THE AUSTRALIAN COMPUTER SOCIETY

PRESENTS

ANNUAL DENNIS MOORE ORATION

AND

1962 AWARDS PRESENTATION

Unchained: Blockchain for Businesses

WITH

ASSOCIATE PROFESSOR

VIDY POTDAR

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The Australian Computer Society
Annual Dennis Moore Oration Dinner
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26th October 2022
Speaker: Associate Professor Vidy Potdar

Proceedings

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Introduction of Opening Speaker
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Opening address
Dr Nick Tate FACS CP, ACS President

Introduction to the 1962 Prize and Medal Finalists
Dr Bob Cross FACS CP

Presentation of 1962 Awards by
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Oration delivered
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Drinks and Canapes

Annual Dennis Moore Oration Past Orators

Since 2012, to commemorate fifty years of digital computing in Western Australia, the WA Branch of the ACS has invited a distinguished scholar and researcher with a connection to WA to present a lecture on the leading edge of an important and emerging area of information and computer technology.

YEAR	ORATOR
2012	Professor Andrew Rohl
2013	Professor Ian Reid
2014	Professor Craig Valli
2015	Professor Svetha Venkatesh
2016	Dr Adrian Boeing
2017	Professor Matthew Bellgard
2018	Professor Jinbo Wang
2019	Associate Professor Rachel Cardwell-Oliver
2020	No Oration held due to Covid restrictions
2021	Associate Professor Doina Olaru

2021

2018

2019

2016

2017

2014

2015

2012

2013

1962 Prize

From a suggestion of Dennis Moore (and with his strong support) 2012 also saw the setting up of an annual prize for the best graduating student in ICT from a WA university. Although the primary criteria are based on academic performance, the candidates are also judged on their ability to promote their ideas in computing and contribution so far.

Previous winners of the 1962 Prize are:

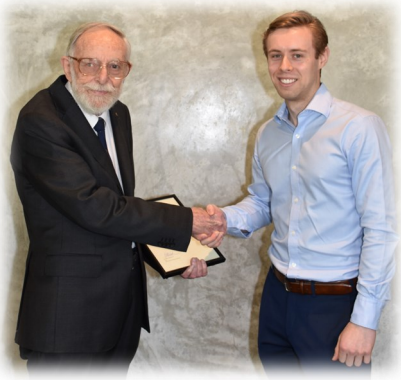
- 2012 Kevin Adnan - Curtin University
- 2013 Laurence Da Luz - Edith Cowan University
- 2014 Anthony Long - Curtin University
- 2015 Michael Martis - University of Western Australia
- 2016 Dalibor Borkovic (Murdoch University)
- 2017 Mark Shelton - University of Western Australia
- 2018 Taaqif Peck - University of Western Australia
- 2019 Jarryd Wimbridge - Edith Cowan University
- 2020 Samual Heath - University of Western Australia
- 2021 Alistair Martin - Murdoch University

The 1962 Prize finalists for 2022 in alphabetical order are:

- David Adams - University of Western Australia
- Yuval Berman – University of Western Australia
- Morium Mostafa Momo – Edith Cowan University
- Timo Reichelt – Curtin University
- Qiang Sun - University of Western Australia

2019

2020



2021

1962 Medal

In 2019 the 1962 Awards was expanded to include a new award for the most outstanding completed Doctoral research (eg PhD) in Western Australia in the field of Information Technology and Computer Science.

Previous winners of the 1962 Prize are:

- 2019 Dr Qiuhong Ke, University of Western Australia
- 2020 Dr Anupiya Nugaliyadde, Murdoch University
- 2021 Dr Naeha Sharif, University of Western Australia

The 1962 Medal finalists for 2022 in alphabetical order:

- Dr Fouzia Altaf – Edith Cowan University
- Dr Nur Al Hasan Haldar – University of Western Australia
- Dr Mohammad A. A. K. Jalwana – University of Western Australia
- Dr Huan Lei – University of Western Australia
- Dr Uzair Nadeem – University of Western Australia
- Dr Camilo Pestana – University of Western Australia
- Dr Megan Pusey – Murdoch University
- Dr Ha Giang Truong – Edith Cowan University

2020

2021

Unchained: Blockchain for Business

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Abstract:

Blockchain technology has the potential to transform our economic, social and environmental landscape as we know it. We are at a tipping point right now where there is a huge shift toward the legitimacy and applicability of this technology. This gives us one of the best opportunities to reimagine our lives, our economy, and the entire way we interact with each other around the world.

Blockchain technology was first introduced in 2008 as the foundation for Bitcoin. It has since swiftly evolved to mainstream business applications, and it is showing no signs of slowing down. In 2021, blockchain and fintech attracted investment over $20 billion globally.

Blockchain technology is the perfect fit for the modern business landscape. It empowers individuals, companies, and entrepreneurs to be directly involved in the blockchain. This puts control

back into the hands of the people. Instead of tech giants and financial institutions having full authority over your data, blockchain democratises data so you are in control of your own data.

In the last 18 months, the Blockchain Research & Development Lab (BRDL) has led 12 blockchain projects in Western Australia and across the nation. We were working to address one fundamental question: How can blockchain technology be implemented successfully within business across a variety of industries? We found the answer by executing 12 projects across 8 different industries, including agriculture, sustainability, mining, art, healthcare, supply chain, photography and recycling.

Given our extensive blockchain experience we initiated two new in-house blockchain initiatives. The first is the development of our own lightweight blockchain platform, which we call the XBC. The second is A2B: Anything to Blockchain, a blockchain accessibility platform being researched and developed in our Blockchain R&D Lab. The objective of this initiative is to make blockchain technology accessible and affordable.

1. Introduction

Welcome to the world of blockchain technology and Web 3. Blockchain technology is changing the way business gets done. It has the potential to transform a number of business applications, including finance, supply chain management, and identity management.

Blockchain began in the realm of finance with decentralised digital currency, or Bitcoin. As innovations advance day by day, so does blockchain's popularity and applications—it's being used in various realms, including business applications thanks to its innovative features: decentralisation, trustworthiness, and secure data storage system (Akram et al. 2020).

Blockchain is a transactional database technology that is continually being innovated on in order to provide new opportunities for businesses. It is a ledger of transactions stored across multiple computers; its decentralised nature ensures transaction validation, and it remains tamper-proof. (Ali et al. 2021).

The core blockchain features are decentralisation, immutability, and transparency.

Decentralisation: Traditionally, transaction systems process in a centralised manner, where a centralised entity (e.g. the central bank) performs transactions and charges a transaction fee for transaction execution. But blockchain enables decentralisation of this process, thereby removing the need for a third party like a bank to act as an intermediary between two or more parties. (Akram et al. 2020).

Immutability: Blockchain data is immutable, which means it cannot be tampered or modified once it is stored on the blockchain. This is because blockchain uses public key cryptography technology to ensure immutability and data security. You've probably

used this technology before—it's exactly like the encryption you use when you log on to your bank account online! It's a proven and tested technology that is used differently. (Akram et al. 2020).

Transparency: Blockchain technology uses a network of computers to ensure that information is distributed and decentralised. This makes the system secure, avoiding unauthorised data tampering. It also keeps a complete transaction history, offering total transparency and information traceability. Businesses can provide complete evidence when requested by concerned authorities by making their data transparent and accessible (Akram et al. 2020).

Blockchain technology comprises cryptography, advanced mathematics, innovative algorithms, economic models, peer-to-peer networks, distributed consensus algorithms, and distributed ledgers (Lin and Liao 2017). It is a complex choreography of theory, tools, techniques and technologies that streamline business processes across industries. In business contexts, blockchains are useful for signing digital contracts for peer-to-peer (P2P) energy trading, P2P ride sharing, P2P insurance, and so on. Similarly, banks have realised that permissioned blockchains can be established as distributed ledgers for keeping track of transactions, using the concept of blockchain as a distributed ledger technology. Validation is carried out by consortium members or separate entities within the organisation.

The rest of this paper is organised as follows. Section 2 explains

the current blockchain process. Section 3 outlines the key challenges associated with blockchain technology. Section 4 examines the benefits of blockchain technology for businesses. Section 5 introduces the A2B framework to simplify blockchain adoption, followed by business use cases in Section 6 and a roadmap for future research in Section 7.

2. Blockchain Development Process

When building a blockchain solution, we typically follow a three-phase approach: evaluating possible use cases within a business where blockchain technology makes sense (phase 1); developing a proof of concept to showcase the possibilities and business benefits of adopting blockchain technology (phase 2); and scaling the blockchain solution to a Minimal Viable Product and going into production (phase 3).

Phase 1 - Use Case Evaluation: When building a blockchain solution, it is important to focus on use cases that will have the greatest impact. This means identifying and prioritising areas of a business that can benefit from blockchain technology. In this phase we attempt to understand the business value that a blockchain solution can achieve and evaluate which use cases are well suited for blockchain and leverage blockchain technologies' core strengths—namely security, transparency, and decentralisation. After identifying an appropriate use case, we need to prioritise it based on some criteria. Typically, we will assess the feasibility of the project, its viability and its business desirability. Those projects

that pass this test move on to the next phase. Phase 1 takes about 12 to 18 weeks to complete properly, as it involves extensive discussion with stakeholders and a thorough understanding of business processes. In addition, when multiple use cases are being evaluated, the process can take even longer.

Phase 2 - Developing a Proof-of-Concept: Once potential uses have been identified, we develop a proof-of-concept with the help of a software team to demonstrate how blockchain technology will improve these processes. As part of this phase, we develop a list of functional requirements by mapping the use cases to respective functionalities. We then develop a detailed technical architecture that can withstand the demands of the potential use case. One of the important steps here is to select a proper blockchain platform and associated technology stack. This is an important consideration because the success or failure of the proof-of-concept heavily relies on selecting the right blockchain technology stack and platform to build upon. We then move on to develop the proof-of-concept over several iterations and finalise it. The objective is for a fully functional prototype to be ready for presentation to management, who will then decide whether to greenlight funding for production. Phase 2 can take anywhere between 16 to 24 weeks, depending on the project and the team's skills on working on a specific blockchain platform. If the use case is novel and has not been implemented by others earlier, there may be a longer learning curve leading to additional time.

Phase 3 - Scaling the Blockchain Solution: To take a blockchain project from a proof of concept to a minimum viable product or MVP, it's important to ensure the solution is scalable so it can be implemented at scale. In this phase, the focus is on ensuring the solution will work in a production ready environment. The live solution must interact with existing legacy systems without any hiccups. Extensive testing is undertaken to ensure that the system will not fail when deployed in a real business environment. A product rollout strategy needs to be developed and executed to ensure a seamless transition into blockchain technology. Phase 3 can take up to eight or ten months, depending on the nature of the project.

Collectively, phases 1 to 3 can take more than a year and that is too long for businesses. In Section 4, we will explain how our proposed A2B platform can substantially reduce this timeline and get businesses on blockchain much more quickly.

3. Challenges with Blockchain Technology Adoption

Blockchain technology has the potential to form the foundation of a new kind of internet. It has the potential to connect everyone in the world and empower people to control their own identities and information. But before this happens, we are confronting various challenges that blockchain technology must first overcome. This section presents and discusses the challenges.

Challenge 1 - Lack of Skilled People

As blockchain adoption grows, the demand for skilled people to develop and implement infrastructure has increased. Many so-called "blockchain developers" claim to have the skills required for developing blockchain, but the reality is that there's still a major gap between what is needed and what is available. This lack of talent has caused salaries to rise, resulting in high costs for businesses looking to implement blockchain solutions. Top consulting firms are picking up talent by offering higher salaries than most other companies, creating a high attrition rate as employees quickly leave their jobs to take better offers elsewhere. Recruiting and maintaining talented professionals in this space will become more difficult as time goes on; however, training existing software engineers might be one way to address this problem (Adamska, Blahak, Abanda 2021).

Challenge 2 - Capital Investment

The second challenge involves capital investment. For blockchain technology to be effective, businesses must have a lot of stakeholders or suppliers and a common database for recording transactions and business information. Currently, such development comes at a high price, making it an unrealistic option for companies with a limited budget. These concerns are valid because developing a blockchain architecture requires time, effort and money. Businesses might not want to spend those resources on a technology if they do not see enough of an upside to justify the expense. Companies may also refuse to invest their time and

money in developing a blockchain solution if it does not fit into their overall business strategy due to fears that doing so will yield limited returns. If a company decides to adopt blockchain for its business operations, then it needs to first identify which type of blockchain architecture works best (permissioned or permissionless) as well as who has access rights and who has restricted access. It is important to understand that this issue is not unique to blockchain projects but rather an issue facing any software development project. Additionally, many companies feel that their current information sharing systems are functioning fine. To deal with such challenges, a new business model for blockchain service with low cost and less risk should be developed (Wan, Huang and Holtskog 2020).

Challenge 3 - Reluctance from Senior Management

Another challenge that the blockchain industry faces is resistance from senior management. To be widely adopted, blockchain technologies must overcome cultural resistance within organisations. It takes time to understand and fully appreciate the value that blockchain brings to businesses. Rumours about blockchain abound, and many of them contribute to an image problem that the industry as a whole must solve by educating people about what blockchain is beyond Bitcoin or cryptocurrencies. One rumour is that people still think blockchain is Bitcoin or cryptocurrency. Another rumour is that people think blockchain uses too much energy—an idea that people link to Bitcoin's significant energy consumption. These rumours serve as obstacles for adoption because they sug-

gest a lack of understanding among the general public about what exactly blockchain is. Things like these cause hesitation among decision makers who are already biassed against blockchain technology (Janssen et al. 2020).

Challenge 4 - Lack of Understanding of Blockchain Technology

The lack of understanding of what blockchain is, how it works, and how it will benefit small and medium enterprises has been cited as a major barrier to the adoption of blockchain technology. Many companies do not understand how blockchain works or what value it can bring to their organisations. One reason for this lack of understanding is that many people are uncomfortable using digital wallets or do not know what a digital wallet is and how to use public and private keys. They are comfortable to use a username and password. Hence, even if blockchain technology offers various benefits such as facilitating immutable information sharing among partners, increasing transparency and traceability of a product, it still suffers from the basic adoption challenge which is simple accessibility (Wan, Huang and Holtskog 2020).

Challenge 5- Complicated User Interface

The last challenge is related to the complex user interface required to access blockchain technology. As mentioned earlier, blockchain requires the use of public keys and private keys via a digital wallet like Metamask. Many people are not familiar with this technology and do not see the need to switch to it unless they are

trading in cryptocurrencies. People are used to accessing web applications by username and password; if you ask them to start accessing a software using public and private keys, their immediate response is where is the username and password? If somehow you convince them to switch, the next question is how can you reset your public key and private key if you forget them? It's difficult to explain that it is not possible to reset your private key or public key pair; hence, developing new user interfaces that can solve these accessibility issues needs to be investigated in order for us to solve this challenge.

These challenges present a huge opportunity and a massive unexplored market. We now present our innovative framework called A2B (Anything to Blockchain) as a way to solve these five blockchain challenges facing the industry.

4. Introducing Anything to Blockchain (A2B) Platform

Curtin University's Blockchain Research and Development Lab is developing a blockchain accessibility platform called A2B, which stands for Anything to Blockchain. The objective of this research project is to make blockchain technology easy-to-use, accessible, and affordable for all. A2B is designed to address the key shortcomings and challenges surrounding blockchain technology adoption. Our primary aim is twofold: ***first***, we aim to make blockchain technology simple and accessible; ***second***, we aim to make it af-

fordable. A2B aims to make it easier for people of all skill levels to take advantage of the technology by removing technical road-blocks.

Simple & Accessible Blockchains

A2B will allow users (individuals & corporates) to save text, files, images, and other content directly to the blockchain with a Web 2.0–style interface using username and passwords. We are re-searching ways to provide easy access to post data to different blockchains like Polygon, Ethereum, Solana, Algorand and others.

We are researching innovative ways to offer Web3 functionality via a Web2 interface. For example, the A2B app will use its native wallets to accept transactions from users and post them to differ-ent blockchains, thereby removing the need for end users to man-age their wallets or public and private keys. Our UI teams will de-sign appropriate user interface designs that will help with this re-verse transition (Web3>Web2).

This project will follow design science research methodology, in-cluding user interviews and validation. The first release will include Polygon, while we also plan to add other blockchains in the future. Our goal is to simplify access to the blockchain by creating an in-tuitive user interface, which is the first research objective – sim-plicity / accessibility.

Affordable Blockchains

Our second objective is to make blockchain technology ***affordable***. We eliminate the cost of development by providing a complete, ready-to-use platform for building blockchain solutions. By removing the upfront cost of building a blockchain solution, A2B makes it easier for businesses to use the technology.

One thing to remember though is that affordability here refers to the cost of development, not use — users still have to pay fees for blockchain transactions. Transaction fees, which are paid to miners who process transactions on the blockchain, cannot be eliminated and remain an integral part of any blockchain system.

The cost of developing, implementing and maintaining blockchain platforms can be a barrier to small and medium sized businesses wanting to leverage the benefits of blockchain technology. Small businesses that decide to implement blockchain technology need help from experts in secure software development so they can safely deploy their systems without bugs or security breaches. This requires hiring more people, which adds another layer of expense to using a blockchain platform in the business model.

A2B will allow companies to affordably adopt blockchain technology without significant upfront investment in developing customised blockchain solutions. By researching ways to develop industry-

specific blockchain templates, A2B aims to provide companies with readymade solutions that they can customise to suit their individual needs and decide what information should be captured and recorded on the blockchain.

For example, we have developed a blockchain template for the wine industry. Any winery can now easily create an account on A2B and customise the Wine template to suit its needs, capturing information about its products and recording it on the blockchain.

The template concept aims to eliminate the need for companies to do any custom blockchain development, which otherwise requires a great deal of time and money. Instead, they can find a suitable template and customise it to their needs. This is a completely no-code approach. Template creators can use a visual editor and no coding experience to build these templates and start recording information on the blockchain as needed.

Designing templates is a research challenge. Research teams will develop innovative ways to design such templates, which will be validated with end users. As we gather feedback on the templates, we will continuously improve them. Another direction for research is automatic template creation.

Our research team is making blockchain technology more affordable. In order to encourage its adoption, we're looking at ways to

make it as cost-effective as possible.

A2B Features

This section outlines the key features of the A2B platform.

Templates: A2B offers more than 100 pre-built blockchain templates for a wide array of industries and applications, from agriculture to mining and everything in between. Customise any template to easily upload and format your data and transfer it to any blockchain of your choice.

Transactions: A2B platform allows users to access more than 100 templates to help create and securely post transactions to any blockchain platform.

Seamless Collaboration: Creating and maintaining organised business relationships has never been so easy. Create groups to easily share blockchain transactions with business partners and other entities. Groups allow you to share transactions with suppliers, distributors or other entities within your business network without the need to send an email.

No Wallet: No Keys, No Word Phrase, No Hassle. A2B platform offers a hassle-free way to post blockchain transactions without

the need for public or private keys. A2B handles the gritty end of blockchain technology to provide you with an effortless connection to this new age of technology.

No Coding Platform: Don't know how to program? No worries! Use A2B and embrace the power of blockchain with a tap of a button without any prior coding experience.

Upload Anything: A2B's simple and intuitive interface makes it easy to upload anything—text, audio, video, or a pdf—to any blockchain.

Low Transaction Fees: Before you post a transaction to the blockchain, A2B provides an estimate of the fees that you will need to pay. You can view the estimated fee before any funds are transferred from your account.

Dashboard: A2B's interactive dashboard lets you monitor your transactions across all blockchains.

A2B's Target Audience

A2B platform will democratise access to blockchain technology for individuals or businesses that can leverage the technology for their individual or business needs. Our target audience includes:

Individual users

Corporate users (including large corporations);

Smaller companies

Startups

Non-profit organisations

Government & Institutions

Our goal is to establish A2B as a platform that will allow us to serve such varied audiences to meet their data storage and management needs.

5. Real-world Blockchain Use Cases

Agriculture

In Australia, an estimated 55% of the habitable land is used for agriculture that grows 90% of food that is consumed locally. However, the agriculture industry is facing key challenges. The fluctuations in global temperature and the overall climate affect the profitability, quality and prices of agri produce. To tackle this issue, farmers are now adapting to sustainable farming methods; for instance, no-tillage before sowing, whereas others are taking care not to pollute water bodies. On the other hand, consumer trends are evolving with more demand for organic produce. Recently, the population of Australia is leaning towards more plant-based products that substitute for meat and dairy (Xiong et al. 2020).

Blockchain technology can help manage and store data. Globalisation and market competitiveness have resulted in a complex food supply chain. As a result, there are major concerns related to traceability, quality assurance, and ethical standards. A2B provides industry-specific templates for storing data about provenance on its blockchain platform. Anyone along the supply chain can verify this data by accessing the blockchain via A2B's dashboard. With traditional data storage methods, there is a risk that some information might be manipulated or deleted. The immutability of blockchain eliminates this risk because it is impossible to tamper with the data once it's on the blockchain platform.

A2B offers templates for a wide range of agriculture entities, including farms, processing facilities and transport companies.

Manufacturing

The manufacturing industry of Australia has a significant role in the economy, contributing over AUD 100 billion each year (Australian National Accounts: National Income, Expenditure and Product 2022). The sector employs around 900,000 people (Labour Force, Australia, Detailed 2022), accounting for 26% of business investment in research and development (Research and Experimental Development, Businesses, Australia 2022). After the global pandemic, it is dealing with supply chain resilience and environmentalism challenges. According to a survey conducted by

SCM World Future of Supply Chain in 2017, 44% of the respondents were ‘very concerned about data and IT security like cyberattacks’. Transparency is also a concern when it comes to consumers demanding ethical products. According to an IBM Institute of Business Value (IBV) report published in 2017, 3 out 5 customers responded that they mostly buy sustainable products; 49% claimed they pay premium prices for products that were branded green or sustainable. As consumers are becoming more environmentally responsible and calling out brands for greenwashing, manufacturers should shift their focus towards transparency and openness (World Economic Forum 2021).

The aforementioned issues demonstrate the need for transparency and data security in supply chains. Blockchain can provide these benefits by uploading relevant information to a public ledger with time stamps, permitting stakeholders access to that information. This data can be analysed and leveraged for predictive purposes to increase efficiencies, reduce waste and better prepare businesses for potential crises.

A2B has developed blockchain templates for different manufacturing industries that are easy to use. These blockchain templates support both manufacturing companies and customers by providing them with everything they need to provide provenance and traceability to their products.

Apparel

The State of Fashion report, conducted by Mckinsey & Company, called the fashion industry the seventh largest industry in the world. The world's clothing industry is said to reach $1.95 trillion in 2023 (Ahmed et.al. 2021). The Australian textile industry contributes roughly $27.2 billion to the country's gross domestic product, with $7.2 billion coming from exports (Economic contribution of the Australia’s fashion and textiles industry 2021).Despite growth and innovation in the sector, it faces several important problems: counterfeit fabrics; sustainability issues such as water use and pollution; and human rights violations such as sweat shops and child labor.

According to the Global Brand Counterfeiting report, luxury brands lose up to $100 billion due to counterfeiting. In addition to monetary loss, companies have suffered from tarnished reputations due to replicas that exist in the market. Consumers have also changed their buying habits and put pressure on fashion labels to be more transparent about their sourcing practices and seek raw materials ethically (Everledger n.d.)..

Blockchain technology can be used to track the manufacturing and retailing process. It can also be used for inventory management, reducing the mass production of garments that harm the environment. Blockchain can also help with counterfeit claims by

protecting the rights of artists or documenting how designs are created. Consumers can verify the authenticity of brands and differentiate them from counterfeit labels.

A2B, an online platform, allows individual artists to record their designs permanently on a blockchain before posting it online or sharing it on social media. A2B was created to empower artists and combat the problem of design plagiarism by big brands like Zara, H&M, Urban Outfitters (Lieber 2018)

6. A2B’s Future Roadmap

A2B blockchain has just launched a first version of its product that allows individuals to record and store information on Polygon blockchain. The next release (December 2022) will offer templates' functionality. A2B plans to introduce Ethereum as its next blockchain option followed by Solana and Algorand (Apr 2023).

A2B will continue to add more blockchain platforms in 2023; it will begin an extensive marketing and customer acquisition campaign from Jan 2023 onwards. In parallel, it will introduce Non-Fungible Tokens (NFT) on A2B platform in March 2023, using which anyone can start minting and selling NFTs seamlessly. This feature will widen its target customer base and incorporate new revenue streams for A2B; currently bootstrapped, A2B plans to fund development till 2023; it will explore capital raising in 2024 depending upon how much traction it receives in 2023.

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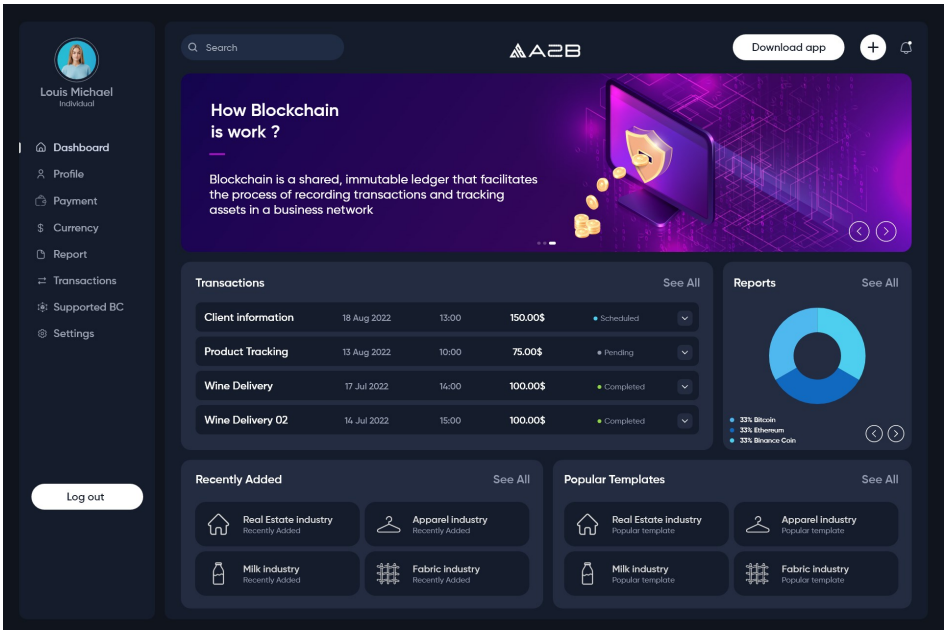
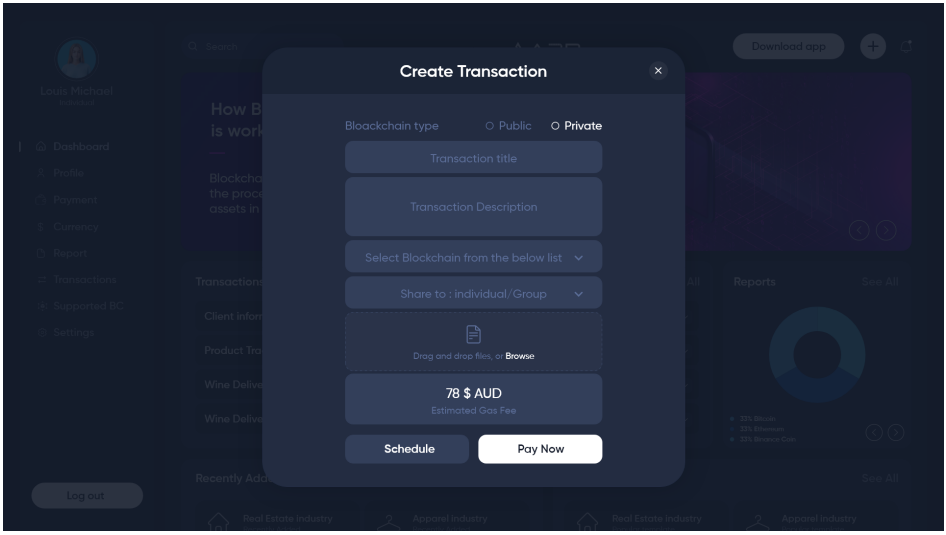
8. Appendix - A2B Screenshots

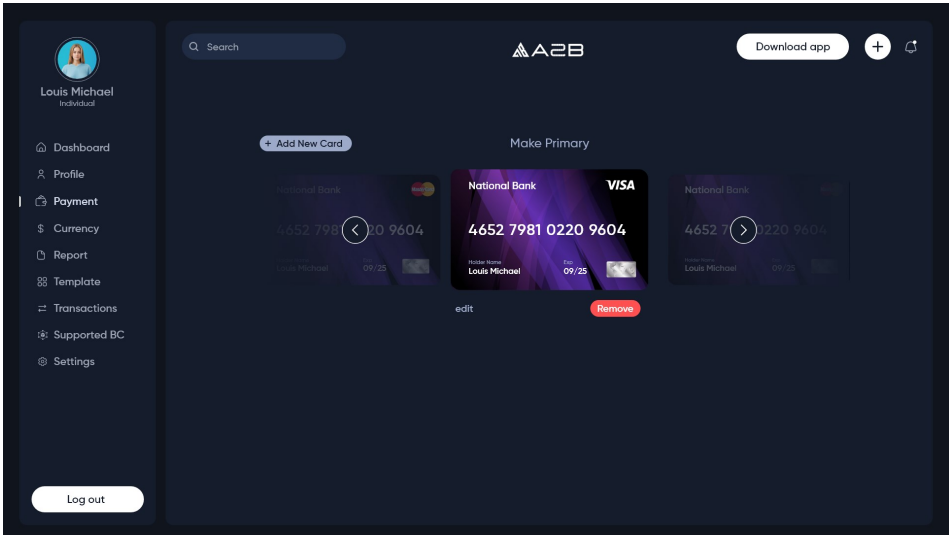
A2B Dashboard Screen



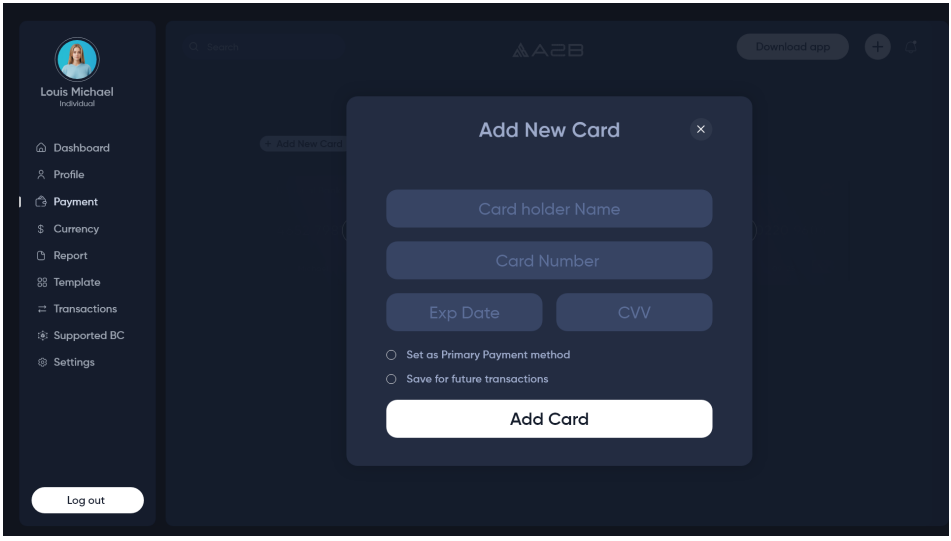
A2B Create Transaction



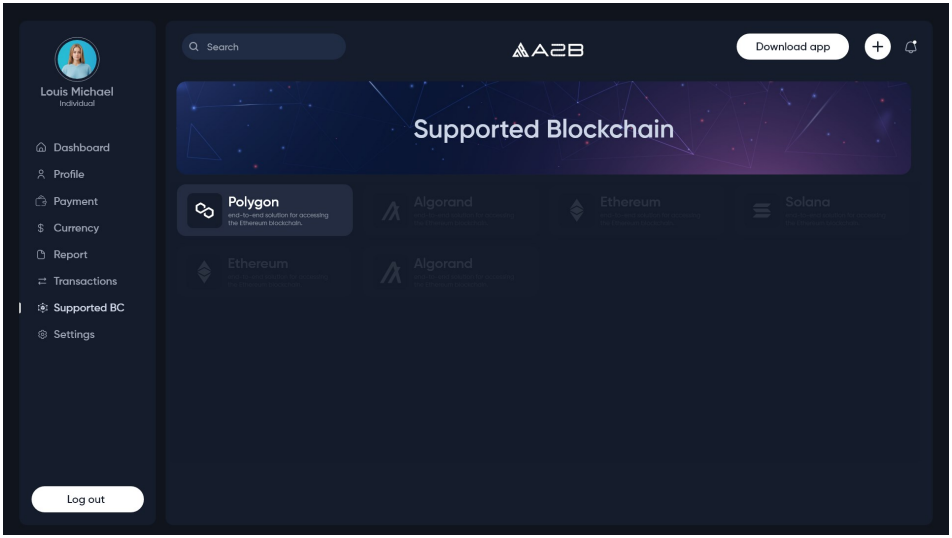
A2B Payment Credit Cards



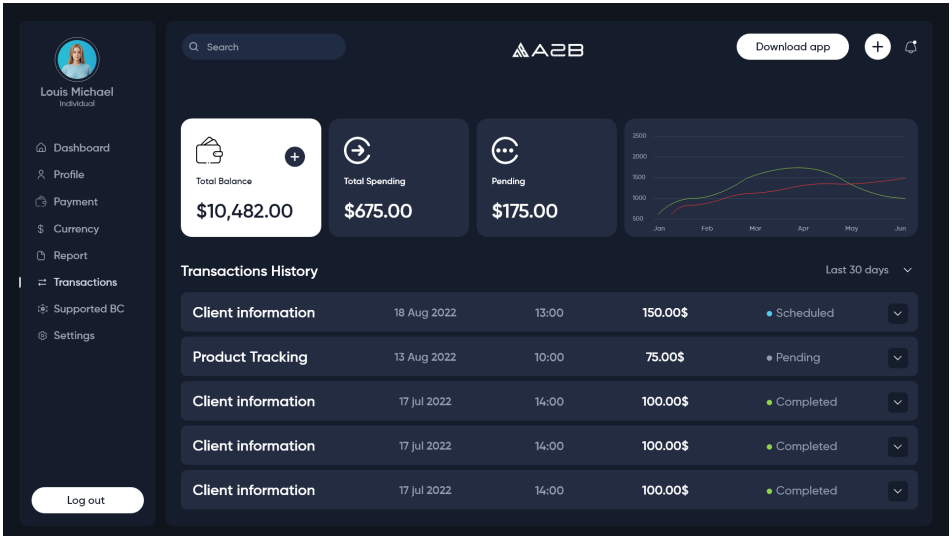
A2B Add New Card



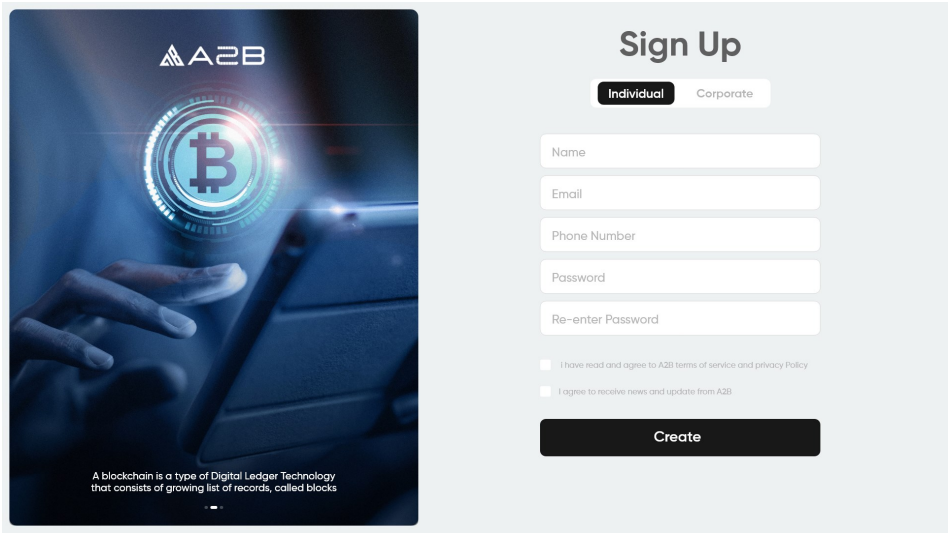
A2B Supported Blockchains



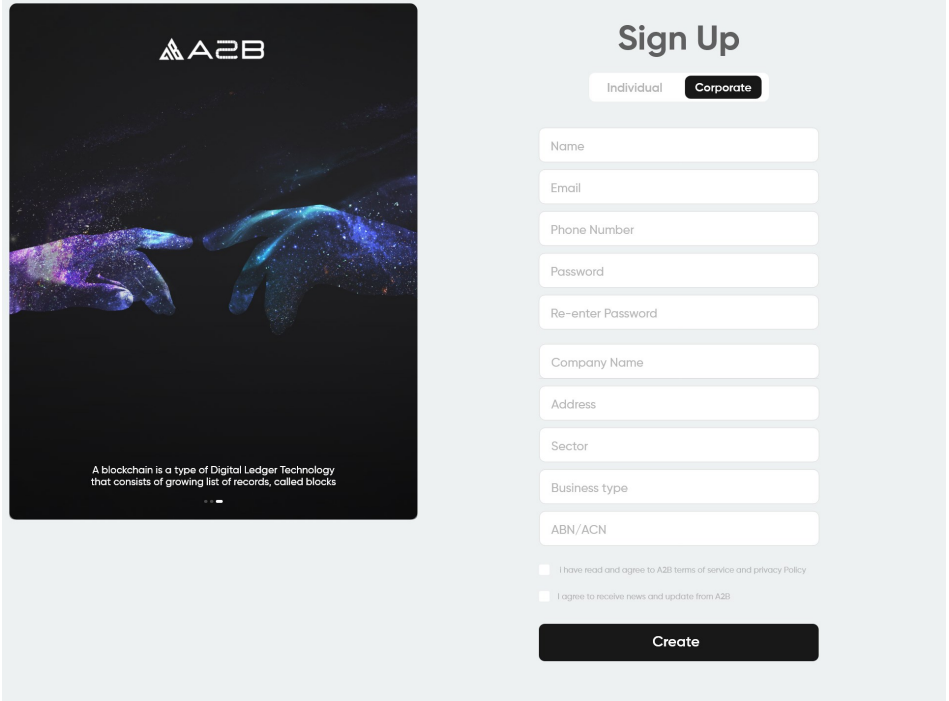
A2B Transaction History



A2B Individual Signup



A2B Corporate Sign up



A2B Email Verification

Email Verification

please enter the 6-digit verification code that was
sent to name@gmail.com
verification code valid for 30 minutes

Verification code

Didn't get the code? Resend the code

Submit

A2B Phone Verification

Phone Verification

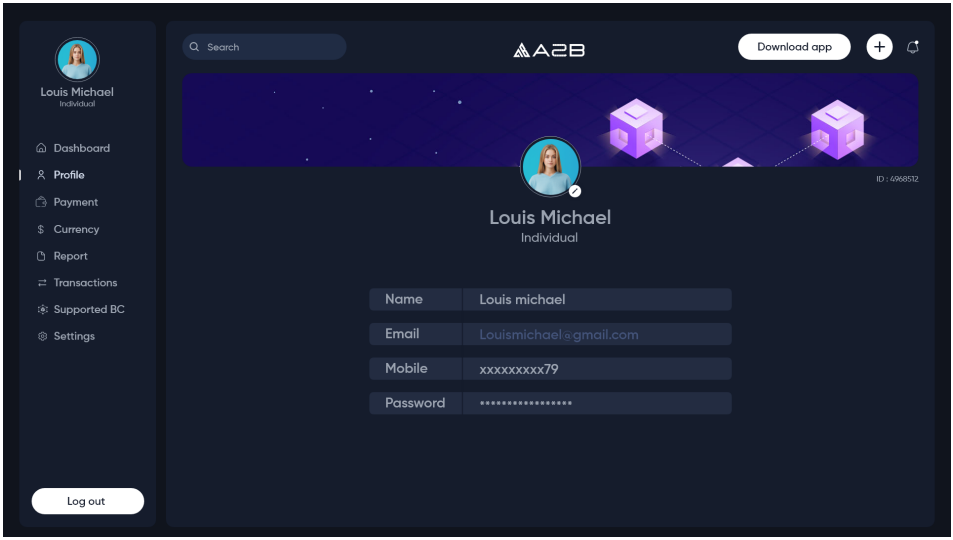
please enter the 6-digit verification code that was
sent to xxxxxxxx123
verification code valid for 30 minutes

Verification code

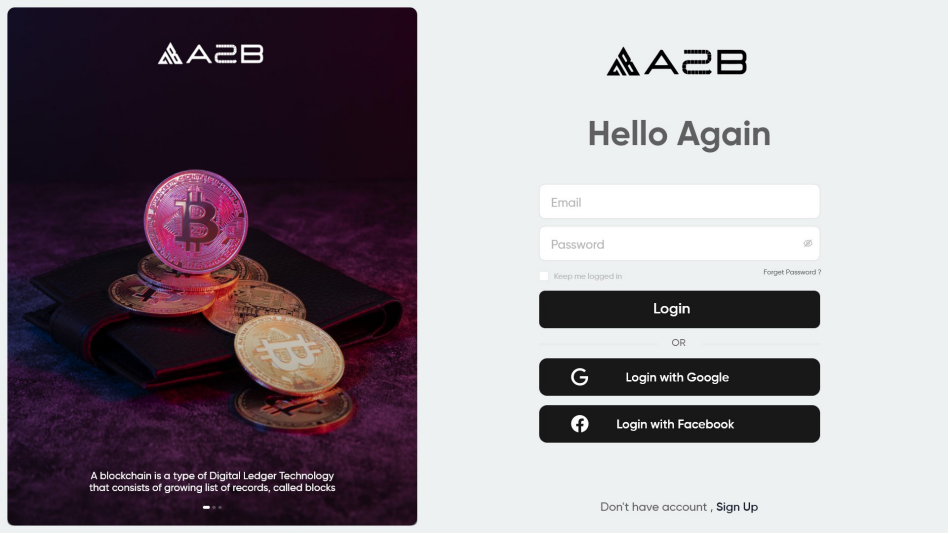
Didn't get the code? Resend the code

Submit

A2B User Profile



A2B Login



Dennis Moore AM MA *(Cantab)* FACS

Dennis Moore was born in NSW in 1937. He was educated on scholarships at The King's School, Parramatta where he was captain and dux of the school, and at Queens' College Cambridge where he graduated in 1958 in mathematics.

After a period with commerce and industry in computing and operations research in NSW, he pioneered computing in Western Australia, installing the first computer at UWA in 1962. He introduced WA's first computing qualification – the DipNAAC – at UWA. In 1965, he was responsible for the purchase and installation of the DEC PDP-6. This was the world's first commercial installation of a time-shared computer and Australia's first high precision graphics device.

He was foundation president of the WA Computer Society, which later merged with the Australian Computer Society, becoming the first WA Branch Chairman. He was Director of the Western Australian Regional Computing Centre in the sixties and seventies. This provided computing services to CSIRO and State Government Departments as well as the University.

He was executive director of Government Computing for WA from 1978 to 1984. During this period he promoted the development of inter-departmental systems and was closely associated with the development of the WA Land Information System and the WA Technology Park. This was followed by a two year stint managing a computer company in Malaysia, including a consultancy to the Sarawak Government.

He then undertook research in RAN DATA, an encryption company which he had helped establish, and was appointed foundation Head of School of Computing at Curtin University of Technology in 1987. From 1998 to 2002 he was Director of Academic Planning at Curtin. From 1995 to 1999 he was Chair of the State Government's Information Policy Council.

Dennis Moore was elected a Fellow of the Australian Computer Society in 1970 and was made a Member of the Order of Australia for services to Information Technology in 1997. He retired in 2002 and was made an Honorary Life Member of the ACS in 2014.

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