



How Uniswap Become No.1 DEX in the World A Strategic Management Analysis

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ABSTRAK

Fenomena Cryptocurrency semakin mengguncang dunia dengan munculnya Uniswap yang merupakan Decentralized Exchange (DEX) sebagai terbesar di dunia dengan TVL sebesar US\$ 1.3 Milyar. Keberhasilan Uniswap didorong oleh baiknya pengelolaan citra merek, eksistensi global, loyalitas investor serta dukungan teknologi yang mumpuni. Uniswap memiliki tingkat kepercayaan pengguna dan investor yang tinggi dan memiliki tingkat kompetisi yang masih rendah di bidangnya. Hal ini menyebabkan tingginya pangsa pasar yang diraih Uniswap dalam industri Decentralized Exchange (DEX).

ABSTRACT

Uniswap which is the largest Decentralized Exchange (DEX) with TVL of US \$ 1.3 billion. The success of Uniswap driven by it's excellence management of brand image, global presence, investor loyalty and hi-technology support. Uniswap has gain high level of user and investor trust and has a low level of competition in its field. This led to the high market share achieved by Uniswap in the Decentralized Exchange (DEX) industry.

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I. BACKGROUND

Originally it was Bitcoin. Bitcoin is the world's first cryptocurrency created in 2008 and launched on January 9, 2009 by a person or group of people who refer to themselves as Satoshi Nakamoto.

Bitcoin is the answer to the global financial crisis caused by the subprime mortgage crisis in the United States that is spreading around the world. Satoshi Nakamoto considers that the public has lost confidence in centralized financial institutions as well as the banking world which is considered negligent and not transparent to the investment risks and financial policies taken.

Bitcoin is considered a solution because it provides better transparency in the absence of a centralized regulator that is often misused for certain purposes resulting in financial losses suffered by the public and leading to the global economic crisis.

This is because Bitcoin is a decentralized currency by utilizing people's computing resources to manage distribution mechanisms and financial transactions. This mechanism is placed on top of blockchain technology and cartogrifi technology so that Bitcoin is very much from the act of manipulating financial data.

Over time Bitcoin's dominance as the world's no.1 cryptocurrency has become increasingly undisputed with valuations increasing every year. This led to the proliferation of various cryptocurrency projects with various singularity and designation.



Table 1. Bitcoin Price Movements 2014 – 2020

Bitcoin has inspired many information technology activists to create new cryptocurrency technology based on blockchain which Ethereum is such a technology.

Ethereum is a decentralized form of blockchain but also has support for smart contracts with Ether (ETH) as the primary token used as a currency in various activities within the blockchain. Ethereum was proposed by a cryptocurrency activist and researcher named Vitalik Buterin in 2013. Then the development of Ethereum was financed by the community through a crowdsale mechanism in 2014 and launched on July 30, 2015.

As Vitalik Buterin said in his Ethereum whitepaper that the main goal of Ethereum is to build decentralized applications as an opening for blockchain-based decentralized finance.

Like a conventional financial system where it requires an exchange as a place of currency exchange. So in cryptocurrency also requires an exchange where market participants can exchange between each cryptocurrency in the form of Cryptocurrency Exchange.

In general, cryptocurrency exchange has a mechanism similar to fiat currency exchange where there are exchanges that are managed centrally then people come one by one to exchange currency through the cashier who is an employee of the money exchanger (Centralized Exchange).

With ethereum and smart contract features in it coupled with decentralized mechanisms, it is now very possible to conduct a decentralized cryptocurrency exchange where no single managing entity can control the exchange.

People can now have multi-role both as a trader and as a liquidity provider in a decentralized cryptocurrency exchange (DEX). One of the leading decentralized exchanges today and widely used by cryptocurrency enthusiasts is DEX called Uniswap. Uniswap can be accessed via <http://uniswap.org>

Uniswap was created by Hayden Adams in November 2018 based on inspiration from Ethereum creator Vitalik Buterin. Uniswap is an ethereum-based protocol for exchanging ERC20 tokens without the need for buyers and sellers to create a demand. This is done through a calculation that automatically sets and balances the price depending on the amount of demand. There is no order book or centralized entity to trade using Uniswap.

Now in 2020 Uniswap is the largest decentralized exchange (No. 1) in the world, with a total locked fund (TVL) of USD 1.3 billion or equivalent to IDR 18.2 Trillion. With a market share of 34.82%. It has only been two years since Uniswap became a giant in the cryptocurrency world due to its participation in society.

Total Value Locked (USD) in DeFi

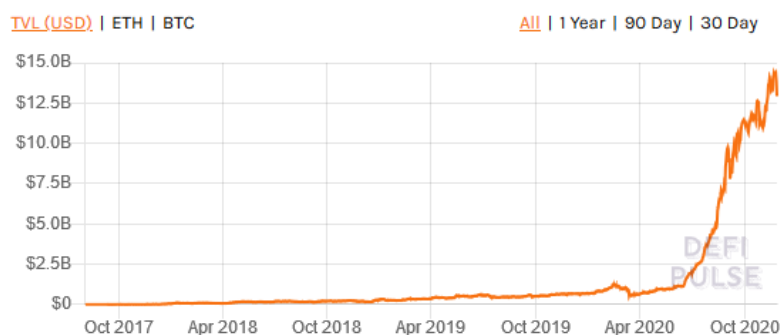


Table 2. Movements of DeFi TVL 2017 – 2020

Total Value Locked (USD) in DeFi



Table 3. Movements of Defi TVL Sep 2020 – Nov 2020

II. METHOD

2.1 External Analysis

External Analysis (Environmental Analysis) is an objective assessment of a company (organization) against changes in the world in which it operates, so the company (organization) has an 'early warning system' to identify potential threats and opportunities.

This analysis will involve several other analysis methods so that you get a clear picture of the external surroundings that affect Uniswap as a decentralized exchange in the cryptocurrency world.

The tools involved in performing external analysis are as follows:

1. PESTEL analysis

It is a tool used to list all relevant external forces using four headings: Political, Economic, Sociological, and Technological.

2. Porter's Five Force Model

The tool was created by Harvard Business School professor Michael Porter to analyze industry attractiveness and possible profitability. The Five Force Model consists of the dimensions of Competitive Rivalry, Supplier Power, Buyer Power, Threat of Substitution, and the Threat of New Entry.

3. SWOT

SWOT analysis (strengths, weaknesses, opportunities, and threats) is a framework used to evaluate a company's competitive position and to develop strategic planning.

2.2 Internal Analysis

Internal analysis is an objective assessment of the company's internal environment (organization) to assess its resources, competencies, and competitive advantages. Conducting internal analysis makes it possible to identify the strengths and weaknesses of the company (organization) in terms of Internal Strength, Competitive Advantage and Internal Weakness.

2.3 VRIO Analysis

VRIO analysis is an analytical technique used for the evaluation of company resources that can contribute to a competitive advantage. VRIO is the initial name of the evaluation dimension: Value, Uniqueness, Imitability, and Organization. VRIO analysis is an analytical technique used for the evaluation of company resources that can contribute to a competitive advantage. VRIO is the initial name of the evaluation dimension: Value, Uniqueness, Imitability, and Organization.

2.4 Value Chain Analysis

Value chain analysis is a strategy tool used to analyze the internal activities of a company (organization). The goal is to recognize which activities are most valuable to the company and which ones can be improved to provide a competitive advantage. The analysis reveals where the competitive advantages or disadvantages of the company (organization) are located. Companies that compete through differentiation advantages will try to do their activities better than competitors do. If competing through cost advantages, then the company (organization) tries to do internal activities at a lower cost than competitors will do. When a company is able to produce goods at a cost lower than the market price or provide superior products, then the company benefits.

III. THE ANALYSIS

3.1 External Analysis

3.1.1 PESTEL Analysis

Uniswap is a global brand and operates in a very challenging global environment. There are several factors that can hinder growth and their nature can vary from market to market. PESTEL's analysis helps understand how these factors can influence the growth of global brands such as Uniswap. PESTEL is an acronym for political, economic, social, technological, environmental and legal. All of these factors are very important in the 21st century and affect a business and its growth and profitability in a number of ways, such as:

1. Political and Legal Factors

Uniswap operates in various countries such as the United States, Europe, Africa and Asia. Thus companies must also consider the legal aspects of the countries in which they operate. Many countries do not yet have regulations governing cryptocurrency trading, especially those based on Ethereum ERC20. Currently Uniswap can operate almost freely without any obstacles from the regulator, but it may be that in the future the company will have to make adjustments to the regulations and regulations made by each country regarding the company's operations. Although Uniswap is a decentralized platform that prioritizes transparency and privacy aspects, efforts should be made to adjust to the development of regulations so as not to sacrifice these two aspects.

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2. Economy

Economic factors are also increasingly important in the 21st century. The world has gone through various recessions, the Covid-19 pandemic, led to the global economic crisis and during such difficult periods, businesses can face huge declines in sales and profits. Although Uniswap experienced an increase in trade transactions and liquidity supply as seen from the increase of Total Value Locked (TVL) in 2020. But that does not mean that in the future, especially where the economic crisis is repeated Uniswap will again experience improved performance as happened in 2020.

3. Social, Demographic, Technological, Cultural and Environmental Strengths

The cryptocurrency boom of the last 5 years, marked by the price of bitcoin reaching USD19,000, and its prediction to reach the target price of USD100,000 within period around 2021-2025 has opened the international community's eyes to the potential of cryptocurrencies as a promising new means of investment. So that both Institutional and retail investors flocked to participate in investing in cryptocurrency. This could be a new threat as well as an opportunity for Uniswap. Uniswap can support cryptocurrency-related events to send a message to the public that Uniswap is a trusted, secure, advanced technology support as well as an accountable decentralized organization.

Uniswap targets users who already have understanding and experience in the field of cryptocurrencies. These users are not limited in age due to the high penetration rate of cryptocurrency iterations in the world. Uniswap should still consider the level of education of its users to make its strategy because education has a direct impact on promotion and marketing. So you have to create a marketing/promotion campaign that can make people aware of their brand and prduk according to the level of education in each country.

Socio-cultural factors also continue to experience important growth in the 21st century. It is very important for a business to adopt new methods in marketing. The changing demographic conditions of the global population have changed the way the DEX market and users view it from a new angle. Millennials are a generation that understands and eager to be served differently. They are looking for more personalized experience, ease of use cryptocurrency exchange, low trading fees and integration with real world payment systems to buy goods and services and withdraw using fiat currency through ATMs. Brands also need to vary strategies and marketing methods. Through this, sociocultural factors have become important in the context of international business in the 21st century.

Technological factors have become a source of competitive advantage as well as a driver of success in the 21st century. Technology is proving to be a key accelerator that helps businesses fill huge gaps and gain exceptional value in new ways. Unisap's operations and marketing are entirely dependent on ICT technology

and the role of the internet-connected cryptocurrency community in conducting trade and communication activities. The upgrade of Uniswap version from 1.0 to 2.0 is one form of technological improvement to provide better services and accommodate the user's desire. Uniswap scalability can be improved as well as the addition of new features such as analytics features where users can see the performance of various tokens traded within the Uniswap platform

4. The Power of Competition

In the decentralized exchange industry, Uniswap has the largest market share in the world. A summary of Uniswap's performance compared to its competitors in the decentralized exchange industry, namely Curve Finance and SushiSwap, is shown in the table below:

(USD)	Uniswap	Curve Finance	SushiSwap
TVL	\$ 1.3 B	\$ 924.6 M	\$ 690.3 M
TVL growth (ytd)	\$ 229.589 M – 1.193 B	\$ 1.16 M – 924.594 M	2.2267 K – 690.34 M
% TVL growth (ytd)	519.589%	79,706%	258,854%

Table 4. Comparison of TVL Uniswap with major competitors.

From the analysis above, we can conclude that Uniswap excels from the TVL side by \$1.3 Billion and controls DEX's market share of 37%. This means that Uniswap is the most popular DEX platform trusted by ETH ERC20-based cryptocurrency users. Uniswap operates in fast-growing industries, changing social trends, and social media promotion opportunities. In addition, Uniswap has the opportunity to collaborate with leading Ethereum-based DeFi projects such as Compound, Synthetix and Balancer. The threat of Uniswap is competition from similar decentralized exchanges operating within the Ethereum blockchain. And also the potential gap in smart contracts that can be exploited by hackers to deplete users' crypto funds.

3.1.2 Porter’s Five Force Model



Figure 1. Map of the Five Force Models presented by Porter

Analysis:

1. Rivalry Among Existing Competitors: LOW

The level of competitive competition owned by the industry is relatively low. Although there are three important key players in the Ethereum blockchain-based DEX industry including Uniswap, Curve Finance and SushiSwap. Competition between the three for market share is not fierce. And the potential to work on new users around the world still has a high opportunity because of the rapid development of cryptocurrencies and is classified as very young or still in its early stages. All three brands invest heavily in ICT technology, marketing and research and development. All three have excellent marketing strategies and also use a variety of other methods to attract new users.

2. Bargaining Power of Buyers: MODERATE

The bargaining power of users grew higher due to liquidity mining activities offered by DEX as compensation for impermanent losses as a liquidity provider. Of course, DEX that is able to provide returns from high liquidity mining activities will be more attractive to users. In addition, the number of token pairs (pairs) provided to be exchanged / traded also affects the number of users, especially popular token pairs.

3. The threat of Substitute: LOW

The threat of substitute products to Uniswap is still low. Uniswap and similar DEX are substitute products for centralized exchange (CEX). Where DEX offers more participation of the community (community) in providing daily trading activities, especially in terms of providing trading liquidity. The security, privacy (anonymity) and transparency offered by Uniswap have caused CEX users to migrate to the Uniswap platform. Meanwhile, the substitution service from such exchanger currently has no impact for Uniswap in general.

4. The Threats of New Entrants: HIGH

A decentralized financial system (DeFi) that is open (open source) allows everyone to participate in providing similar services. This causes the threat of new entrants to the DEX industry to be high. Various new innovations that have come are not impossible to cause the technology and concepts promoted by Uniswap to become obsolete. With the support of technological innovation and huge capital, new players can shift Uniswap from the game map in the cryptocurrency exchange industry. This increases the threat of new brands entering the market to a high level.

5. Bargaining Power of Supplier: HIGH

The supplier referred to in the context of Uniswap is a liquidity provider. The bargaining power of liquidity providers in Uniswap is high, because without them Uniswap could not provide optimal exchange services to users. Liquidity providers always pay attention to the rate of return on the investment they deposit into Uniswap and compare this rate with other platforms, they are not reluctant to migrate if they offered higher returns. Therefore Uniswap always increases its technological capacity which affects service quality and maintains competitive returns, as well as enhancing cooperation with various cryptocurrency projects to welcome new liquidity to enter Uniswap platform.

3.1.3 The SWOT analysis highlights the strengths, weaknesses, opportunities and threats faced by Uniswap.

1. Strengths

A. Strong brand image

Although still very young, Uniswap is a global brand in the decentralized exchange (DEX) industry with a strong brand image and this is why it is a leader in the decentralized exchange (DEX) industry. Uniswap is well known and serves investors and traders in more than 200 countries. This is due to the trust in the platform and governance of Uniswap which uses the concept of decentralized organization (DAO) where the community is the highest decision maker within Uniswap. Transparency in the management of Uniswap and the support of advanced technology in it caused Uniswap to become the no. 1 decentralized exchange platform in the world. Uniswap has two main competitors, Curve Finance, and SushiSwap. But unfortunately Curve Finance focuses more on stable coin (a stable cryptocurrency that refers to the value of fiat currencies). Meanwhile, SushiSwap has recently had a trust problem due to the founder's departure by disbursing a large number of crypto tokens owned. Surely these two competitors have a number of obstacles that can certainly withstand their growth rate both in terms of market segmentation and confidence.

B. Strong Total Value Locked (TVL) Performance

TVL's strong performance is Uniswap's main strength. In 2020, TVL Uniswap grew so high, more than 500%. This performance was contributed by the branding, socialization and market education efforts carried out in the last 2 years. TVL increased to \$ 1.2 billion in 2020, an increase of about 1 billion dollars from 2019. This occurred due to:

- Global operational coverage is accompanied by high liquidity of trading within the platform as well as increased users.
- Marketing capabilities to be able to collaborate with the DeFi platform, dAps, and various projects in the field of cryptocurrency based on Ethereum ERC20 to participate in making Uniswap the main token exchange platform.
- Provides diversity in token exchange and is large so that it becomes the main choice for users (users).

2. Opportunities

A. Financial services innovation: There are several opportunities available to Uniswap that can help it develop its brand and business. Innovations in digital-based financial services, especially cryptocurrency, can be expanded from just exchanges, to become a means of decentralized cryptobank and payment intermediaries. Since Uniswap is an ICT-intensive organization, it certainly invests in R&D and product innovation and payment technology offers faster growth opportunities and options for wider market expansion..

B. Cooperation with related businesses: Cooperation (partnerships) with related businesses can also help brands increase growth faster. Uniswap formed partnerships with various RealT-based startup projects that provide a blockchain-based real estate investment platform to increase user acquisition and liquidity providers.

C. Growth through acquisitions: Uniswap can also increase growth faster by flooding related brand (platform) quizzes that can help it enter new areas.

D. Changing social trends: Uniswap is currently a trend-setter in the cryptocurrency exchange industry. Where more and more people migrate from centralized exchange (CEX) to decentralized exchange (DEX) such as Uniswap. The ease of use and high level of privacy have made Uniswap increasingly favored by many cryptocurrency users.

3. Threat

A. Legal and regulatory threats: Regulations issued by the government can threaten or at least limit the space for growth of Uniswap. Some legal experts say that it is possible that such services are breaking the rules in some areas of the country. They suggest that the platform needs to immediately look for relevant licenses depending on the services they are facilitating because it is very likely that regulators are targeting them.

In addition, regulators can force Uniswap to run KYC for its users which of course can threaten user privacy. Users who feel uncomfortable with KYC implementation can migrate from Uniswap and choose another platform.

B. Competitive pressure: Competitive pressures can also lead to Uniswap risk. Although market opportunities are still very wide but a high level of openness causes even more new players to enter the market to try their luck in the industry.

C. Technological developments: The fast development of technology, especially the blockchain technology used in cryptocurrency, causes an application platform to become obsolete, and be replaced by a new, more sophisticated one. Therefore new innovations are needed such as version updates and the addition of various new features so that Uniswap can always be at the forefront of technology implementation.

D. Smart contract security gap: The development of technology in the field of cryptocurrencies can not be separated from the threat of hacks carried out by irresponsible parties, especially those who exploit weaknesses in the coding of smart contracts. Because the smart contract is open, so the security gap can be read by everyone immediately. And irresponsible hackers can excrete that weakness and move funds elsewhere. Therefore Uniswap must always ensure the security of the smart contracts they use, at least not provide a loophole for irresponsible parties to exploit it.

E. Uniswap issued a special token called UNI which is a government token from the platform. The fluctuation of the UNI exchange rate could cause financial losses both from Uniswap and from the user side. If the UNI value falls, it can cause a decrease in liquidity providers who provide funds to ensure trading liquidity on the Uniswap platform.

F. Gas-fee changes from Ethereum: To ensure the smooth running of the Ethereum blockchain, a useful gas-fee is needed to provide incentives to miners to continue running their mining machines for smooth transaction traffic within the Ethereum environment. Gas fees fluctuate according to the level of traffic density transactions. If there is traffic congestion on the Ethereum network, it causes high gas fees, which makes users reluctant to exchange crypto. Because a gas fee is required to execute a smart contract from Uniswap. The reluctance of users to carry out exchange activities can result in lower trading activity.

3.2 Internal Analysis

3.2.1 Strength

A strong brand name is one of Uniswap's greatest advantages. It is one of the largest brands in the field of decentralized exchange that people in the world can recognize. All over the world organizations use the "Uniswap" brand in every country in the world. The presence of such a strong brand makes it easy for Uniswap to market its products worldwide. The popularity of the Uniswap brand also makes it easier to introduce new services to the market.

Technology excellence is a distinct advantage for Uniswap. Currently Uniswap is the best of DEX technology which is often used as a reference for new DEXs that have emerged. The Uniswap platform offers trading and investment convenience and features catering to the whole world. Users can exchange crypto tokens smoothly thanks to the support of large liquidity providers.

Uniswap is a decentralized exchange with the highest level of TVL compared to its competitors which is also a significant advantage. This means that Uniswap can provide exchanges with a wide variety of Ethereum-based crypto tokens at competitive prices and avoid price play by speculators due to low levels of liquidity. The high level of TVL is a form of the high level of user trust in Uniswap

3.2.2 Competitive Advantage

Uniswap is a decentralized crypto token exchange service, this service is based on information and communication technology (ICT). This has resulted in the field being loaded with technology. Uniswap's competitive advantage is the technology and service features it provides to users. Innovative services are the hallmarks of Uniswap. The small and concise organizational structure causes Uniswap to have a higher level of efficiency than a centralized crypto exchange. Where decisions are made through voting by the community which allows for a concise organizational structure and does not have a long bureaucratic chain, but decisions

are taken by the community by exchanging UNI tokens for voting rights, after the most votes are collected, the task of implementing decisions can be carried out by the task force directly.

3.2.3 Internal Weaknesses

Because Uniswap is an organization that provides technology-based services, this makes technology the main thing. Failure in technology can cause havoc for many. This will have an impact on user trust in the Uniswap platform and moving users to other platforms.

In addition, server limitations (service centers) can cause service to be disrupted. This limitation can be caused by the high user access to the platform which causes the server to crash or the full internet bandwidth that goes to the server, causing the service to experience connectivity problems.

3.2.4 SWOT Matrix

	+	-
Internal	Strength (S)	Weakness (W)
	1. Strong brand 2. Strong marketing & advertising 3. Availability of tokens for exchange (trading) 4. TVL is high 5. Market share 6. Advanced technology	1. Security leak 2. Technology failures 3. Server limitations 4. Internet connection limitations
Eksternal	Opportunity (O)	Threat (T)
	1. Financial services innovation 2. Business partnerships 3. Platform acquisition 4. Social trends	1. Regulatory pressure 2. Increasing competitors 3. The emergence of new technology 4. Hacker attacks 5. Exchange rate fluctuations 6. High gas-fee transactions when the network is congested

Opportunity 1. Financial services innovation 2. Business partnerships 3. Platform acquisition 4. Social trends	Strategi S-O 1. Increase marketing and advertising to penetrate financial services in the market (S1, S2, O1, O4) 2. Promote investment in liquidity mining with promising returns (S1, S3, S4, S5, S8, O2) 3. Scouting and hunting new start-ups in the blockchain field (S4, S5, S6, O3)	Strategi W-O 1. Extend R&D department to address security issues, and innovation (W1, W2, W3, W4, O1) 2. Sampling in events to capture customer desires for the platform used (O4)
Threat 1. Regulatory pressure 2. Increasing competitors 3. The emergence of new technology 4. Hacker attacks 5. Exchange rate fluctuations 6. High gas-fee transactions when the network is congested	Strategi S-T 1. Adequate financial resources can help Uniswap to develop more services in the blockchain-based investment sector (S1, S2, S5, T2, T3) 2. Beat the main competitors by adopting aggressive strategies in other sectors (S3, T2, T3)	Strategi W-T 1. By improving the quality of service and user experience (W1, W2, W3, W4, T2, T3, T4) 2. Developing investment products that are secure but provide higher returns than competitors (W1-W4, T1, T2)

Tabel 5. Uniswap SWOT Matrix Analysis

3.3 VRIO Analysis

3.3.1 Brand Image

Uniswap's main resource is its brand image. The brand is known as a trusted brand for cryptocurrency activists around the world..

3.3.2 Global Existance

Uniswap services can be accessed using the Internet so that it can serve users from all countries in the world. There is not a single country that is not served by Uniswap as long as the country has adequate internet infrastructure.

3.3.3 Supply Chain Is Provided By Liquidity Providers and Global Distribution Range

Uniswap has an extensive global supply chain covering all countries in the world and distribution reach reaches the whole world through the internet-based DEX platform.

3.3.4 Large Customer Base and High Customer Loyalty

Although Uniswap is classified as a very young platform, Uniswap has a large and loyal customer base that is spread globally in more than 200 countries.

3.3.5 DAO dan Technology Resource

Uniswap is a DAO (Distributed Autonomous Organization) which manages and manages DAI (Distributed Autonomous Institution). This system requires high technology support, especially the internet and blockchain. Uniswap has very adequate technology support.

3.3.6 Human Resources and Organization Culture

Uniswap as an ICT-based company has undoubted human resources in the field of technology, and has a dynamic and non-formal corporate culture that is flexible in the fast dynamics of the blockchain-based financial industry.

3.3.7 Corporate Capability

Uniswap is also known as a great marketer who involves its users (consumers) in various opportunities, both for socialization (marketing) and the development of new features on its platform.

Resources / Capabilities	Valuable	Rare	Inimitable	Exploited	Implication
Brand Image	√	√	√	√	Competitive Advantage
Global Existance	√	√	√	√	Competitive Advantage
Liquidity Provider & Dist. GLobal	√	√	√	√	Competitive Advantage
Customer Base & Loyalty	√	√	-	√	Temporary Advantage
DAO but technology resource	√	√	√	√	Temporary Advantage
Human Resource & Organizaition Culture	√	√	-	√	Temporary Advantage
Marketing Capabilities	√	√	√	√	Competitive Advantage

Table 6. Uniswap VRIO analysis

3.4 Value Chain Analysis

Effective Value Chain Analysis requires Uniswap to realize that all activities or functions do not require the same level of supervision. Therefore, the first step of adapting porter's Value Chain framework is to identify the importance of activities according to their role in the product/service delivery process.

3.4.1 Main Activites

Uniswap's key value chain activities are directly involved in the exchange of Ethereum ERC20 blockchain-based tokens to cryptocurrency users.

- Liquidity Provider

It is important to be able to provide an exchange of ERC20 tokens according to what the user wants. Therefore, it is very important to keep liquidity providers from moving to other platforms as well as to attract new liquidity providers to be able to accommodate increasing exchange transactions. Therefore, Uniswap must always ensure the security of investor funds and provide competitive returns. Surely all this has been done using sophisticated and adequate ICT technology.

- Operation

It is very important to be able to analyze operational activities. All uniswap operational activities are virtual so there is no need for physical entities to make it happen. Operational entirely using ICT technology. So that analysis and management can be done instantly.

The activities started from the provision of liquidity, exchange (trading) of ERC20 tokens, and liquidity mining carried out using the website <https://uniswap.org> Computer systems can automatically make certain adjustments in case of changes to supply and demand so that the token exchange (trading) can run smoothly and ensure all parties get a reward or good service.

ICT technology is the backbone of Uniswap's operations so that Uniswap can be accessed from all parts of the world consistently and fairly to all users.

- Marketing

Marketing activities are generally carried out digitally using influencer services on various social media. This method is considered more suitable today. In addition, it is also more efficient to use promotions in the form of advertising. Then also by establishing partnerships with various other blockchain projects and conducting community development and regularly communicating with them such as conducting AMA events (Ask Me Anything) or digital gatherings using a video conference platform.

3.4.2 Supporting Activities

Support activities play an important role in coordinating and facilitating major value chain activities. Uniswap can also benefit from the analysis of its supporting activities as described below:

- **Organization Infrastructure**

The organizational infrastructure shows various activities, such as quality management, handling legal issues, accounting, financing, planning, and DAO that can be done online. Because most of Uniswap's operations use ICT technology, and nowadays ICT technology does not have to be provided independently but can use cloud-based services so that it is more efficient in terms of costs and also space provision and system maintenance. Effective infrastructure management can enable Uniswap to optimize the value of the entire value chain. Uniswap can control infrastructure activities (or what is commonly known as overhead costs) to strengthen competitive positioning in the market.

- **Procurement**

Although most of Uniswap's operations are cloud based, Uniswap still has a procurement team that is responsible for the procurement of both software, hardware and cloud devices. Uniswap should carefully consider its procurement activities to optimize the value chain entry, operation, and exit (service and user experience).

As mentioned above, the application of the Porter's Value Chain model depends on understanding the importance of all activities (activities). After understanding the relative importance of the identified value chain activities, Uniswap should highlight areas where value can be added, cost efficiency can be achieved, bases for differentiation can be established, or processes can be further optimized.

- **Human Resource Management**

Uniswap can analyze human resource management by evaluating various aspects of HR, including recruiting, selecting, training, awards, performance management, and other HR management activities. Human resource management at Uniswap is unique in that it differs from organizations (companies) in general, in terms of human resources and a lean and decentralized organizational structure. This is very effective and allows Uniswap to be efficient in terms of HR costs. Where the organization must minimize costs associated with recruiting, training and employee benefits.

- **Technology**

Uniswap is an organization (company) that relies heavily on ICT technology in carrying out smooth, effective and efficient operational activities. In addition to providing technology independently, it is undeniable to increase the cost efficiency of technology can be rented through more practical cloud server services and low maintenance costs (management) so that Uniswap can focus on developing technology, services and improving platform security.

- **Services**

Uniswap is a cryptocurrency token exchange (trading) platform based on Ethereum ERC-20. Where the exchange activities in the form of cryptocurrency commodities are provided by the public and for the community. Uniswap is not a conventional organization (company) in general. Starting from the technology, commodities and services provided are completely online based. Intermediaries are not needed because users interact directly with other users globally (internationally). However, Uniswap also directly handles user service inquiries, complaints and inquiries related to its services via telegram messenger and email and does not close down the use of other social media such as Facebook, Twitter and Instagram.

IV. CONCLUSIONS AND SUGGESTIONS

Uniswap is a global organization (company) in the field of Cryptocurrency Decentralized Exchange (DEX) that operates throughout the world using internet access. Uniswap is the number one DEX in the world with the largest TVL (Total Value Locked) value in the world. However, to be global and successful in a highly competitive industrial environment requires focusing on several things. Apart from a strong business and marketing strategy it also requires several sources of competitive advantage. In the case of Uniswap, by providing more diverse service features and competitive returns for its liquidity providers.

Uniswap also spends a lot of money on advertising and promotions. The main sources of Uniswap's competitive advantage are as follows:

- Strong brand
- Marketing capabilities
- Availability of tokens for exchange (trading)
- Keep TVL levels high
- Market share
- Advanced technology
- Customer loyalty

While some of these sources have created brands that have a sustainable competitive advantage, some of them also give rise to temporary competitive advantages that can be further strengthened through service innovation and customer orientation. HR Management and Technology Management are also important parts that require a big focus in the 21st century for a sustainable competitive advantage.

However, as in any business situation, there are areas that Uniswap can improve. Some recommendations are as follows:

- The cryptocurrency exchange market (trading) is a business that will continue to grow in the future, of course it will be very lucrative if Uniswap able to gain even greater market share in the future.
- Extend service (feature) and social benefits, especially for those in developing countries, especially targeted to unbanked society (people who are not reached by conventional banking access).
- Capture more market share of the population that has not been reached at this time, such as women. In developing countries, women have a high enough role in economic activities and investment.
- A small but important change needs to be made to their website. After comparing it to competitors, we felt it necessary to add some more varied service features.

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