



# Morpheus Lab **Whitepaper**

August 2019

# Executive Summary

Seldom has a technology fascinated the media and public like blockchain. Touted to be the catalyst of the fourth industrial revolution, institutions are experimenting with the technology. Similarly, investors have invested hundreds of millions of dollars in blockchain-related firms. Such investments carry risks of failure in commercialisation for organisations, which generally lack the lab-like environment to experiment with the technology in a low risk, safe-to-fail setting.

Innovation is a combination of creativity and implementation. Often, an idea needs to go through phases of evolution or pivoting before it reaches maturity for commercialisation. In reality, most ideas seldom reach their commercialisation value because the cycle is too long and expensive, rendering it too ineffective in time and costs to allow ideas to grow and mature. Hence, commonly, almost 99% of start-ups fail.

## Join us in this journey of experimentation, discovery and innovation

Our objective is to build an enterprise-grade blockchain platform as a service (BPaaS) with an additional blockchain app marketplace that enables organisations of any size, regardless of whether they are a two-person company or a Fortune 500 company, to rapidly design, deploy and operate distributed ledgers.

Too much focus has been given to the price of cryptocurrency tokens but not enough to the fundamentals of Satoshi Nakamoto's original purpose of the blockchain, which is to enable anyone and everyone to partake in the exchange of value and realise the power of the blockchain. We believe that blockchain technology has the power to change lives for the better and we are building a platform for inclusion. This BPaaS will be the vehicle to enable anyone to benefit from this technology.

Morpheus Labs' BPaaS will help idea originators create their own blockchain innovation lab, by providing the necessary infrastructure and set of integrated tools. It will empower them to test-drive blockchain applications and experiment with the technology at a fraction of the cost and time.

Working closely with business partners, we will offer comprehensive blockchain-based solutions. Our partner-driven model allows us to bring in complementary emerging technology and blockchain expertise, allowing customers to experiment with and build cutting edge blockchain applications atop our platform.

This project is founded by a cross-functional team that has a combined 70 years' experience in artificial intelligence, blockchain, mobile applications, cybersecurity and IoT across Europe and Asia. We are advised by a seasoned advisory team consisting of industry veterans and prominent angel investors.

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# Introduction

Blockchain is a cryptographically secure distributed ledger technology that allows businesses and governments to streamline their business processes by utilizing a new generation of applications and cross entity services. It provides trust, accountability and transparency by using a shared ledger among the distributed network of participants. At Morpheus Labs, we believe the power of the blockchain will fundamentally change the way we interact with and conduct business. The way forward is to build an inclusive society in which anyone can access this technology in a cost-effective manner.

The blockchain platform will provide corporates, banks, financial institutions and government entities easy access to a platform that enables them to develop, test and manage blockchain applications using different blockchain protocols supported by the platform to achieve rapid prototyping, cost efficiency and a fail-safe environment. This way, organisations can stimulate and encourage innovation.

The platform will support distributed hosting for blockchain network nodes and off-chain applications while providing a centralised platform service for developing, managing and regulating blockchain networks. Ultimately, our platform will enable anyone to partake in this revolutionary technology.

## Problem Statements

Distributed ledger technology (DLT), also known as blockchain, is a relatively new technology made famous by Bitcoin in 2008. Globally, governments, enterprises and idea owners are eager to find the best fit use cases in various industries. Restrained by global shortages of experienced blockchain talents and challenged by evaluating and adopting blockchain technology, most projects were initiated as proof-of-concepts and most ideas died before they could pivot or mature for commercialisation. Most of the time, these challenges can be identified as listed below:

### Which DLT?

Enterprises have difficulties evaluating multiple blockchain technologies and selecting which to use because they lack collective blockchain expertise and a single multiple-blockchain-enabled test environment. For example, many blockchain technologies are currently available: Ethereum, HyperLedger, Multichain, VeChain, NEM, and more. However, no single platform provides a test environment for these blockchains and no single technology vendor or consulting firm has deep collective knowledge of these blockchains to help enterprises select the best fitting blockchain technology.

#### **Difficult to find fitting use cases and evaluate business benefits**

Companies have difficulties finding the use cases that will apply to their industry and knowing how to evaluate the return on investment.

#### **No easy way to install and test**

Piecing together the blockchain nodes, storage, cloud development environment and repository connection requires a lot of effort and time.

#### **High development costs**

The cost of blockchain project development is immense. Whether in-house or outsourced, to build an application from scratch for idea validation is prohibitive for a lot of enterprises, let alone going through trials and errors. Thomas Edison famously 'failed' 10,000 times before inventing the light bulb. Our platform makes failing less costly and allows innovation to go through its natural process.

## **Four Pillars of Value –Our Solution for Inclusion and Blockchain**

### Evaluate Various Blockchain Technologies on one Platform

*Consolidating multiple blockchain technologies and experiment environments onto one platform minimises the switching costs associated with various platforms, applications, and providers.*

### **Crowdsourcing**

Obtain services, ideas, or tools by soliciting contributions from a wide range of partner experts, and curate crowd contribution allowing broad aggregation of innovative ideas and solutions in a relatively short period.

### **Enterprise Grade**

Scalable, secure and robust enterprise blockchain platform for rapid prototyping and easy production deployment in segregated environments for enterprises

### **Ready to Deploy App (from our App Library)**

Quickly build and validate blockchain use cases atop pre-deployed blockchain applications by leveraging our ready to deploy blockchain applications in the App Library. This shortens the time and lowers the costs, creating a fail-safe environment.

# Morpheus Labs –Blockchain Platform as a Service Overview

*Morpheus Labs Blockchain Platform as a Service (BPaaS) simplifies and expedites your blockchain application development and gives you the flexibility to choose between available programming languages and blockchain runtimes that better suit your needs. You receive unparalleled benefits from an integrated collaborative development environment, workspace management, version control repository and many preconfigured tasks. Let our platform do the heavy lifting while you focus on value-adding work such as application creation and experimentation with the blockchain technologies at a fraction of the cost and time. The following describes our competitive advantages.*

## Turn-key Solution

Preconfigured ready-to-use blockchain solutions support multiple blockchains and integrated development. The test environment provides the most efficient blockchain platform services and addresses the most technical challenges being faced by enterprises.

## Robust, Secure and Scalable

All resources and support are made ready on the cloud, allowing you to customise and deploy applications anytime and anywhere in a secure, reliable and scalable environment. The platform is hosted in a private cloud environment during MVP and Phase 1. It will be hosted in a leading cloud environment, such as AWS, from Phase 2 onwards

## Accessible

Our team is cross functional and experienced in the business of blockchain with varied backgrounds.

## Cost Efficient

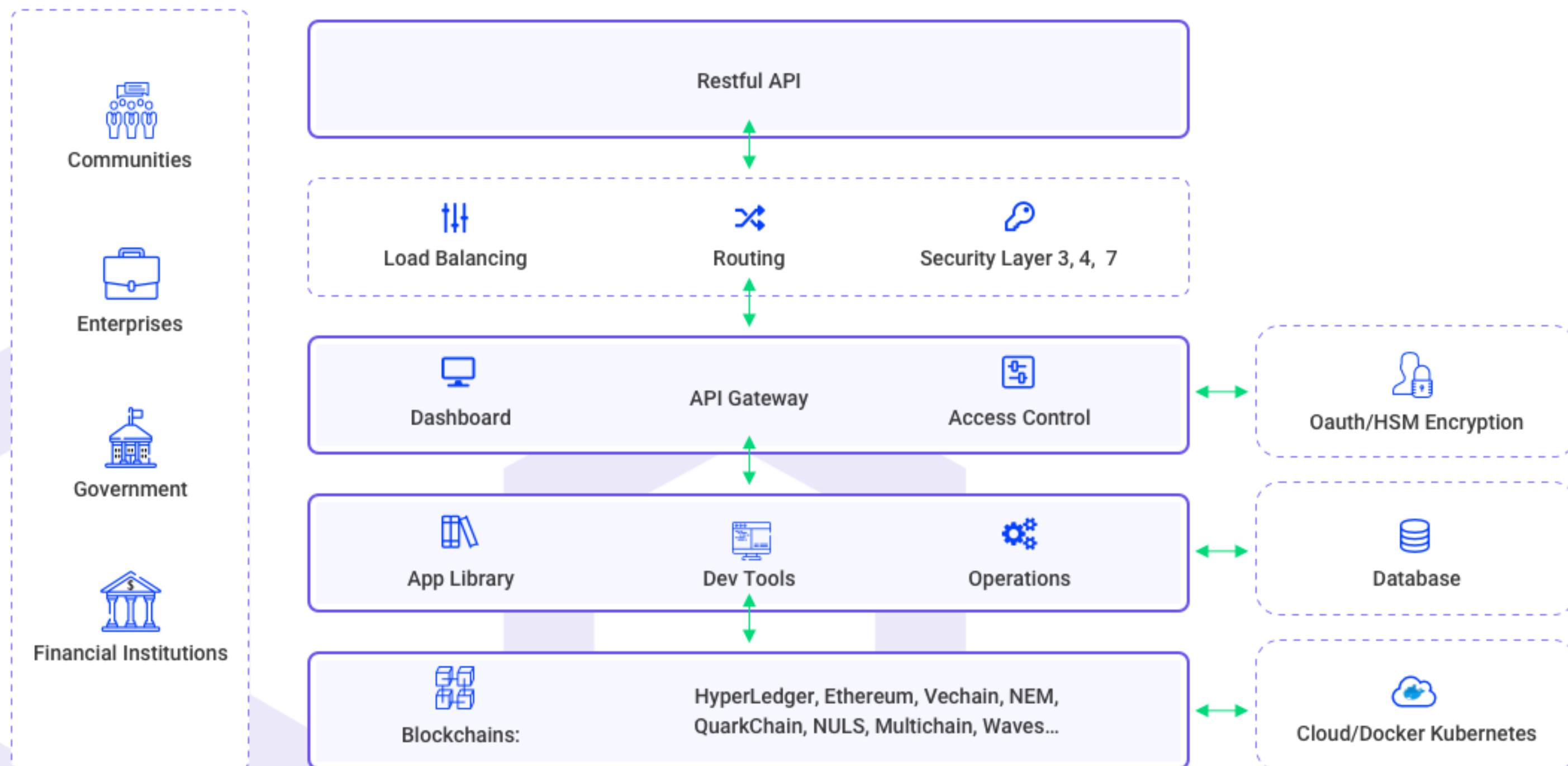
We stand by the quality of our products and services. We are committed to providing value to our clients with no hidden costs. Blockchain for inclusion is our mantra.

## Trusted

Our idea and our founder has been accepted into SGInnovate, the Singapore Government's hand-picked start-up group. Staffed by the most skilled engineers and an award-winning team, SGInnovate has extensive experience in implementing large scale and complex platform applications.

# Platform Architecture Overview

The following diagram provides a high-level view of our vision of our BPaaS platform.



## Blockchain Platform as a Service

We offer all businesses an integrated blockchain platform to rapidly develop, test and deploy enterprise blockchain applications at a fraction of the cost. The platform can also be used by individual developers. Below are some key features supported in the platform:

- Multiple blockchain technologies, private blockchain alongside public blockchain.
- In-region hosted cloud data centres, leveraging VM and Docker container virtualisation technology to provide a reliable and scalable cloud environment.
- Integrated cloud development environment with a suite of tools to develop, test and deploy blockchain applications.
- Team functionality allows administrators to manage their teams for collaborative development in the workspace.
- User and identity access management and security protection services to secure access to the platform.
- Preconfigured sample applications and ready-to-use applications from in-platform application marketplace and ready-to-use APIs published (e.g., banking APIs) for fast prototyping and easier customisation. For example, we provision an open sourced trade exchange or cryptocurrency exchange.
- Support macro service-based application architecture to easily composite new applications.
- Able to expose blockchain applications as APIs and consume external APIs.

The platform will also provide one-stop management services for:

1. Provisioning and governing blockchain network
2. Mobile version to allow project manager and lead to keep track on project progress anytime and anywhere.
3. Applying operational intelligence to blockchain network
4. Provisioning software and middleware as application services.

Refer to Platform Components Overview for a comprehensive view of the platform services to be provided.

# Platform Architecture Principles

*Long-term success and scalability of the platform is underpinned by the specific platform architecture principles outlined below:*

- Adopt open standards by design, specifically leveraging open source tools and technologies where appropriate.
- Facilitate blockchain applications to remain agnostic of underlying computer and network structures on the platform.
- Support micro-service architecture pattern in developing and hosting blockchain applications.
- Conform to a layered architecture with modular and pluggable components.
- Provide a secure segregated environment for users' entities to host their blockchain network, thus maintaining data privacy.
- Provide a defined way to integrate self-provisioned middleware services in the platform for additional integration with external world and other private or public blockchain networks.
- Build on robust cloud technology to support scalability, elasticity and auto-provisioning of compute resources.
- Provide containerised technology such as containers and virtual machines, for hosting of blockchain nodes on the platform in a distributed way.
- Because of the evolutionary nature of blockchain technology, new protocols are emerging. The platform is architected to support any blockchain protocol, specifically, the following protocols currently:
  - a. Ethereum
  - b. Hyperledger Fabric
  - c. Multichain
  - d. Vechain
  - e. NEM
  - f. and more

# Platform Components Overview

Our integrated blockchain platform consists of the following components that provide ready-to-use resources for rapid blockchain application prototyping, development and hosting. The core components below are already available for use on the platform and in the future, additional features will be rolled out to further upgrade the platform.

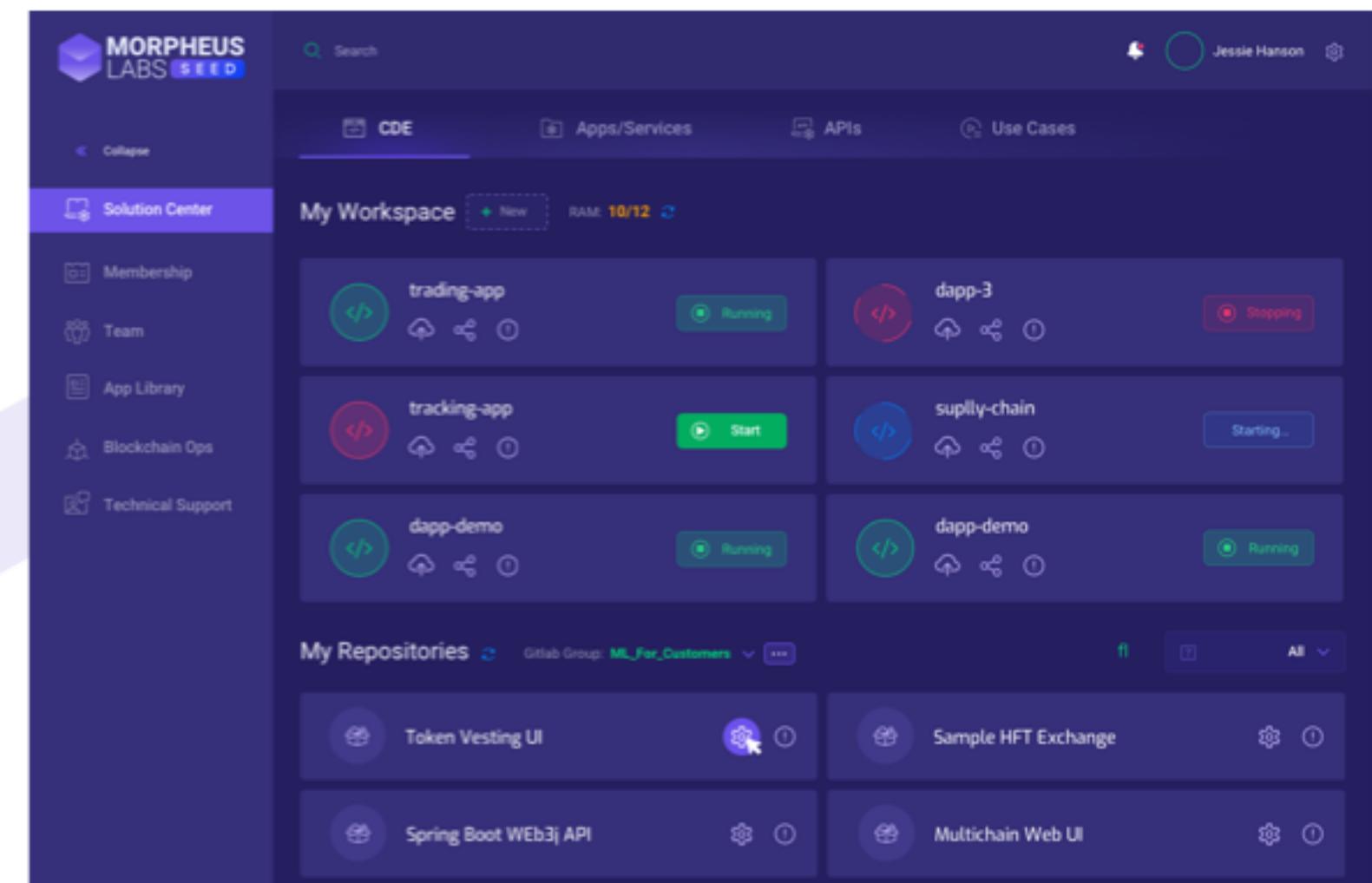
## Platform Presentation Layer

### Platform Admin Console

The admin console component aggregates the administrative functions required to manage the platform. Administrative functions include monitoring, management, audit and security checking of the components of the platform. This console will be used by the platform system administrators.

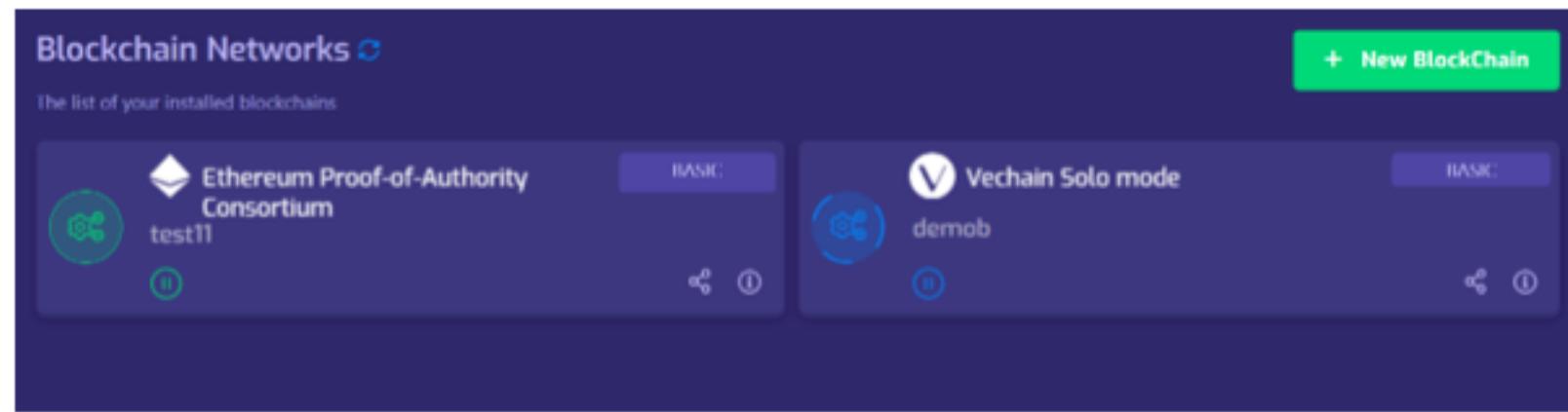
### Platform Dashboard

The platform dashboard displays project workspaces users have initiated as well as connected repositories they have onboarded to the platform. Functions include monitoring and management of the workspace of the platform. Team administrators can add new workspaces and connect new repositories for members to work on new projects.



## Blockchain Operation Console

The operations console aggregates the operational activities required to manage the blockchain network provisioned on the platform. The operational activities include self-provisioning, monitoring health and membership management of the blockchain network. It will be used by blockchain network owners, auditors and member operators.



## Blockchain Developer Workspace

This workspace provides development and deployment capabilities for the blockchain and off-chain developers. It provides DevOps capabilities to the blockchain application developers to develop, test and deploy their code on test environments for both smart contracts and off-chain applications before deploying to production instances.

## DevOps Tooling

*The platform provides DevOps tooling to facilitate rapid development of conventional or micro service-based blockchain applications and solution templates for rapid prototyping. These include but are not limited to source code management, continuous integration, protocol specific IDEs and tooling.*

## Off-chain DevOps Tools

This comprises a set of development and operations tools for platform developers to rapidly develop and host off-chain applications on the blockchain platform.

The screenshot shows the Morphous Labs SEED application library. The left sidebar includes links for Solution Center, Membership, Team, App Library (which is selected), Blockchain Ops, and Technical Support. The main area displays a grid of eight application cards:

- Fusion Boilerplate Sample**: A free client-side interface for creating and using wallets. Rating: 4.5 stars (7 reviews).
- Fusion Wallet Sample**: Fusion Wallet is a free client-side interface for creating and using wallets. The Fusion wallet ... Rating: 4.5 stars (10 reviews).
- Polling SCORE Demo**: A simple voting DAPP using ICORE wallet, one vote per wallet, and the results are ... Rating: 4 stars (17 reviews).
- waves\***: Waves Escrow dApp Sample. This is a sample Waves dApp providing escrow service. It contains a Springboot Java dApp ... Rating: 4 stars (4 reviews).
- Neo DApp Demo**: This is a python Dapp demo running on NEO blockchain. The project itself does not ... Rating: 4 stars (1 review).
- Learning - Your first Neo Python Smart Contract**: Try Neo Python Smart Contract. This is a very simple Python smart contract for neo blockchain, for you to play ... Rating: 4 stars (9 reviews).
- VIP180 Generator - Developer Version**: This is an VIP180 token generator app that is issued from command line. This is ... Rating: 4 stars (3 reviews).
- CrowdSale**: This is a CrowdSale application running on VeChain. Rating: 4 stars (6 reviews).

At the top right, there's a "Upload New App" button.

## Application Store (Application Library)

Application store is a crowdsourced marketplace to curate all blockchain-based applications. It allows seekers to browse for ideas that suit their businesses and purchase ready-to-use or customised products; it also allows contributors to promote their applications.

## Platform Command Line Interface and APIs

The platform command line interface (CLI) and API component provides command line tooling and APIs for the entities to interface with the blockchain platform to manage blockchain applications, networks and accounts.

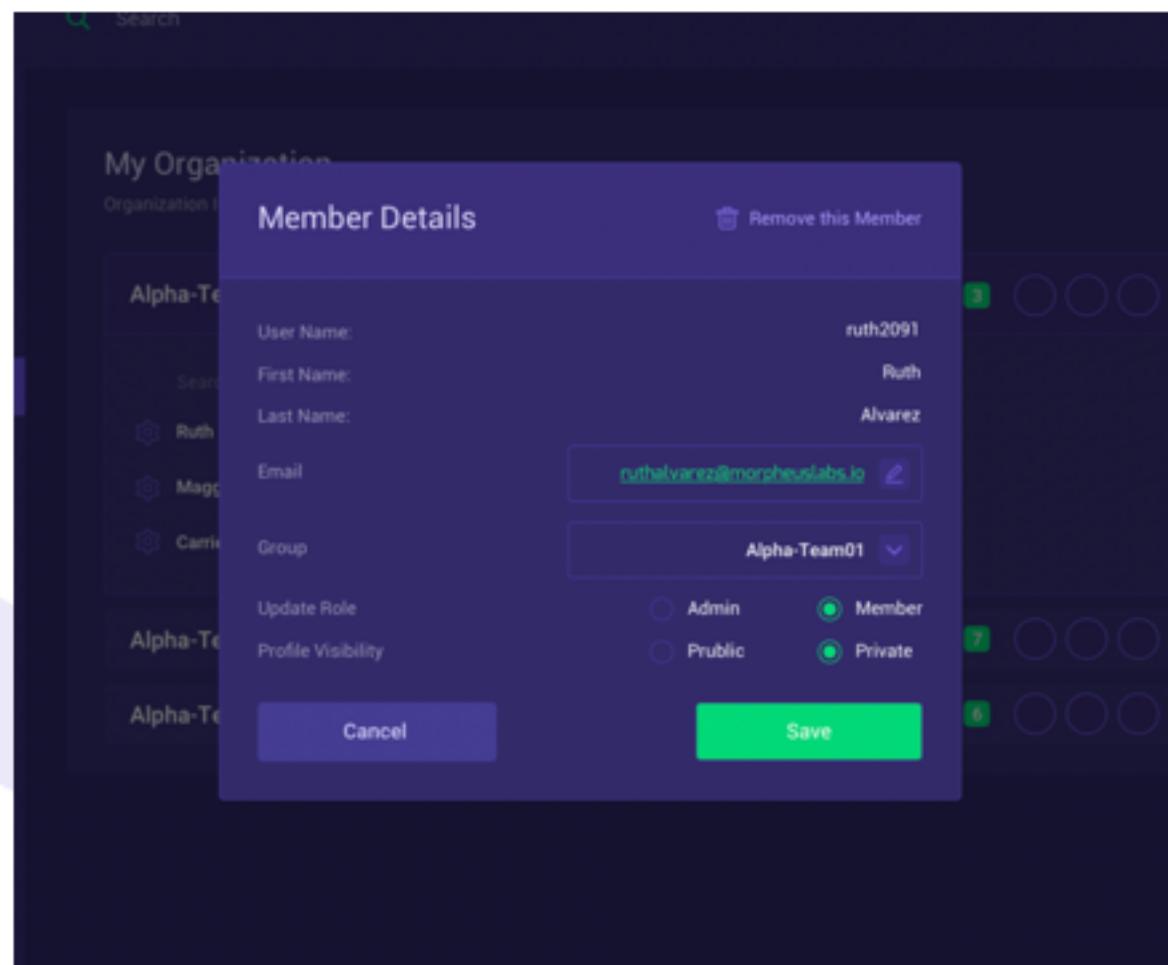
## Blockchain Protocol-Specific DevOps Tooling

Since different blockchain technologies provide different tools for the development of blockchain applications, the blockchain platform supports either the host of those tools on the platform or provides API/CLIs for integrating with the tools.

# Platform Support Systems

## User Account Management

The blockchain platform provides user and account management functions for the platform administrator and entity operators to manage their blockchain platform accounts.



## Platform Identity Management

The blockchain platform will provide an identity management system to manage, authenticate and authorise blockchain platform users from multiple entities and public participants.

## Configuration Management

The platform will provide a source code management system for entities and public developers to manage the source code of their blockchain applications.

# Blockchain Middleware Layer

## Blockchain Protocol Runtime Images

The blockchain protocol runtime is a logical component that provides the runtime of blockchain protocols (such as HyperLedger Fabric) supported by the platform as collections of virtual images, or Docker containers. It also provides sandbox environments for the supported protocol.

## Blockchain Event Hub and Gateway Adapters

The blockchain Event Hub and Gateway Adapters provide the asynchronous messaging or event backbone for blockchain applications, as well as integrating with the enterprise systems. These are used for the integration of blockchain networks using different protocols, integration of blockchain solutions running on BPaaS with the entity's backend systems and integration of blockchain solutions that require asynchronous communication.

## Cryptographic and Security Services

The cryptographic and security services provide a collection of security software components as services.

## API Management Services

The platform provides API management as a platform service in the catalogue. This allows blockchain applications to be exposed as APIs, employing security and governance around the API.

## Application Services

The application services component represents a collection of application software and APIs that should be services on the platform, to be used in developing blockchain applications. For example, data and analytic services, multi-tenant content management services and notification services.

# Infrastructure Services Layer

## Docker Containers Infrastructure

The Docker container infrastructure provides a complete infrastructure virtualisation suite to manage and optimise Docker containers on the blockchain platform.

## Virtual Machine Infrastructure

Virtual machine infrastructure provides a complete infrastructure virtualisation suite to manage and optimise hardware infrastructure of the Morpheus Labs BPaaS platform.

# Platform Management Layer

## Platform Catalogue Management

This component provides capabilities to create and manage middleware services and blockchain specific services. Administrative users can create new services and add them to the catalogue. Platform users can access available platform services in the catalogue and self-provision new instances of these services for their use.

Some of the examples of services in the catalogue could be:

**Blockchain:** Ethereum Development Sandbox  
VeChain Development Sandbox  
Multi-Chain Development Sandbox  
Hyperledger Fabric Development Sandbox  
Other blockchain development sandbox

**Language:** Java Runtime  
Node.js Runtime  
.Net Runtime

**Database:** MySQL  
PostgreSQL  
CouchDB

## Blockchain Monitoring Dashboard

This component provides a monitoring dashboard to collect and display monitoring metrics and reports for each blockchain network on the platform. It includes performance data, network information about member nodes status, ledger state and

deployed smart contracts. The dashboard provides separate views for different types of operators (blockchain network operators, entity operators, regulators). On the blockchain operations console, users can obtain internal/external RPC URL to aid deployment within the workspace.

## Blockchain Permission Management

The permission management component provides blockchain network operators and owners the capability to manage membership and permissions of blockchain users and nodes within a blockchain network.

## Blockchain Audit Management (in plan)

This component provides audit management capabilities to the blockchain network auditors or regulators. These users can audit the transactions on the blockchain network to verify compliance with regulations and to detect any fraudulent behaviour.

## Blockchain Network Registry

The Blockchain Network Registry is the key component that manages provisioning of blockchain networks on the blockchain platform. It interacts with other components to create new blockchain networks as well as add nodes to an existing network.

## Metering and Subscription Management

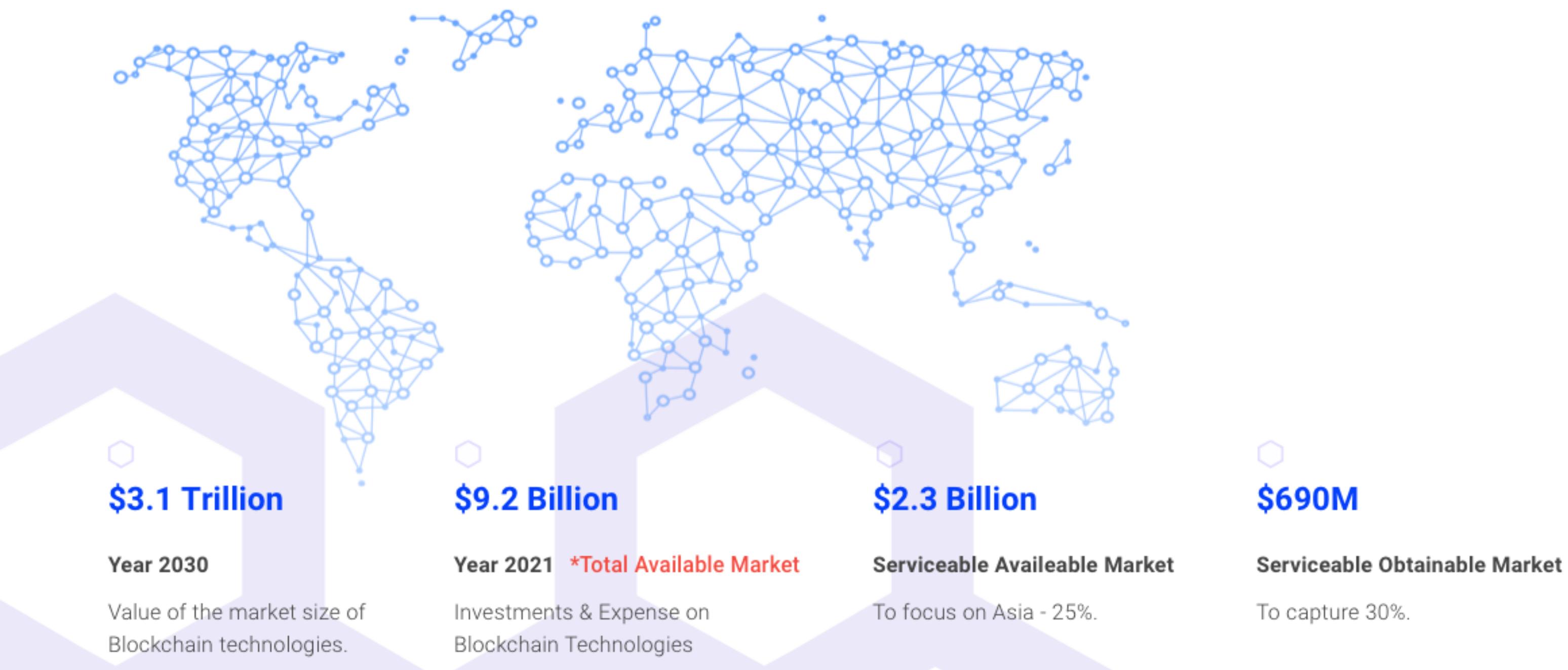
Metering management provides a set of services for collection of usage information and metering the platform usage for the accounts. It also provides a service defining the subscription plans for platform services. Morpheus Labs offers 4 tiers of subscription: Try, Basic, Advanced, Enterprise. Each tier segregates the usage capabilities based on organizational needs.

Benefits	Our Plan				
	Subscription	Onboarding	BASIC	ADVANCED	ENTERPRISE
Development	99 USD /month Selected		489 USD /month Upgrade	1899 USD /month Usage	
IDE Eclipse/VaCode	✓	✓	✓	✓	
Running Workspaces	1	1	1	1	
Max RAM (GB)	2	2	2	2	
Teamwork Features	1	1	2	2	
Max Number of Workspaces	3	3	3	3	
Blocks	5	5	10	10	
(S: Standard, A: Advanced, E: Enterprise)	S A E S A E	S A E S A E	S A E S A E	S A E S A E	
Blockchain Networks	Show more				
Blockchain Configuration Type	Ready to Go Advanced				
Max Number of Networks	2	2	3	3	
Share the Network	1	1	2	2	
Applications and Solutions	Show more				
Application Library	✓	✓	✓	✓	
Download Applications	✓	✓	✓	✓	
TurnKey Solutions	1	1	1	1	
Member Profile					
Entity Type	Individual	Email	bessengayen@gmail.com		

# Market Size

There is expected to be strong growth in the blockchain technology market in the near future. As a leading innovator in providing a pioneering blockchain platform service, Morpheus Labs aims to capture a portion of the Serviceable Obtainable Market (SOM) of the predicted market for blockchain technologies by 2021.

## Blockchain market to hit \$3.1T by 2030



Source: Publication by BitcoinMagazine and Markets&Markets

# Business Model - Canvas

Morpheus Labs BPaaS is founded as an enterprise-grade B2B platform as a service, enabling businesses to rapidly prototype their ideas and validate potential markets in a cost- and time-efficient manner.

The platform also supports a B2C model for freelancers to develop their applications or provide professional services. Alternatively, individual developers can use it as a learning or prototyping platform. Apart from providing a lab-like environment, the platform also provides blockchain application development and hosting services, and a marketplace for contributing and selling blockchain applications.

## Problem

1. Time consuming and costly to prototype
2. Difficult to find which blockchain and user case to use
3. Hard to find good blockchain talents

## Solution

1. Blockchain Ops console
2. Collaborative development environment
3. App Library

## Cost Structure

1. Staff
2. Distributors
3. Hosting
4. Training
5. Joint Events

## Key Metrics

1. Blockchain partner validation
2. Distributor validation
3. Client validation

## Unique Value

1. Rapid prototyping at fractional time
2. Efficient testing idea
3. Easy collaborative tools for Dapp building
4. Fail safe and pivot fast

## Revenue Streams

1. Platform Subscription - Distributor fee
2. App Library fee
3. Course

## Competitive Advantage

1. RTenths thousands man hours invested
2. Tight tech integration with blockchain partners
3. Tight BD/Tech Collaboration with Blockchains
4. Captured name distributors

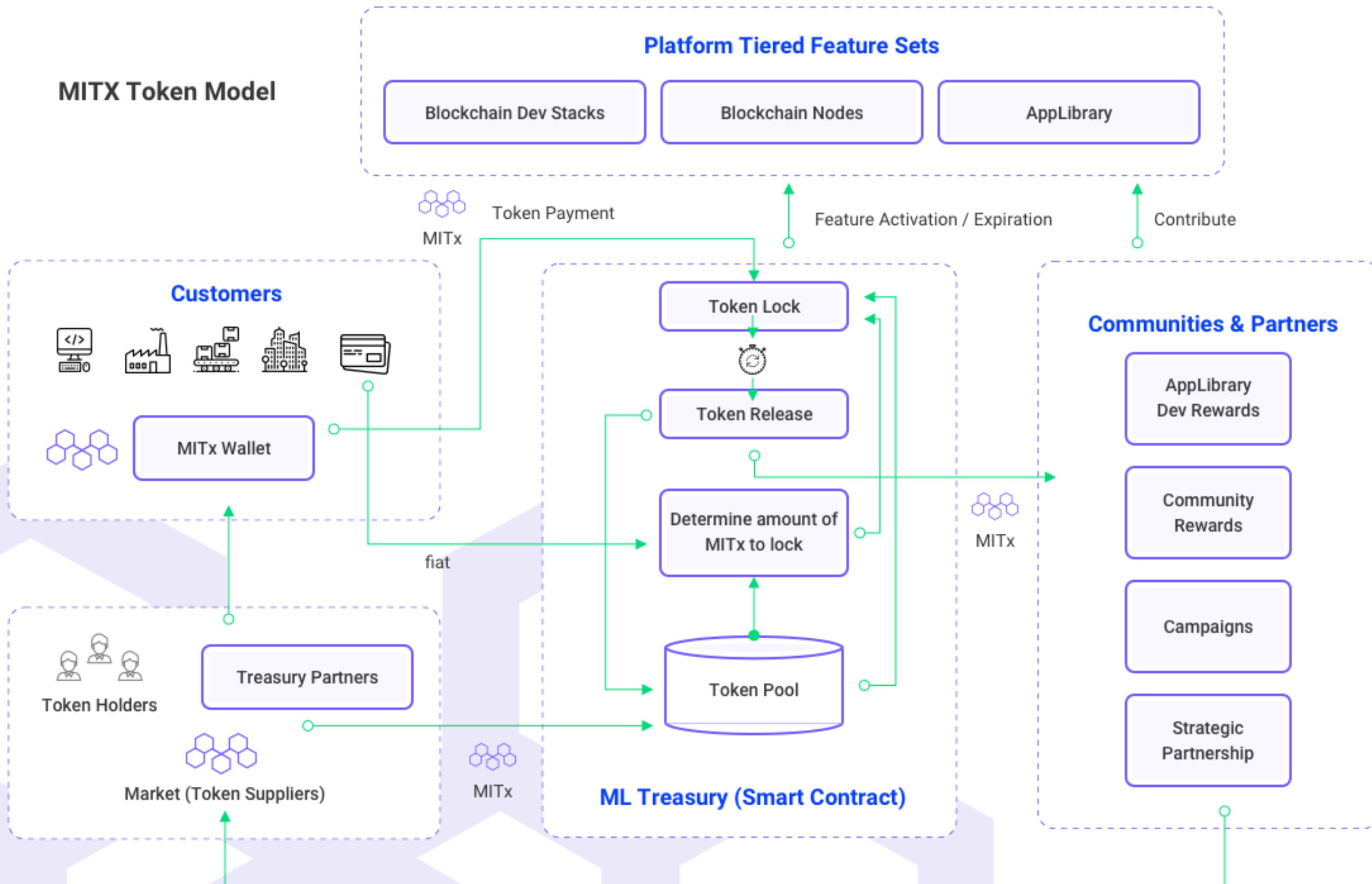
## Channels

1. Blockchains
2. Distributors
3. Educational Institutions

## Customer Segments

1. Developers - Freelancer
2. Development house
3. Innovation labs
4. Tech dept in SMEs and Enterprise

# Tokenomic



# Tokenomic

## Treasury Partners

Our development platform will be exclusively powered by MITx tokens. As mentioned previously, we recognize that rather than force customers to purchase MITx from the open-markets, as such Morpheus Labs will convert FIAT payments into MITx by purchasing tokens from the current circulating supply on the market. Central to this model, are our Treasury Partners (TPs).

Treasury Partners can be liquidity providers, brokerage firms, OTC desks or substantial investors in MITx tokens that buy directly off the market and provide MITx tokens for our customers. This model reduces the friction inherent in dealing with crypto-asset exchanges for our non-trading savvy platform customers, while providing a fundamentals-based mechanism for investors and service providers to monetize their MITx holdings.

The appointment of TPs will be subject to our discretion based on a multitude of criteria, chief among them will be the size of their MITx holdings and consistent trading volume.

Below, we have outlined the five general pillars of our token circulation model. That will be followed by a detailed overview on our Proof-of-Alliance mechanism.

# Tokenomic

## 01- Platform Subscriptions

For customers to use the platform, they will be directed to pay in either USD/SGD via traditional payment methods or opt to pay directly in MITx tokens. In both scenarios, MITx tokens will be bought from the open-market, whether the customer already owns MITx tokens or not, as described in the previous section on Treasury Partners.



For the trading/blockchain savvy customer, they can opt to purchase tokens directly off appointed treasury partners for efficiency or for themselves on the open-market. We anticipate this class of customer to be in the minority.

The more likely scenario will be customers that choose to pay their subscription fees in USD and interact with our built-in smart contract mechanism which pegs the fiat amount paid to the current MITx exchange rate with our treasury partners. Once activated, the corresponding MITx amount will be locked. Please note that this mechanism is currently being built, in the interim we will manually purchase the fiat equivalent amount of MITx from our treasury partners. Upon expiration of the subscription period, the tokens will be unlocked.

# Tokenomic

## 02- AppLibrary

The AppLibrary is an open marketplace where enterprise, startups and individual developers can develop and publish applications that will be usable by businesses and their customers globally. Morpheus Labs will charge a commission on fees imposed by the publisher. These include application or component download fees, one-time in-app purchases and recurring application subscriptions.

Again, the MITx token will be used as a discount token for application publishers and application users. Application publishers will be required to hold MITx as a security deposit and they will be incentivized to hold MITx tokens in order to be eligible for discounts on the commissions payable. Application users are also incentivized by holding MITx tokens when downloading applications.

In addition, referencing back to our Proof of Alliance article, Application users holding specified amount of MITx tokens will be entitled to provide app reviews and get involved in an AppLibrary revenue share scheme. We will be releasing more information on the revenue share scheme as well as more creative PoA implementations going forward. So, stay tuned for that!

# Tokenomic

## 03- Blockchain Protocol Partners

Our blockchain providers are vital to the success of Morpheus Labs. They provide the blockchain infrastructure and protocols that allows us to serve as a gateway for businesses to implement blockchain technology. As outlined in our revenue model, protocol partners will be required to pay a listing fee which is payable only in MITx. We will also continue to develop deeper partnerships with our protocol vendors which may include building developer communities, research collaboration and community outreach, among other initiatives.

MITx tokens will also be used as 'gas payments' for the underlying protocol. This feature is in development and will be applied to blockchains that feature 'gas' as a transfer mechanism.

Partners/clients (Jan 2019): VeChain, Quarkchain and NULS

# Tokenomic

## 04- Community 'Nodes'

While token circulation within the platform is imperative, ensuring adequate usage of the token outside the platform will also greatly enhance the utility of MITx. As such, we have developed the concept of community 'nodes'. Avid supporters of Morpheus Labs, be they developers, marketing experts or community managers can set up a 'node' tasked with hosting meetups, drumming up support and engaging with other blockchain enthusiasts on behalf of Morpheus Labs.

Partners will be required to 'stake' a specific amount of MITx for as long as they are running their community within their city. Partners will be eligible for MITx rewards based on performance in community building, both in the digital world and by hosting real world meetups and events.

We will be releasing a more detailed blog post soon with the exact requirements and application form.

## 05- Product Council

The product council will be a closed group of community members comprised of developers and non-developers, tasked with assisting and engaging with the Morpheus Labs development team as new updates are released. They will be tasked with assisting in the debugging process, providing feedback and suggestions on new features. Top developers may also be part of the DApp listing approval process on the AppLibrary, depending on their skillset.

Members of the product council will be required to hold an amount of tokens for as long as they are part of the group. We will be releasing a more detailed blog post soon with the exact requirements and application form.

## Proof of Alliance

*Proof of Alliance is a mechanism used to effectively regulate the token velocity across the platform and all involved stakeholders. It's an incentive structure that aligns the need for adequate token circulation while still being biased towards reducing velocity in a sustainable fashion. PoA is split into three main pillars:*

### 1) Staking Mechanism for Developers:

DApp developers are incentivized to stake MITx tokens for increased visibility within the AppLibrary. Depending on the amount of tokens staked and the duration, developers can have their DApps featured at the top of the search results within their relevant category. This will be done via a tiered approach. The minimum tier will start at staking \$100 USD worth of MITx a month, with a minimum holding period of one month.

### 2) Staking Mechanism for Subscription-Based Discounts:

Platform users will have the option of staking tokens on the platform for additional discounts on their total contract size. The discounts will follow a tiered approach regarding the size of the token holdings, as duration will be fixed to the length of the contract size. The required amount of MITx to stake for each subscription tier is outlined in the table below:

Discount Tier	MITx Amount Staked	Discount Percentage
Basic Tier	Min. 10% of total subscription	10%+ 5%
Range Tier	11 ~ 20%, e.g. 18.2%	18.2%+5%
Max tier	Max 20% of total subscription	20%+5%

Table on Staking Mechanism for Subscription-Based Discounts

It is important to note that the maximum discount awarded to eligible platform users will be 25%. Please note that the above numbers are placeholders and will continue to be adjusted in the case the token price fluctuates widely to ensure the dollar value of the above stakes remains constant over time.

As explained in the previous section on developers, Morpheus Labs will commission our Treasury Partners to buy MITx on behalf of our customers, in exchange for fiat.

### 3) Staking Mechanism Distributors:

As outlined in our initial token economics paper, distributors are a key component of our growth strategy. As such we have integrated a staking mechanism for MITx in order to enhance value capture.

As a quick overview, to be eligible for a distributor agreement, companies must hold an amount of MITx corresponding to the size and length of the agreement. There will be a tiered hierarchy regarding the amount of MITx held. For example, exclusive distributors will be required to hold higher amounts of MITx to be eligible for their region. The required amount of MITx also grows with the distributors geographical coverage reach. An example of the structure is outlined in the table below:

Distributor type	Lock-up period	Amount required
General (Trial)	Min. 3 months ~ Distributorship period + 1 month to unlock	Contact us
Country	Min. 6 months ~ Distributorship period + 2 months to unlock	Contact us
Regional	Min. 9 months ~ Distributorship period + 3 months to unlock	Contact us

[Table on Staking Mechanism Distributors](#)

As explained in the previous sections, Morpheus Labs will commission our Treasury Partners to buy MITx on behalf of our customers, in exchange for fiat.

# Go-to-Market Strategy

Our strategy is to leverage our network of partners and distributors and reach out to potential users who have an acute need for our technology. As a B2B firm, partnering with the right distributors and platforms is key to rapidly scale across various verticals.

As an infrastructure play, we intend to focus on building value-added peripheral services to maximise ease of deployment for companies and enterprises. We have secured numerous in-principle arrangements with enterprises to provide our BPaaS and are in the process of sealing partnerships with MOUs.

Using our platform, our customers can serve their existing clients with higher value-adding services. In addition, by tapping into their network distribution channels, this will create additional demand for their existing services platform.

For the B2C model, we leverage digital marketing to build our brand as a leading integrated BPaaS platform and increase market awareness to enable networks to attract freelancers and individual developers.

Our platform has attracted attention from the market; the following are some of the key stakeholders and partners who have approached us:

- **Blockchain Protocols**
- **Innovation labs and accelerators**
- **Major Internet content providers**
- **Educational institutions such as universities and polytechnics**
- **Software development houses**
- **Blockchain as a service provider**
- **Government related agencies**
- **System integrators (SIs)**
- **Telecommunication companies**
- **Established accelerators and incubators**

# Roadmap

## Platform/Technical Road Map

Phase 1:

### **Design and Version Alpha**

**Sep 2016**

Develop alpha version, which is focused on the implementation of Platform Presentation Layer (refer to Platform Components Overview). The purpose of this phase is to create a fundamental set of user-facing functionalities and applications catered for the public to try.

Phase 2:

### **Version 1.0 Beta version completed**

**Oct 2018**

Beta version launched for private testing to select partners to get feedback for upgrades and improvements.

Phase 3:

### **Version 1.0 Official Launch**

**End Jan 2019**

With all feedbacks gathered, move into UX/UI enhancement and delivering a powerful and user friendly platform for commercial use which targets rapid prototyping and testing environment.

Phase 4:

### **Version 2.0 BETA**

**Q4 2019**

- Moving beyond a platform for rapid prototyping. This phase enables customers to host enterprise grade applications which are revenue sensitive and business process driven.

- Starting implementation of interoperability

Phase 5:

### **Version 2.0 Live**

**Q1 2020**

Release the complete end-to-end platform leveraging on enhanced blockchain agnosticism and providing cohesive services.

Phase 6:

### **Interoperability & Interconnection**

**Q2 2020-Future**

Complete blockchain interoperability implementation and add ecosystem and enterprise interconnection capabilities

# Roadmap

Business Roadmap

## Phase 1: 2016-2017

- Accelerate by SGInnovate.
- Top 5 in Smart Dubai Competition
- SGD 200K seed investment from BANSEA
- Signed partnership with Proline Integrated Intelligence

## Phase 4: Q2-3, 2019

- To onboard education providers
- To grow blockchain partners
- To integrate <5> blockchain partners
- To expand on platform adoption

## Phase 2: 2018

- USD 10M ICO raised, April 2018
- Partnered with Sure International
- First blockchains partners i.e. Vechain, QuarkChain, NULS and Neurochain
- Signed partnership with KMSIM and Smartmind.

## Phase 5: After 2019

- Expansion in Europe and North America.

## Phase 3: Q1, 2019

- Signed partnership with DeamPlus (Hanwha Group)
- Become AWS Technology Partner

# Token Information

## Morpheus Infrastructure Token Use Cases

*Morpheus Infrastructure Token (MITx) is the utility token used in all Morpheus Labs platform services and is an ERC-20-compliant token that is designed to be used within the Morpheus BPaaS network for all services and products rendered.*

The services are: Platform subscription payment, Application usage fee and Distributorship licensing fee, as stated below:

### Platform

Subscription payment for different tiers of services  
Transaction fee in App Library  
Stake to get discount

### Distributorship licensing fee

Stake to get exclusivity in their country or region  
Bulk pre-purchase license at discount for selling  
Download to customise, or engage the application owner to customise for you

### Education Distribution partner

Stake to get exclusivity in their country or region  
Bulk pre-purchase license at discount for selling

### Blockchain Protocols

Stake to access exclusive features  
Sponsorship to access exclusive environment

# How Token is released

## Objective

Token release back to follow below principles

- a. Increase Brand awareness
- b. Increase subscribers and platform activities
- c. Boost ecosystem around Morpheus Platform

### 01 General Community

SmartAirdrop (Educational airdrop etc)  
Trading contest  
Referral scheme  
Ambassador/evangelist program  
Community partners

### 02 Developer community

Hackathon  
Referral Scheme  
Incentivise quality application

### 03 Blockchain Partner Community

Sponsorship to encourage community to sign up

### 04 Distributor Community

Sponsorship to encourage community to sign up

Future Plan

Business driven API (refer to roadmap)

R&D

Internal exchange to allow easiness and smooth payment experience

# Token breakdown [Update]

## Total 45% (max) of total supply will be burnt

**Token Distribution of Original 1B**

**25% (250M had been burned)**

**20% Max to be burnt over 48 months**

**25+% sales and in circulation**

**10% community (in Process of joint marketing/campaigns and more targeted at quality new crowd)**

**>10% Team (Locked)**

**10% foundation (Untouched)**

**5% reserve**

## Note

The primary use of the token is for both platform subscription and application-related usage, whereby users can use these tokens to procure any services within the platform network, and pay service providers within it. Users can switch among different subscription tiers with full flexibility. Upgrades are featured for applications that are chosen.

As more blockchain applications are curated on our app store, MITx will also allow convertibility to discount coupons for other applications within our network. This will translate into cost savings and promotional items in other applications.

Financial settlement and resources support between licensees and licensors, where distributorship could be easily managed, facilitates critical real-time support for any distributors or sub-distributors in any corner of the world. Easy token swapping among our app stores will also permit savings on transactional fees and more effective portfolio management for individual and corporate investors.

## **Why Morpheus Labs** –Blockchain Platform as a Service (BPaaS)

Imagine trying to run a business (provide a service or sending a good) without roads, electricity and telecommunications in place. Running operations would be extremely difficult, and communication externally or internally would not be efficient.

Hence, for all growing economies, there is a need for a well-designed, stable and scalable infrastructure. This is similar to the blockchain economy, which is one of the latest and fastest growing technologies, and which governments and enterprises across the globe have identified, pledging huge resources to adopt significantly in the coming decades. Our goal is to be the enabler for this technology, building 'roads and infrastructure' for the blockchain world.

Our BPaaS is based on our mission to provide efficient connectivity among all networks and resources; hence, it provides a conducive environment for innovation to fast track success. We have a seasoned and highly skilled team in entrepreneurship, application development and implementation of large scale infrastructure, coupled with the strong support of a committed and prominent advisory team who are leaders in their own industries with strong networks.

We are confident and committed to commercially and viably scaling our BPaaS operations and capturing a huge section of the blockchain market.

## **Why Morpheus Labs –Blockchain Platform as a Service (BPaaS)**

### **For the Investor**

We are in the midst of a surge of interest across global markets in blockchain technology. We have also witnessed Bitcoin, Ethereum and other cryptocurrencies gaining popularity.

Interest in blockchain technology is likely to grow with an increased push for blockchain adoption across industries. We aim to leverage this rising wave of intensive interest as we launch our blockchain platform.

While Google has been successful as a platform for information, and Alibaba as a platform for products, our platform is in the same category regarding value creation. Here, we stand at the forefront ready to lead the next technology revolution.

Since we launched our private Version Alpha in mid-2017, we have received overwhelming enquiries for partnership, distributorship and various forms of collaboration from Southeast Asia and UAE regions.

These enquiries are mainly from key industry players such as major system integrators, global tech giants, educational institutes and government innovation departments. Most have indicated interest to sign collaboration agreements once our commercialised version is ready.

## Why Morpheus Labs –Blockchain Platform as a Service (BPaaS)

### For the User

We are focused on providing the best UI and experience for your development environment on the cloud. The aim is to disrupt current inefficient ways and processes of validating ideas by enabling rapid prototyping and avoiding unnecessary costs.

This is an integrated and one-stop platform for your development team, hassle free, with all resources ready to hand. After all, as a business owner, time should be spent on developing and designing a better idea or solution, not on sourcing tools or resources to build it.

### What are clients and partners have to say about us:

#### **[VeChain's CTO, Mr Gu Jianliang](#)**

*"I believe that the Morpheus Labs platform's one-stop development tool is a time-saving feature and will definitely ease the developers' load on project development and deployment. This is a positive attribute where the team can place their focus on other key areas of the project"*

#### **[VeriTAG– CEO, Jason Lim](#)**

*"After going through a series of selection and having examined the skill sets, we are fortunate to have Morpheus Labs with us to take up the end-to-end development now, after few months of fruitless search. Great platform and team"*

## Why Morpheus Labs –Blockchain Platform as a Service (BPaaS)

### Quarkchain, Founder & CEO, Qi Zhou

*"Morpheus Labs greatly simplifies blockchain DApps development and promotes wider applications of blockchain. We would like to work with Morpheus Labs to build next-generation scalable DApps that could serve massive users."*

### Batelco - Sure International, CDO, Justin Bellinger

*"Allows businesses to rapidly prototype and experiment with multiple types of blockchains on a single, secure, platform – leading to swift, easy and secure production deployment."*

### NULS, Founder & CEO, Miss Liesa Huang

*"By working with Morpheus Labs, we can expand our reach to more enterprises with NULS's technology that focuses on reducing the technical barriers for them to build real-world business application cases. The platform will also convince more enterprises and developers in adopting blockchain technology into their business needs which is crucial in the sustaining the success of the blockchain industry."*