

MDAE

(Minima Decentralized Advertising Ecosystem)

White Paper v0.1

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Minima Innovation Challenge - - EDENBASE

Developed for innovation competition by Josua's Team

Table of contents

(Minima Decentralized Advertising Ecosystem)	1
ABSTRACT (Goals)	4
1. INTRODUCTION	5
A. DAO	5
B. Service System.	7
→Generic overview:	7
→First way:	7
→Second way:	8
2. TOKENS, DAPPS, AND SMART CONTRACTS OF THE SERVICE SYSTEM	9
TOKENS:	9
gDAE (Generic Token):	9
aDAE (Advanced Token):	9
paDAE (Profile Anonymous Token):	10
ppDAE (Personal Profile Token):	10
dmDAE (DAO Manager Token):	10
fDAE (Fuel Token):	11
DAPPS:	11
DAO DApp:	11
Advertiser DApp:	11
Profile DApp:	12
Tracker Publicity DApp:	12
SMART CONTRACTS:	13
gDAE and aDAE (Generic and Advanced Tokens):	13
paDAE and ppDAE (Profile Anonymous and Personal Token):	13
dmDAE (DAO Manager Token):	14
3. USE CASES	14
4. A DISCUSSION OF A MARKET FIT	18
5. WHY THE IDEA IS UNIQUELY SUITED FOR THE MINIMA PROTOCOL.	19
6. WHAT THE COMPETITIVE LANDSCAPE LOOKS LIKE	19
7. GLOBAL DIGITAL ADVERTISING FORECAST.	21

8. ROADMAP	23
9. CONCLUSION	25
10. TEAM PARTICIPANTS	26
The team participants are the following:	26
Special Thanks to	27
References	27

ABSTRACT (Goals)

The goal of this project is to decentralize the market of the digital advertising from the big companies and break their monopolies, making a win to win, where everyone gets rewarded fairly from the advertising of the companies, tokenizing the whole ecosystem.

Imagine a decentralized system where advertisers can reward their clients directly instead of paying exclusively for the media they advertise on.

In a nutshell, this is the main purpose of this project:

A Minima Decentralized Advertising Ecosystem where everyone can be fairly rewarded and where advertisers can very simply offer a new method of rewards/advertising to their customers using tokens, smart contracts, DApps and a DAO, using web2 or web3 systems, over Minima.

This includes any possible scenario:

- Minima nodes and any developed DApp over it
- Phone app
- Websites
- Mobile / Web / Desktop GAMES
- IoT devices
- Virtual worlds
- Augmented reality
- Metaverses

Where people could benefit from marketing campaigns / advertising of companies, where they can offer their publicity using tokens and the customers would get rewarded when they watch the publicity or follow the instructions given by the advertisement instructions set into the token.

So paraphrasing Minima:

MDAE would be the Advertising Ecosystem that was meant to be.

A truly Decentralized Advertising system has to be ruled by some nonprofit organization in order not to swap one monopoly from another, so the best way to do that is on a DAO.

This DAO, as we are going to explain later, should act as a way to improve the system over time and as an incubator for helping to develop promising projects over Minima and a lot of other things with the little fees collected from this Decentralized Advertising Ecosystem

1. INTRODUCTION

In this section we are going to explain the two main parts of the **MDAE** and how they would work without going into too many details, just pointing out what technologies they would use.

So as stated, the **MDAE** would consist of two basic main systems, that both of them can be split into several ones.

- A. **DAO** - The DAO mainly would manage the distribution of the Tokens and the improvement of the system over the future.
- B. **Service System** - The service system is the part that would let every one play his role in the game (Producers/Consumers), so it would be made from DApps, Tokens, Smart Contracts that would work over Minima as well as the integration parts to be able to interact with systems that don't have a Minima node.

A. DAO

A truly Decentralized Advertising system has to be ruled by some nonprofit organization in order not to swap one monopoly from another, so the best way to do that is on a DAO.

The mission of the DAO has to be:

- Manage the Tokens and their types available to the parties, to keep a good ratio of price vs rewards.
- Keep the ecosystem safe and improve the system according to the requirements of the market and companies.
- Keep the funds received from the fees, when every token is bought or the publicity has been watched, and the token is returned to the DAO, safe under multi signature contract.

The funds of the DAO has four main purposes:

- One part to improve the DAO and the MDAE use cases
- One part of investing on promising projects over Minima, acting as some kind of incubator for Minima projects.
- One part for rewarding the developers who built the system and the people who are managing the DAO.
- One part for developing or funding scientific project mainly on green energy as hydrogen.

There is a risk that the DAO ends up as some kind of centralized system, which is the opposite that we want. So, in order to avoid that, the DAO have to be able to sell / distribute big quantities of their advertising tokens to exchanges, DeFi systems, companies or special campaigns or contests but with some limited capabilities set by smart contracts in order not to trespass some limits that would corrupt the system.

The DAO have to set a way to let individuals and third parties to collaborate gathering and sharing information or using external sources of information to help companies to prepare their campaigns.

These “external sources” could also be some kind of **Oracles** to watch for external events of the real world, if they have happened or not, and they will let advertising companies or individuals to make more complex campaigns.

For instance, a Twitter-Oracle could be a service that checks if a tweet has been posted on a specific account, or if an RT or a Like has been done by a specific user and the Advertiser DApp could use this service to offer more possibilities when the companies or individuals want to launch their advertising campaigns.

The DAO will be a DApp application that will let you manage all those requirements exposed.

B. Service System.

As we described before, this part has to be the one that specifies the roles that every part is going to play, the DApps to build, the tokens and smart contract and how they are going to relate to each other, and the connections with the non Minima world.

Before we start defining each part, let's describe a general overview of the system, since the system has to fit a lot of different possible scenarios, there are two main ways to deal with it, so we are going to define a very generic overview and after that, we will point out how to address the goal in two different ways to make it work.

→**Generic overview:**

There are a certain amount of advertising Tokens distributed on the market by the DAO.

The companies buy these Tokens and set their advertising info on the token / tokens destined to the target audience, on the buy process a little fee is sent to the DAO.

Once the advertising is watched by the target audience, the person who watched the publicity or followed the instructions, receives a reward stipulated on the Token's contract on his Minima's wallet, then the Token returns to the DAO as well as a little fee.

→**First way:**

The first way to achieve some scenarios is the traditional way, a link, an image on a web page or Minima DApp, that once clicked it would trigger some JavaScript that depending on if the computer or mobile from where the webpage is viewed, is running a Minima node or not, it would do one thing or another:

- The consumer is running a Minima node:

The link or the image clicked would trigger a transaction over Maxima, where the link should have the Maxima contact of the Advertiser, and once the publicity would have been watched, the transaction would take place on the Advertiser's Minima node involving the publicity Token, a reward that would be sent to the viewers Minima node of the publicity, the little fee that would go to the DAO and in the same transaction the token would return to the DAO Minima node, satisfying the Token's contract conditions.

- The consumer is not running a Minima node:

In that case a JavaScript would be triggered once the link or image clicked, then a Chrome extension or a popup could be opened and here we can have two options:

- 1) The consumer has a Minima node, but not as the device is watching the web page.

2) The consumer has not a Minima node.

In both cases the user would pick up a wallet or scan a code bar, (if it has a Minima node on his mobile), from a list of blockchains where to receive the rewards for watching the publicity, after that, once the publicity would have been watched, a transaction on the Advertiser's Minima node would be triggered and managed by specific service developed to interact with other blockchains, so it can satisfy the Token's contract as described in the former step.

→**Second way:**

In this way, is where we can exploit the full potential of Minima(L1), maxima(L0) and omnia(L2) and accomplish almost any possible scenario use case and where the system becomes more decentralized.

In this part, instead of executing the transaction on the Advertiser side, the Token is sent to the consumer wallet if certain conditions are met, and this opens a new bunch of different amazing possibilities.

Here the customer has the control when to watch the publicity, and also it could be the possibility to have different types of advertising Tokens, when in those scenarios the token could also be sold by the customer to the third parties as we explain in the almost infinite use cases that this system can manage.

In both ways, the third party who acts as intermediary where the advertiser token is shown or sent has also to receive a few rewards if it is defined on the conditions of the token publicity contract.

2. TOKENS, DAPPS, AND SMART CONTRACTS OF THE SERVICE SYSTEM

In this part we are going to describe a general overview of all parts involved to fulfill the roles of every actor who interacts with the system, and we also will describe the DAO DApp in this section.

TOKENS:

Are the essential part of the MDAE, their purpose is to drive all other pieces of the system to work together in order to achieve the system goals.

There would be several types of Tokens everyone related to one or several actors of the system, all the Tokens created will not have decimals but **fDAE** (Fuel Token) that would be the only one with decimals if finally is decided to use it.

All tokens will be generated by the DAO with billions of units of it, locked in a vault by a multi-signature contract.

gDAE (Generic Token):

The tokens will be delivered into the market in a controlled way to avoid speculation and over saturation.

Every Token will be used by advertising companies to set their publicity into the Token and a basic set of rules on how this publicity has to be managed, using smart contracts, state variables by a DApp that will let companies configure the Tokens as they wish.

This token would be used on scenarios described in the previous section as “**First way**”

aDAE (Advanced Token):

The tokens will be delivered into the market in a controlled way to avoid speculation and over saturation.

Every Token will be used by advertising companies to set their publicity into the Token and a basic set of rules on how this publicity has to be managed, using smart contracts, state variables by a DApp that will let companies configure the Tokens as they wish.

This token would be used on scenarios described in the previous section as “**Second way**”

paDAE (Profile Anonymous Token):

The tokens will only be delivered in units of one to a specific consumer by using a DApp, an exception can be made to investors.

The purpose of the token is to save information about the user profile, but keeping the user anonymous.

The token could be required by some advertising tokens (gDAE, aDAE) to give more rewards to the consumer of publicity or to be a requirement to let the consumer use the

advertising tokens set with this condition, the token comes back to the user once the company gets the token's data.

The token could also be sold in exchange for a reward, so every time a company buys the token, a reward would be sent to the consumer as well as his token *paDAE*.

ppDAE (Personal Profile Token):

The tokens will only be delivered in units of one to a specific consumer by using a DApp, an exception can be made to investors.

The purpose of the token is to save information of the user profile with his personal data, so the user information wouldn't be anonymous.

The token could be required by some advertising tokens (gDAE, aDAE) to give more rewards to the consumer of publicity or to be a requirement to let the consumer use the advertising tokens set with this condition, the token comes back to the user once the company gets the token's data.

The token could also be sold in exchange for a reward, so every time a company buys the token, a reward would be sent to the consumer as well as his token *ppDAE*.

dmDAE (DAO Manager Token):

Only a few tokens will be generated of this type that grant admin permissions on the DAO DApp.

So only the person with this token will be able to operate the private parts of the DApp plus this token will also have a private hashed password set on his state variables to add an extra security layer.

fDAE (Fuel Token):

The whole system could be set in a way that in order to use it would be necessary to have some units of this token, like gas in other networks, and it could be set to be published on the exchanges for trading.

DAPPS:

They are also an essential part of the MDAE , they will configure any part of the ecosystem related to any actor involved in such a system, as well as the DAO and the Tokens.

DAO DApp:

The DAO DApp functions have been described previously in this document in the **Introduction** section, so we only add a few things.

Only the persons with the token **dmDAE** will have access to the private functionality of the DAO.

Advertisers can access the DApp to buy advertising tokens (gDAE, aDAE), and also to access to third parties information like **"Oracles"** available on the DAO to help them to organize their publicity campaigns

Consumers can also access DAO DApp to get their profile tokens (paDAE, ppDAE) that later, they will have to set with their profile info using the **Profile DApp**, and also to access to third party services that let them notify these parties that they are offering their profile tokens to sell.

Third parties can also develop their **"Oracles"** and notify the DAO of their existence and how they should be used and de fDAE(fuel) quantity necessary to use them.

Advertiser DApp:

This DApp lets advertisers who have bought publicity tokens (gDAE, aDAE), to configure them according to their necessities or any marketing campaigns to launch to the public or events.

The DApp lets users configure a token or a group of them with the publicity of the company, the way it has to be managed by the consumers to watch it, the instructions to meet the requirements and the rewards to receive if the requirements are followed, as well as the intermediary parts, if they are, and what rewards should them receive.

The DApp will configure all this information, by setting the state variables of the tokens.

The DApp could also let you buy the tokens and/or configure them on the same transaction.

There are a lot of options that the DApp will offer to the advertising companies to configure their tokens that are almost endless, like the **"Oracles"** that are available to use from the DAO, that we will see when we describe some use cases.

Profile DApp:

This DApp lets people configure their profile tokens (paDAE, ppDAE) which they get from the DAO DApp or any third party (this open the system to attract companies and investors, so they could buy those tokens and then give rewards to people who will fill them up, so people got rewarded, and a company get profile information and the investor get money from the company for the tokens).

The DApp lets users configure the profile tokens using state variables with any kind of information that would be interesting by the advertising companies.

There is also the possibility to protect the private information on the (ppDAE) token hashing it and let the company contact you over Maxima to ask you for the key to unhash the private information.

Tracker Publicity DApp:

The DApp also lets you configure in which situations, applications, DApps, games, events, metaverses, GeoPosition waypoints or zones you want to receive publicity tokens (**Second Way**) or you want those links to show up (**First Way**).

The DApp also lets you use the info of your profile token to automatically configure the DApp areas on which you are interested on to receive publicity or set in manually.

The DApp will also let you activate your GPS and, under which conditions, let you receive publicity tokens or links that are geolocated.

The DApp lets you subscribe to third parties that act as sources or “**Oracles**” of publicity, specific brands, events, competitions, restaurants, games, metaverses, augmented reality, and so on...

SMART CONTRACTS:

They are essential, as they must assure the integrity of the system and verify that every token satisfies its script conditions and that the DApps make them work as expected, providing all information necessary to fulfill the contract’s conditions.

We are going only to enumerate the ones that are needed and point out only the most important things they must consider, as we already described how the tokens and DApps should work.

gDAE and aDAE (Generic and Advanced Tokens):

The smart contract that has to rule these two tokens is the most complex of all of them to develop, as it has to control all conditions and the requirements as described previously on the tokens and DApps.

The main function of the contract is verifying that:

1. When the token is bought, a fee is sent to the DAO.
2. When the publicity is watched a reward is sent to the person who watched, a fee is sent to the DAO and the tokens are sent back to the DAO and if there is an intermediary (website) then also receive a reward.
3. Verify that all conditions set are satisfied, and the ones related to publicity as state variables are true.

paDAE and ppDAE (Profile Anonymous and Personal Token):

- The smart contract has to verify that only one unit is transferred at a time from the DAO.
- When the person sends that token as a publicity token requirement, the token has all information required to be set as state variables and that the token itself is not a "fake token". Then the token is sent back to the person on the same transaction.
- When the token is sold, it must check that a reward is sent to the person, and that the information required on the state variables is set, as well as the token is sent back to the person.

dmDAE (DAO Manager Token):

The smart contract of this token must control that the token is not transferred to anyone without matching the hashed key with the key representation of it.

Unless whom sent the token is the DAO, in that case, once the token is sent to a user, this must set the hashed password as a state variable, if it is not set, the token cannot be sent to anyone nor used when required.

3. USE CASES

The use cases that can be managed with this kind of system (MDAE) are almost infinite and if there are in the future some special requirements that cannot be fit using the actual tokens, smart contracts and DApps developed, the DAO always can create new tokens, smart contracts and DApps to be adapted to the new conditions and improvements that will be required in the future, *or third parties can develop "Oracles" and incorporate them on the system for free or the companies that want to use them can buy them or pay a fee for using them.*

So in this section, we are going to describe scenarios where such a system (MDAE) could be used to achieve the goal of a truly decentralized advertising ecosystem.

Those scenarios would be described as an overview, without entering in details to get a wide vision of what can be done.

1. A Minima user is browsing the web and there is an advertisement using MDAE (link or image on the web) about a new product, the user clicks on the link, watches the publicity and then a transaction is made over Maxima and the user receives a reward on his wallet.
2. A Minima user configured that he wants to receive advertising about sports when he is using a Minima DApp called socialMin on the **Tracker Publicity DApp**.

The user is using socialMin, and he receives a notification that there is available a new token of publicity, he can choose to watch it now and a transaction over Maxima is done, and he receives the reward on his wallet after watching the publicity, or he chooses to watch it later and the token publicity is sent to his wallet to be watched later.

3. A user waiting in the subway is watching the flat TV (IoT device with a node of Minima running on it), when a bar code show up on the screen (Saying sports Minima publicity), the user uses his mobile to scan the code and watch on his mobile the publicity, then he receives a reward on his wallet.
4. A company buys 10,000 tokens on the DAO of MDAE to launch a campaign on a very famous multiplayer game, configures them using the **Advertiser DApp** with a video to be watched, and sets the rewards to be received by the user and the company of the game.

The user is playing a game and a token of the publicity show up on the game, (the user can decide to use the token and watch the publicity now and receive the reward or watch it later and the token is sent to his wallet), the company of the game receives his reward too for showing up one of 10k tokens of the campaign when the user uses the token and watch the publicity.

5. A user asks for a ppDAE token profile on the DAO of **MDAE**, once he has the token on his wallet he uses the **Profile DApp** and configures the token with all the info asked by the app and this info is set on the state variables of the token.

He specifically indicates that he is 23 years old and is interested in financial, sports, technology, cars, and about crypto and blockchains.

The user uses the **Tracker Publicity DApp** and uses his profile token to autoconfigure it to receive publicity about his preferences.

6. A marketing company wants to perform a survey about the knowledge of financial products over the population of a country between 20 and 35 years old.

The company buy the 50k tokens on the DAO of **MDAE**, configure the tokens with the **Advertiser DApp**, setting the way the survey must be filled up and the requirements of that the age of between 20 and 35 years old are required, and that also a ppDAE token profile must be attached to in order to receive the rewards, and also the rewards the media where the advertising will be published will receive.

The marketing company chooses the five most known online newspapers in UK to perform the campaign and those newspapers published every one 10k token links on their website.

7. A user who is watching online **The Telegraph** newspaper (the one chosen by the marketing company), the **Tracker Publicity DApp** notifies him that there is a token of publicity that he may be interested on, the user fulfill the survey and then a Maxima transaction is triggered checking that the user profile meets the requirements and then the transaction is done, the profile token is sent to the company, the rewards are paid to **The Telegraph** and to the user, and the user's

token profile is sent back to the user and the publicity token is sent back to the DAO, all in the same transaction.

8. A new single player game under **GODOT Game Engine** is made (has an API that can interact with a Minima node directly), and a company wants to launch a campaign's publicity on this game considering that:
 - The game can only be played if you have a Minima node running on the same machine.
 - The game can show publicity on the fly on specific areas of it (Images, text, video) only receiving a Token Publicity (aDAE) on the Minima's node of the player.
 - The game has some "power" tokens that can be bought to enhance the player's capabilities.
 - The company who wants to advertise on that game contacts the developers of the game and reach an agreement, 10k power tokens of the game will be transferred to the company's Minima wallet.
 - The company will buy 10k tokens of publicity (aDAE) on the DAO of **MDAE** and also will publish on it (The DAO), the campaign is going to do, the only requirement to participate is to register your Minima's wallet address on the company web page or Twitter account to receive the publicity and the "power" tokens for the game as a reward.
 - The company configures the publicity token (aDAE) so that, will give "power" tokens when the publicity is watched as a reward.
 - **The Tracker Publicity DApp** will notify the users of this campaign.
 - So when the day D arrives, the company begins sending the publicity tokens to the Minima's wallet addresses.
 - The players start playing their game and when specific areas for showing publicity are reached, if they have been received the (aDAE) token, a publicity will be shown on the wall of the game, or any other object the game has been specified, then the player only have to click on the area, and he will receive on his wallet the "power" token as reward, that can be used when the player wishes.

This is one of the Proof of Concept we are going to develop, game on GODOT

9. A technological company has developed a new phone and wants to promote it by organizing a conquest all over the city, where the rewards will be tickets for participating in a draw of 1,000 brand-new phones.
 - So the company makes an agreement with Minima company, for organizing the conquest using Minima nodes and **MDAE** with some special conditions over the others.
 - The company wants to distribute 10k aDAE tokens with geolocated positions all over the city and give a series of hints, to let people find them using their mobiles, using the **Tracker Publicity DApp** or a new augmented reality DApp developed.
 - The company creates the 10k NFT ticket tokens as a reward, each one with a number on it.
 - The company buy the 10k aDAE tokens on the DAO at a special price, and then use **the Advertiser DApp** to configure the tokens at specific GeoPositions all over the city and set, that the reward will be one of 10k NFT tokens deposited on one of the company script's address.
 - So the conquest starts, and everyone starts looking for the tokens using the hints given by the company at different time intervals.
 - Once the token is found you only have to claim it on the app and a reward NFT ticket token will be sent to your Minima node using Maxima, Minima or Omnia.
 - Once the conquest has finished, the draw is done and the winner's ticket number is published on the company web page, Twitter account and maybe the winners are notified directly over Maxima.
 - After that, the only thing left is to claim your brand new mobile phone you won.

To end up this section, as you have seen there are almost infinite possibilities to organize advertising campaigns over Minima with people who also have Minima nodes or even with people that don't have Minima nodes as explained on the introduction "**First Way**".

Even little companies like restaurants can buy advertising tokens at the DAO of **MDAE** and offer any kind of rewards to their future clients and to attract visibility using the DAO tools at very economical prices.

4. A DISCUSSION OF A MARKET FIT

Considering the actual moment and the near and long future, the market fit is almost endless.

In the actual moment:

A decentralized advertising system where the monopoly of Google and Facebook would be broken, and the advertising would be a fair system where everyone would take profits of it and also could be funny as well as more profitable for companies because the idea of tokenize it open a lot of possibilities where to apply: web2, Chrome extension, web pages, videos where a code bar could lead you to get your token of advertising in your Minima wallet, or on any device where Minima are running, the DApps and games could be configured to receive the publicity tokens according to the profile you already configured.

Or imagine a thing like Pokémon Go, where a company could set up some publicity tokens spread all over the site guided by GPS , or set the publicity tokens only to show up on specific streets or areas of a city.

In the near/long future:

The internet of things is becoming a reality very soon, Minima can be the spark that initiates that new era, so what can we expect?

Minima will be on every IoT device on the planet, or Minima nodes could be on any phone on the planet and the IoT devices could be only sensors to be able to interact with any kind of device, imagine sensors everywhere that emit free data of traffic, contamination, number of passengers, vehicles with Minima nodes, Minima phones all of them being able to interact to each other so the augmented reality, virtual worlds, metaverses, real world, all of them will become one or several of them which opens endless possibilities for decentralized advertising system.

5. WHY THE IDEA IS UNIQUELY SUITED FOR THE MINIMA PROTOCOL.

The idea is perfect for Minima, as Minima will be the most decentralized network of the world, and is the best way to build a decentralized advertising system. The “colored” token system that Minima has with the ability to create trillions of tokens or NFT’s with only one

fraction of 1 Minima, plus their smart contract script language that lets you set rules over tokens/NFT's and instructions on how to use them.

A system like **MDAE** is the ideal system to use over Minima blockchain to exploit all his potential using his amazing capabilities like **tokens, scripts, DApps, Maxima, Omnia** that would be the perfect suit to create an ecosystem with infinite possibilities applied to the advertising world, on the present, the near future and the long future as there is nothing in the market like the **MDAE**, where advertising will become fully decentralized and at the same time will let everyone be rewarded fairly and at very lower prices.

6. WHAT THE COMPETITIVE LANDSCAPE LOOKS LIKE

It is a change of game, if the idea is developed taking into consideration several factors like the tokens to create, how to rule them, how to distribute them to get to the people, how to incentive people who want to receive tokens to get publicity or even to go for them playing games, contests all over the city with a mixed metaverse/real world/augmented reality. How to let the advertising be part of the game objects, static objects like walls or dynamic like players that have a suit of a brand, or powers that get extra capabilities to a player.

The **MDAE** at first it looks like a "non-profit organization", but it is designed to attract a lot of attention. Third parties that would develop "**Oracles**" or any kind of sources of information that would act as an input to advertising companies to design and develop their campaigns better, or even they will use **MDAE** as a base to build their own marketing systems or complex systems, but always, the DAO of the **MDAE** will always receive his fees to perform the DAO's goals.

Such a system can attract a lot of investors, as the way it is designed is all about tokens, and almost every one of them can be sold, bought, exchanged by any of the actors that are using the system or any investors, on exchanges, DeFi systems, games, metaverses, web2, web3 and the system has endless possibilities and always can be improved without any limitations but the DAO of **MDAE** rules and tokens, *keeping in mind that one of the goals of the DAO is to adapt always to the future and the customers but keeping itself decentralized and fair for every party in a way that monopolies must be avoided.*

Centralized ad in Web 2.0 began is currently dominated by ad exchanges, complex behavior monitoring systems, and cross-device user tracking. Furthermore, most programmatic

ads are launched through a few major ad exchanges that control the flow of data and are highly opaque in terms of their algorithm.

We can take note of the main benefits of decentralized advertising, looking at the centralized advertising problems:

- The consumer will regain **control of their data** (algorithmic transparency issues).
- The marketers only pay for genuine click-throughs (**fraud prevention**).
- Reinvent the market by providing a transparent advertising environment that connects advertisers with users. It will achieve more knowledge about the audience reached, and consumers will be aware of how third parties use their data without their permission.
- Customers will be able to choose when, to whom, and for how long their information is made public.
- Assist users in maintaining their anonymity and improving their privacy.
- A blockchain like Minima can help digital marketers keep their client's data anonymous on their servers as well as third-party applications.

Regarding the platforms known as PTC or Paid to Click like “neobux”, “ysense”, or others mainly have a centralized organization. Customers have to access the platforms to do two things: watch ads and get paid to watch them. But we know that people who access these platforms primarily do so for a different purpose than to compare the products of their advertisers. In addition, the profile of people who access these platforms represents a very small percentage. Others PTC (Pay to Read) platforms like “clicksgenie”, where you have to open emails to view them and receive a commission for it, have the same problem as PTC platforms.

What we propose is a more renewed and fresher option to deal with advertising. A simple ecosystem capable of embedding itself in any ad on any web page, mobile app, game, metaverse, IoT, where the person viewing it can automatically receive a token reward.

To end up, if developed well it would be one of the best businesses of the century, breaking the monopoly of Google, Facebook-Meta, Microsoft, Brave, and major ad companies.

7. GLOBAL DIGITAL ADVERTISING FORECAST.

Marketing and advertising are key elements in the growth of a company. There are more and more internet users and companies have understood that it is extremely important to increase their spending on digital marketing.

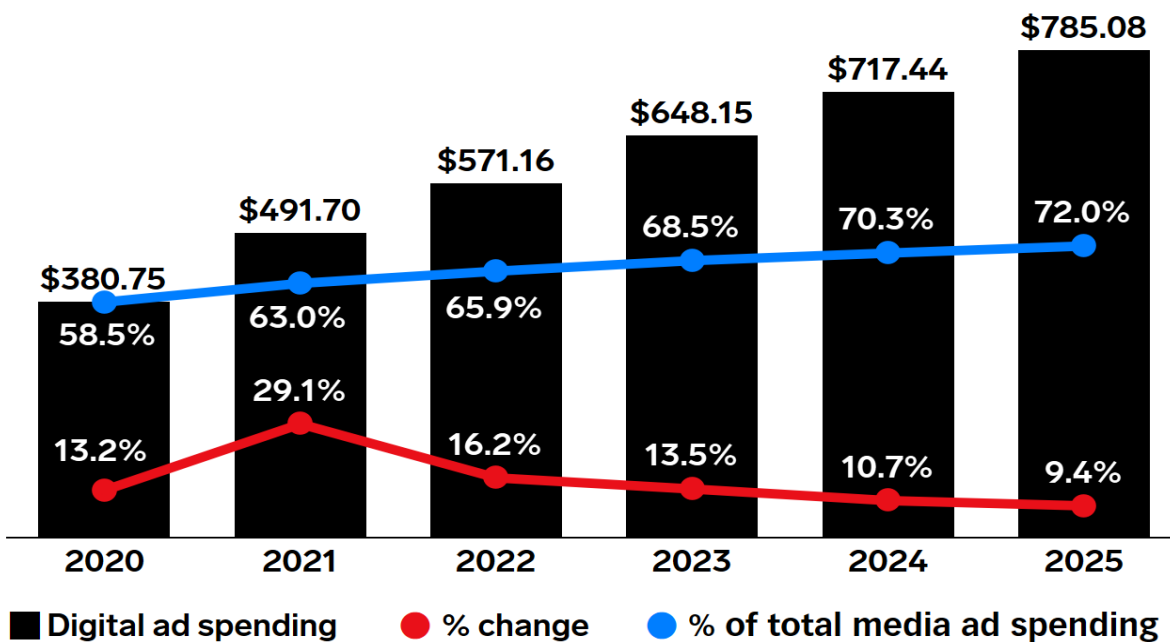
The global digital advertising market in 2022 is valued at \$571.16 billion. This is a marketplace for Internet-connected devices such as computers, mobile devices, and smart devices.

The digital advertising spend in 2022 marks a 16.2 percent rise from the \$491.70 billion spent in 2021. Digital advertising growth is showing no signs of stopping. 2022 is the first time global digital ad spend is expected to cross the \$500 billion mark, and the digital advertising market is forecast to continue growing and reach \$648.15 billion in 2023 and rise further to \$717.44 billion in 2024.

By 2025, it will hit \$785.08 billion. Not only is this more than double what it was in 2020, but it will also make up 72 percent of the overall expenditure on media ads. In other words, in 2025, for every dollar spent on ads, 72 cents will be on digital ads.

Digital Ad Spending Worldwide, 2020-2025

billions, % change, and % of total media ad spending



Note: includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets, and other internet-connected devices, and includes all the various formats of advertising on those platforms; excludes SMS, MMS, and P2P messaging-based advertising

Source: eMarketer, October 2021

8. ROADMAP

⇒ Stage 1 (July 2022): Ideation Phase

- The team decided to participate in The Minima Innovation Challenge.
- As a team, we identified an opportunity to enhance how advertising viewing is incentivized, combining ads technology and Minima Global Blockchain. We mainly focus on decentralization, advances and individual/collective freedom to allow users and marketers more control, privacy, and openness.
- Write the White Paper of the project.

⇒ Stage 2 (August 2022): Coding Phase

- First proposal of the distribution management DAO Tokens.
- First designs and development of DAO DApp, Advertiser DApp and Profile DApp.
- First design and development of smart contract gDAE and aDAE.
- First design and development of Tracker Publicity DApp (Mock prototype)

The DApps, Smart Contracts, Tokens they will be with basic functionality to demonstrate that the system works, it won't have contemplated the integration with other blockchains, all use cases on the Proof of Concept will require that the actors will be running a Minima node.

Proof of Concept:

We will implement four, five cases:

- Use the DAO DApp to buy two publicity tokens (gMDAE and aMDAE) and get one profile token(apDAE).
- Use the Advertiser Dapp to configure two tokens (gMDAE and aMDAE)
- Use the Profile DApp to configure the profile token with user data.
- **MDAE** advertising link on a web page using Maxima
- **MDAE** dynamic advertising on a developed Game under GODOT Game Engine that will react when the game receives a publicity token on the Minima's node

when the game is running, showing the token's publicity and giving to the player a special power as a reward to watch the publicity.

⇒ **Stage 3 (Q4 : 2022 → Q1 : 2023): Continuing and ending the basics of the project**

If we win the competition, or we receive some funding.

- Improvements on DAO.
- First design and development of Tracker Publicity DApp (a real one).
- Improvement on all DApps.
- Improvement on all Smarts Contracts.
- If OMNIA is ready, adapt the **MDAE** to use OMNIA and define the use cases when to be used.
- Development of the first **"Oracle"**.
- Defining the external sources of input / output information.
- First third party integration with other blockchains.
- Test net environment deployment.

⇒ **Stage 4 (Q2 → Q4 : 2023): Prepare the system to be ready for a massive use on the market.**

- Improvement of all parts of the system.
- Partnerships and commercial agreements to end the circle to make the system useful for every one of the actors.
- First exchanges list of tokens and integration.
- First integrations with DeFi systems.
- API development for "Oracles".
- API development for external sources input/output of information.

- API development for interacting with other blockchains.
- Main net launch.

⇒ **Stage 5 (Q1 → Q4 : 2024): Adapt the system to new outcomes and partnership necessities.**

- Continue the improvement of the **MDAE**.
- Solving the problems that may arise.
- Massive publicity campaign of the **MDAE**.
- Use the same **MDAE** to launch and incentivize the campaign and all possible scenarios.
- Taking into consideration to make a few changes on the system so that it can also become a Decentralized Minima Selling Products Ecosystem, wiping **AMAZON** like systems out of the market.

9. CONCLUSION

By implementing this idea, we are trying to attract a large audience of people to the project who see value in the application. Moreover, the project will receive additional funding at the expense of attracted advertiser funds.

So, think about the differences about a Decentralized Advertising System and the same system but, **instead of selling publicity, selling products**, the system is designed in such a way that only a few changes should need to be done to sell products in a decentralized way, wiping of **AMAZON** business of the earth.

There is nothing like this on the market, so the possibilities to smash it is enormous and the amount of money in play is in the order of billions per year, and since the use case scenarios are nearly infinite it is a game changer in the world of advertising and applicable to other sectors as we mentioned.

10. TEAM PARTICIPANTS

The team participants are the following:

- **NAME / NICK: JOSUA**

- Being on the computer world since 1987 with my first computer a “useless 8088” by then with MS-DOS operating system, so that I’ve been evolving and implied in this world since the beginning, participating in almost any roles possibles:
 - Hardware Repairing
 - Developer (A very long list of languages and technologies)
 - Analyst
 - Teacher / Mentor
 - Team leader
 - Researcher in a lot of technologies related and not related to computers
 - Most of the years worked on Java related technologies back end and third parties frameworks.
 - Worked also on front end also on several technologies html/JavaScript/Ajax/jQuery/CSS and whatever was needed for the project to develop.
 - And also researching on Godot Game Engine and Phaser games API.
- Bachelor’s degree on computer science
- And if I had to say something about me, I would say that I am a person with such a vivid mind that never stops thinking about ideas, projects and with a curiosity out of limits for a lot of things, that never accepts a NO for an answer if I believe something can be done.
- That is the way I knew about Minima, as I thought the same idea to build a censorship resistant network and the only logical solution was a blockchain on a mobile, so, everyone said that was not possible until I discovered Minima, and since then, I have been involved in such a breaking through technology learning as much as I can as there are lots of ideas I would like to apply and develop over Minima.
- **I want to thank all the Minima team for helping me on asking so many questions and sometimes being a pain in the ass with my crazy ideas, especially to Paddy, Elias, Naomi, Eurobuddha, Jazminima, Ryan and Luke.**

- **NAME / NICK:** **Jordi G.Castillon**

- Artificial Intelligence expert
- Back-End
- Server Admin
- AWS Partner
- AWS Start Up on a F6S
- AWS Community Builder
- AWS User Leader Group in Barcelona
- I am in the 10% of world Machine Learning Deep Racer PRO.

- **NAME / NICK:** **Joan Ramon**

- Computer professor for the last 10 years. Before and after finishing my Computer Engineering, I also have been working in different areas, related to Software and business administration.
- Fields of interest:
 - Blockchain technologies.
 - Operating systems based on the Linux kernel.
 - Virtualization solutions like LXC, docker, etc.
 - Web and mobile development.
 - Business Administration.
 - Managerial skills.
 - Online marketing.

- **NAME / NICK:** **fess2005 - Ivan Fesenko**

- Linux Admin
- Windows Admin
- MSSQL Admin
- Head of IT Department
- DevOps junior
- I have some basic knowledge in bash, python, JS, Haskell, scala, PowerShell
- Crypto enthusiast

- **NAME / NICK:** **Rafal Robert Cieslak**
 - Entrepreneur
 - Business
 - QA Tester
 - Technology and crypto space enthusiast
 - Early Minima tester

Special Thanks to

The Minima Team, who has helped us a lot with our multiple questions.

References

<https://www.minima.global/>

Minima is a cryptocurrency designed to be ultra-compact. Designed to remain totally decentralized. Designed to have no rulers. There are no miners and no ever-growing database.

<https://edenbase.com/>

By building a community and ecosystem, EdenBase supports portfolio companies to deliver responsible growth and valued impact to create a better future.

<https://www.neobux.com/>

Pay per click platform which connects advertisers and potential customers from all over the world in order to achieve mutual benefit.

<https://www.ysense.com/>

One of the main pages to earn money doing surveys and paid tasks.

<https://clicksgenie.com/>

Clicksgenie is a page that sends you emails with advertising that you have to see for a few seconds

<https://www.wpp.com/>

A creative transformation company who offers its clients communications, technology, and commerce services.

<https://www.omnicomgroup.com/>

A global leader in digital marketing serves over 5,000 clients in more than 100 countries.

<https://www.insiderintelligence.com/>

Unlock digital opportunities for their clients with forecasts, analysis, and benchmarks.