



R1 DOT MY Sdn Bhd [976862-M]

PRODUCTS & SERVICES

Last Updated on 17th of April, 2017

Executive Summary

R1 DOT MY is a technology solutions provider that was incorporated within Malaysia in 2012, from where it has been consulting with several organizations and startups to help implement and adopt new technologies such as NoSQL storage and blockchain based distributed ledgers.

Neuroware is the brand name for our blockchain and distributed ledger technology solutions. It was first established when we were selected to join Batch 9 of the illustrious 500 Startups accelerator program in Silicon Valley at the beginning of 2014. It was during our time there in the USA that [Venturebeat](#) declared Neuroware as one of the 5 most promising startups to watch from the Batch 9 demo day pitches that took place at the Microsoft campus.

Since 2015, we have been dealing with a broad spectrum of both regional and central banks, national regulators, telecommunication providers and licensed equity crowdfunding institutions from within both Malaysia and Singapore. We have consulted Maybank and DBS bank and have helped to organize the only bank-backed blockchain hackathons to have taken place in Asia. We help organizations such as this to not only understand, but also begin to implement blockchain technology and the various distributed protocols that we have developed upon them.

Recently featured as one of Malaysia's [top-ten fintech companies](#), we've spent the past year developing Cortex - it acts as a single unified graphical interface for managing distributed ledgers and the protocols built upon them, including our own core modules, which provides:

- Identity & Authentication
- Distributed Data Storage
- Customised API Services
- Crypto-Currency Wallets
- Multi-Signature Escrow

Some of the use-cases we've been working on include:

- Loyalty Reward Platforms
- Tamper Proof Data-Backups
- Remittance & Settlement Systems
- Notarization & Time-Stamping Solutions

By utilizing blockchain-agnostic protocols and modular architecture, we support ten blockchains out-of-the-box and can easily add new distributed ledgers for both public and private networks.

Kind regards;

Mark Smalley | Founder & CEO of R1

Company Profile

R1 DOT MY is a technology solutions provider that was incorporated in Malaysia in 2012. It has since founded several technology communities, products and various other brands. By providing full-stack development, product ideation and design, we have been able to work on a number of exciting projects. We brought NoSQL to Malaysia and introduced the banks to blockchains through the creation and maintenance of the following three brands:

- **Blockstrap** - <http://blockstrap.com> - OpenSource HTML5 Framework for Blockchains
- **Neuroware** - <http://neuroware.io> - Blockchain Enterprise Infrastructure Providers
- **Blockchain Embassy of Asia** - <http://bce.asia> - ASEAN's 1st Blockchain Consortium

History

At the beginning of 2012, R1 DOT MY won an award for its open-source NoSQL solution, MongoPress. It was this that was used as the foundation for forming the company when we became the first Southeast Asian business to be registered as a qualified vendor for MongoDB. During the first three quarters of 2013, R1 DOT MY then started consulting Perfectsen to help them further develop their MongoDB based PFM (Personal Financial Management) solution. This was provided to Maybank as a white-labelled financial management service and become the world's first banking solution to be successfully implemented utilizing a MongoDB database.

At the end of 2013 we developed an experimental Bitcoin wallet called BrainControl, which caught the attention of 500 startups - who offered us a place within their accelerator program in Silicon Valley, where we spent four months to launch blockstrap. By the end of 2015, we started working with a broad spectrum of both regional and central banks under the Neuroware brand, which has also included consultation and training for national regulators, telecommunication providers and licensed equity crowdfunding institutions from both Malaysia and Singapore.

Co-Founders

Mark Smalley | CEO

Mark's been building distributed applications on the blockchains since 2012 - but building fintech web applications since 2002. He was the first ASEAN MongoDB Master, where he won an award for his open-source NoSQL Content Management System.

Ruben Tan | CTO

Ruben is one of Malaysia's leading NodeJS developers, founding member of the Malaysian JS User-Group, and regular contributor to many open-source projects and communities. Having explored distributed consensus technologies and relational graphs with previous projects such as MyTeksi and OnApp he has a wealth of server-side knowledge and programming languages.

Neuroware Solutions & Services

Neuroware provides enterprise-ready blockchain infrastructure solutions, which often include:

- Education & Training
- Cortex API Integration
- Consultation & Development

Some of the use-cases being developed upon our technology include:

- Loyalty Reward Platforms
- Tamper Proof Data-Backups
- Remittance & Settlement Systems
- Notarization & Time-Stamping Solutions

Education & Training

The way we begin the majority of our business relationships is by providing education and training, which often revolves around a two-day paid workshop costing US\$5,000. The goal of these training sessions is to help organisations understand blockchains by eventually putting them in a position to answer the following questions:

1. What are the differences between Bitcoins, Blockchains and Distributed Ledgers?
2. How do these work, and which are best applied to your organisation's needs?
3. What benefits will you see in cost savings, improved efficiency and better security?
4. How can this all be used to gain new projects and business in the future?

Day 1 - Introducing Distributed Ledgers

The first day is usually divided into two main sessions - the first of which would be presented semi-technical content introducing the following important topics:

- **Introducing money, assets & ledgers** (how did Bitcoin come to be)
- **Understanding blockchain technology** (for the non-technical audience)
- **Blockchain generations** (from digital currencies to open assets & smart contracts)
- **Current systems overview** (industry adoption, current challenges, Asia's role)

The second session is usually used to more openly discuss use cases applicable to your organization and its current needs - including, but not necessarily limited to the following topics:

- **Distributed Data**
- **Identity & Authentication**
- **Smart Contracts & Custom Tokens**

Day 2 - Basic Technical Training

The second day of training is usually divided into two main sessions - the first of which is presented technical theory covering the following important topics:

- **Distributed Consensus** (how and why blockchains work)
- **Smart Contracts** (programmable money and automation)
- **Storing & Protecting Crypto-Currency** (tips and tricks)

The second session would provide hands-on examples with source code and audience participation whilst we issue and use crypto-currency together as we cover the following topics:

- **Key Management** (generating and using cryptographic keys)
- **Crypto Transactions** (learn how to create and relay raw transactions)
- **Immutable Data** (storing and serving data from the blockchains)

Upon completing the technical workshop, participants will be able to locate and explain to others how and where specific data can be stored and accessed from the blockchains, whilst also having had opportunities to openly discuss the following topics:

- **Developing new products and services**
- **Improving efficiency and allowing cost savings**
- **Blockchain agnostic technical implementations**

Blockchain Agnostic Protocols

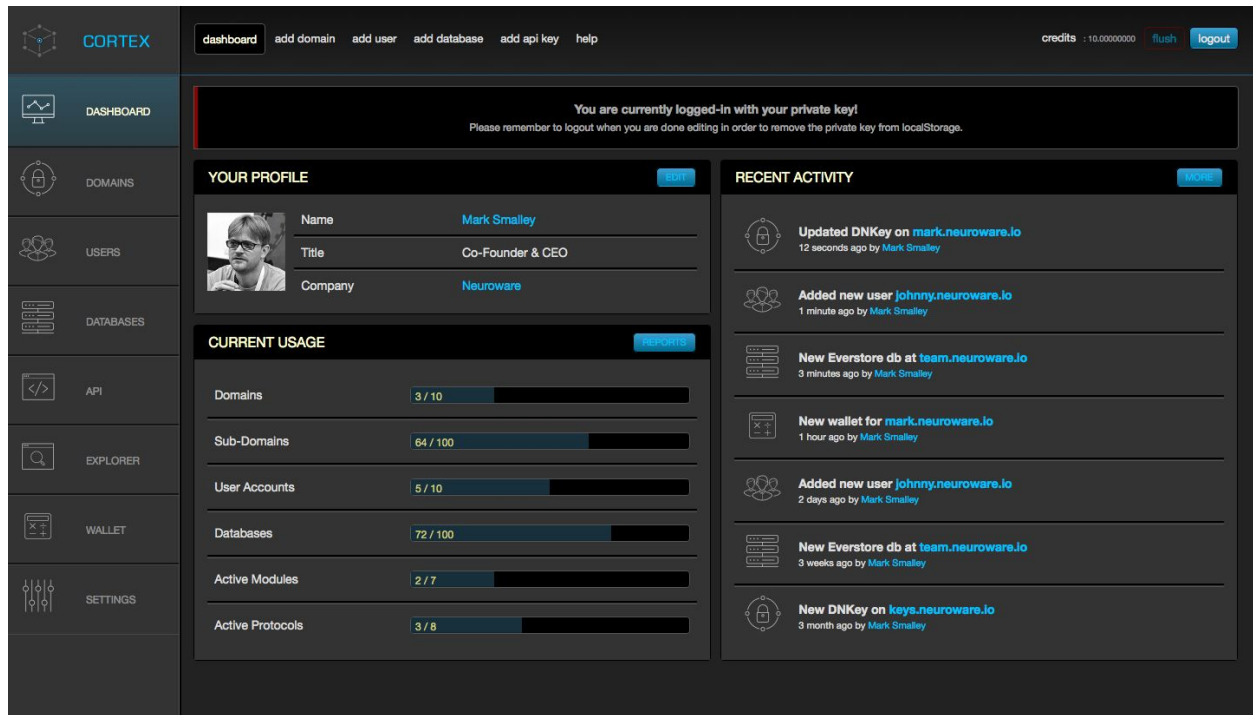
We have been able to develop blockchain agnostic solutions by first building our base protocols:

- **Everstore** - distributed database protocol with full CRUD functionality
Create, Read, Pseudo-Update and Pseudo-Delete structured data on any blockchain
- **BlockAuth** - distributed self-managed identity and decentralized authorization
Own your own identities with a secure single sign-on for users and devices
- **DN-Key** - replace complicated public key cryptography with simple domain names
Added layer of abstraction allows for key management services such as revocation

Each of these three protocols work with any distributed ledger featuring transactional messaging services such as OP_Returns. Our private APIs currently support Bitcoin, Litecoin, Dogecoin, Dash and Ethereum as well as each of their corresponding testnets - making Cortex possible.

Cortex

Cortex provides a portal for non-technical users to access and manage blockchain applications.



With a single unified interface for managing any blockchain or any of the distributed protocols that are being built upon them - it comes equipped with any or all of the following core modules:

- Identity & Authentication
- Immutable Data Storage
- Customised API Services
- Crypto-Currency Wallets

Cortex is currently being used by the following organisations:

- ATA-Plus - <http://ata-plus.com> - Licensed Equity Crowdfunding Operator
- Blockchain Embassy - <http://bce.asia/chancery> - Public Blockchain Consortium

These services are made available under either of the following plans:

- **SME (Small Business Plan)** - Hosted by Neuware - US\$20,000 per annum
- **Enterprise (White-Label Solution)** - Hosted by Client - US\$20,000 per annum with an additional one-time on-premise setup fee of US\$180,000

BlockChain Embassy of Asia

The BlockChain Embassy of Asia is a non-profit coalition of business entities exploring the technical & legal implications of blockchain technology together through distributed governance.



The Embassy is working to launch the following services by leveraging the Cortex platform:

- Digital Immigration (user management) - <http://bce.asia/chancery>
- Digital Notarization (store and authenticate data)
- Digital Escrow (automated arbitration)

The nine founding members that make-up the embassy's steering committee include:

- **R1 DOT MY** - Technology Ambassador
- **Maybank** - Banking Ambassador
- **RHB** - Banking Ambassador
- **1337** - Community Ambassador
- **ATA-Plus** - FinTech Ambassador
- **Lim Jo Yan & Co** - Legal Ambassador
- **Chain of Things** - IoT Ambassador
- **iTrain** - Education Ambassador
- **Capital Bay** - Invoicing Ambassador

Since the Embassy also owns a copy of Cortex, they are able to provide API access plans to their ambassadors for US\$3,000 per annum - ideal for pilot projects between members.

R1 - R&D & Consulting

Since being operational in 2012, R1 DOT MY Sdn Bhd has predominantly been known for providing general full-stack technological consulting with paid research and development sprints at a rate of anywhere between US\$1,000 to US\$3,000 a day; depending on the required skills.

However, since launching our first product, Cortex in 2016 - we also provide a fixed discounted rate of US\$500 a day for any work that takes place on custom Cortex modules and (or) application development that utilizes Cortex in some way.

This allows us to crudely estimate project development costs as follows:

- Proof of Concept - 25 Days Development (Delivered in under 60 Days) @ US\$12,500
- Minimal Viable Product - 50 Days Development (in under 120 days) @ US\$25,000

PoC (Proof of Concept) Vs MVP (Minimal Viable Product)

When we refer to a proof of concept, it is meant as an example application, which has data and access controls that are 100% blockchain-based, entirely standalone and self-contained with no integration to existing systems or data sets. Creating a proof of concept is often required in order to bring on new partners for larger projects and can also be used as an efficient way to test people, products, and new ideas without committing private data or unnecessary resources.

A minimal viable product is usually a single-featured fully working solution that is stripped down to the absolute essentials and often used within a beta environment for live public testing and (or) for gathering closed-loop feedback prior to a wider open launch. Integrating with existing systems and established data sets is often skipped until testing minimal viable products, but landing pages for the public to understand the services and sign-on for more information is usually recommended in order to maximize the effectiveness of the launch sequence.

Taking things to a full production environment scaled for mass consumption and integrated with existing systems and prior data is not accounted for in this documentation as it is difficult to accurately estimate the required resources without more information.

Current Clients

Our first client using Cortex in a live production environment is ATA-Plus, who are one of six licensed equity crowdfunding platforms in Malaysia that is regulated by the Securities Commission. They are the world's first blockchain-enhanced ECF platform to also provide direct Bitcoin investments and working with them has allowed us to form important relationships.

REGULATORY TRAINING & WORKSHOPS



INSTITUTIONS FUNDING US



REGULATED INSTITUTIONS WE HAVE DONE BUSINESS WITH



Between these Neuroware partners, and the Blockchain Embassy ambassadors, we're working on some big problems - many of which involve multiple partners working together:

