ABRACADABRA PROTOCOL

1. Introduction

a. What is DeFi?

DeFi is short for “decentralized finance,” an umbrella term for a variety of financial applications in cryptocurrency or blockchain geared toward disrupting financial intermediaries. DeFi draws inspiration from blockchain, the technology behind the digital currency bitcoin, which allows several entities to hold a copy of a history of transactions, meaning it isn’t controlled by a single, central source. Unlike centralized systems, DeFi operates on secure distributed ledgers, similar to those used by cryptocurrencies.

b. Background of Abracadabra protocol

The Abracadabra protocol emerged from the rapidly evolving decentralized finance (DeFi) landscape, and its development of was influenced by several key trends and technologies in the DeFi space. The idea behind Abracadabra originated from the need to maximize the utility of interest-bearing tokens (ibTKNs). These tokens are generated by various DeFi protocols when users deposit their assets to earn yield. The idea behind Abracadabra originated from the need to maximize the utility of interest-bearing tokens (ibTKNs). These tokens are generated by various DeFi protocols when users deposit their assets to earn yield. Abracadabra draws inspiration from several existing DeFi protocols like MakerDAO, Yearn Finance and most notably SushiSwap. Abracadabra was launched in 2021, initially on the Ethereum blockchain. The protocol quickly gained traction due to its innovative approach to utilizing ibTKNs as collateralAbracadabra expanded to multiple blockchain networks, including:Binance Smart Chain (BSC), Avalanche, Fantom, Polygon etc.

c. Purpose and Scope of research

The purpose of this report is to provide an in-depth overview of Abracadabra and MIM, examining their innovative take on the decentralized stablecoin design. The report will delve into the workings of the protocol and the advantages it offers users, as well as the current state of the stablecoin market and how Abracadabra fits into the larger DeFi ecosystem. Additionally, the report will explore the challenges faced by the protocol and its creators’ plans to overcome them.

2. Technical Analysis

a. Architecture

The architecture of the Abracadabra protocol is designed to facilitate decentralized lending and borrowing using *interest-bearing tokens (ibTKNs)* as collateral. Here's an overview of its key components and mechanisms:

- **Smart Contract design**
  Abracadabra relies on a series of interconnected smart contracts to manage its operations:
  - Collateral Vaults: These smart contracts handle the storage and management of collateral (ibTKNs). Users deposit their interest-bearing tokens into these vaults, which are secure and transparent. This collateral can be any of the whitelisted assets, such as vault tokens from Yearn Finance or liquidity provider tokens from Curve Finance.
  - Borrowing Contracts: These contracts facilitate the borrowing process. They allow users to mint *Magic Internet Money (MIM)* against their deposited collateral based on predefined loan-to-value (LTV) ratios.
  - Liquidation Contracts: These are designed to manage liquidations when the value of the collateral falls below a certain threshold. They automatically sell the collateral to repay the outstanding loan, protecting the protocol from under-collateralized positions.
  - Interest and Fee Management: Separate contracts are responsible for calculating and collecting interest on borrowed MIM and any associated fees. This ensures that the protocol's economic model is maintained.
- **Security Mechanisms**
  - Audits: Regular security audits by reputable firms help identify and mitigate vulnerabilities in the smart contracts.
  - Insurance and Risk Mitigation: The protocol may utilize insurance mechanisms or strategic reserves to protect against potential losses due to exploits or market volatility.
  - Interest-Bearing Tokens (ibTKNs): The core innovation of Abracadabra is its use of ibTKNs as collateral. These tokens, generated by other DeFi protocols like *Yearn Finance (yvUSDT, yvDAI)* or *SushiSwap (xSUSHI)*, continuously earn interest, providing ongoing yield to the user even while being used as collateral.

    - Multi-Collateral Support: The protocol supports a variety of ibTKNs, allowing users to choose from a range of interest-bearing assets to use as collateral. This flexibility enhances user experience and risk management.
- **Interoperability with other DeFi protocols**
    - Multi-Chain Deployment: Abracadabra operates on multiple blockchain networks, including *Ethereum, Binance Smart Chain, Avalanche*, and others. This cross-chain functionality broadens the protocol's reach and enhances liquidity.
    - Interoperability: The protocol's architecture ensures seamless interaction between different chains, allowing users to move assets and collateral efficiently across networks.

b. Tokenomics

- **SPELL Token Utility and Distribution**

  SPELL is Abracadabra's *native Ethereum token* and the governance and utility token used for incentivization. Further, the Abracadabra Money project is community-governed, and the SPELL tokens are used for voting on platform developments. In addition to governance rights, the SPELL token rewards liquidity providers who provide tokens to the Abracadabra pools. This is all done through yield farming and bonds.

  SPELL sits at a current price of $0.0007 and ranks at *#286* with a market capitalization of $76,332,263.

  Token supply:
    - *Circulating supply*: 107,405,628,969
    - *Max/Total supply*: 196,008,739,620

  The SPELL supply was allocated as follows:
    - *Liquidity providers incentives*: 63%
    - *Team member rewards*: 30%
    - *SPELL distribution*: 7% (supply split evenly between *SushiSwap* and *Uniswap v3*)

- **MIM Stablecoin Mechanics**

  The Abracadabra Money platform utilizes two tokens: *Magic Internet Money (MIM)* and *SPELL*.

  The MIM tokens are yield-bearing stablecoins. And users are loaned MIM in exchange for their interest-bearing asset deposits. Users can collateralize crypto assets to mint MIM on multiple

blockchains. These include *Avalanche, Arbitrum, Fantom, Ethereum,* and *Binance Smart Chain*. Lastly, when MIM is repaid, the platform burns MIM from the supply, reducing its overall circulation in the market.

- Stablecoin Pegging: MIM is a stablecoin pegged to the US dollar. Its value stability is crucial for its utility within the DeFi ecosystem.
- Minting and Burning: Users can mint MIM by depositing collateral and can also burn MIM to unlock their collateral. The minting and burning processes are managed by smart contracts to ensure transparency and security.

- **Incentive Structures**
  - SPELL Token: The native governance token, SPELL, is central to the protocol's decentralized governance model. SPELL holders can propose and vote on changes to the protocol, such as adjustments to collateral types, LTV ratios, and other parameters.
  - Staking and Rewards: SPELL tokens can be staked to earn a share of the protocol's fees. This incentivizes long-term holding and participation in governance.

c. Platform Features

- **Lending and Borrowing Processes**
  - Lending: Abracadabra likely uses a decentralized lending pool where deposited collateral is aggregated. Borrowers can then draw from this pool to access MIM.
  - Borrowing: Based on the value of the collateral, users can borrow MIM up to a certain loan-to-value (LTV) ratio.The LTV ratio determines how much MIM can be borrowed relative to the collateral's value, balancing risk and borrowing capacity.
  - Interest and fees: Borrowers pay interest on their loans, which accrues over time. Abracadabra charges a small fee on borrowing and other transactions, contributing to the protocol's revenue.

- **Yield Farming Opportunities**
  - Increase yield rewards: Abracadabra enables users to leverage their positions to maximize yield farming rewards.

One can deposit ibTKNS like yvWETH (representing deposited ETH in Yearn) as collateral and borrow MIM.

- Amplifying returns: By borrowing MIM against their collateral and reinvesting it into yield-generating assets, users can amplify their returns. One can directly deposit MIM or other supported crypto assets into Abracadabra's lending pool. This earns you interest on your holdings as borrowers pay interest on their MIM loans.
- Holding SPELL Tokens: By holding SPELL, the Abracadabra governance token, you can participate in voting on proposals that may impact yields. For example, proposals could involve adjusting interest rates for lenders or borrowers. While not directly generating yield, voting rights can influence the protocol's future profitability.

- **Liquidation Mechanisms**
  - Repaying loans: If the value of the collateral falls below a critical threshold (due to market volatility or other factors), the protocol can liquidate the collateral to repay the outstanding loan.
  - Ensuring security: This mechanism protects the protocol and ensures solvency.
  - Oracles: Abracadabra interacts with external price oracles to get reliable data on the value of deposited collateral and MIM itself. This data is crucial for calculating interest rates and managing liquidations.

3. Financial Analysis

a. Market Overview

- **Position of Abracadabra in the DeFi Landscape**

  Abracadabra occupies a niche position in the DeFi landscape with its focus on leverage and unlocking liquidity for yield-bearing assets.

  It showcases innovation by allowing users to leverage interest-bearing tokens (like Yearn vault tokens) as collateral for loans. This frees up liquidity for users and who wouldn't want to sell their ibTKNS to access capital. By using these ibTKNs, Abracadabra allows users to continuously earn yield on their deposits, unlike traditional DeFi lending platforms where collateral remains idle.

Also, it introduces MIM, a stablecoin pegged to the US dollar, which plays a crucial role in the protocol. It provides a stable borrowing option for users, which can be used across the DeFi ecosystem invariably. Not only does it leverage yield farms but also attracts sophisticated DeFi users looking to maximize their yield farming strategies, giving Abracadabra a competitive edge over simpler lending protocols.

- **Competitive Analysis**
  Abracadabra operates within a highly competitive DeFi landscape. To understand its position, it's essential to compare it with some of its key contemporaries: MakerDAO, Aave, and Compound. Here's a comparative analysis based on several critical dimensions:

Points	**Abracadabra**	**MakerDAO**	**Aave**	**Compound**
Collateral type Accepted	Interest-bearing tokens (*ibTKNs*)	*ETH, BTC*, and other *ERC-20* tokens	A wide range of assets including *stablecoins, ETH, BTC, and* various *ERC-20* tokens	Multiple assets including *ETH, stablecoins, and other tokens*
Yield on Collateral	Users earn yield on collateral through ibTKNs while borrowing against them	Collateral does not earn yield directly; it is locked solely to mint DAI	Some assets earn yield, but not as part of the primary collateral function	Users earn interest on supplied assets, which can also be used as collateral for borrowing
Name of StableCoin	Magic Internet Money(MIM)	DAI	No native stablecoin; uses stablecoins like *USDT, USDC* for lending and borrowing	No native stablecoin; uses *DAI, USDC*, and others
Stablecoin Utility	MIM can be used widely within the DeFi ecosystem for trading, liquidity provision, and	Highly integrated and widely accepted across the DeFi ecosystem and beyond, often seen as the	Broadly used in DeFi but lacks a unique, protocol-specific stablecoin	Widely used but similar to Aave in terms of reliance on third-party stablecoins

	other financial services	benchmark decentralized stablecoin		
Leverage	Allows leveraged yield farming by borrowing MIM against ibTKNs and reinvesting	Allows leverage by borrowing DAI against collateral	Flash loans and borrowing against collateral enable leverage	Users can borrow against supplied assets to leverage positions
Yield Farming	Amplified returns through recursive borrowing and reinvestment	Limited; primarily focused on stable borrowing and lending	Moderate; integrates with yield farming strategies but not as core functionality	Moderate; similar to Aave in terms of yield farming integration
Multi-chain Support	Operates on Ethereum, Binance Smart Chain, Avalanche, Fantom, and more	Primarily on Ethereum	Available on Ethereum, Polygon, Avalanche	Primarily on Ethereum; developing Compound Chain for interoperability
Interoperability	High; designed to tap into diverse liquidity pools and user bases	Limited to Ethereum ecosystem	Strong; active efforts to expand cross-chain presence	Growing; Compound Chain aims to enhance cross-chain capabilities
Governance Token	SPELL	MKR	AAVE	COMP
Governance Model	Decentralized, community-driven with staking and voting rights	Decentralized governance with token-holder voting	Decentralized, community voting on proposals and protocol changes	Decentralized, community-driven with token-holder voting

Incentives	Staking rewards from protocol fees	Governance rewards and protocol fees	Staking for rewards and governance participation	Distribution of COMP tokens to users for participation
Audits	Regular audits by reputable firms	Continuous security audits and robust risk management frameworks	Regular and thorough security audits	Regular audits and security reviews
Security Measures	Focus on smart contract security and risk mitigation	Proven track record and community trust	High emphasis on security, with multiple safety modules	Strong emphasis on smart contract security and operational transparency

b. Financial Models

- **Revenue Streams**
  - Interest on Loans: When users borrow Magic Internet Money (MIM) by depositing interest-bearing tokens (ibTKNs) as collateral, they are charged an interest rate on the borrowed amount. This interest is a primary revenue stream, accumulating over time as loans remain active.
  - Stability Fees: Similar to MakerDAO's stability fee, Abracadabra can charge a stability fee on borrowed MIM. This fee can fluctuate based on market conditions and governance decisions to ensure the peg of MIM and maintain system stability.
  - Liquidation Penalties: When a borrower's collateral value falls below the required loan-to-value (LTV) ratio, the protocol initiates liquidation to protect itself from under-collateralized positions. A liquidation fee is charged, which can include a penalty for the borrower and an incentive for liquidators. This ensures timely and efficient liquidations, contributing to the protocol's revenue.
  - Auction Mechanisms: In some liquidation processes, the collateral may be sold through an auction, with the protocol earning fees from the auction process. This mechanism ensures fair price discovery and generates additional revenue.

- Cross-chain Transaction Fees: Operating across multiple blockchain networks (Ethereum, Binance Smart Chain, Avalanche, etc.), Abracadabra can charge transaction fees for cross-chain interactions.These fees cover the operational costs of bridging assets and managing interoperability, providing a revenue stream that scales with cross-chain activity.

- **Business Models**
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- **Risk Assessment and Management**
- **Token Valuation Methods**

c. Performance Metrics

- **Total Value Locked(TVL) Trends**
  Since its creation, Abracadabra has experienced significant growth, with an average APY of 15.58%. The protocol has generated $67.4 million in revenue on *total value locked*(TVL) of $3.24 billion in collateral and loaned out a total of $1.86 billion in MIM across Ethereum, Avalanche, and Arbitrum.

- **Transaction Volumes and User Growth**

Total value locked		$123.62m
Market Cap		$139.59m
Token Price		$0.001
	All-time High (2/11/2021)	$0.0035
	All-time Low (5/8/2021)	$0.0003
Fully Diluted Valuation		$189.87m
24h Token volume		$44.01m
	CEX Volume	$44.34m
	DEX Volume	$3.91m (*8.9%*)
Fees (*annualized*)		$2.98m
	Fees 30d	$2, 44, 375
	Fees 24h	$480
Revenue (*annualized*)		$1.49m

	Fees 30d	$1, 22, 189
	Fees 24h	$239
Treasury		$11.63m
	Own Tokens	$6.3m
	Stablecoins	$8.04m
	Majors	$9, 68, 635
	Others	$2.62m

Source: https://defillama.com/protocol/abracadabra

- **Financial Health Indicators**
  - Total Value Locked (TVL): TVL represents the total amount of assets locked within the protocol. It is a critical indicator of user trust and the protocol's overall adoption.As of early 2024, Abracadabra has a TVL of around $123 million. This significant TVL indicates strong user confidence and robust participation in the protocol's lending and borrowing activities.
  - Collateralization Ratios: This ratio measures the amount of collateral deposited against the borrowed MIM. High collateralization ratios indicate healthy over-collateralization, reducing the risk of under-collateralized loans.Maintaining a healthy collateralization ratio is essential to prevent liquidations and ensure the stability of the protocol. Abracadabra requires users to deposit interest-bearing tokens (*ibTKNs*) as collateral, which typically appreciate over time, thus maintaining a strong collateral base.
  - Market Sentiment and Token Performance: The performance of the SPELL governance token in the market reflects investor confidence and the perceived value of the protocol. As of recent data, SPELL has seen periods of volatility but generally maintains a position of interest among DeFi investors.Also the stability of the MIM stablecoin is crucial. Maintaining its peg to the USD with minimal fluctuations is a sign of robust financial health.

4. Executive Summary

a. A Brief Overview

The Abracadabra protocol is a decentralized finance (DeFi) platform that provides unique lending and borrowing services in the cryptocurrency space. It is built on multiple blockchain networks, including *Ethereum, Binance Smart Chain, Avalanche*, and more. The protocol allows users to deposit interest-bearing crypto assets (*ibTKNs*) as collateral to borrow its native stablecoin, *Magic Internet Money (MIM)*, which can be used across the DeFi ecosystem, by using even hard-to-sell crypto assets as collateral. It offers leverage and yield farming opportunities, but be aware of the risks involved: complex DeFi mechanics, volatile crypto values, and potential security issues.

b. Key findings from technical and financial analysis

c. Summary of conclusions and recommendations

5. Regulatory and Compliance Considerations

a. Overview of regulatory challenges in DeFi

- **Regulatory Uncertainty**: Regulatory frameworks for DeFi are still evolving, leading to uncertainty about how existing laws apply to decentralized protocols. Traditional financial regulations often do not account for the decentralized nature of DeFi, causing confusion and potential compliance issues.
- **Jurisdictional Issues**: DeFi platforms operate globally, but regulatory authority is typically jurisdiction-specific. This discrepancy creates complications in enforcement and compliance, as different countries have varying regulations regarding financial activities, securities, and data protection.
- **Anti-Money Laundering (AML) and Know Your Customer (KYC) Requirements**: DeFi platforms often lack traditional AML and KYC processes, which are standard in traditional finance to prevent illicit activities. This can lead to facilitation of money laundering, terrorist financing, and other illegal activities due to the anonymity and pseudonymity of transactions.
- **Consumer Protection**: The decentralized nature of DeFi means there is often no central authority or intermediary to resolve disputes or compensate users in case of fraud, hacks, or platform failures. This lack of consumer protection mechanisms poses significant risks to users and challenges for regulators aiming to protect investors.
- **Security Risks**: DeFi protocols are susceptible to hacks, smart contract bugs, and exploits, which can result in significant financial

losses. Regulators are concerned about the security measures of these platforms and their ability to safeguard user funds.

- **Market Manipulation and Fair Trading**: The potential for market manipulation and unfair trading practices is high in DeFi due to the lack of regulatory oversight. Issues like front-running, price manipulation, and insider trading are challenging to detect and prevent in a decentralized environment.
- **Taxation**: The tax implications of DeFi transactions are complex and often unclear. The anonymous nature of transactions makes it difficult for tax authorities to track and ensure compliance, creating challenges in implementing and enforcing tax laws.
- **Legal Classification and Regulation of Tokens**: The classification of tokens (e.g., as securities, commodities, or currencies) affects how they are regulated. The lack of clear guidelines on how different types of tokens should be classified and regulated creates legal ambiguity and potential conflicts with securities laws.
- **Decentralized Governance**: Many DeFi protocols are governed by decentralized autonomous organizations (DAOs), which complicates regulatory oversight. Determining accountability and enforcing regulations in such a decentralized governance structure is challenging.

b. Abracadabra's compliance with Global regulations

As of today, May 28, 2024, there are no specific regulations directly targeting the Abracadabra protocol itself. DeFi (Decentralized Finance) is a relatively new and evolving space, and regulations are still being formulated by governments around the world.

6. Challenges and Risks

- **Technical risks and vulnerabilities**
  - ➔ Smart Contract Risks: As with any DeFi protocol, Abracadabra relies on smart contracts, which can be vulnerable to bugs and exploits.The protocol undergoes regular audits to mitigate these risks, but users should remain aware of the inherent dangers.

Pros:

- ➔ Risk tolerance levels and collateral ratios of assets can be adjusted individually
- ➔ Available on multiple major chains
- ➔ No hosting costs
- ➔ It makes use of otherwise illiquid tokens

Cons:

- ➔ It may not be beginner-friendly due to technicalities.
- ➔ May have risks involved regarding smart contract exploits or bugs
- ➔ Possibility of liquidation

- **Market risks and Stability concerns**

  Despite the advantages of using Abracadabra, there are still some challenges and risks associated with the platform that users should be aware of before participating. Some of the main challenges and risks include:

  - ➔ Centralization Risk: As with many DeFi protocols, there is always the risk of centralization, as the minting and backing of MIM is managed by private companies. This can lead to a loss of trust in the stability of the stablecoin and the overall platform.
  - ➔ Market Volatility: The value of MIM is pegged to the U.S. dollar, but fluctuations in the cryptocurrency market can still impact its value. This can result in a loss of value for users who hold MIM or have borrowed against it.
  - ➔ Volatility of LTV Ratio: The value of collateral can be volatile, affecting the LTV ratio and potentially triggering liquidations.Users need to manage their collateral carefully and be aware of market conditions.
  - ➔ Depegging Events: MIM has experienced two major depegging events since its inception, which can lead to a loss of trust in the stability of the stablecoin. Depegging events can result in a loss of value for users who have borrowed MIM and are forced to repay their loans at a higher value than the current market rate.
  - ➔ Bad Sentiment and Negative Price Action: The project has received a lot of negative sentiment due to its association with its founder, Daniele Sestagalli, and this has translated into overall negative price action for the SPELL token. This can result in a loss of value for users who hold SPELL and can impact the overall growth and success of the platform.

- **Governance and Community concerns/risks**
  - ➔ Regulatory risks: DeFi platforms operate in a rapidly evolving regulatory environment.Changes in regulations could impact the protocol's operations and users' ability to access services.

7. Future Outlook

a. Development Roadmap

b. Potential protocol upgrades and features

Abracadabra offers an innovative take on the collateral-backed stablecoin model by incorporating yield-bearing assets as collateral. It will be interesting to see how this design philosophy shapes the future of decentralized stablecoins.

c. **Forecasting the protocol's growth and market adoption**

8. Conclusion

a. **Recap of key insights from the technical and financial analysis**
This article has provided an overview of Abracadabra and MIM, including its background, key features, and benefits. It has also discussed some of the challenges and risks associated with using the platform.

b. **Strategic recommendations for stakeholders**
It is recommended that potential users exercise caution and perform their own due diligence before participating in the platform.

c. **Final thoughts on the sustainability and innovation of the Abracadabra protocol**
Despite some challenges and risks, Abracadabra and MIM offer users a capital-efficient and decentralized platform for borrowing and generating revenue.

9. Appendices

a. **Glossary**

b. **Data sources and methodology**

c. **Additional charts and tables**

d. **References**

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