SwiftDao Standard 1.0

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Abstract. This document lays out the technical, legal, and social standards for operating an investment club on the blockchain. The 1.x standard takes a Minimum Viable Blockchain (MVB) approach. Only legal contracts and voting mechanisms are on the blockchain. All other features, including asset management, are implemented off-chain following the pattern of traditional investment clubs. The MVB approach enables better record keeping for geographically distributed investment clubs while minimizing legal, regulatory, and technical risks. Such SwiftDao investment clubs are both easy to develop and likely to outperform index funds and other traditional asset funds. A sample implementation on Ethereum with a Slack chat bot illustrates one method for creating a seamless end user experience.

1 INTRODUCTION

1.1 MOTIVATION

Over the last decade, passively managed funds increased to 45% of all equity and 25% of all bond assets under management.[1] These flows are caused by managed funds underperforming indexes once fees are included.[2] Commonly overlooked the alpha that managed outperform indexes when fees are excluded. Top managed funds generate long term out performance even after fees, as much as 10%.[3] Furthermore, ETF and other passive investment funds have increased correlations between securities within their purview, creating additional opportunities into the future for expert active management to outperform.[4]

Meanwhile, research into expert sub crowds in the last few years has shown that they typically outperform both crowds and individual experts.[5] Traditional investment clubs may be viewed as an in-vivo experiment into the power of expert sub crowds. These clubs tend to underperform the market when members are uninformed and outperform the market with

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[1] Cox, J. (2019). *Passive investing automatically tracking indexes now controls nearly half the US stock market*. CNBC. https://www.cnbc.com/2019/03/19/passive-investing-now-controls-nearly-half-the-us-stock-market.html.

[2] Ennis, R. (2005). *Are Active Management Fees Too High?*. Financial Analysts Journal. 61:5, pages 44-51.

[3] Morningstar. (2019). *Active funds do outperform the passive ones*. https://morningstar.in/posts/49156/active-versus-passive.aspx/

[4] Lynch, H. Page, S. Panariello, R. Tzitzouris, J. Giroux, D. (2019). *The Revenge of the Stock Pickers.* Financial Analysts Journal. 75:2, pages 34-43.

[5] Goldstein, D. McAfee, R. Suri, S. (2014). *The Wisdom of Smaller, Smarter Crowds*. Proceedings of the fifteenth ACM conference on Economics and computation. Pages 471-488.

informed members.[6] The very best investment clubs provide substantial educational resources to their members and heavily vet new entrants. Formal rules are also critical. Underperforming investment clubs tend to have informal structures that lend themselves to group think. Investment clubs must have a formal mechanism for selecting investments that forces each member to careful consider the investment on its merits rather than on friendships.

By developing a new set of standards for blockchain based investment clubs, SwiftDaos have the potential to perform as well as the top investment clubs. These clubs consistently outperform the larger market.[7] At the same time, since record keeping is done on the blockchain, fees can be kept to a minimum. Even average investment clubs outperform traditional funds if fees are not considered.

Since capital in the 21st century is highly liquid, if the SwiftDao's fund governance structure indeed outperforms the market as academic research and historical evidence suggest, these standards will become the standard for all investment projects involving allocation of capital. With over 16 trillion USD in US mutual funds alone[8] and 36 trillion USD globally, even slightly more efficient capital allocation would result in much higher growth rates for investors and the wider economy with substantial social and economic impacts.

1.2 APPROACH

SwiftDao standards are iterative rather than revolutionary. The goal of SwiftDao 1.x is to maintain the legal and social structure of traditional investment clubs. Blockchain is used merely for record keeping purposes which can fall back onto traditional methods if necessary. Social media channels allow meetings to be held for geographically distributed members. This iterative approach reduces the legal and technical costs of developing SwiftDao implementations while also providing stronger protections to investors from technology failures.

SwiftDao 1.x can be viewed as the foundation for more fully distributed investment clubs. As research into governance, regulatory clarity, and blockchain technology progresses, limitations on SwiftDaos such as the 100-investor cap will likely be lifted. Rather than just record keeping, future versions of SwiftDaos will allow organizational logic to be stored on smart contracts.

Given the limitations, the 1.x standard still does provide a complete, implementable guide for investment clubs on blockchain. As discussed elsewhere in this document, even such an iterative advancement has the potential to revolutionize capital allocation and will likely outcompete traditional methods of pooling funds for investment.

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[6] Barber, B. Odean, T. (2010). *Too Many Cooks Spoil the Profits: Investment Club Performance.* Financial Analysts Journal. 56:1, pages 17-25.

[7] David, H. (2007). *Investment Clubs.* Network Journal. 14:5, pages 48-49.

[8] Board of Governors of the Federal Reserve System (US). Total financial assets Mutual funds [BOGZ1LM654090000Q], https://fred.stlouisfed.org/series/BOGZ1LM654090000Q.

1.3 BLOCKCHAIN

Blockchain empowers investment clubs to implement best practices easily, cheaply, and securely. In the 1.x version of the SwiftDao standard, it does so on a high level in three ways:

1. Smart contracts that clearly define and enforce what actions members make take,
2. A formal, immutable record of all investment club activities auditable by all members, and
3. Democratically empowering members to take individual action without social hierarchy.

These three pieces address the issues of groupthink, informal decision making, and lack of critical thinking that plague underperforming investment clubs. The SwiftDao standards are built to maximize the benefits of blockchain in each of these three areas.

Other potentials for the use of blockchain, such as for asset management, exist. Future versions of the SwiftDao standard may recommend these use cases. Following an MVB principle, the 1.x version recommends limiting the use of blockchain to the areas with the clearest legal guidance and simplest technical implementation.

1.4 SOCIAL

Social integration for SwiftDao blockchain smart contracts creates a collaborative environment for decision making backed by the formal rules of the smart contract. SwiftDao's social features fulfill the following functions:

1. Off-chain meetings resulting in decisions recorded on-chain,
2. Information sharing, both for educational and for specific investments,
3. Vetting of new members to validate their level of knowledge and commitment, and
4. Cyber incident response in the case of blockchain failures or hacks.

The social level of the SwiftDao can be viewed as a lower layer than the blockchain. Ultimately, the blockchain functions to validate and record decisions made by the members. If the blockchain fails to service member's needs, they can fall back on their member network to act.

Future versions of the SwiftDao standard may place more features onto the blockchain. These features will also require deep social integration.

1.5 LEGAL

This first iteration of the SwiftDao Standard, 1.x, is extremely conservative. The approach taken is iterative rather than revolutionary. Unlike other daos, which have consistently faced existential and expensive legal issues, SwiftDaos fit into a very well explored space. They are traditional investment clubs with the single exception of record keeping on the blockchain. If the blockchain fails, SwiftDaos can operate just like traditional investment clubs.

These facts mean investment clubs following the SwiftDao standard can incorporate as LLCs, just like normal investment clubs. They are also regulated by the same rules as investment clubs. Of these, a few are important to note.

First, SwiftDaos may need to register with the SEC as an investment company if the SEC determines that SwiftDao tokens are securities. The SEC clearly states that investment clubs do not issue securities unless there are any passive members. Just one passive member is enough to turn an investment club tokens into securities. To prevent this, the standards recommend the following best practices:

1. Immediately remove passive members,
2. Limit the number of members to 100 or less,
3. Carefully vet new members to determine if they are an expert in the field of investment, and
4. Do not have any Active Participants with elevated privileges to recommend or select investments.

Specific details for operating in US states may require different features. The recommended practice is for each SwiftDao to retain an attorney to address any issues specific to their operating environment. The legal assumptions in this document only address SwiftDaos operating in the US. SwiftDaos operating in other legal environments will need legal consultation.

Future versions of the SwiftDao standard may address a wider range of legal environments and provide more state-by-state guidance for the US. These standards are specifically designed for a US SwiftDao incorporated as a BBLLC in Vermont.

2 TERMINOLOGY

This section describes the terminology used throughout this standards document. Terms are almost uniformly taken from their use in traditional investment clubs. However, the use of blockchain does require slight changes in definition and a few novel terms.

2.1 SWIFTDAO

A SwiftDao is an investment club where a group of people who pool their own money to invest collectively. Research may be done individually but decisions are all made collectively. SwiftDaos provide educational resources to their members, vet new members, and have officers who are responsible for carrying out the decisions of the SwiftDao. All members in a SwiftDao actively participate in all decisions made by the group. Decisions to trade assets held by the SwiftDao are made by votes held by all members. SwiftDaos hold monthly formal meetings to discuss investment strategies.

2.2 STATEMENT OF PURPOSE

All SwiftDaos must provide a Statement of Purpose outlining what investment strategy they plan to take. This allows the SwiftDao to select new members who are aligned with the mission and are knowledgeable in the defined area of investment. The statement of purpose must at a minimum state the duration, industries, asset classes, and other criteria investment decisions are based on. The Statement of Purpose may in addition specify social, environmental, or other socially conscious criteria for investments.

The Statement of Purpose is published onto IPFS. The hash is stored in the SwiftDao's smart contract and must be updated if the members vote to change the Statement of Purpose.

2.3 ARTICLES OF ORGANIZATION

The SwiftDao's Articles of Organization are the formal documents filed with the government to create the SwiftDao's legal identity. In the 1.x version of the standard, the Articles of Incorporation are assumed to be filed with the state of Vermont and are compliant with its regulations for BBLLCs.

The Articles of Incorporation are published onto IPFS. The hash is stored in the SwiftDao's smart contract and must be updated if the members vote to amend the Articles of Incorporation.

2.4 OPERATING AGREEMENT

The Operating Agreement governs the internal operations of the SwiftDao. It describes the rights and obligations of all members. The Operating Agreement specifies traditional investment club operations such as roles of officers, meeting schedule, procedures for valuing assets held by the SwiftDao, adding new members, removing exiting members, and voting rules. In addition, the Operating Agreement must detail information about how the blockchain is used by the SwiftDao, especially for voting procedures. It must also contain a Cyber Incident Response Plan.

2.5 CYBER INCIDENT RESPONSE PLAN

The Cyber Incident Response Plan is the section of the Operating Agreement dedicated to how the organization will continue to function in the case of a cyber incident. It must outline how members are informed about the incident, define offline rules for organizational continuity, and specify how critical technologies are brought back online after an incident.

While the Cyber Incident Response Plan must especially address blockchain incidents, it must also handle incidents with other technologies used by the SwiftDao such as social networking software.

2.6 CYCLE VALUATION STATEMENT

The Cycle Valuation Statement shows the calculation of the SwiftDao's value per Token on the last day of the Voting Cycle. It includes information about all held securities and cash balances. It also shows the purchase cost of all securities and the current capital gain or loss.

2.7 MEMBER STATUS REPORT

The Member Status Report shows the summary of each SwiftDao Member's ownership on the last day of the Voting Cycle. It shows each Member's total cash invested, tax basis, Tokens held, and the current cash value of the Tokens. It also shows any change in the Member's holdings during the Voting Cycle.

2.8 TOKEN

SwiftDao Tokens are modified ERC20 tokens that are unique to each SwiftDao. Before an individual can acquire a SwiftDao's token, they must be whitelisted by the SwiftDao following the new Member process defined by the Operating Agreement. Tokens may be exchanged between both Prospective and Active Members, but not Inactive Members, at the standard valuation as determined by the SwiftDao's Operating Agreement. Every time Tokens are exchanged, 0.1% are set aside to be liquidated by the SwiftDao to pay the SwiftPater licensing fee.

2.9 VOTING CYCLE

The Voting Cycle is the 4 week recurring cycle for submitting, deliberating, voting, and acting on Proposals. Proposals are submitted to the blockchain on the first week. Deliberations on the SwiftDao's social network proceed for one week. Open voting is held on the third week. The fourth week is set aside for the responsible officers to implement the proposals accepted by the SwiftDao. On the fifth week, the cycle restarts with Proposal submissions.

2.10 PROPOSAL

A Proposal is a course of action suggested by an Active Member to be taken by the SwiftDao. Proposals can be for officer elections, new member admittance, trading activities, or to amend the SwiftDao's founding documents. Proposals are submitted in the first week of the Voting Cycle. Proposals require a majority vote from a quorum of Active Members to become Resolutions.

2.11 RESOLUTION

A Resolution is a Proposal that has passed a majority vote by a quorum of Active Members. Resolutions are executed by the Officers.

2.12 PROSPECTIVE MEMBER

A Prospective Member is any individual who is authorized to hold the SwiftDao's Tokens but does not currently hold any. Prospective Members can purchase Tokens from any Active Member at any time.

2.13 ACTIVE MEMBER

An Active Member is any individual who is both authorized to hold and does hold the SwiftDao's Tokens. Active Members are required to vote on all Proposals in at least 4 of the last 6 Voting Cycles and fulfill any other duties under the Operating Agreement.

2.14 INACTIVE MEMBER

An Inactive Member is an Active Member who failed to meet their responsibilities under the SwiftDao's Operating Agreement. Inactive Members must sell all their tokens within 2 Voting Cycles of becoming inactive. Inactive Members who fail to do so have their Tokens redeemed to the SwiftDao in exchange for their market value as defined by the SwiftDao's Operating Agreement. They may never hold Tokens issued by the SwiftDao again. While in the 2 Voting Cycle token holding period, Inactive Members can still vote.

2.15 OFFICER

A SwiftDao's Officers are the Active Members responsible for executing various tasks proscribed by the Operating Agreement, including executing Resolutions. Officers elections are held every 6 voting cycles.

2.15.1 President

The President's duty is to preside over meetings, set meeting times, and appoint committees. He is also responsible for executing any Proposals that are not the responsibility of the other Officers.

2.15.2 Vice-President

The Vice-President takes the place of the President when the President is absent or incapacitated. The Vice-President is also responsible for screening new applicants for basic knowledge of the investment area described in the Statement of Purpose.

2.15.3 Secretary

The Secretary is responsible for notifying all Active Members of meetings and other activities. The Secretary also is responsible for maintaining backup logs of social network meetings and blockchain records. The Secretary is responsible for filing any government documents excluding those related to taxes. The Secretary must also update the Authorized Members blockchain ledger to record changes in member status. In the case of a cyber incident, the Secretary is responsible for record keeping if necessary.

2.15.4 Treasurer

The Treasurer is responsible for placing authorized buy and sell orders with the SwiftDao's broker and logging the results of such transactions on the blockchain. The Treasurer prepares the Cycle Valuation Statement and Member Status Report on the last day of every Voting Cycle. The Treasurer gives receipts to Active Members for payments to the SwiftDao. The Treasurer is responsible for paying fees to SwiftPater from the SwiftDao's treasury every Voting Cycle. The Treasurer is responsible for compiling tax information and filing any tax reports.

2.15.5 Technologist

The Technologist is responsible for monitoring and maintaining the blockchain and social network technology used by the SwiftDao. The Technologist is also responsible for the Cyber Incident Response plan and must immediately notify the President and Secretary in the case of a cyber incident.

2.16 THIRD PARTIES

Third parties are contractors who are paid by the SwiftDao to perform some work. SwiftDaos can pass Resolutions to hire any third party, but almost every SwiftDao will need a Brokerage and Accountant. Every third party needs an assigned Officer to communicate with.

2.16.1 Brokerage

A SwiftDao's brokerage is responsible for executing buy and sell orders for the SwiftDao. The Treasurer communicates with the brokerage to both place orders and record the results on the blockchain.

2.16.2 Accountant

An accountant assists the Treasurer in preparing tax statements for the SwiftDao. The accountant should be versed in traditional investment club tax preparation.

2.16.3 Attorney

The attorney reviews the founding documents of the SwiftDao and any amendments proposed by the Active Members. The Attorney communicates with the Secretary.

2.17 SWIFTPATER

SwiftPater is the company that develops the SwiftDao standards and implementations. All SwiftDaos sign a technology licensing agreement with SwiftPater. However, SwiftPater is not responsible for cyber incidents and every SwiftDao must have a Cyber Incident Response Plan in the unfortunate event of technological failure.

3   STANDARDS

3.1 BLOCKCHAIN

These blockchain standards are implementation agnostic. They describe how the underlying technology for the SwiftDao standard must operate. All operations and records are public unless specified otherwise.

3.1.1 Authorized Members

Authorized Members maps public keys to Member structs. Only the Secretary has privileges to modify this mapping.

3.1.2 Member

The Member struct contains the following fields:

- Name (string)
- Address (string)
- Status (enum, 0: Prospective, 1: Active, 2: Inactive)

Only the Secretary can add new Members.

3.1.3 Officers

Officers maps public keys to an Officer Position enum as follows:

0. President
1. Vice-President
2. Secretary
3. Treasurer
4. Technologist

Only Active Member public keys are authorized to be assigned an Officer Position.

3.1.4 Publish Document

The Publish Document method logs the name and IPFS hash of a SwiftDao contract such as the Statement of Purpose, Articles of Organization, Operating Agreement, and Cyber Incident Response Plan. The method is called when the SwiftDao is initialized. In all other cases, only the Secretary can call the method.

3.1.5 Sign Document

The Sign Document method logs the signing Member's public key and the IPFS hash of the document they are signing. No authorization is required to call this method.

3.1.6 Token

Tokens follow the ERC20 standard with transfer restricted to only Prospective and Active Members. The Treasurer is authorized to mint and transfer new Tokens. All transfers burn the SwiftPater fee.

3.1.7   New Token Sale

The New Token Sale method is executed by the Treasury after a Prospective or Active Member deposits assets into the SwiftDao. The New Token Sale mints new tokens to the Member account and logs the Token Sale:

- Member (publicKey)
- TokenAmount (uint256)
- Asset Transferred (string)
- Asset Transferred Quantity (unit256)
- Cash Value (unit256)
- Timestamp (uint256)

3.1.8   Token Liquidation

The Token Liquidation method is executed by the Treasury at the request of an Active Member or when an Inactive Member fails to sell their tokens within 1 Voting Cycle. Token Liquidation logs the following properties:

- Member (publicKey)
- TokenAmount (uint256)
- Asset Transferred (string)
- Asset Transferred Quantity (unit256)
- Cash Type (string)
- Cash Value (unit256)

3.1.9   Multihash

A Multihash struct stores IPFS hashes with the following fields:

- Hash (bytes[32])
- HashFunction (uint8)
- Size (uint8)

3.1.10 Proposal

A Proposal struct is a Multihash of the associated published document. Proposals can only be submitted during the Propose state in the Voting Cycle.

The published document is JSON structured as follows:

```
{
        ActiveMember: [publicKey, string],
        ResponsibleOfficer: [OfficerPosition, enum],
        Title: [title, string],
        Description: [description, string]
}
```
The Proposal struct holds the following fields:

- ActiveMember (publicKey)
- Multihash (Multihash)

3.1.11 Proposals Map

The Proposals Map maps the Voting Cycle nonce to Proposals, recording all Proposals submitted in a specific Voting Cycle.

3.1.12 Voting Cycle States

Each state lasts one week and consecutively follows the previous state. During all states Officers can record the execution of their duties. Each Voting Cycle has a unique nonce that increments by one after each cycle completes.

3.1.12.1 Propose

Active Members can submit Proposals.

3.1.12.2 Deliberate

No actions (excluding officer actions) on-chain can be taken.

3.1.12.3 Vote

Active Members, and Inactive Members with positive token balances, vote on Proposals. The Vote struct contains the following fields:

- ActiveMember (publicKey)
- Proposal (MultiHash)
- Endorse (bool)

3.1.13 Trades Record

The Trades Record is a log of Trades with the following fields:

- Brokerage (string)
- Asset Purchased (string)
- Asset Purchased Quantity (uint256)
- Asset Purchased Total Balance (uint256)
- Asset Sold (string)
- Asset Sold Quantity (uint256)
- Asset Sold Total Balance (uint256)
- Fees (uint256)
- Timestamp (uint256)

Use the type of asset (STOCK, BOND, REALESTATE, COMMODITY etc) followed by underscore and the ticker symbol (example: STOCK_APPL). For cash or cash-like assets, use the keyword CASH followed by the currency ticker (example: CASH_USD). For prices, quantities, and fees, use 10 decimal places. Total Balances are post trade. Timestamps are the moment the trade

executed. Brokerage is the name of the brokerage the trade was executed on. If no brokerage was used, it should indicate where the trade took place.

Only the Treasurer has authorization to append to the Trade Record.

3.1.14 Payments Record
The Payment Record is a log of Payments, excluding Trades and Token Liquidations with the following fields:

- Counterparty (string)
- Description (string)
- Asset Transferred (string)
- Asset Transferred Quantity (unit256)
- Cash Type (string)
- Cash Value (unit256)
- Timestamp (uint256)

Only the Treasurer has authorization to append to the Payments Record.

3.1.15 Revenues Record
The Revenues Record is a log of Revenues, excluding Trades and Token Sales with the following fields:

- Counterparty (string)
- Description (string)
- Asset Transferred (string)
- Asset Transferred Quantity (unit256)
- Cash Type (string)
- Cash Value (unit256)
- Timestamp (uint256)

Only the Treasurer has authorization to append to the Revenues Record.

3.2 SOCIAL
SwiftDao social standards are enforced by legal contracts and convention. It is the responsibility of the Active Members to maintain a healthy SwiftDao with social conventions.

3.2.1 Founding
Before creating a new SwiftDao, the initial members must identify who are the initial Active Members, how many Tokens each will purchase, select their brokerage, accountant, and legal counsel, and finally publish the founding documents. It is critical that all founding members are experts in the investment area in the Statement of Purpose (See Appendix A).

3.2.2   New Members

New applicants must be sponsored by a current Active Member, the sponsor. The applicant signs all required SwiftDao documents. Afterwards, the sponsor introduces the applicant to the Secretary. The Secretary then interviews the applicant within 1 Voting Cycle to determine if they have expert level knowledge in the area of the SwiftDao's Statement of Purpose. If the Secretary approves the applicant, the applicant must then sit in meetings for 2 Voting Cycles. The sponsor then submits a proposal in the next Voting Cycle to make the applicant a Prospective Member. The proposal must contain the name, Ethereum address, and physical address of the applicant.

3.2.3   Officer Election

Officers elections are held every 6 Voting Cycles. Proposals to elect an Officer must contain the prospective Officer's public key and the Officer Position. Members can vote on more than one prospective Officer for the same position. The Proposal with the most votes selects the Officer, even if less than a majority. The previous Secretary is responsible for updating the Officers map on the blockchain.

3.2.4   Officer Impeachment

In the case an Officer fails to perform their duties in a timely matter, the Active Members can submit a Proposal to replace the Officer with a different Active Member. The new Officer will serve until the next usual election cycle. The previous Secretary is responsible for updating the Officers map on the blockchain. If the Secretary fails to complete their duties, it is a Cyber Incident and the Cyber Incident Response Plan for restoring the organization is to be followed.

3.2.5   Third Party Selection

Third Parties are selected or removed through a majority vote on a Proposal. The Proposal must state the name of the Third Party and what role they will fill for the SwiftDao.

3.2.6   Member Meetings

Synchronous monthly member meetings are scheduled at a convenient time for all Active Members by the President. During the Deliberation 1 week period, meetings may be held asynchronously in a social media channel if all members are informed and have access to the channel.

3.2.7   Automated Exit

Active Members who fail to vote on all Proposals in 2 of the last 6 Voting Cycles are considered Inactive and must sell their tokens within 2 Voting Cycles. Failure to do so results in liquidation of the Tokens based on the Cycle Valuation Statement.

3.2.8   Cyber Incident Response

3.3 LEGAL

The SEC reserves the power to determine when a SwiftDao's tokens are a security. In the case that the security status of the Tokens is in question, legal counsel should be retained. Some, but not all, of the cases where this may occur include:

1. The SwiftDao does not properly vet new members,
2. The SwiftDao raises the maximum number of members above 100,
3. The SwiftDao publicly promotes itself to acquire new members,
4. An Active Participant vets investment decisions and/or Proposals,
5. One or more Members are passive and not actively involved in all decisions.

3.4 FEES

3.4.1 Legal

The SwiftDao may need to pay substantial legal fees to setup and review the founding documents.

3.4.2 Accounting

The SwiftDao may need to hire an accountant for tax preparation.

3.4.3 SwiftPater

SwiftPater charges a 0.1% fee on Token transfers, equivalent to a front loaded fee in a traditional mutual fund. Once the cash value of the fee Tokens exceeds 100 USD, the Treasurer must burn the tokens and pay the cash value to SwiftPater.

3.4.4 Brokerage

Most Brokerages offer free trades, but some brokerages charge for trades.

3.4.5 Blockchain Transactions

If blockchain transaction fees are substantial, the SwiftDao may reimburse Officers and Members for their expenses.

4 CONCLUSION

Here we have provided a set of standards for building investment clubs on blockchain. These standards are designed to limit risks by only using blockchain for record keeping and basic logic. Fallbacks onto traditional record keeping and abundant and clearly defined. The legal framework for SwiftDaos in the US is well developed, since the blockchain is merely used in the same manner as usual records kept by traditional investment clubs.

These standards may seem to be a very small step in the eyes of utopian blockchain enthusiasts. While the ideas of blockchain visionaries may eventually come to pass, they ignore the legal, technical, and social realities of today's world and fail to provide a clearly actionable

vision. Incentives to defect from traditional finance must be provided at every step along the way, not just at some distant point of the future.

The 1.x SwiftDao standards provide such a small, actionable step. By placing record keeping onto the blockchain, SwiftDaos empower investment clubs to have improved governance. As noted in the Introduction, expert sub crowds have been demonstrated to outperform both individual experts and uninformed crowds. Even with the small steps the 1.x standard takes, these potentials are brought to the foreground. SwiftDao 1.x will empower above market returns at lower costs than index funds.

With better governance comes better financial returns. Traditional financial structures will find themselves left behind by the agility and expert knowledge better rules for cooperation create. While SwiftDao 1.x does not provide a framework for such organizations, future iterations of the standard will need to provide guidance for traditional financial organizations to migrate onto the standard. Partnership is the way forward, not revolution.