

FINANCIAL REVIEW

Blockchain 'smart contracts' to disrupt lawyers

The
Economist

Blockchain

The next big thing

AMERICAN BANKER

The race to connect smart
contracts to the real world

THE WALL STREET JOURNAL.
Getting Smart About Smart Contracts

Forbes

Legal Technology and Smart Contracts:
Contract as Code

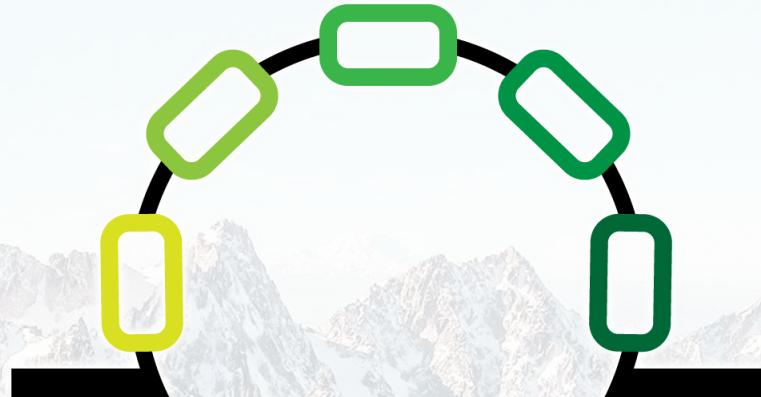
A boom time for blockchain

FINANCIAL TIMES

Smart contracts will need human juries

The Token And Smart Contracts Boom Is Only Just Starting

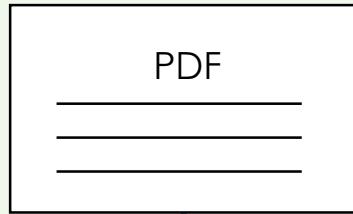




legal oracle

bridging the blockchain to the real world

Private Blockchain



Smart Clauses

Public Blockchain

Smart Contract
<§>



Arbitration Clause
& Library

Arbitration
Token

legal oracle

bridging

real world

Self-Mediation

Arbitration

Create new contract

Existing written agreement

What does this mean? 



Create new contract

Use contract creation service

What does this mean? 



Create new contract

Title:



Drag & Drop PDF Document here

GENERATE HASH

PROCEED

Create new contract

Title:



Upload 100 %

GENERATE HASH

PROCEED

Create new contract

Title:

Loan Agreement



Upload 100 %

GENERATE HASH

PROCEED

Create new contract

Title:

Loan Agreement



Upload 100 %

[GENERATE HASH](#)

8743b52063cd84097a65d1633f5c74f5

[PROCEED](#)

Create new contract

PDF Document upload complete ✓

Do you already have a smart contract for this agreement?

What does this mean? i

YES, LINK SMART CONTRACT

NO, START SMART CONTRACT WIZARD

PROCEED

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Create Smart Clauses

PAYMENT

IOT CONNECTION

TRANSFER

DURATION

CONDITION

What does this mean? 

REVIEW & AUDIT CODE

PROCEED

Create new contract

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Do you already have a smart contract for this agreement? ✓

Create Smart Clauses

PAYMENT

IOT CONNECTION

TRANSFER

DURATION

CONDITION

Amount of payment

,00

Interval of payment

monthly

on the

first

What does this mean? 

REVIEW & AUDIT CODE

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TRANSFER

DURATION

CONDITION

Amount of payment

Interval of payment on the

What does this mean? 

REVIEW & AUDIT CODE

PROCEED

Create new contract

PDF Document upload complete

Review Smart Contract

```
5     uint value; /* The amount of rent that is paid */
6 }
7 PaidLoan[] public paidrents;
8 uint public createdTimestamp;
9 uint public loan;
10 address public lender;
11 address public borrower;
12 enum State {Created, Started, Terminated}
13 State public state;
14 function LoanAgreement(uint _rent, string _house) {
15     loan = _loan;
16     reimbursement = _reimbursement;
```

REQUEST AUDIT

ACCEPT

What does this mean? 

REVIEW & AUDIT CODE

PROCEED

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REVIEW & AUDIT CODE

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Arbitration clause

[USE LEGAL ORACLE STANDARD CLAUSE](#)

[USE OTHER ARBITRATION CLAUSE](#)

Available soon

Any dispute arising out of or in connection with this Agreement
([Loan Agreement](#)) shall be settled exclusively by arbitration according to the
eJust Rules of Arbitration (http://www2.ejust.fr/EN/Rules_of_arbitration).

Accept

What does this mean? 

[PROCEED](#)

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Arbitration clause

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Do you already have a smart contract for this agreement? ✓

Create Smart Clauses ✓

Arbitration clause ✓

Finalize Smart Contract

Include Link to PDF Document (8743b52063cd84097a65d1633f5c74f5)

Include Standard Arbitration library in smart contract

What does this mean? 

PROCEED

Create new contract

PDF Document upload complete



Do you already have a smart contract for this agreement?



Create Smart Clauses



Arbitration clause



Finalize Smart Contract

Include Link to PDF Document (8743b52063cd84097a65d1633f5c74f5)



Include Standard Arbitration library in smart contract

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Arbitration clause ✓

Finalize Smart Contract

Include Link to PDF Document (8743b52063cd84097a65d1633f5c74f5) ✓

Include Standard Arbitration library in smart contract ✓

What does this mean? 

PROCEED

Create new contract

PDF Document upload complete ✓

Do you already have a smart contract for this agreement? ✓

Create Smart Clauses ✓

Arbitration clause ✓

Finalize Smart Contract ✓

Contractual party

You have to enter your contractual partner's email address
to get his confirmation on this contract.

email address:

What does this mean? 

PROCEED

Create new contract

PDF Document upload complete ✓

Do you already have a smart contract for this agreement? ✓

Create Smart Clauses ✓

Arbitration clause ✓

Finalize Smart Contract ✓

Contractual party

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What does this mean? 

PROCEED

Create new contract

PDF Document upload complete ✓

Do you already have a smart contract for this agreement? ✓

Create Smart Clauses ✓

Arbitration clause ✓

Finalize Smart Contract ✓

Contractual party ✓



Great! You've created your first contract.

Once we receive confirmation from the other party you can publish your contract to a blockchain.

What does this mean? 

RETURN TO DASHBOARD

Open tasks

Looks like there's nothing to do at the moment...

New messages

Looks like there's nothing to do at the moment...

REFRESH

What does this mean? 

CREATE NEW CONTRACT

Open tasks

Please check your messages.

New messages

 **New confirmation received from lawstudent@gmail.com**

What does this mean? 

CREATE NEW CONTRACT

Open tasks

Looks like there's nothing to do at the moment...

New messages

New confirmation received from lawstudent@gmail.com

You've received a confirmation from lawstudent@gmail.com

REVIEW

AGREEMENT TITLE: Loan Agreement

STATUS: Unpublished

What does this mean? 

CREATE NEW CONTRACT

Contract Database

**NAME**

Loan Agreement

PARTNER

lawstudent@gmail.com

CONFIRMATION RECEIVED

Accept Standard Arbitration clause



STATUS
Unpublished

PUBLISH**CREATE NEW CONTRACT**

What does this mean?

Contract Database

Please choose the Blockchain you want to publish the smart contract on.

Ethereum Blockchain ▾

PUBLISH

STAT
Unpublished

What does this mean? 

Contract Database



Smart Contract successfully published on
Ethereum Blockchain

[VIEW SMART CONTRACT](#)[CLOSE](#)

STAT
Unpublished

What does this mean?

Contract Database

**NAME**

Loan Agreement

PARTNER

lawstudent@gmail.com

CONFIRMATION RECEIVED

Accept Standard Arbitration clause

STATUS
Published

[DISPUTE](#)[CREATE NEW CONTRACT](#)

What does this mean?

Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

Breach of contract ▾

DESCRIPTION**NAME**

Loan Agreement

PARTNER

lawstudent@gmail.com

STATUS

Published

CREATE CASEWhat does this mean? 

Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

Breach of contract ▾

DESCRIPTION

We lend you money for your studies, not for participation in a hackathon.

NAME

Loan Agreement

PARTNER

lawstudent@gmail.com

STATUS

Published

CREATE CASEWhat does this mean? 

Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

Breach of contract

NAME

Loan Agreement

HISTORY**PARTNER**

lawstudent@gmail.com

You:**STATUS**

We lend you money for your studies, not for
participation in a hackathon.

Mediation started

[START ARBITRATION](#)[RESOLVE](#)[SEND MESSAGE](#)[REFRESH](#)

What does this mean? 

Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

Breach of contract

NAME

Loan Agreement

HISTORY**PARTNER**

lawstudent@gmail.com

You:

We lend you money for your studies, not for participation in a hackathon.

STATUS

Mediation started

Partner:

Understood. But wait until I win the award!

Read by Partner 

[START ARBITRATION](#)[RESOLVE](#)[SEND MESSAGE](#)[REFRESH](#)

What does this mean? 

Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

HISTORY

You:

We lend
particip

Partner
Underst



Information
to share with
eJust

Branch of duty

For the final resolution of your dispute,
please submit to our partner at eJust.



PDF
contract



Contract
record



Dispute
history

CANCEL

SUBMIT

REFRESH

What does this mean?



Contract Database: Mediation - Loan Agreement

TYPE OF COMPLAINT

HISTORY

**You:**

We lend
particip

**Information
shared***Branch of duty*

Case successfully submitted.



PDF
contract



Contract
record



Dispute
history

[RETURN TO DASHBOARD](#)[REFRESH](#)

What does this mean?

Open tasks

Arbitration case Loan Agreement / lawstudent@gmail.com sent to eJust

REVIEW

New messages

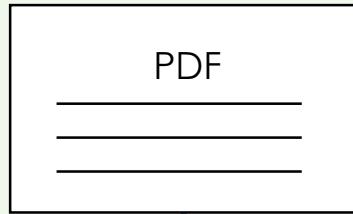
Looks like there's nothing to do at the moment...

REFRESH

What does this mean? 

CREATE NEW CONTRACT

Private Blockchain



Smart Clauses

Public Blockchain

Smart Contract
<§>



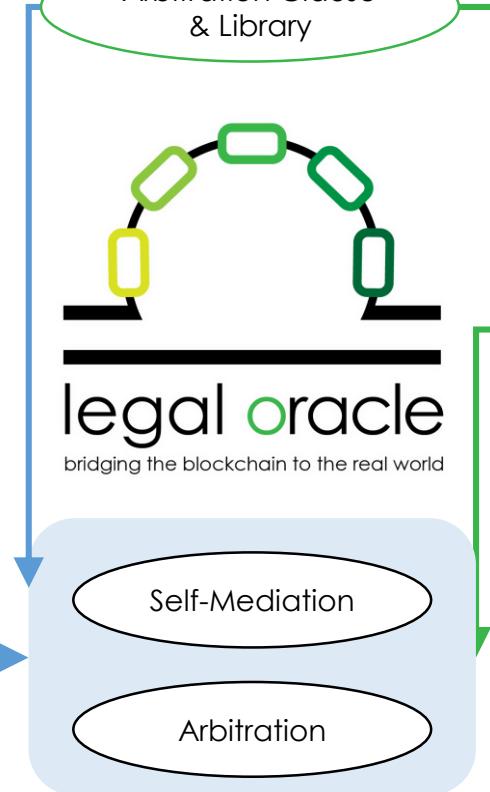
Arbitration Clause
& Library

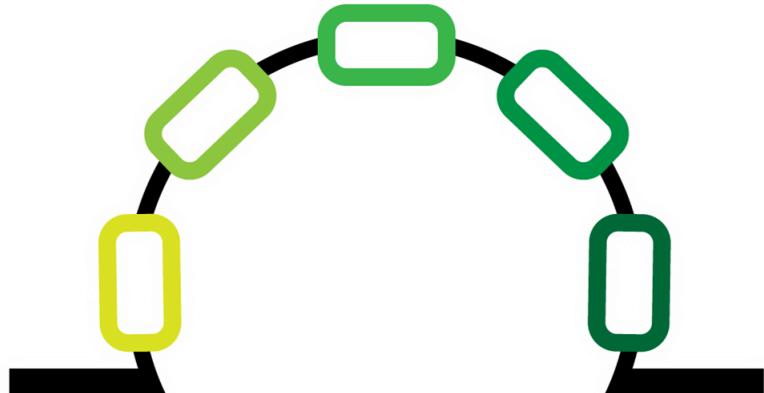


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bridging the blockchain to the real world

Self-Mediation

Arbitration





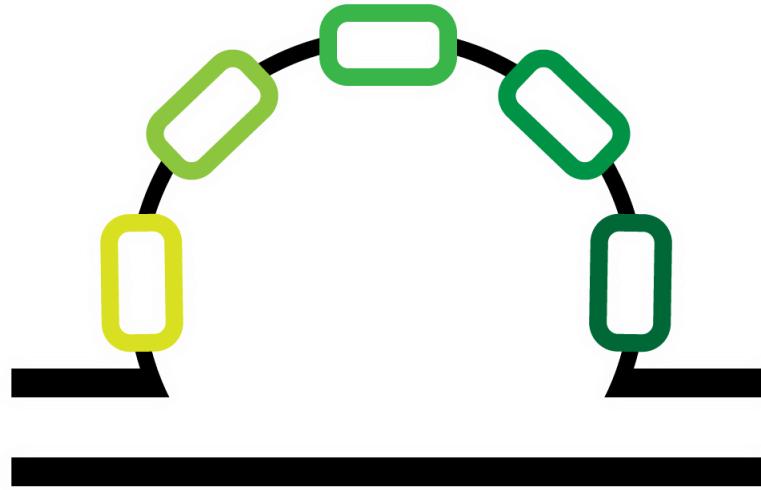
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bridging the blockchain to the real world

Our Team:

Loic Battistelli
Fabien Gillioz
Stefan Höhn
Biba Homsy
Fedor Poskriakov
Kento Reutimann
Stefan Staub

Check out our click-dummy at:
<https://tiny.cc/legaloracle>



legal oracle

bridging the blockchain to the real world

LegalTech Hackathon - Project - Legal Oracle

PROBLEM Making enforceable dispute resolution mechanisms for smart contracts Linking smart contract with written agreement (e.g., PDF of signed contract)	SOLUTION Using a hash of a PDF agreement embedded into a smart contract Arbitration library combined with the hash link to original agreement allows for dispute resolution through arbitration	UNIQUE VALUE PROPOSITION Bridging the gap between real life contracts and smart contracts	UNFAIR ADVANTAGE Network of service providers (e.g., smart contract coders, arbitrators, etc.) Quality of dispute resolution mechanism	CUSTOMER SEGMENTS Businesses willing to provide smart contract functionality to their customers (B2B model)
	KEY METRICS Number of contract "bundles" created Number of arbitration library integrations	HIGH-LEVEL CONCEPT Marketplace connecting contract automation, smart contracts and arbitration	CHANNELS Website Internet marketing Social networking (e.g., LinkedIn)	
EXISTING ALTERNATIVES Arbitration libraries for smart contract exist, but no known solution for linking a written agreement to a smart contract				EARLY ADOPTERS Crowdfunding platforms Crowdlending Landlords Individual media producers (e.g., singers, others)
COST STRUCTURE Platform maintenance fees (website, etc.) Employees / consultants (e.g., for drafting smart contracts)		REVENUE STREAMS Commission on making available proprietary arbitration library Fees for creation of smart contracts Commission on any referral work (e.g., smart contract audit, contract generation, etc.) Arbitration processing (i.e., platform as arbitration institution) Commission on smart contract transaction (e.g., % on any transaction, either in crypto or in fiat via ebanking APIs)		

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