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Ligate

The future of Lay Away

White Paper

Introduction

The Pawn (Lay Away) business has been around for millennia it is one of the earliest concepts in finance children learn when growing up. Despite this as an industry it has not evolved very much from its basic premise or implementation. The advent of blockchain technology which provides publicity, immutability, decentralization and consensus based on open internet protocols, heralds the beginning of an evolution in the concept, application and implementation of lay away.

The problems in Pawn

In spite of its antiquity the pawnbroking industry is still today fraught with many issues. Some of these include predatory lending, unfair trading practices such as withholding customer assets despite loan completion, and most concerningly grossly undervaluing of borrower assets with a blatant disregard for borrower protections as enshrined in consumer legislation. All this results in an unsavoury and poor borrower experience.

Burdened by these challenges and market inefficiencies, the global pawn industry rose to USD\$42 billion dollars in 2019 and is expected to grow by a further 2% per annum roughly USD\$840 million dollars in 2020. The UK pawn market accounts for GBP£300 million pounds in lending over a customer base of 350,000 annually, with average loans of GBP£300 on an average loan to asset value of 50% and an average APR of 120%.

For their troubles Pawnbrokers are also plagued by issues such as being exploited for criminal purposes e.g. offers of stolen goods or being used for organised money laundering. The tools

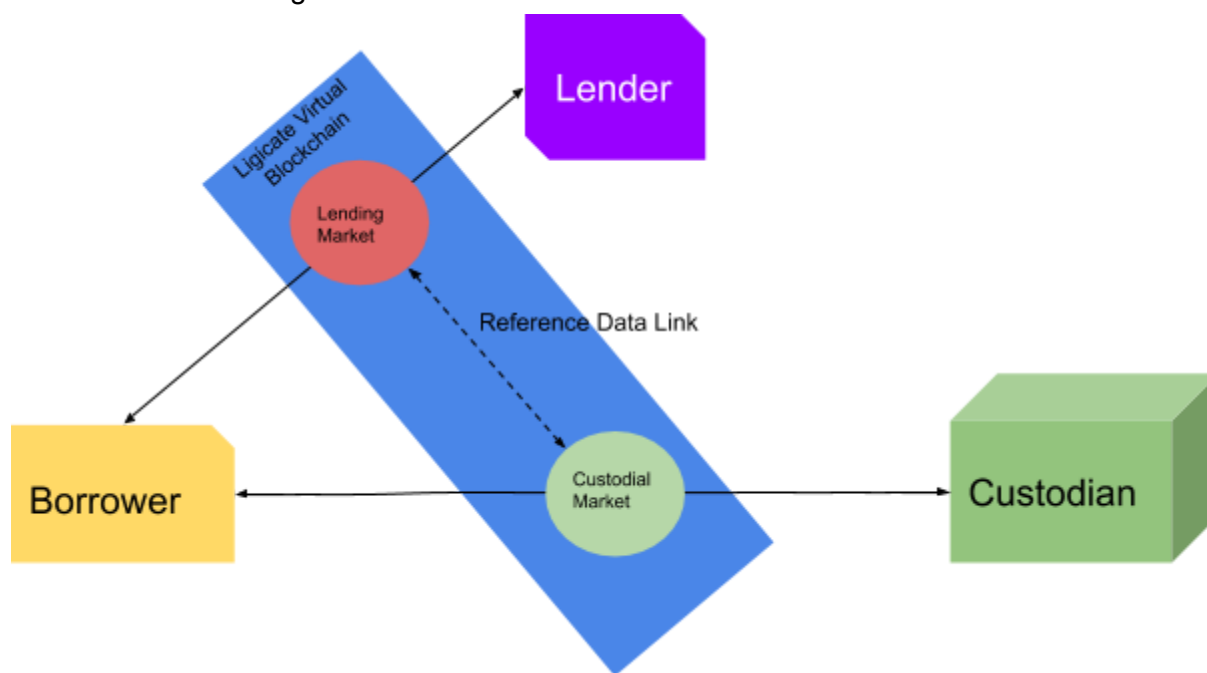


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and the ability to prove ignorance and/or innocence on the part of the broker are severely limited.

Enter Ligate

Ligate is a public, blockchain enabled, decentralized mechanism for executing a more efficient and impartial model of lay away. Based on Open Digital Commerce principles of open markets, open transactions and open data, Ligate achieves a new way by separating and decentralising the roles and responsibilities in the layaway process. Ligate introduces the concept of independent custody tied to devolved asset management on the blockchain. The Ligate model is described in the diagram below:



All the transactions between the borrower, custodian and the lender are supported by the Ligate Virtual Blockchain, which is currently built on the Algorand Blockchain Platform. By separating custody of the borrower's asset from the lender, and providing a token representing the asset called a Ligature, the Ligate platform establishes a system based trust envelope. Within this envelope the Ligature can then be exchanged for loan and repayments managed by smart contract. The Reference Data Link between the Custodial and Lending markets ensures that the asset can only be released by the Custodian on presentation of the Ligature by the appropriate party.

Independent custody also introduces several advantages not readily available to pawnbrokers today. Without having to take custody of the borrower asset, the number of loans the layaway provider can issue is limited only to the ability to lend. This compared with the situation today



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whereby a pawnshop owner has to ensure they have enough space in the shop to store and secure assets that they might loan against before issuing a loan. The use of a Ligature also provides the Lender with the ability to package and “sell” loans, a feature found in more advanced financial markets.

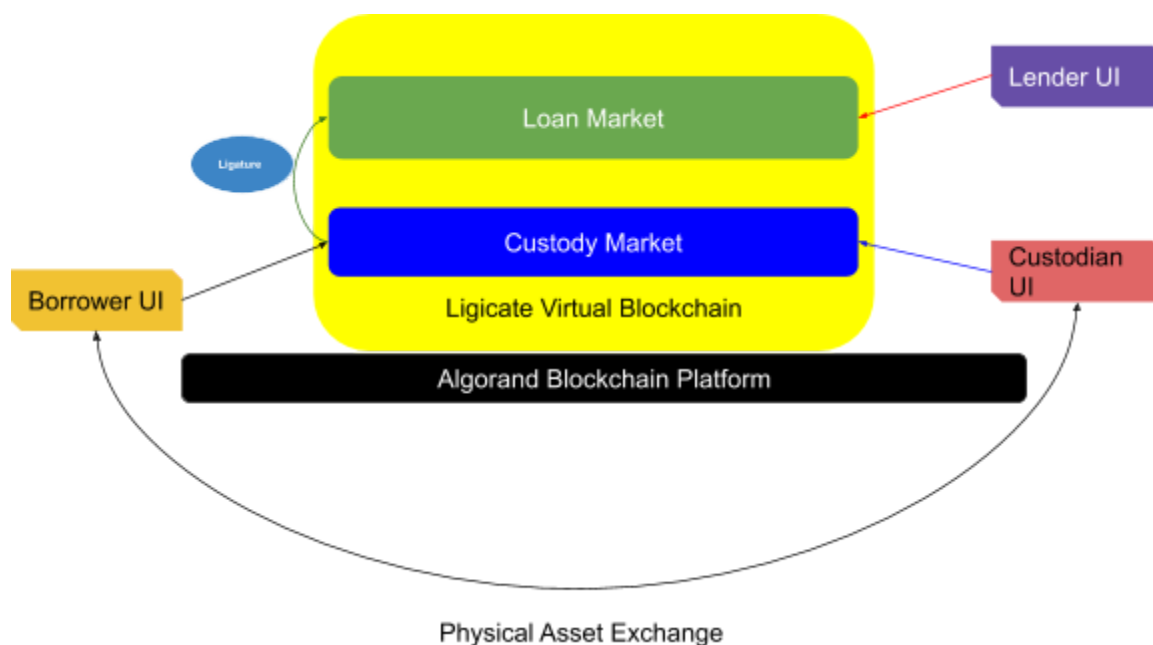
The Technology

Ligate is built on the Algorand Blockchain platform. This platform enables the quick and easy creation of a Ligature which is a representation of the asset in custody without the need to establish an explicit smart contract. This allows each custodian to be issued with a unique set of Ligatures which can be readily tracked and administered.

The Ligate Virtual Blockchain is built on top of the Algorand platform and provides the execution context for the Ligate Markets. This provides for independently verifiable transactions between the borrower, custodian and lender. This also facilitates any future regulatory or law enforcement audits.

This unique ability enables each Ligate party to manage its risk and exposure when entering into an agreement as well as enabling independent regulatory oversight with respect to loans terms, assets and repayments.

The high level design of Ligate on the Algorand platform is described in the diagram below:





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Ligate provides independent web UIs for each Ligate party, enabling role focus in a decentralized context.