

# A permissioned blockchain prototype facilitating banking record interoperability

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# Declaration

Test text

# **Abstract**

# **Acknowledgements**

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# **Chapter 1**

## **Introduction**

# **Chapter 2**

## **Background Literature**

### **2.1 Defining Blockchain Technology**

#### **2.1.1 Background**

Blockchain technology reaches back far further than the inception of Bitcoin, and we can see some of the first implementations stretching back as far as 1998. In a 1998 white paper titled bmoney we see some of the earliest building blocks of cryptocurrencies and the adoption of blockchain technologies (Dai 1998).

### **2.1.2 Types of Blockchains**

**Permissionless**

**Permissioned**

**Consortium**

### **2.1.3 Blockchain Components**

**Cryptographic Hash Functions**

**Transactions**

**Asymmetric-Key Cryptography**

**Addresses**

**Ledgers**

**Blocks**

**Chaining Blocks**

### **2.1.4 Consensus**

**Proof of Work (PoW)**

**Proof of Stake (PoS)**

**Delegated Proof of Stake (DPoS)**

**Proof of Elapsed Time (PoET)**

**Practical Byzantine Fault Tolerance (PBFT)**

### **2.1.5 Smart Contracts**

## **2.2 Organisational Interoperability**

## **2.3 Facilitating Interoperability using Blockchain Technology**

## **2.4 Blockchain Technology in Banking Organisations**



## **Chapter 3**

# **Ethical and Professional Considerations**

## **Chapter 4**

### **Evaluation**

# **Chapter 5**

## **Learning**

## **Chapter 6**

## **Conclusion**

# Bibliography

Dai, Wei (1998). *Bmoney*. URL: <http://www.weidai.com/bmoney.txt> (visited on 08/18/2022).

# **Appendix A**

## **Appendices**