legal aspects of distributed organizations

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The CorpBot Project

In collaboration with the esteemed firm, Robot, Robot and Hwang, I'm delighted to announce the launch of a new project to create autonomous corporations, conduct a pilot and release the code as open source with a developer toolkit.

Download Robo-Corporation-Prototype-V4

Tim Hwang's post on his firm's website contains some more of the background and context. From a CIVICS.com point of view, this project reflects some of the most interesting thinking in eCommerce law over the last decade, highlighting the use of Electronic Agents, Electronic Contracts, Automated Transactions and advanced interchange, online identity and open architecture. In 1999, I worked with John Muller (now General Counsel for PayPal) on the legal and policy issues that would be raised by use of software robots, e-agents and we advised the drafters of the Uniform Electronic Transactions Act (UETA) on the applicable provisions of the law. The law, including the sections defining and governing electronic agents and automated transactions, has since been enacted by nearly every state of the USA and has also been mirrored by the federal statute known as the Electronic Signatures in Global and National Commerce Act (or E-SIGN). With this project, a full prototype of the underlying types of agents and transactions will be conducted.

Please CONTACT US if you’d like more information about the project. As the prospectus indicates, we’re now actively seeking funding partners to generate the resources needed to kick-off the project. Be a part of the new age of the virtual corporate machine and help define the contours of law, business and online transactions of the future.

Recent Posts on CIVICS.com

Robo-Corporation Prototype Overview


Overview

In the same way that code is law, law can also be code. One of the most interesting applications of this idea may be in form of the autonomous corporation, legal business entities whose actions are driven entirely by computers. Autonomous corporations operating automated transactions conducted by electronic agents under electronic contracts may have numerous applications in the future of business and online marketplaces generally.

To date, these legal entities remain conceptual at best, and there exists no simple way for developers to experiment with the concept. However, the statutes and practice supporting electronic transactions is well matured. For the first time this summer, we would like to develop a true proof of concept for this idea by prototyping the first autonomous corporations, and then opening the basic codebase up for all to use.

This would take the form of a toolkit that will allow developers to quickly set up an LLC and associated bank account, and then code that LLC to behave programmatically according to certain rules. The toolkit will contain modules for the company to perform actions like form electronic contracts, trade virtual or physical assets, create subsidiaries, and merge with other interoperable LLCs. These modules could be set to trigger on particular phenomena detected by the LLC, including the vote of a holding company board or external events like a news story appearing online or the behavior of another business entity. By documenting the architecture, interfaces, inputs, outputs and message formats, others can improve our code, or develop their own interoperable code offering alternative types of corpbots.
2016 automated loan fund

Economic Independence on the Haiti/DR Border

Research Objective
To enable individuals and communities to collect and control their own data as an asset class to secure a better economic future.

Blockchain Border Bank
Applying data, analytics and blockchain as a solution to the world refugee crisis; to provide better financial services and combat economic instability on the Haiti/DR border.

Building open source products that best fit the needs of Community Banks and Savings Circles. We believe that open access to usable digital (self sovereign) identity will enable refugees and stateless persons to become participating actors in a global economy.

Sovereign Identity
Providing reliable identity for individuals as the first step to economic independence

Achieving the UN’s goal of providing legal identity to all by 2030 (Target 16.9 of UN SDG)
Leveraging blockchain’s capability to provide secure identity at large scale

Research Focus Areas
- New Data on Data: Tools and technology enabling individuals to collect and use their own personal and financial data
- "Self-sovereign" identity for individuals
- Automated Loan Fund: Simplified, streamlined lending to entrepreneurs to develop businesses
- Social/Physical Barter and other alternative indicators: determining creditworthiness

Business Development
- Education: Technical training, financial literacy, marketing
- Financial Services: Low interest microloans, product lending, savings
the future either happens with you or it happens to you
who owns the entity? the ip? will there be investment? how will the proceeds divided? how will materials sourced? who is capable of entering into contracts for the DAO? what happens if the DAO does something illegal? what happens if the DAO goes bankrupt?
all of these questions _will_ be asked of this community
roadmap

> legal personality rights
  - vermont
  - delaware
  - wyoming

> investment & securities

> commodities

> contracts & ip

> contracts & agency

> tort
legal personality rights (generally)

> registration with the state

> identification of governance mechanisms

> identification of individual(s) in charge of administering governance mechanisms

> legal protection (limited liability) within narrow purpose
legal personality rights (vermont)

> registration with state as a bbllc

> state reviews operating agreement to ensure safety of access and permission protocols

> summary of mission and purpose

> whether bbllc is fully automated or partially automated

> specification of voting procedures of bbllc
Operating Agreement of dOrg, LLC

This Agreement (the "Agreement") is among Ori Shimony, Jordan Ellis, and Cluda AS, a Norwegian Private Limited Company, the sole current members of dOrg, LLC (the "Company"). These persons and any others who may become members of the Company are collectively known as the "Members" or singly as a "Member". Interests of the Members of the Company are denominated in "Units".

Section 1. Purpose. The purpose of the Company is to operate a Decentralized Autonomous Organization (a "DAO") through which the Company can accept requests to perform services for third parties, solicit bids on such requests from Members and non-Members, and permit Members to allocate responsibility and remuneration of Members and others for completion of related tasks. The Company may transact such other lawful business as the Members may determine in accordance with this Agreement.

Section 2. Powers. The Company may engage in any and all activities that may lawfully be performed by a blockchain-based limited liability company under the Vermont Limited Liability Company Act (the "Act"); 11 V.S.A. §§ 4001 et seq., and other applicable laws, including, but not limited to, operating a DAO and bonding on and performance of services to third parties.

Section 3. Governance; Type of Decentralized Ledger; Security Protocols; Tax Elections.

(a) Governance. The Company intends to govern itself and conduct all of its activities through the use of blockchain technology, software-enabled governance procedures and protocols, and associated voting protocols, including but not limited to: (a) admission or expulsion of Members and approval or denial of Member Unit transfer requests; (b) proposed upgrades to or modifications of the Company’s DAO, software, and/or protocols; (c) proposed changes to this Agreement; (d) bids or proposals to perform work for third parties; (e) bids or proposals for Members or non-Members to perform work for the Company and/or third parties and receive payment and Reputation thereon in their individual capacities; and (f) any other matter of governance or other activity the Company finds necessary or convenient to have its Members determine collectively. The software-enabled governance procedures and protocols adopted from time to time by the Company, together with this written Agreement, shall jointly constitute the Operating Agreement of the Company. The initial version of such governance procedures and protocols is described in Appendix A to this Agreement, but the current version of governance procedures shall, at all times, be determined by and stored on the DAO. Subject to the foregoing provisions and the provisions of Section 6, the Company shall be governed by its Members, collectively.

(b) Type of Decentralized Ledger. The Company will utilize a fully decentralized, publicly-available ledger (the "Ledger"). Information about participants’ permissions and ability to read and write protocols to the ledger is set out in Appendix A.

(c) Security Protocols. The Company believes that the use of blockchain technology and a DAO structure provide ample security, but has nonetheless established security protocols to address and mitigate risk. Information about those Security Protocols is set out in Appendix A.
legal personality rights (delaware)

> corporate regulations adopted to permit use of electronic networks or databases to administer:

- stock ownership

- books and records

- voting

> note: under delaware corporate law, this permits registration of “series” entities
legal personality rights (delaware)

the LAO
legal personality rights (wyoming)

> certificate tokens may be issued in lieu of stock certificates

> tokenized certificates authorized by network signatures

> special purpose depository banks for crypto transactions
legal personality rights (wyoming)

Lasso DAO
investment & securities

> utility tokens
v. security tokens

> howie test
commodities
>
> commodities exchange act (cea)
>
> enforcement actions
contracts & ip
contracts & agency

principal > agent > third party

> express authority

> inherent authority

> implied authority
contracts & agency

> express authority

> inherent authority

> implied authority
tort

> negligence
> res ipsa loquitur
> products liability
> accountability gap
example use cases and research history
2019 aale working group
2019 publishing DAO example
2019 aale challenge

AALE: Automated and Autonomous Legal Entities

This site is an MIT Legal Engineering open, collaborative research project to gather a list of automated and autonomous legal entity examples (eg corporations, LLCs, non-profits, etc). We are seeking to compile a list of any such products and projects, including web-based, blockchain-based, and enterprise implementations. This research may be part of an upcoming publication of the MIT Computational Law Report and may form part of an upcoming summit of people leading such projects planned for April, 2020 at Stanford.

Working on an AALE Project or Product? Let Us Know!

- Please fill out this short form to let us know about how you are tackling this challenge: https://forms.gle/JzU2RfKD4r8vJNN98
questions?
end