



**MOBI**

Building the  
**Web3 Economy**

# FINANCE, SECURITIZATION, & SMART CONTRACTS

B U S I N E S S   W H I T E   P A P E R

June 2021

**MOBI FSSC0001/WP/2021 Version 1.2**

**Finance, Securitization, and Smart Contracts (FSSC) Working Group**

© 2024 MOBI. All rights reserved

# TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

© 2024 MOBI

## 1. Definitions.

“**License**” shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

“**Licensor**” shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

“**Legal Entity**” shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, “control” means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

“**You**” (or “**Your**”) shall mean an individual or Legal Entity exercising permissions granted by this License.

“**Source**” form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

“**Object**” form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

“**Work**” shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

“**Derivative Works**” shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

“**Contribution**” shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, “submitted” means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as “Not a Contribution.”

“**Contributor**” shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

**2. Grant of Copyright License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

**3. Grant of Patent License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted.

If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

**4. Redistribution.** You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- a. You must give any other recipients of the Work or Derivative Works a copy of this License; and
- b. You must cause any modified files to carry prominent notices stating that You changed the files; and
- c. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- d. If the Work includes a “NOTICE” text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

**5. Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

**6. Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

**7. Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an “AS IS” BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

**8. Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

**9. Accepting Warranty or Additional Liability.** While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

Licensed under the Apache License, Version 2.0 (the “License”). You may not use this file except in compliance with the License.

**END OF TERMS AND CONDITIONS**

# INTRODUCTION

This standard was issued by MOBI and its members. MOBI is a nonprofit alliance of many of the world's largest vehicle manufacturers, startups, governments/transit agencies, NGOs, financial institutions, e-mobility providers, consultancies, suppliers, logistics providers, and more working to create standards and build the Web3 digital infrastructure for connected ecosystems and IoT commerce.

MOBI is creating standards for trusted self-sovereign data and identities (e.g. vehicles, people, businesses, things), verifiable credentials, and cross-industry interoperability, with the goal of making transportation more efficient, equitable, decentralized, and circular, all while preserving the data privacy of users and providers alike. MOBI is technology and ledger agnostic. The work of preparing standards is carried out through MOBI Working Groups. Each member of the consortium interested in a subject for which a Working Group has been established has the right to be represented and participate in that Working Group.

The procedures used to develop this document and those intended for its further maintenance are described in the working group charter. In particular, the different approval criteria needed for the different types of MOBI documents should be noted. Approvals of MOBI Steering Committee and Board of Directors are obtained upon the final document release. Attention is drawn to the possibility that some of the elements of this document may be the subject of intellectual property rights. In accordance with MOBI IPLR policy, a 60-day review period is provided to the MOBI community to disclose any and all IP matters pertaining to this standard. MOBI shall not be held responsible for identifying any or all such rights. Details of any IP rights identified during the development of the document will be in the Introduction upon public release of this standard.

Any trade name used in this document is provided for the convenience of users and does not constitute an endorsement. The Working Group responsible for this document is the Finance, Securitization, and Smart Contracts (FSSC) Working Group. Sincere thanks and appreciation are extended to those who contributed their unique insights to the FSSC White Paper.

## CONTACT

[connect@dlt.mobi](mailto:connect@dlt.mobi)  
[www.dlt.mobi](http://www.dlt.mobi)

## **AUTHORS**

Howard Altarescu, Orrick  
Chris Ballinger, MOBI  
Joe Bannon, KAR Global  
Michelle Corson, On the Road Lending  
David Eddy, D.E. Consulting  
Josh Fodale, Ford Credit  
Griffin Haskins, MOBI  
Tu Le, USAA

Phil Masi, BMW Bank,  
S Chris Min, Orrick  
Daniela Novaro, Reply  
Eric Pilat, Altaventure  
Andrew Smith, TQ Tezos  
Tram Vo, MOBI  
Marguerite Watanabe, MOBI

## **REVIEWERS**

Howard Altarescu, Orrick

Anthony Salamone, RouteOne

## **CONTRIBUTORS**

Joe Bannon, KAR Global  
Toby Box, Quant Network  
Anne-Sophie Cartray, ConsenSys  
Michelle Corson, On the Road Lending  
David Eddy, D.E. Consulting  
Josh Fodale, Ford Credit  
Don Ho, Quantstamp  
Timo Jaeger, Reply  
Tu Le, USAA  
Phil Masi, BMW Bank

S. Chris Min, Orrick  
Charlie Moore, Global Debt Registry  
Daniela Novaro, Reply  
Eric Pilat, Altaventure  
Dan Simerman, IOTA  
Andrew Smith, TQ Tezos  
Jamie Solomon, Accenture  
Michele Tellarini, Reply  
David Wattebled, Quant Network

## **MOBI TEAM**

Tram Vo, CEO + Founder  
Grace Pulliam, Communications Manager  
Chris Ballinger, Advisor + Founder  
Andreas Freund, CTO  
Marguerite Watanabe, Advisor

Rajat Rajbhandari, Head of Standards & Certification  
Griffin Haskins, Finance Lead  
Matt Shi, Supply Chain Lead  
Betul Kahya, Mobility Lead

# TABLE OF CONTENTS

Executive Summary .....	1
List of Acronyms .....	2
Glossary of Terms .....	2
Objective of this Document .....	3
The FSSC Standards .....	4
The FSSC Use Cases .....	6
Conclusion .....	16
Bibliography .....	17

## EXECUTIVE SUMMARY

Our financial system - including banking, auditing, accounting, and many other components that can be characterized as “trust services” - underlies markets for goods and makes all non-barter trade possible. The financial system is a network of trust services that together permit markets to function efficiently. These trust services are quite expensive - transaction fees alone are estimated to account for almost 1% of global economic activity.<sup>1</sup>

*The vehicle finance ecosystem has many components that can be characterized as trust services. Blockchain has the potential to radically improve, or even fully replace, many of these trust services.*

In the US, almost 90% of new car purchases and more than 50% of used car purchases are financed.<sup>2</sup> Vehicles on dealer lots are likewise financed. Most of these retail and commercial finance contracts are pooled, packaged into Asset Backed Securities (ABS), and financed by third-party investors in a process called securitization. Blockchain has the potential to reduce risks and costs associated with the financing of vehicle loans, including the securitization process, improve visibility of asset values, and replace the trust services currently in place.

Blockchain and related ledger technologies have the potential to make the trust service function significantly more efficient, transforming the role of financial intermediaries and delivering value to downstream businesses and consumers. Many processes within the vehicle and mobility industry will benefit from the standardization and digital efficiencies that blockchain enables.

*MOBI's FSSC Working Group was created to accelerate the impact of blockchain and related technologies on many areas in the vehicle finance ecosystem. The FSSC Working Group considered both B2B and B2C use cases in its investigation.*

MOBI's Finance Securitization and Smart Contract Working Group (FSSC) was created to accelerate the adoption and value creation from blockchain and related technologies, including smart contracts in the mobility ecosystem as applied to consumer and dealer floorplan lending and financing.

This whitepaper will overview a variety of use cases that were considered by the FSSC WG. The Working Group considered both B2B (business-to-business) and B2C (business-to-consumer) use cases, and each section of this paper focuses on B2B and B2C use cases separately.



<sup>1</sup>“The Social and Private Costs of Retail Payment Instruments: A European Perspective”, European Central Bank Ecosystem, September 2012, <https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp137.pdf>

<sup>2</sup>“Automotive Industry Insights Finance Market Report Q4 2020”, Experian, March 2021, <https://www.experian.com/content/dam/marketing/na/automotive/quarterly-webinars/credit-trends/2020-quarterly-trends/v2-2020-q4-state-automotive-market.pdf>

## LIST OF ACRONYMS

---

ABS	:	Asset-Backed Securities
AML5	:	Anti-Money Laundering Directive
API	:	Application Programming Interface
CIP	:	Customer Identification Program
CDD	:	Customer Due Diligence
ESG	:	Environmental, Social, and Corporate Governance
EV	:	Electric Vehicle
GDPR	:	General Data Protection Regulation
ICP	:	Inventory Control Personnel
KYC	:	Know-Your-Customer
OEM	:	Original Equipment Manufacturer
SPO	:	Second Party Opinion
V2X	:	Vehicle-to-Everything

## GLOSSARY OF TERMS

---

This section contains the definitions of all technical and specific terms used throughout this document.

**Application Programming Interface (API):** An Application Programming Interface is defined as a specification of possible interactions with a software component, allowing two applications to interact with each other. It defines the kinds of calls or requests that can be made, how to make them, the data formats that should be used, the conventions to follow, etc.

**Asset-backed securities (ABS):** An Asset-Backed Security is a type of financial investment that is collateralized by an underlying pool of assets—usually ones that generate a cash flow from debt, such as loans, leases, credit card balances, or receivables. It takes the form of a bond or note, paying income at a fixed rate for a set amount of time, until maturity. For income-oriented investors, asset-backed securities can be an alternative to other debt instruments, like corporate bonds or bond funds.

**Blockchain:** A blockchain is a growing list of records, called blocks, that are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a cryptographically secure tree structure such as a Merkle tree).

**Distributed Ledger Technology (DLT):** Distributed Ledger Technology enables consensus about the state of replicated, shared, and synchronized digital data geographically spread across multiple sites, countries, or institutions. A peer-to-

peer network is required as well as consensus algorithms to ensure replication across nodes is undertaken. Blockchains are the most well-known example, though general practical byzantine fault-tolerant systems fall under this category as well.

**General Data Protection Regulation (GDPR):** A legal framework that sets guidelines for the collection and processing of personal information from individuals who live in and outside of the European Union (EU).

**Know-Your-Customer (KYC):** Know Your Customer is a standard used in the investment and financial services industry to verify customers and know their risk and financial profiles.

**Original Equipment Manufacturer (OEM):** An Original Equipment Manufacturer is an organization that makes devices from component parts either made internally or sourced from other organizations.

**Vehicle-to-everything (V2X):** Vehicle-to-Everything generally encompasses vehicle-to-vehicle(V2V), vehicle-to-infrastructure(V2I), and vehicle-to-pedestrian (V2P) communications, collectively known as “V2X.”

## OBJECTIVE OF THIS DOCUMENT

The objectives of this white paper are:

- » Outline (at a high level) a variety of B2B (business-to-business) and B2C (business-to-consumer) use cases that were considered by the FSSC WG:
  - » Know Your Customer (KYC) Requirements
  - » Dealer Floorplan Financing
  - » Dealer Floorplan Auditing
  - » A Blockchain Foundation for Securitization
  - » Verifiable Credentials in the Loan Application Process
  - » Digitization of Manual Processes with Smart Contracts
  - » Loan Servicing
  - » Issuance and Investor Impact Reporting for Green Bonds
  - » V2X and Securitization
  - » Non Risk-Based Credit
  - » Fractional Ownership of Mobility Assets
- » Identify value creation from blockchain and related technologies, including smart contracts in the mobility ecosystem as applied to consumer and dealer floor plan lending and financing.

## THE FSSC STANDARDS

---

*While connected vehicles offer vast data potential, the mobility industry is hindered by siloed systems and costly integrations, limiting scalability and efficient data sharing.*

Modern vehicles and trucks are increasingly connected, intelligent, endowed with large amounts of computing power, and have a wide range of sensors that can capture data about the vehicle and its surroundings. Connected vehicles are beginning to dominate global roadways, and the mobility industry has quickly focused on how newly available data from those vehicles can be used to power exciting new applications. However, there are some major barriers to fully actualizing the value of these developments. Most notably, the organizations and companies that would utilize vehicle data operate entirely within data silos, and integrating their closed systems with external partners or data sources necessitates building costly integrations every time. As a result, any coordination or data sharing occurs bilaterally, but such a one-to-one approach does not lend itself to scalability, transparency, openness, or economic efficiency.

Executing multi-party applications requires that each party is able to communicate and coordinate actions. In other words, multi-party systems require that each participant's system have a degree of interoperability. Truly exciting advances become possible when we are able to seamlessly and easily share data with each other, with the necessary shared functionality assured. These abilities are called data interoperability and functional interoperability; both are difficult to achieve at scale. Within the vehicle finance ecosystem, there is very little interoperability between the siloed data systems of the participants. Lenders, rating agencies, servicers, OEMs, vehicle dealers, and other organizations operate almost entirely with a siloed model, and most still rely heavily on trusted third parties to mediate and manage multiparty processes.

The staying power of trusted third parties is no accident - financings of all kinds are subject to regulation, scrutiny, and potential liability, often necessitating the use of trust services. For example, in vehicle loan securitizations, a third party is often required to carry out various functions, including servicing and trustee responsibilities such as receiving funds and distributing payments to various parties according to a waterfall structure. Such a third party is providing a trust service.

*Blockchains provide a trust layer, where the trust arises from the immutability and transparency of data on the chain, as well as the shared governance of distributed ledger systems.*

Blockchain, ultimately, provides a trust layer, in that it provides a secure avenue for stakeholders to authenticate each other's identity, immutably record their secured information, and securely expose such information to other permissioned stakeholders. For example, instead of using a costly third party, a smart contract can disburse funds according to a pre-defined and agreed upon waterfall structure. All parties can trust in the accuracy of the payments, as everything is transparent on chain. Ultimately, the ability to trust arises from the immutability and transparency of data on the chain and the shared governance of distributed ledger systems. Distributed ledgers, with standards enabling necessary data and functional interoperability, provide a necessary, foundational layer for creating multi-party applications on top. However, breaking down these silos requires more than just technology - it requires community buy-in and coordination.

*The FSSC Standard prescribes core services and logical schemas for data sharing between vehicle finance stakeholders with the goal of achieving functional and data interoperability.*

Interoperability can only be achieved when there are common standards for core infrastructure – identity, data, and functions. The FSSC Standard prescribes core services and logical schemas for the sharing of data between vehicle finance stakeholders. In other words, the FSSC Standard is a foundational step towards achieving data interoperability and functional interoperability for multi-party financial applications in mobility ecosystems. This allows for the proliferation and growth of multi-party solutions, enabled by the frictionless flow of data between these silos.

Multi-party applications, as the name implies, involve multiple parties interacting in a shared system to achieve a mutually beneficial outcome. Therefore, it necessarily follows that systems supporting multi-party applications require an existing set of parties to use those systems. In other words, multi-party systems rely on network effects to succeed, and indeed, their value is tied to the level of adoption and the number of stakeholders. The diversity of features and range of feasible use cases of a distributed ledger system are thus married to its network effects. Such network effects grow as adoption grows over time.

*The core services and logical schemas prescribed by the FSSC Standard are key for creating and scaling multi-party applications and allowing communication and collaboration between the siloed ecosystems of each vehicle finance stakeholder.*

The FSSC Standard’s main components – core services and logical schemas – provide the structures required for creating and scaling multi-party applications, allowing communication and collaboration between the siloed ecosystems of each vehicle finance stakeholder. Such structures lay the foundation for robust, secure data sharing and value transacting at scale. The FSSC Standard carefully and effectively distinguishes between what sorts of data and functionality must be standard across all implementations, versus what considerations are best left up to the engineers. Standards are much like mobility ecosystems and distributed ledgers, in that they all rely on network effects to provide value. The FSSC Standard enables a compelling array of use cases, and those use cases will grow in number, complexity, and value as adoption grows over time.

*Distributed ledger technology provides technological trust structures that can replace many third-party intermediaries or processes that require onerous manual verification. These trust structures enable a diverse array of benefits to many varied use cases, which are explored in detail for the remainder of this paper.*

Given the widespread use of various types of trust structures within vehicle finance and securitizations, distributed ledger technology has enormous potential to quickly disrupt many traditional processes. Distributed ledger technology provides technological trust structures that can replace many third-party intermediaries or processes requiring onerous manual verification. Therefore, the trust layer that is provided by distributed ledger technology can quickly provide value within a wide range of use cases within vehicle finance and securitization. The remainder of this document provides an overview focused on explaining and evaluating these use cases and their benefits.



# THE FSSC USE CASES

## KNOW-YOUR-CUSTOMER (KYC) REQUIREMENTS

*In both the US and the EU, financial institutions must comply with KYC/AML regulations in order to avoid facilitating money laundering, terrorism financing, or other criminal activity.*

In the U.S., the adoption of the Patriot Act made it incumbent upon banks and other lenders, including vehicle dealers, to verify the identity of borrowers (their customers) to avoid facilitating money laundering, terrorism financing, or other criminal activity. The KYC requirement applies to all loans, no matter the size. Financial institutions must comply with two key components of Title III of the Patriot Act – the Customer Identification Program (CIP) and Customer Due Diligence (CDD).<sup>3</sup> In the European Union, anti-money laundering requirements are included in the 5th Anti-Money Laundering Directive (AMLD5), and the specific provisions on electronic identification and trust services are covered in Regulation (EU) No 910/2014 (the “eIDAS Regulation”).<sup>4</sup>

*Each bank has the discretion to use whatever process it chooses to verify the identity of a customer. Financial institutions are required to report if they have reason to suspect criminal activity. These processes are expensive for banks and cause friction with customers.*

Each bank has the discretion to use whatever process it chooses to verify the identity of a customer and may require different information. At a minimum, an individual customer is ordinarily asked to provide government-issued identification, such as a passport or driver’s license (or both). If the customer is a business, the customer may be asked for filed formation documents and/or references. In both cases, financial institutions will often review information from a credit reporting agency. There is no standard, uniform approach for establishing a customer’s identity.

Financial institutions are required to report if they have reason to suspect potential criminal activity, including reporting on activities that look high risk, such as frequent wires and international transactions. The process is expensive for banks and causes friction with customers.

*Siloed business lines within and across institutions and jurisdictions lead to redundant processes and a poor user experience. The inability of banks to reference a common dataset reduces the efficiency of the diligence process.*

Many banks are running on computing systems with inefficient data capture methods. Siloed business lines within and across institutions and jurisdictions lead to redundant processes and when the customer is required to repeatedly provide the same information, a poor user experience. The inability of banks to reference a common dataset reduces the efficiency of the diligence process, creates ambiguity, and may result in inaccurate conclusions. Reducing or eliminating manual interpretation allows for an enhanced data-driven decision-making process. The ability to augment a customer profile that is accessible to a broad network of financial institutions will reduce risk, can enhance the customer experience, and bring down compliance costs.

*The objective of this use case is to reduce costs that financial institutions incur in complying with KYC regulations by building a standardized approach to a global digital customer identification system.*

Most financial institutions use at least some information from third-party service providers, although the data and information services vary. Enabling systems integration with third-party service providers would reduce repetitive information requests of the customer and would allow for consistent use of independently verified diligence.

<sup>3</sup>“KYC vs. CIP vs. CDD | Know Your Customer Rules and Guidelines”, AdvisoryHQ, accessed April 2021, <https://www.advisoryhq.com/articles/kyc-vs-cip-vs-cdd-know-your-customer-rules-and-guidelines/>

<sup>4</sup>Charles Krier, Katharina Wagener, “eIDAS and AMLD5: A perfect match?”, PayTechLaw, September 2020, <https://paytechlaw.com/en/eidas-and-amld5-a-perfect-match/>

Customers naturally appreciate simple, fast, and seamless journeys. As new relationships are increasingly remote, especially in light of the Covid-19 pandemic, an efficient KYC process should contribute to an improved customer experience in the customer journey for the purchase of a vehicle.

The objective of this use case is to reduce costs that financial institutions incur in complying with KYC regulations by building a standardized approach to a global digital customer identification system. A digital customer ID that is compatible with blockchain technology (and, of course, consistent with applicable privacy laws and regulations in relevant jurisdictions) can be a catalyst to virtually connect silos of KYC diligence systems between institutions across the world.

## DEALER FLOORPLAN FINANCING

*Dealer floorplan financing is a form of inventory financing for a dealer of vehicles and trucks where each loan is secured by a specific vehicle or truck.*

*Lenders often pool loans into ABS transactions. A vehicle ABS is similar to a mortgage-backed security, except that the underlying assets that form the collateral are a pool of loans secured by vehicles purchased and owned by car dealers.*

*Blockchains and smart contracts can enable a dealer to better monitor and manage multiple maturities of the loans financing its vehicles. Alerting dealers to upcoming loan maturities allows the dealer to better coordinate a floorplan financing management strategy.*

Dealer floorplan financing, among other things, is a form of inventory financing for a dealer of vehicles and trucks, in which each loan, or advance against a floorplan credit facility (also known as an “asset-backed loan”) is secured by a specific piece of collateral, i.e., a specific vehicle or truck.

Lenders in the dealer floorplan finance space include commercial banks, captive finance companies (financial institutions owned and operated by original equipment manufacturers or “OEMs”), and specialized lenders in the vehicle wholesale industry, including those owned by wholesale auction companies that lend money to dealers purchasing vehicles at such auctions.

These lenders often pool these loans into ABS transactions. An ABS is an investment security—a bond or note—which is backed by a pool of loans, in this case floorplan loans secured by new and used cars. A vehicle ABS is similar to a mortgage-backed security, except that the underlying assets that form the collateral are not residential mortgage loans secured by residential properties, but rather, in the dealer floorplan securitizations, a pool of loans secured by vehicles purchased and owned by new and used car dealers.

Blockchain and smart contracts can enable a dealer (a borrower) to better monitor and manage multiple maturities of the loans financing its vehicles. For dealers, a common mistake is a failure to track loan maturities and to realize that many of these loans mature at the same time – although each vehicle could have a vastly different sales cycle. Smart contracts can be created to alert dealers to upcoming loan maturities and to better enable the dealer to coordinate a floorplan financing management strategy with its vehicle sales strategy and expectations.



## DEALER FLOORPLAN AUDITING

*The primary purpose of a floorplan audit is to reconcile dealer inventory used as collateral for the floor plan loan to reduce the lender's risk. The main objective is to capture the VIN number and to confirm the presence of the vehicle at the dealership. Gathering this information accurately represents a significant operating cost.*

The primary purpose of a floorplan audit is to reconcile dealer inventory used as collateral for the floor plan loan to reduce the lender's risk. The main objective is to capture the VIN number and to confirm the presence of the vehicle at the dealership. Gathering this information and accurately reporting it in a trustworthy fashion represents a significant operating cost. Floorplan audits are intended to identify fraud, intentional or otherwise, by dealers, including double-flooring (when a dealer takes out a line of credit with two lenders on the same set of vehicles); and a dealer has sold vehicles out of trust (SOT) (where a dealer fails to repay an inventory advance and sells the underlying vehicles), among others.

*Distributed ledger technology can be used to eliminate the cost of a dealer floorplan audit by capturing data elements like the VIN, GPS, and time of day. By leveraging the availability of verifiable data, the onerous manual verification can be avoided entirely.*

Audit solutions can be evaluated on a spectrum that ranges from simply taking a dealer at their word all the way to a perfectly reliable connected car future with autonomous vehicles reporting their location and condition in real-time. Existing solutions rely heavily on Inventory Control Personnel (ICP). ICPs are either internal employees or those from a third-party company contracted by the lender to confirm the relevant details of the financed inventory.

Distributed ledger technology can be used to eliminate the cost of the ICPs with a technical solution that replicates the trust level in the existing system while also providing a pathway for more efficient collection of data in the future. A high degree of trust can be maintained by capturing primary data elements like VIN, GPS, time of day, etc. In addition, metadata can be used to capture second order trust indicators like time between captures, physical movement, distance covered, etc. Lenders, as well as securitization investors, must be able to trust the audit process. Using distributed ledger technology to replicate the audit process, and the ability to reconstruct the source information for audits on demand should increase confidence in the validity of the audit system.

## A BLOCKCHAIN FOUNDATION FOR SECURITIZATION

*Vehicle loan securitizations provide a crucial source of funding and liquidity for the vehicle industry, but they are complex and costly, involving many transaction parties and a vast amount of data.*

Vehicle loan securitizations provide a crucial source of funding and liquidity to the vehicle industry. Securitization transactions, however, can be complex and costly, involving many transaction parties and a vast amount of data that must be obtained, secured, and reviewed multiple times by various intermediaries in each step of the financing process.

*The FSSC WG has identified and compiled a list of data elements commonly required in the securitization of loans. The goal is to improve the efficiency of various multi-party processes involved in securitization.*

The FSSC WG has identified and compiled a list of data elements commonly required in connection with the origination and securitization of loans. The goal is to improve the efficiency of various multiparty processes involved in securitization by creating a common understanding by lenders (as securitizers), the rating agencies, and investors of the data elements required for these processes, and the homogenization of information required from such lenders and considered by rating agencies and investors. Also, the use of common data elements in loan originations can further standardize related securitizations, improving transparency into the underlying loans and liquidity in the markets. Blockchain technology can provide such data in a trustworthy, secure and immutable format, that could result in efficiencies and cost-savings for all parties involved.

*The creation of a common and trustworthy reference architecture allowing multiple stakeholders to expose their data to shared, multi-party applications, can ultimately allow for the reduction or elimination of the need for multiple verifications of data or repetitive due diligence by third parties.*

The creation of a common and trustworthy reference architecture allowing multiple stakeholders to expose their data to shared, multiparty applications, may also provide the opportunity for smaller lenders to sell loans into warehouse facilities. Then, such lenders would be able to utilize securitizations to finance the loans originated, thus providing the benefits of rated securitization financings to lenders for whom such capital market efficiencies may not be otherwise available.

Elimination or reduction of the need for multiple verifications of data by third parties and related due diligence costs may also be possible by putting data on a trusted blockchain. Cost savings from a streamlined securitization process through the use of a single trusted blockchain database would lower the cost of entry for many smaller players in the vehicle securitization industry, giving them access to a valuable funding source.

*A single source of truth can help eliminate the need for paper-intensive processes and additional loan-level diligence at the time of securitization, which diminishes opportunities for fraud or errors.*

Reductions in transaction costs mean that it can be cost-effective to enter the securitization market with a smaller deal size, which can further lower the hurdle for smaller lenders. A single source of trusted data may diminish, if not eliminate, the need to diligence the accuracy of information mined from loan applications, loan agreements, related contracts, and other documents. For example, tracking the underlying vehicles and their associated loans and their ownership is often a paper-intensive process, requiring a time-consuming process of scanning pages, establishing and securing “authoritative” copies, and multiple manual verifications and diligence reviews. Such a process, which is typically conducted manually, is also prone to error, and may present opportunities for fraud. Making relevant data and other information accessible through a single trusted blockchain could help eliminate the need for additional loan level diligence at the time of securitization and diminish opportunities for fraud or errors.

*It is essential that the rating agencies, investors, and other participants in the securitization process have confidence in information made available by the network. Industry wide consensus on how these processes are to be carried out, and what verification looks like, are critical for trustability.*

Smart contracts can also be used to efficiently bundle loans with certain characteristics together for securitization purposes. It is essential that the rating agencies, investors, and other participants in the securitization process have confidence in the information made available by the network. Accordingly, it is also critical that the data attestations be placed on blockchain by a trusted third party or that the accuracy of the data notarized on blockchain be verified by a trusted third party.

Alternatively, the process by which the information is verified and notarized on blockchain can be automated through smart contracts. Or, the lenders can require the source of information to be notarized on blockchain which allows for the digital authentication of the information, which could significantly reduce the reliance on third-party verification. In any case, it may prove useful to have industry-wide consensus on one or more of these processes, including on the parties that would be trusted to verify the accuracy of the information on blockchain derived from the database.



## VERIFIABLE CREDENTIALS IN THE LOAN APPLICATION PROCESS

*A verifiable credential is a set of tamper-evident claims and metadata that cryptographically prove who issued it. They are the electronic equivalent of physical credentials we use today, like drivers licenses. They can be used in many processes within the credit application lifecycle.*

*Verifiable credentials can assist with data authenticity and verifications. A standard vehicle credit application contains many data elements provided directly by the customer. Verifiable credentials can eliminate the manual verification processes that are traditionally employed for those data elements.*

*Verifiable credentials can also help protect customer privacy by reducing or eliminating the lender's need to see and keep copies of personal documents. This helps reduce oversharing of personally identifiable information during the credit application process.*

A verifiable credential is a set of tamper-evident claims and metadata that cryptographically prove who issued it. By storing that cryptographic proof on blockchain, it can be easily accessed for use in various applications and processes. Verifiable credentials are the electronic equivalent of the physical credentials that we all use today, such as plastic cards, passports, driver's licenses, paper credentials, and awards, among others. Verifiable credentials can be utilized in many components of the vehicle credit application process. Some examples are provided below.

Verifiable credentials can assist with data authenticity and verifications. A standard vehicle credit application contains several data elements provided directly by the customer. Some of these data elements, such as annual income amounts, are key pieces of information used in the credit decision process. Today, a variety of (often) manual processes exist to verify an applicant's income. For example, lenders may need to reach out and contact the applicant's employer, in order to confirm their employment status. Lenders may also require copies of pay stubs or previous tax returns. All of these processes are time consuming. Verifiable credentials carried by an applicant could alleviate many of these pain points. For example, a verifiable credential signed by an employer or bank could automatically and authoritatively confirm an applicant's employment status and income level. Such a confirmation could be carried out in mere seconds as the credential is verified against a registry via an Application programming interface (API) call.

Verifiable credentials can also be leveraged to help protect customer privacy. Lenders often acquire and store copies of an applicant's personal documents, such as driver's licenses or other government IDs. Verifiable credentials can reduce or remove the lender's need to see and keep such copies, as the data is passed digitally and its authenticity can be confirmed by the cryptography. In addition, verifiable credentials can potentially leverage cryptographic techniques, such as zero-knowledge proofs, to mask the types of information given to a lender. For example, a credential could prove that an applicant makes more than \$100,000 per year, without giving away their exact income or it can prove that such an applicant graduated with a four-year college degree, without specifying the college or major (which would typically be on a diploma). This can help reduce oversharing of unnecessary personally identifiable information (PII) data in the credit application process.



## DIGITIZATION OF MANUAL PROCESSES WITH SMART CONTRACTS

*Smart contracts can be used to automatically implement conventional contractual arrangements in a securitization and the underlying financing, as well as programmatically execute many processes involved within the securitization or loan.*

*One prime example of where smart contracts can streamline traditional processes is executing the waterfall distributions and reporting.*

*While the initial use of smart contracts is not likely to replace the transaction parties traditionally used, a smart contract that is publicly available and subject to audit by market participants will be able to carry out tasks currently performed by such transaction parties, which could save on diligence costs.*

Smart contracts may be used to automatically implement, without the need for third-party intervention, the conventional contractual arrangements in a securitization and the underlying financing (i.e., the servicer obligations to collect borrower payments and remit such payments to a securitization account, pursue borrowers to collect delinquent payments or to pursue recoveries in defaulted loans, and allocate payments to investors pursuant to waterfall provisions in the relevant agreements).

One prime example of an area in which smart contracts can streamline traditional vehicle finance and securitization is waterfall distributions and reporting. An immutable and time-stamped chronology of borrower payments, and a verified smart contract that provides for the distribution of such payments based on the waterfall, could diminish if not eliminate the need for investors to do monthly payment reconciliations. Smart contracts can securely execute the distribution of interest and principal payments to investors and fees to transaction parties pursuant to the waterfall, without manual allocations, reporting, and wire transfers. Blockchain technology allows for seamless, trusted, and audited sharing of data among all of the participants in the transaction while being assured that the potential for fraud or errors has been diminished, if not eliminated.

A typical vehicle loan ABS transaction produces investor reports on a monthly basis with payment information and loan performance data from a prior month, resulting in a considerable data lag of up to 30 or more days. Smart contracts can track payments, delinquencies, and other performance data on blockchain and make such data available on a real-time basis to all the permissioned actors in a transaction, eliminating the need to rely on stale data and manual processes, increasing transparency for the related securitization.

Smart contracts must, of course, be consistent in all respects with the terms of the related documents and the rating agencies and investors must have confidence that this is the case. The initial use of smart contracts in securitizations is not likely to replace the transaction parties conventionally used, at least until the time when rating agencies and investors have full confidence in such replacements. However, having a smart contract, publicly available and subject to audit by the market participants, could help streamline the diligence process. If the market participants can trust in the integrity of the smart contract being utilized, and the accuracy with which it can perform various tasks that are currently performed by third-party intermediaries, the diligence that is typically necessary to ensure the accuracy of the tasks performed by such intermediaries can be reduced, and can therefore result in both time and cost savings.



## LOAN SERVICING

*Most settlements are not reflected in real time; there is a lag between the time of the payment and when the payment is actually “settled” in the lender’s account. Blockchain allows settlements to happen in minutes, rather than days.*

One of the benefits of distributed ledgers systems is the ability to remove both the friction and costs of intermediaries. Most settlements are not reflected in real time. When a consumer makes a loan payment, there is a lag between the time of payment and the time the payment is actually “settled” in the lender’s account. With blockchain, these settlements can occur in a matter of minutes, rather than days. While this obviously benefits the lender, it can also benefit the borrower, particularly lower-income consumers, whose bank accounts can be more volatile, by avoiding the potential for overdraft fees. These better on-time payment performance metrics can also boost their credit scores.

For cross-border transactions, allowing settlements to be made directly, rather than via existing protocols like SWIFT, can facilitate international lending for consumers in emerging markets. Rather than using correspondent banking and custodial service arrangements, transactions can be settled publicly and transparently.

By removing intermediaries and their associated fees, loan servicing activities have lower transaction costs. The ability to provide transparent and cryptographically secure payment histories can bring down costs by reducing the need for redundant services within portfolio transactions for smaller lenders.

## ISSUANCE AND INVESTOR IMPACT REPORTING FOR GREEN BONDS

*Green bonds are bond issuances that have an environmental purpose and are structured to appeal to ESG investors. Green bond issuances require both pre- and post-issuance evaluation and reporting that ordinary bonds do not.*

Green bonds and their variants are bond issuances that have an environmental purpose and which are structured to appeal to Environmental, Social, and Corporate Governance (ESG) investors. To avoid instances of “greenwashing” – labeling projects that are potentially harmful to the environment as beneficial -- green bond issuances require both pre- and post-issuance evaluation and reporting. For the issuance to be marketable, a Second Party Opinion (SPO) regarding the impact and credibility of the proposed framework in relation to the Green Bond Principles accepted in the ESG marketplace is required. The review includes an evaluation of the intended use of proceeds, the process to evaluate potential projects for eligible sustainability criteria, management of proceeds for compliance with issuer’s Green Bond framework, which outlines their intended green objectives, and reporting on the actual allocation of proceeds and relevant impact metrics.

*The evaluation criteria for these offerings is fairly standardized, so a database schema development within blockchain is a viable option to bring down transaction costs for users.*

Most SPO providers have proprietary systems for capturing and disseminating the pre-issuance SPO, but the evaluation criteria is fairly standardized, so a database schema development within blockchain is a viable option to bring down transaction costs for issuers. For post-issuance reporting, distributed ledger technology offers an immutable and transparent way to demonstrate impact. Standardization of impact reporting is beginning to occur, including by the Partnership for Carbon Accounting Financials, which adopts uniform approaches by asset class. For passenger vehicles, direct emissions from fuel combustion and indirect emissions from electricity generation for EVs can be captured on blockchain and measured in relationship to the targeted reductions stipulated by an issuer in its green bond issuance framework. In-vehicle telematics can

provide much more accurate information on miles traveled and greenhouse gasses emitted (for gasoline-powered vehicles) directly from the vehicle to the blockchain. Electric vehicles (EVs) can report on miles traveled and electricity consumed, which can then be correlated with the emissions generated at the grid level. This kind of real-time impact reporting would enable green bond issuers to efficiently provide a transparent, immutable record of compliance with their stated goals, adding efficiencies to the market.

*There is a great opportunity for blockchain applications to disrupt the real estate transactions space.*

Some lenders have used blockchain in the structure, registration, sale and distribution of green bonds. While some real estate transactions have used tokenization to record ownership transfer (St. Regis Hotel), few parties have thus far used blockchain for payments and settlements.<sup>5</sup> Because securities' issuances require many intermediaries and delayed settlement times, there is great opportunity for cost reduction, investment democratization, and the ability of smaller green bond issuers to enter the marketplace using blockchain.

As green bond issuances become more prevalent, the ability to demonstrate compliance with green bond standards will become a valuable tool.

## V2X AND SECURITIZATION

*With hundreds of millions of connected vehicles on the road worldwide, both OEMs and vehicle owners have access to massive amounts of data, which will only continue to grow over time. This data is valuable and can be monetized in various ways.*

More than 650 million vehicles are already connected to OEMs worldwide. This figure will only increase in the coming years with cars equipped with 4G SIM cards and soon 5G. Thus, massive amounts of data related to vehicle usage will become a potential new source of revenue for OEMs but also for vehicle owners thanks to the General Data Protection Regulation (GDPR) in the EU, which will give these owners a right of ownership and access to data. Information on road and mobility infrastructures, cars and drivers will be available in deferred time and / or in real time due to the advances in connectivity, artificial intelligence, blockchain, and other technologies.

Several players in the vehicle data marketplace already collect the data from certain OEMs and resell it to other OEMs, local mobility authorities, mobility operators and others.

*Thanks to advances in connectivity technologies, vehicles will be able to exchange data between themselves and surrounding infrastructure in real-time. This rapid data exchange and overall data availability can be leveraged within many use cases.*

For real-time data, thanks to 5G and the low transfer latency that this technology offers, it will be possible to exchange information in V2X (connected vehicle-to-everything communication) and in particular between vehicles to improve safety and the driving of semi-autonomous, even autonomous cars and supplying information to DAS-type equipment, for example: exchange of information to avoid a collision in the event of a road accident or a sudden traffic jam, payment for a new road infrastructure which will be financed on the basis of its use per kilometer by motorists, etc.

Vehicles equipped with an on-board hard-wallet will be able to monetize in real time this information transmitted peer to peer thanks to the execution of smart

<sup>5</sup>Robert Hackett, "Ritzy Aspen Hotel Sells Real Estate on Blockchain with Indiegogo's Help", Fortune, August 2018, <https://fortune.com/2018/08/23/hotel-real-estate-aspen-blockchain-ethereum-st-regis-indiegogo/>

*Vehicle wallets will be critical to monetizing telematics data in real-time, as they will be able to execute payments associated with transacting that data. Moreover, smart contracts will enable new road and infrastructure pricing systems.*

contracts giving payment orders and making financial settlement. These smart-contracts will distribute payments between the various stakeholders of the vehicle and data infrastructure according to the stipulations of the agreements integrated into the smart-contracts. In this model, all stakeholders, OEMs, vehicle owners, data infrastructures, and others are encouraged to cooperate according to this model of intelligent “coopetition”. This model makes it possible to avoid recreating data oligopolies as has been done on the Internet with Google, Apple, Facebook, and others.

In addition, smart contracts will make it possible to isolate revenues and thus the possibility of financing of new road and mobility infrastructures, including through securitizations.

*The combination of fast vehicle connectivity, easily communicable geolocation, and secure identities will allow for micro-tolling and dynamic pricing. With micro-tolling providing predictable cash flows, those revenue streams can then be securitized, ushering in a massive new asset class.*

Global transportation infrastructure is expected to require over \$94T in investment between 2016 and 2040.<sup>6</sup> With the relatively small exception of tolled highways, marginal cost pricing isn’t possible for much of this infrastructure. Hence, much of the world’s transportation infrastructure is provided as a public good, leading to chronic infrastructure financing deficits and inequities in use and payment burdens. The combination of fast vehicle connections, enhanced positioning, and decentralized identities will permit efficient tolling for much of this infrastructure, predictable cash flows and ushering in a massive new asset class available for financing through securitization.

## NON-RISK-BASED CREDIT

*Blockchains allow for the creation of a digital identity, unlocking the real-time potential to use other indicators to build a reputational asset profile for otherwise credit-invisible consumers.*

The issuance of debt, at its core, is a statement of trust. In the past seventy years, since the advent of bank issued credit cards, financial institutions have used credit scoring as a proxy for risk analysis since it allows for instant credit-decisioning. Unfortunately, for those who have thin or no credit files, their risk profile is not easily quantifiable and is, therefore, priced higher than might otherwise be the case.

Credit scores are lagging indicators of risk, using data that may not be current. They are also built on inductive reasoning and assuming that the past is a predictor of the future. Blockchain provides a way to establish an individual digital identity, unlocking the real time potential to use other indicators (such as cell phone payments that could be recorded on chain) to build a reputational asset profile for otherwise credit-invisible consumers. This strategy may be particularly useful in emerging economies that lack trusted credit scoring models.

*For thin-file applicants, this provides accessible credit in a system otherwise unavailable to them. This may be particularly useful in emerging economies without credit scoring infrastructure.*

The ability to track non-traditional sources of credit, such as payments for utilities, phones, or rent, can make credit more readily available to these consumers who are not active participants in the conventional financial system. The microfinance movement facilitated peer-to-peer lending with funds from developed countries flowing to borrowers in countries with less developed financial markets. Allowing for the development of an alternative risk assessment process, using data captured on blockchain, could bring together a wide pool of potential lenders and borrowers.

<sup>6</sup>“Infrastructure investment needs 50 countries, 7 sectors to 2040”, Oxford Economics, July 2017, <https://www.oxfordeconomics.com/recent-releases/Global-Infrastructure-Outlook>

## FRACTIONAL OWNERSHIP OF MOBILITY ASSETS

*Today, cars in metropolitan areas are used only 5-10% of the time. The rest of the time, the cars sit still in lots or on streets. These vehicles are productive capital, but sit unmonetized and unutilized for over 90% of the time.*

The vehicle has been a symbol of emancipation and freedom for most of the 20th century. Freedom of movement has become available to almost all. The growth in vehicle sales over the past 20 years, particularly in China where sales of new cars have risen from 0.6 to 25.3 million annually, demonstrates the importance of this freedom of movement.

The vehicle makes it possible to get from point A to point B relatively efficiently, to find a job more easily, to go on vacation or to go out on weekends. The car is a sign of freedom and also a display of social status for some. But today, cars in metropolitan areas are only used 5% to 10% of the time. The rest of the time, cars remain immobilized in parking lots or are parked in the streets. In addition, private car travel is increasingly restricted or banned in major cities in order to reduce traffic jams, make way for public transportation or bikes, and to cut down on carbon emissions. In this context, we can see that the current model is not totally satisfactory for the owners or for municipalities.

*A fractional ownership model may prove to be a cost-effective and desirable alternative to vehicle ownership for many. Blockchain technology allows for the immutable recording and cost accounting between parties, and the tamper-proof recording of shared-usage rights and restrictions.*

The market is increasingly moving towards transportation models where travel is consumed as a mobility service. Different transportation models appear on the market, such as car sharing and new or used car rental of varying duration. However, we expect that outright ownership may remain a popular preference. The desire to take your own car for a weekend getaway may remain, for many, the first choice for a long time. The development of a fractional ownership model (ownership of an vehicle by multiple individuals, each of whom has specified ownership and usage rights) may respond to the low rate of use of vehicles while honoring, to a certain extent, the desire to own a car. Such a model becomes possible with the use of blockchain technology, including payments directed through smart contracts. We can also imagine a model of individual or corporate fractional ownership of autonomous vehicles or robot taxis.

With the capacity of immutable, and tamper-proof records and measures, cost accounting between owners is done programmatically. Owners through their fractional ownership right get a shared use right and are liable for their obligations based on their share of ownership and the use they make of that vehicle.

This model is virtuous because the users of the cars are also the owners. They are therefore collectively responsible, as opposed to a classic car sharing model provided by a platform operator where nobody is responsible. In addition, in the case of the sharing models managed by OEMs, the OEMs are obliged to provide capital and/or financing to finance the cars, with very poor financial performance so far.

Blockchain technology has the potential to make it possible to develop fractional ownership on a scale larger than previously experienced.

## CONCLUSION

---

*Blockchain technology, through the MOBI FSSC Standard, enables trusted, interoperable vehicle finance processes by providing a secure, immutable ledger for validating identities and ensuring data authenticity.*

Blockchain technology is strongly positioned to create widespread shifts within the traditional processes of vehicle finance. The widespread presence of trust services throughout those processes is precisely where distributed ledger technology provides value. The potential for smooth, frictionless operation of multiparty applications by ensuring the availability of trusted shared data is enormous.

Blockchains provide fundamental technology, but multi-party applications require the interaction of multiple parties. Understanding and creating interoperability between those parties is precisely the focus of the MOBI FSSC WG. The FSSC Standard leverages blockchain to provide a trust layer, where all parties are able to validate each other's identity, leveraging an immutable ledger that allows for the verification of the authenticity of data, resulting in a shared platform for deploying interoperable applications.

The applications and use cases enabled by such a platform are precisely the focus of this paper. Today, each of the use cases discussed in this paper is impeded by operational inefficiencies, which are all caused by the need for trust services. Blockchains and standards created by consortia like MOBI result in a neutral environment where all the stakeholders can engage with one another on equal footing. For vehicle finance, the implications for new services and operational efficiencies are manifold.



## BIBLIOGRAPHY

AdvisoryHQ. “KYC vs. CIP vs. CDD | Know Your Customer Rules and Guidelines.” Accessed April 2021.

<https://www.advisoryhq.com/articles/kyc-vs-cip-vs-cdd-know-your-customer-rules-and-guidelines/>.

European Central Bank Ecosystem. “The Social and Private Costs of Retail Payment Instruments: A European Perspective.” September 2012. “<https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp137.pdf>.”

Experian. “Automotive Industry Insights Finance Market Report Q4 2020.” March 2021. <https://www.experian.com/content/dam/marketing/na/automotive/quarterly-webinars/credit-trends/2020-quarterly-trends/v2-2020-q4-state-automotive-market.pdf>.

Krier, Charles, and Wagener, Katharina. PayTechLaw. “eIDAS and AMLD5: A perfect match?” September 2020.

<https://paytechlaw.com/en/eidas-and-amld5-a-perfect-match/>.

Oxford Economics. “Infrastructure investment needs 50 countries, 7 sectors to 2040.” July 2017.

<https://www.oxfordeconomics.com/recent-releases/Global-Infrastructure-Outlook>.

