handle high transaction volumes
- Cannot scale effectively with an enterprise's needs
- High costs to develop, deploy and maintain blockchain applications

Platforms such as IBM's Hyperledger, Ethereum and others are all trying to solve the problem.

XTblock's unique capability and approach

In addition to the standard benefits of blockchain, XTblock can deliver:

Low cost

Because of our subscription model, there will be no CapEx that our clients need to commit to (unless a private network setup is requested). Subscriptions will allow several times lower costs than when using other blockchains. On-premise networks are also possible for large corporations at competitive pricing. Our Platform Terminal App will help to reduce DevOps costs

Performance

Unlike other platforms, XTblock's architecture is fully scalable to deliver the computing performance our clients need, which can be attributed to our supercomputer architecture – simply subscribe to higher TPS speeds, or drop to lower speeds through a few clicks in the Platform Terminal App without the need to configure the entire network again (to save time and cost).

Quick and simple

Using the Platform Terminal App means there is no need for complex network configuration as seen with other platforms. Developers will want to (and love to) use the Platform Terminal App, because it makes DevOps easier, simpler and faster – with powerful features and an easy-to-use interface.

Our Platform Terminal App

Our Platform Terminal allows you to flexibly define Data Structures and Business Flows with theSmart Contract programming function on our platform.

The differences between the Competition and XTblock

Competitors (BaaS): The tech giants	XTblock (BSP – Blockchain Service Provider)
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<ul style="list-style-type: none"> - Sell Blockchain Nodes – Cloud Hosting - Limited Scalability 	<ul style="list-style-type: none"> - Sell blockchain speeds via subscription (like an ISP sells bandwidth packages) - Scalable
<p><u>Complex DevOps Steps:</u></p> <ol style="list-style-type: none"> 1. Purchase nodes (expensive) 2. Configure network 3. Build blockchain application 4. Deploy application to network 5. Maintain network with sys-admin 6. Reconfiguration required to scale up/down 	<p><u>Simpler DevOps Steps:</u></p> <ol style="list-style-type: none"> 1. Purchase affordable speed packages 2. Build blockchain application 3. Publish application 4. Scale up/down as per business needs (no reconfiguration required) <p>Various speed packages will be available from XTblock, and we believe that there is a 90% possibility that costs can be lowered, often very significantly.</p>

XTblock's Subscription-based Business Model

**Tentative Pricing which is subject to be changed due to market demand.*

STARTER PACKAGES	SHARED PACKAGES	DEDICATED PACKAGES
<ul style="list-style-type: none"> • 5 XTT for 5tps/mo • 10 XTT for 10tps/mo • 20 XTT for 20tps/mo • 50 XTT for 50tps/mo 	<ul style="list-style-type: none"> • 100 XTT for 100tps/mo • 200 XTT for 200tps/mo • 500 XTT for 500tps/mo • 1k XTT for 1k tps/mo • 2k XTT for 2k tps/mo • 3k XTT for 3k tps/mo • 4k XTT for 4k tps/mo • 5k XTT for 5k tps/mo • ... • 20k XTT for 20k tps/mo 	<ul style="list-style-type: none"> • 1k XTT for 100tps/mo • 2k XTT for 200tps/mo • 5k XTT for 500tps/mo • 10k XTT for 1k tps/mo • 20k XTT for 2k tps/mo • 30k XTT for 3k tps/mo • 40k XTT for 4k tps/mo • 50k XTT for 5k tps/mo • ... • 1M XTT for 100k tps/mo

1. 'XTT' refers to XTblock's token, which is required to purchase services on the XTblock blockchain network
2. Packages are dynamic and limited by the state of every network.
3. While the above shows subscription rates for shared services, a private blockchain network can also be set up on request.

4. To provide a holistic benefit to our network nodes' operators, we also have Network Routing and Network Storage fees which will be determined by community voting at a later stage.

3. Use Cases

Potential use case examples:

Example for Large-Enterprises

While XTblock's blockchain platform can be used by developers, small businesses and global corporations alike, this example illustrates its ability to solve some of the toughest technological challenges of multinational corporations. It describes the solution currently in use, and the advantages of using XTblock as an alternative.

Organisation: International Food & Beverage Giant, employs 250,000 people worldwide

Uses blockchain for: Food supply chain management

How the organisation is leveraging the benefits of blockchain:

One product the F&B giant uses blockchain technology for is a premium coffee brand. Through blockchain recorded data, buyers of the coffee will now be able to trace the coffee back to its different origins. Importantly, this transparency, traceability and trackability also enhance supply chain efficiencies, while helping to ensure freshness, sustainability, reduction of waste and prevention of food fraud.

How it works:

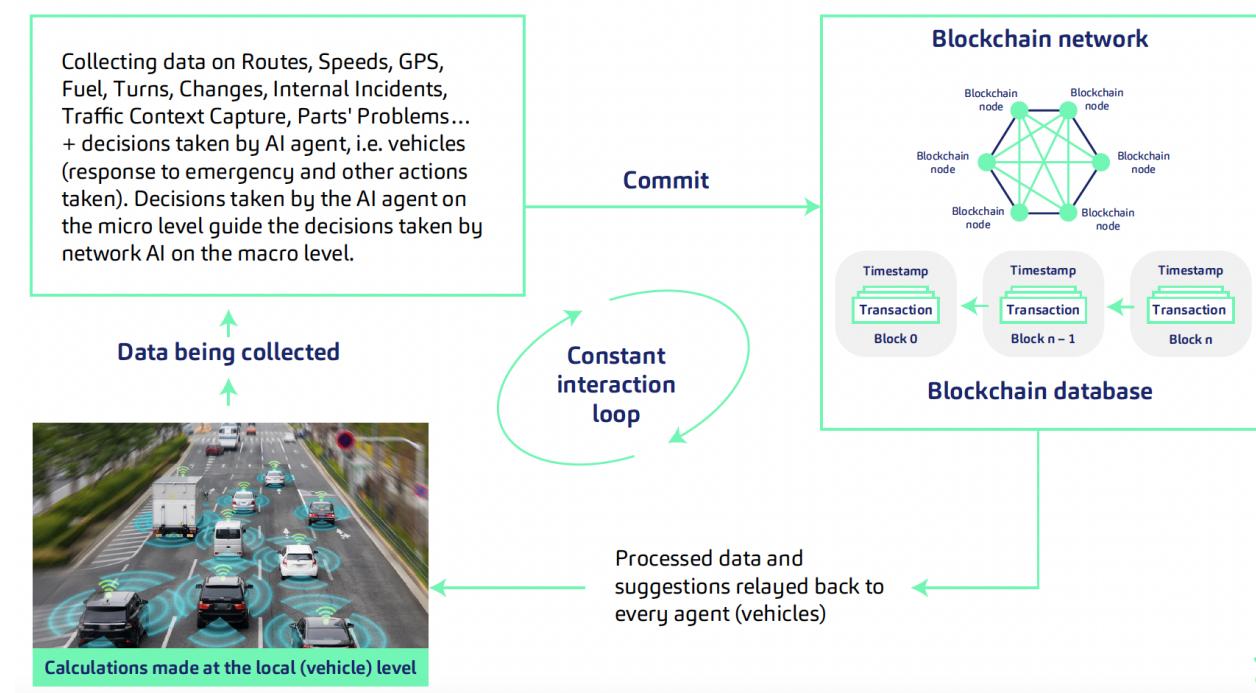
To use the solution to trace food products, data on food products needs to be uploaded to the network by participants. Additionally, data sources can be added to extract custom details. For instance, cold chain data and analyses can be pulled from temperature and humidity sensors, IoT devices, RFID, and more. At any given point in time, the number of 'transactions' (an event that updates the data store) could number in the thousands, depending on how many entries are being uploaded to the network and how much data is being fed into the network by IoT devices, RFID etc. And this is for just one product. Several products on the blockchain would require, potentially, tens or hundreds of thousands of transactions per second.

Costs:

A solution such as this would currently cost several hundred thousands of dollars – or potentially millions of dollars – per month.

But the fact that XTblock has developed, very importantly, a scalable architecture, means that the volume of transactions desired can scale dramatically to tens or even hundreds of thousands of tps, cost effectively.

Potential Example of Use of XTblock Distributed AI and Blockchain (Traffic Management in Smart City)



Organisation: Department of Transport / Division of Traffic Engineering and Operations (Public Sector)

Can use blockchain for: Vehicle tracking, live vehicle behaviour monitoring, fuel consumption analysis etc.

Are other blockchain and AI solutions being used currently?: With other blockchain platforms, this is in exploratory stages only, due to their inability to manage such functions (considering their challenges related to transaction volumes, scalability, high latency etc.). Such platforms can primarily only use blockchain to record transaction data. However, XTblock's high-performance blockchain, coupled with its

Decentralised Artificial Intelligence (dAI) and Decentralised Bots' capabilities, can enable advanced functionality.

What could XTblock provide in terms of high-performance traffic monitoring and management?: With the right software, network, and hardware infrastructure, XTblock's high performance blockchain can help with near-real-time collection of data for millions of vehicles, and can also bring about other benefits, including:

- Vehicle route tracking
- Live behaviour monitoring
- Fuel consumption tracking
- 100% network uptime
- Enhanced cybersecurity, traffic monitoring and management system (e.g. preventing Denial of Service attacks).

In addition, the ability to enable Decentralised Artificial Intelligence and Decentralised Bots means we could get vehicles to communicate with each other to:

- Avoid traffic congestion
- Prevent accidents and collisions

How it works:

With the right network infrastructure, XTblock could operate at 100,000 tps (and scale up if required) to gather data from traffic systems, IoT devices, vehicles, traffic signal networks and other such sources. Coupled with Decentralised Artificial Intelligence and Decentralised Bots it could deliver solutions perfectly suited to the requirements of Smart Cities or even existing traffic networks.

Costs:

Further enhancing this transformational proposition is XTblock's Decentralised Artificial Intelligence capabilities, which make it an enabler of governments' vision for Smart Cities. Apart from the various benefits of deploying a system such as this, there would be very significant cost savings overall, when compared with the use of centralised IT solutions, thanks to our ability to generate significantly higher performance at much lower costs related to infrastructure, systems administration and other key variables

Scientific use cases

Demonstrating our Distributed AI capabilities via Gomoku and Chess

To demonstrate the powerful capabilities of our dAI, our team has developed an AI algorithm for the popular Japanese board game with a huge branching factor, Gomoku, which will run on our blockchain network. Gomoku is one of the world's greatest strategy board games, which is over 4000 years old, and features a high level of complexity. In addition, we are also working on a decentralised artificial intelligence

version of chess.

Promising commercial use cases in development

Our DeFi Platform

Comprising a Decentralised Exchange (DEX), Yield Farming, an NFT Marketplace and more, using XTblock as layer 2 for cross-chain DeFi.

Cryptocurrency market analysis tool

An intelligent cryptocurrency market analysis tool – using XTblock's decentralised blockchain oracles to scan and analyse the entire crypto market parallelly and promptly.

A Decentralised Video Streaming Platform

Relying on XTblock's blockchain network nodes and edge nodes for decentralised video streaming to serve millions of viewers simultaneously.

4. Incubation

Our startup is part of Singapore Management University (SMU) Institute of Innovation & Entrepreneurship (IIE)'s incubation programme – Business Innovations Generator



Singapore Management University (SMU) was launched in collaboration with the

Wharton School of the University of Pennsylvania.

5. Achievements

Despite the challenges of limited funding, given the context of COVID-19, our team has nonetheless achieved exciting and promising results, including the completion of integral technology tests at different scales and in varied scenarios. These include a Testnet Soft-launch and a Stress Test in which the network was set up cross-border for true decentralisation, proving that our assumptions work exceptionally well at a practical level. Kindly review our published videos on XTblock's Youtube channel, which will provide greater insights into the extent of our achievements:

<https://youtube.com/channel/UCeu4t6j8Y6s4xhZh2hIsKrQ>

In summary, some notable achievements include:

- Our Testnet Soft Launch in October 2020
- Our Successful Stress Test in December 2020
- A Distributed Problem Solving Solution with our blockchain network

6. Tokenomics

XTT is the protocol and utility token that will enable developers and enterprises, as well as end-users, to purchase computing services and use dApp(s) on our high-performance blockchain platform.

Please refer to the Tokenomics document on our Github:

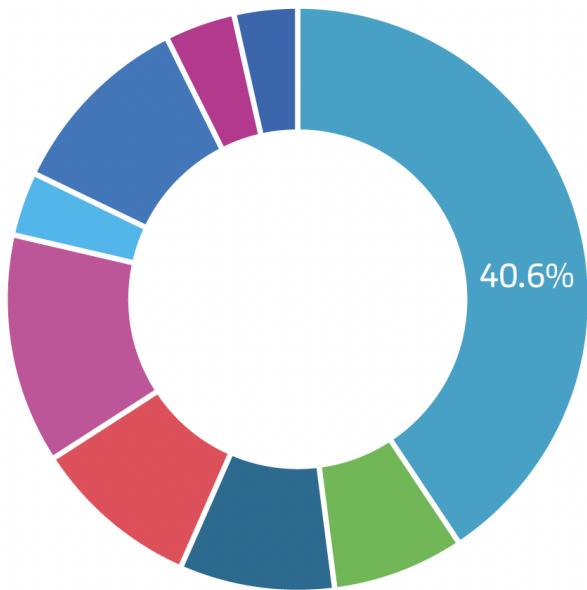
<https://github.com/xtblock/tokenomics>

7. Competitive Landscape/Market

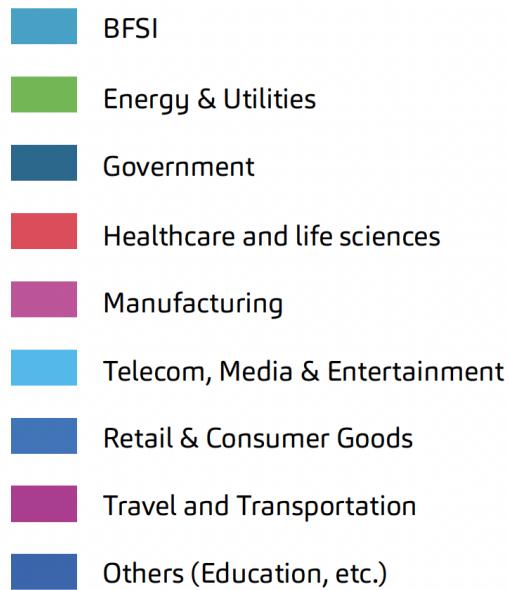
Please refer to the sub-section titled 'The differences between the Competition and XTblock', part of the 'Solutions and Business Model' section, for an overview of the BaaS (Blockchain-as-a-Service) model that various tech giants are currently offering. XTblock aims to disrupt this through the BSP (Blockchain Service Provider) subscription model.

Kindly refer to “XTblock’s Subscription-based Business Model”, also part of the ‘Solutions and Business Model’ section.

Market Share



Global Blockchain-as-a-Service Market Share by Industry, 2019



Market Size and Players

IBM (US), Microsoft (US), Oracle (US), SAP (Germany), HPE (US), Baidu (China), AWS (US), Huawei (China), PwC (UK), KPMG (Netherlands), Infosys (India), EY (UK), Deloitte (US), Accenture (Ireland), NTT Data (Japan), Wipro (India)...



8. Growth Opportunities

Blockchain:

According to Deloitte's 2020 Global Blockchain Survey, leaders no longer consider blockchain technology merely promising. The survey polled a sample of nearly 1,500 senior executives and suggests that business leaders now see it as integral to organisational innovation. As a result, they are putting money and resources behind the technology in more meaningful and tangible ways. Leaders are increasingly investing in blockchain and digital assets as a top five strategic priority, with 66% forecasting investments of \$1million or more in the next 12 months (the survey was conducted between 6 February and 3 March, 2020).

Moreover, according to a ReportLinker article featured on Yahoo! Finance, the Global Blockchain Technology Market size is expected to reach \$72 billion by 2026, rising at a market growth of 51.8% CAGR during the forecast period.

Considering the significant advantages and abilities of the XTblock blockchain platform described in this whitepaper, we believe that a sizeable portion of this market can be addressed – and secured.

An important point to consider are the high-potential use cases we have described in this whitepaper, which will powerfully leverage the performance of our blockchain network, and are potential licensing- or subscription-based revenue streams in themselves.

Artificial Intelligence:

Worldwide revenues for the Artificial Intelligence (AI) market, including software, hardware, and services, are forecast to grow 16.4% year over year in 2021 to \$327.5 billion, according to the latest release of the International Data Corporation ([IDC](#)) [Worldwide Semiannual Artificial Intelligence Tracker](#). By 2024, the market is expected to break the \$500 billion mark with a five-year compound annual growth rate (CAGR) of 17.5% and total revenues reaching an impressive \$554.3 billion.

The opportunities for XTblock in this regard are broadly two-fold: 1) The facilitation of truly Distributed Artificial Intelligence which will enable AI for Collaborative Decision Making, and 2) The development of various advanced instances of Artificial Intelligence

Importantly, our efforts involve advancing the state of the art in collaborative AI and the following are the three areas that it will address:

- i. Human Modelling for Collaboration
- ii. Complex Decision Making Under Uncertainty
- iii. Communications and Interaction

9. Roadmap

**The below roadmap order may be re-arranged based on development progress.*

**At present, we have issued only XTT-b20 tokens on BSC. XTT-e20 token issuance will be announced officially at a later date; therefore, do remain cautious and vigilant regarding malicious actors who may lure you towards any XTT-e20 trade.*

XTblock's Roadmap: 3 years			
2021	Objective	Action	Completion aim
Token	XTblock's Development Fund	Immediate Unlock to begin operations and development without voting	Q2
Token	List on 1st DEX	List XTT Token on the 1st DEX	Q2
Tech	dAI Gomoku DPS Test	Testing distributed AI Framework with Gomoku board game Distributed Problem Solving solution to showcase the platform's AI capability	Q3
Product	XTblock's Farming Site to support XTT-b20	Deploy a farming site to support staking XTT-b20 and farming with XTT-b20/BUSD LP on Binance Smart Chain, along with our token lockers.	Q3
Governance	Voting Site	This is a voting site to support governance of the XTblock platform	Q3
Tech	Decentralised Live Streaming Test	Testing Decentralised Video Live Streaming solution to showcase the platform's video streaming capability	Q3
Tech	XTblock TestNet Launch	Launch of XTblock TestNet	Q4
Tech	Distributed Web Protocol	xhttp / https - XTblock's extended transfer protocol for our distributed web architecture	Q4
Product	XTblock's Web Browser to Support xhttp / https	Our own web browser that additionally supports our distributed web protocol xhttp / https	Q4
Tech	XTblock Explorer	Launch of XTblock Web Explorer	Q4
Product	Decentralised Live Streaming Platform V1	A Decentralised Live Streaming platform that uses our high-performance blockchain network for live video streaming without its own tokenomics.	Q4
2022	Objective	Action	Completion aim

Product	Decentralised Crypto Market Analysis Bot	A Decentralised Crypto Market Analysis Bot that uses XTblock's Distributed Problem Solving solution to analyse the crypto market and suggest potential cryptocurrencies for users' consideration.	Q1
Tech	Cyber Security Assessment	Passing the assessment with a top cyber-security firm to certify our tech for banking and government applications.	Q1
Tech	XTblock Mainnet Launch	Launch of XTblock MainNet	Q2
Tech	XTWallet App	Launch of XTWallet	Q2
Product	XTblock's DEX	An automated market maker (AMM) cross-chain protocol that uses XTT as an intermediary exchange token for other tokens that run on different blockchain platforms.	Q3
Product	Token Bridge	A token bridge to swap XTT-b20 with XTT-e20 (1:1) and XTT tokens on mainnet to allow our users to move their XTT tokens between Binance Smart Chain and Ethereum as well as XTblock networks.	Q3
Token	List on 2nd DEX	List XTT Tokens on the 2nd DEX	Q3
Product	Decentralised Live Streaming Platform V2	Further development on our Decentralised Live Streaming platform that uses our high-performance blockchain network for live video streaming, with its own tokenomics.	Q3
Product	Decentralised Crypto Trading Tool	Open Decentralised Crypto Trading Tool for public use; the advantage of the decentralised trading bot is that: 1) users will receive more info from these decentralised bots for decision-making; 2) transactions won't have to be grouped with others; 3) there will be no limit to trading pairs; 4) you no longer have to give away your crypto fund credentials to any centralised system. Other bots will also be introduced to help users monitor the market and their trades, e.g, pump/dump detection, liquidation position monitor, etc.	Q4
Tech	Platform Terminal	Launch Platform Terminal for dApp development & blockchain speed package subscription model	Q4
Tech	dApp Framework	Publishing dApp Framework with Distributed Computing services (to support Blockchain/ Bot/AI Computing)	Q4
Tech	Solidity Conversion Tool to XTblock Platform	This tool is to support converting Solidity contracts to XTblock platform.	Q4
2023	Objective	Action	Completion aim
Tech	Decentralised Domain Name Service	A Decentralised Domain Name Service that runs with the XTblock blockchain network and xttp / xtts	Q1
Tech	NFT Framework & NFT Marketplace launch on our DEX	Launch of NFT framework & NFT marketplace on our DEX	Q2
Tech	dAI Gomoku NN Test	Testing distributed AI Framework with Gomoku Neural Network solution.	Q3

Tech	dAI Chess NN Test	Testing distributed AI Framework with Chess Neural Network solution.	Q4
Business	100 dApps	Reach 100 dApps with active users	TBD
Business	1,000,000 Txs Daily	Reach a volume of 1,000,000 transactions daily	TBD

10. Marketing

The approach:

Our marketing will adopt a fluid approach, based on the evolving needs of the organisation and our technology roadmap. This would involve engagements with best-in-class service providers. At the outset, community development would be key. In terms of developer community nurturing and management, we believe an outbound engagement strategy predicated on getting developers to know and trust our platform (as a long-term platform for them to work on) will be essential. Using specific targeting methodologies for certain developer, corporate and end-user personas and their daily journey profiles, we can segment whom to reach via specific online media channels. One example of a powerful proposition to end-users would be the bots and dApps that carry out specific, highly specialised tasks on our blockchain network, which illustrates the importance of this particular audience as well.

By delivering our message consistently and relevantly to this audience, we seek to nurture advocates of our purpose. Our more targeted, specific approach would extend to other aspects as well. Across various aspects of our marketing, adequate research around target demographics and markets will be conducted, with careful segmentation to feed key messaging to specific customer personas, which include developers, enterprises, other organisations and end-users as well.

The proposition:

Importantly, we will seek to appeal not only to those familiar with the blockchain and deep-tech realms, but also to a wider audience that includes end-users who care about the powerful positive changes such a platform can deliver across every industry.

Community development:

Along the course of Testnet and Mainnet development, there will be significant efforts to develop the community, to build interest, encourage adoption and promote advocacy.

Public relations:

Public relations will help to create a positive predisposition among our audience, with an aim to engage with credible technology news outlets. The universal and specific applicability across industries and endeavours can be leveraged for significant content generation (also across social media), so that stories remain fresh and also create value in themselves.

Social media:

Building on the above points, for social media, apart from the usual channels, we will consider focusing on channels that have a relatively higher number of blockchain, AI and technology enthusiasts, such as Reddit, Medium, Steemit etc. For end-users, more mainstream social media channels will be considered.

At the enterprise level, more specific use-case based marketing material will be developed, and a lead generation and lead nurturing approach may be considered, to drive prospects down the funnel, towards conversion.

With all of the above, we must be mindful that excessive fragmentation and dilution of messaging and channels could be counter-productive, and we will assess the efficacy of these to deliver a more viable and robust marketing mix.

11. Fund Distribution

Below is our fund distribution structure for the funds raised from our token swap event:

Research & Development: 50%

Operations: 10%

Business Development: 10%

Marketing and Sales: 10%

Legal and Audit Fees: 10%

Liquidity Pool: 10%

Reserved Liquidity: 60%. Beyond the above 10% to be raised and committed to our liquidity pool, we will provisionally consider an additional 60% of the funds raised to be added to this liquidity pool, i.e. up to 70% of funds raised. This is important for optimising our DeFi strategies and will be based on certain circumstances at particular times, with the ultimate intention of strengthening our R&D, operations and other important aspects.

12. The Team

Management team

ANH LE, FOUNDER & CEO, CTO Core Tech

Anh possesses extensive experience as a technology advisor and independently contracted CTO over 15 years, across numerous complex software-based systems. His unique ability lies in being able to design entirely new Blockchain based system architectures and algorithms. Anh has conducted extensive research across Blockchain and AI, and devised the revolutionary concept of Time Sharding. Anh's vision is to decentralise AI and revolutionise Blockchain architecture to significantly increase its speed and scalability, remove barriers to blockchain adoption, and help to create a bold new decentralised Bot and AI computing economy.

LEONARD REGO, COO

Over the past 22 years, Leonard has been instrumental in the business positioning and growth of several high-profile regional and international brands, and has helped strengthen their core selling propositions. His particular strength lies in the identification of promising commercial opportunities, and the development of viable go-to-market strategies. Since 2007, as Founder & CEO of Eleven777, he has played a pivotal role with clients such as Emaar, 3M, Messe Frankfurt, Armani Hotel, Tecnotree Telecoms, Jumeirah Group, Masterkey Real Estate Software and several others. As COO of XTblock, he brings the same thinking to leverage the potential of its revolutionary technologies for massive change across every industry.

VENKATA SANJEEVI, CTO - Infrastructure

Venkata Sanjeevi's CV spans over 20 years in the tech sector, including key roles in management and at senior levels of leadership, for multi-million dollar Enterprise Infrastructure & Operations initiatives. He has repeatedly demonstrated excellence for data centre service providers in a Managed Services and/or Co-location

arrangement and 'Virtual Data Centre over a Public Cloud – AWS'. Notably, he has been instrumental in the development of Complex Information Technology programmes and projects for various business segments, from Aviation and Financial Services to Manufacturing and Trading.

WAYNE DSOUZA, Chief Business Officer

Wayne possesses over 23 years of International Operations and Service Delivery experience with an emphasis on client relations and strategic planning. His career record spans the identification of vital business opportunities, while designing and implementing processes to elevate productivity while keeping operational costs to a minimum.

Technology Advisors

JORGE SEBASTIAO, TECHNOLOGY ADVISOR

Formerly Huawei EcoSystem CTO, Jorge is a proven expert in a vast range of cutting-edge technologies. He has advised several AI, ML, ICO, STO ventures on tech disruption via AI and Blockchain technology, and engineers practical solutions based on industry standards and best practices. He also designs SLAs to make businesses more resilient using cloud computing and managed services. A renowned and sought-after speaker, Jorge frequently presents at international conferences on Blockchain, AI, Cloud Computing, Cyber Security, Big Data, Managed Services and other aspects of technology.

DR. REX YEAP, TECHNOLOGY ADVISOR

Dr. Yeap is currently a Partner at Invention Capital LLP, which supports the creation and commercialisation of novel inventions as well as investment and incubation of early stage companies. He is also the Vice-Chairman of Business Angel Network (SE Asia) and manages a BANSEA angel fund. Dr. Yeap is part of the Adjunct Faculty at Nanyang Technological University. Since 2006, he has been a SCOPE-IP consultant with the Intellectual Property Office of Singapore. He holds a Master of Science Degree (Distinction) from the University of Leeds and his doctoral research involved the invention of patented hedge fund systems.

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