White Paper

Inspirest Fashion Metaverse

inspirest.io

Disclaimer

This paper is intended to be a technical overview. It is not intended to be comprehensive or the final design; thus, non-core aspects are not covered, such as APIs, bindings, or programming languages. The information shared in this whitepaper is not all-encompassing or comprehensive and does not intend to create or put into implicit affect any elements of a contractual relationship. The primary purpose of this whitepaper is to provide potential token holders with pertinent information for them to analyze the project and make an informed decision thoroughly. Before you purchase iREST tokens, we strongly advocate a careful study of this whitepaper of all the documents associated with the same, including the contract about buying the same. You may even engage the services of appropriate experts to help you with investment analysis. Certain statements, estimates, and financial information featured in this whitepaper are forward-looking statements that are based on and take into consideration particular known and unknown contingencies and risks, which in eventuality may cause the estimated results or may differ factually and substantially from the featured estimates or results extrapolated or expressed in such forward-looking statements herewith.

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Summary

Fashion is a way of expressing ourselves and creating identity in digital and real lifes. The fashion industry, where human tastes are the main driving force, is rapidly changing and transforming with the Metaverse. The greater involvement of the Metaverse in human life increases the appetite and need for fashion in the virtual world. Non-Fungible Tokens (NFTs) are accelerating this transition, while the Metaverse offers significant opportunities for the fashion industry. The universal structure of fashion requires establishing relationships within the physical and virtual world.

Inspirest™ is the artificial intelligence-based fashion metaverse that connects the physical and virtual worlds. Inspirest™ consists of Mobile Applications with Fashionic Artificial Intelligence (AI), Fashion NFT (iNFT), Augmented Reality for Fashion (iAR), and Fashion Metaverse (iMETA). iMETA includes artificial intelligence-based stylists, fashion events, shows, fashion houses, stores, and iNFTs. Inspirest™ is built on the focus of highly interactive, versatile, social, and unlimited pleasures. Fashionic AI transfers the limitless creativity of stylists existing in the physical world to the iMETA with AI. Inspirest™ models on the Fashion Metaverse called iMETA by learning in-depth the decision, choice, thinking, and design characteristics of stylists, fashion designers, and fashion artists living from the past to the present. Inspirest™'s iAR technology enables users to rediscover fashion by feeling and perceiving the digital universe at the iMETA. Personalized clothing, collections, and accessories will be integrated into the physical world and games and used in digital metaverse identities. iMETA has been built on the blockchain, thus ensuring the traceability and originality of extraordinary evidence.

The official currency to be used in the economy formed in the mobile app and the iMETA is the iREST token which is used for fashion events, and shows, shopping, access to stylist artificial intelligence models. iREST provides voting rights and priorities within the iMETA. Stylists, fashion designers, and artists participating on the iMETA obtain iREST tokens through AI models. Users who participate in fashion events, shows, and competitions within the Inspirest™ Mobile Apps will earn iREST token. Inspirest™ offers a fashion experience in the digital universe designed just for you. Get ready to challenge time and rediscover fashion that pushes the limits of imagination with the iMETA.

What is Inspirest?

Inspirest™ is a fascinating Fashion Metaverse based on artificial intelligence (AI) that connects the physical and virtual worlds. It aims to remove the universality of fashion from dependence on the laws of physics and reconstruct it on the Metaverse using digital tools. Inspirest™ offers clothes, accessories, collections, and fashion trends that are personalized, unique and push the limits of imagination in the AI-based Fashion Metaverse created by the ideas of designers who bring fashion to real life. The developments to be made in the Metaverse with creating the digital universe in the focus of style are given below.

- Artificial intelligence modeling of the original design characteristics of stylists, fashion designers, and fashion-related artists
- Creating artificial intelligence models in the metaverse of famous stylists, fashion designers and fashion-related artists from the past
- Creation of NFTs of designs modeled with high technology
- Constructing an AI-based metaverse with brands, stylists, fashion-related artists and models
- Virtualized fashion development with collaborations of brands and fashion-related artists
- Creating virtual stores in the metaverse for brands, stylists, fashion designers and fashion-related artists
- Shopping in the metaverse with augmented reality technology
- Organizing digital fashion shows and events
- Creation of virtual wardrobes
- NFTs created by stylists, fashion designers, and fashion-related artists
- Integrating the NFTs into the metaverse
- Integrating the Fashion Metaverse into real life with the Inpirest Mobile App

Unique clothes, collections and accessories that can be personalized and offer originality in the metaverse can be used by integrating them into the physical world, games and digital metaverse identities.

Real and digital lifes will be integrated by reconceptualizing fashion on the AI-based Fashion Metaverse. Fashionic AI has been developed with brands, fashion designers, artists, and stylists. Inspirest™ creates a universal fashion intelligence independent of physical boundaries and time constraints by revealing the original ideas of artists on the Fashion Metaverse. The biggest problem for the fashion industry is the massive gap between design, production, and marketing [1]. The integrated fashion structure will be revealed by creating an end-to-end integrated fashion universe in the Fashion Metaverse developed based on AI.

Fashion as a Service (FaaS) is a distribution model in which digital fashion-related services are provided to users. The Inspirest FaaS model aims to extract the universality of fashion from the inactivity of online shopping sites by combining high technology with fashion. Examples of services provided under Inspirest FaaS system are digital stylist service, artificial intelligence-supported decision algorithm, social interaction tools customized for fashion, bringing the right product and the right user together, digital fashion events, and designs produced by AI models.

The FaaS model has been systematized in the metaverse vertically in the fashion and horizontally in blockchain, AI, and AR technologies. The Inspirest FaaS model has been customized and configured separately for the physical and virtual world. Inspirest FaaS system is formed due to the integrated operation of all the sub-modules specified. The FaaS model focuses on user experience, and end-to-end digital fashion service is offered to users. The fashion industry, where human tastes are the main driving force, becomes practical, effective, and easily accessible with the Inspirest FaaS model.

Why is Inspirest Valuable?

Artificial intelligence (AI): The decision, choice, thinking, and design characteristics of stylists, fashion designers, and fashion-related artists are learned in depth and modeled on the Metaverse with AI. The AI models are produced to offer users a unique, original, and personalized fashion experience.

Interaction and Universality: The universality of fashion is being reshaped on the Metaverse by detaching from the laws of physics and using digital fashion tools. Inspirest™ offers a universality that pushes the limits of interaction and imagination by bringing together brands, stores, stylists, fashion designers, fashion artists, models, and users.

Fashion Events: Fashion-oriented events and fashion shows are held in Metaverse, where brands, stylists, and fashion artists showcase their inspiring designs.

Fun and Social: Social fashion and fun experiences are offered using customized tools in the highly interactive digital fashion universe.

Digital Stores and Fashion Houses: Stores and fashion houses built in the fashion-focused Metaverse provide users with a fashion experience that pushes the boundaries of the physical world in a virtual environment.

Augmented Reality (AR): The Inspirest™ metaverse powered by augmented reality technology, users, feel the digital universe and provide the opportunity to explore by reaching the limits of perception capabilities of all senses.

Customer Experience: A high-level digital customer experience is created with the characteristic artificial intelligence models of stylists and fashion designers, AR, the creation of the fashion metaverse field, and the NFT studies of fashion-inspiring stylists and fashion designers.

Sustainability: Digitally, products and designs that do not pollute nature and have a low carbon footprint are created.

Limitless: Digital fashion reaches the bottom of the digital universe by exceeding the limits of the laws of physics. A universe that the limits of your imagination can only surround is being built in the Metaverse.

Wide Scalability: In the artificial intelligence-based Metaverse, every product and service related to fashion can be rapidly transformed and reproduced with extraordinary evidence.

Customizable: Users can customize their clothes, collections, and accessories without the risk of damaging them.

Originality: Every fashion instrument produced is registered on the blockchain, and the identity of the extraordinary evidence can be tracked end-to-end.

Merging the Physical and Digital Fashion Universes: The physical universe of fashion combines with the digital universe using artificial intelligence, blockchain, and augmented reality technologies. It creates a fashion bridge from the artificial intelligence-based Metaverse to the physical world.

Infinity: Artificial intelligence models, fashion events, NFT clothes, NFT collections, NFT accessories, and fashion tools gain independence from time with the unchangeable record structure of the blockchain.

Marketing Analysis

The fashion industry has large-scale global significance in economic, social, environmental, and other fields. Fashion industry statistics show that the apparel and textile industry is the 4th largest industry globally. The fashion industry employs professionals ranging from the highest technical level and education to the lowest level of education. According to McKinsey, the fashion industry, which is one of the largest industries in the world, generates a global annual revenue of 2.5 trillion dollars [2]. According to Statista, the global apparel market alone will have USD 1.5 trillion in 2020 [3]. New companies are entering the market every day to cater to the textile and apparel industry in fashion. Most of these companies remain little known to the consumer audience, while the individual brands that make up these global fashion companies are better known.

The fashion industry is undergoing change and transformation in digitalization, e-commerce, social media, value chain, sustainability, diversity, and inclusion. Although the digital transformation of the fashion industry began years ago, the last year has taken this change to the highest level, bringing new, innovative solutions to longstanding challenges. The fashion industry is in an era of digital transformation as more and more digital innovations are made available to fashion companies. According to Morgan Stanley, digital demand for fashion and luxury brands is expected to reach 50 billion U.S dollars by 2030 [4]. McKinsey states that the deepening digital divide in fashion creates a multifaceted effect from sales channels to cost structures [5].

2021	Global Fashion Market Value 2.5 tr $	2021	Current Apperal Market Value 1.5 tr $
2021	NFT Market Value 23 bn $	2021	Metaverse Market Value 585 bn $
2024	Metaverse Market Value 783.3 bn $	2030	Digital Demand in Fashion Industry 50 bn $
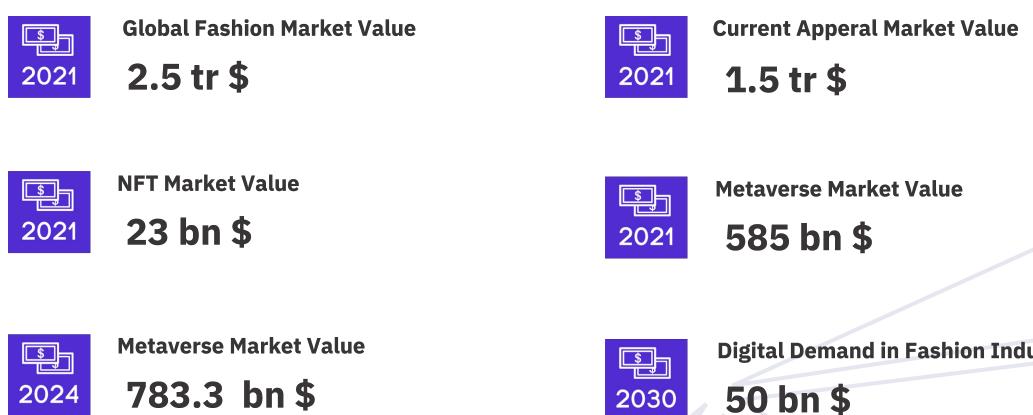
Figure 1: The Market for Inspirest™

**Global Augmented Reality (AR),
Virtual Reality (VR) And
Mixed Reality (MR) Market Value**

2024

$300 bn

$30.7 bn

2021

**Global Blockchain
Market Value**

2027

$163 bn

$6.92 bn

2021
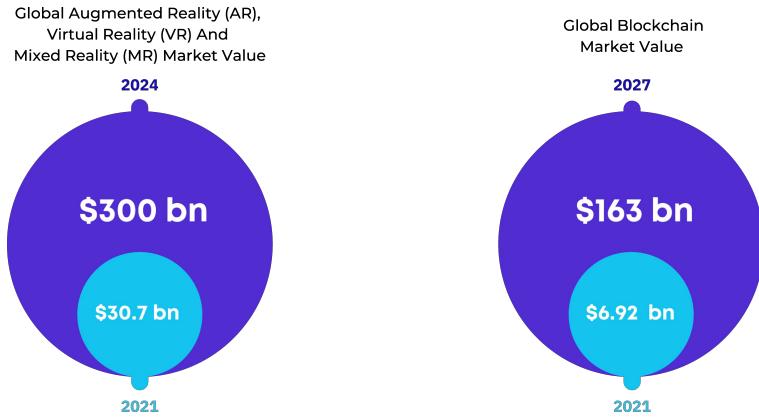
Figure 2: The Growing Market for Inspirest™

High value-added business models are emerging with disruptive technologies such as artificial intelligence, blockchain, and augmented reality in the fashion field. It is predicted that disruptive technologies will offer more efficient and practical tools to the fashion market in the future. The global augmented reality (AR), virtual reality (VR), and mixed reality (MR) market is estimated by Statista to reach 30.7 billion U.S. dollars in 2021 and approach 300 billion U.S dollars by 2024 [6]. Statista has stated that the global artificial intelligence (AI) software market is worth 34.87 billion U.S. dollars in 2021 and predicts that it will overgrow in the coming years and reach approximately 126 billion U.S. dollars by 2025 [7]. Statista states that global artificial intelligence in the fashion market reached 636.6 million U.S. dollars in 2021 and is expected to reach 4.4 billion U.S. dollars by 2027, with a CAGR of 36.9 percent [8]. At the same time, Statista estimates that the worldwide blockchain market was valued at 6.92 billion U.S dollars in 2021 and will grow more than a hundredfold to reach 163 billion U.S dollars by 2027 [9].

**Global Artificial Intelligence (AI)
Software Market**

2025

$126 bn

$26 bn

2021

**Global Artificial
Intelligence(AI) in the Fashion**

2027

$4.4 bn

$0.64 bn

2021
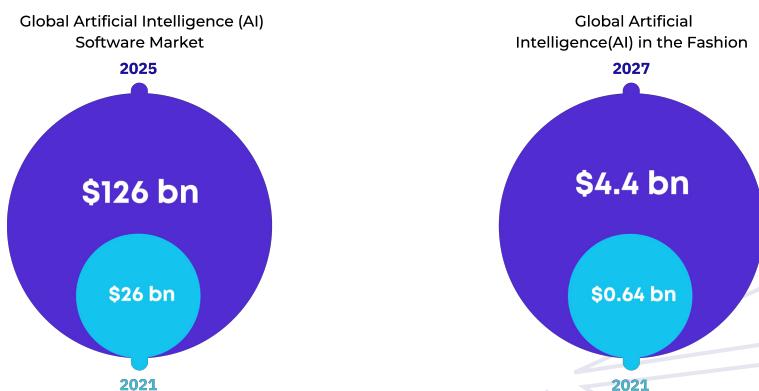
Figure 3: The AI Market for Inspirest™
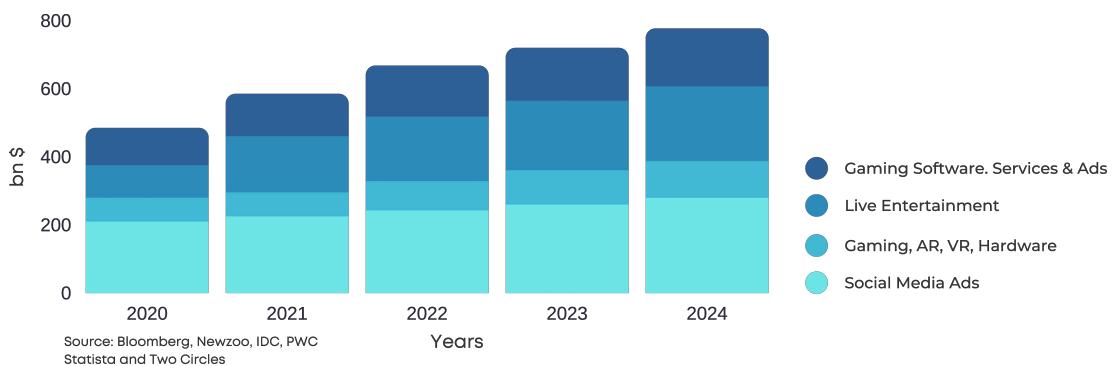
Figure 4: The Market Expectations for Inspirest™

Constructing the Metaverse with the focus on fashion with the use of destructive technologies together offers a large-scale and integrated fashion structure. The fashion industry, where human tastes are the main driving force, is in rapid change and transformation with the concept of Metaverse. NFTs are accelerating this transition, while the Metaverse offers significant opportunities for the fashion industry. DappRadar stated that the NFT market size had reached 23 billion dollars [10]. JPMorgan stated that the NFT market size had reached 7 billion dollars. According to the global metaverse market analysis based on Newzoo, IDC, PWC, Statista, and Two Circles data, it is targeted to reach 478.7 billion U.S. dollars in 2020 and 783.3 billion U.S. dollars in 2024 with a compound annual growth rate of 13.1% [11]. According to PwC, a global consulting firm, the market outlook for the Metaverse, including AR and VR, is expected to grow steadily and reach approximately 1,500 billion U.S. dollars by 2030 [12].

Modules

Inspirest™ Mobile App: Inspirest™ Mobile Application is an artificial intelligence (AI) based smart catalog and social fashion application that enables users to experience a high level of fashion in the online environment. The platform brings together users, brands, stores, and stylists, integrating fashion with social life and high technology. The essential features of Inspirest™ APP are the artificial intelligence module developed for the Mobile APP, customized social interaction tools, product learning and processing, online fashion events and fashion shows, weekly top-rated and media-based clothing recommendations. Fashion companies and stores have to manage different data with numerous and complex correlations, interdependencies, and uncertainties regarding human factors [13]. Inspirest™ APP uses artificial intelligence to ensure that the right product is met with the correct user and creates highly predictive style and product recommendations.

Artificial Intelligence Based Models (Fashionic AI): The design, thinking and decision structures, design systematics, and characteristics of stylists, fashion designers, and fashion artists working in fashion and inspiring fashion are learned and modeled by the Fashionic artificial intelligence module. The unlimited imagination of the stylists in the real world is transferred to the universal and borderless Metaverse with artificial intelligence and revived again in a virtual world. Get ready to meet AI-based digital fashion wises and challenging times together in the world of Metaverse.

Fashion Non-Fungible Token (iNFT): Stylists, fashion designers, brands, and fashion artists transform the fashion-oriented digital works and collections they create with their imaginations into unique proofs by recording them on the blockchain. iNFTs is a set of NFTs that push the boundaries of fashion's imagination with collaborations with stylists, fashion designers, independent artists and brands, and artificial intelligence studies. NFTs with original designs and traces of famous artists will be able to be used on contracted games and online identities in the virtual world.

Fashion Metaverse (iMETA): iMETA is an artificial intelligence-based digital fashion universe that combines fashion's physical and virtual worlds into an immersive experience. With Inspirest™ Metaverse, fashion moves into a limitless, interactive, universal, and passionate phase. The developed Metaverse creates a conceptual universe in which artificial intelligence-based stylists, digital stores, and augmented reality fashion events occur.
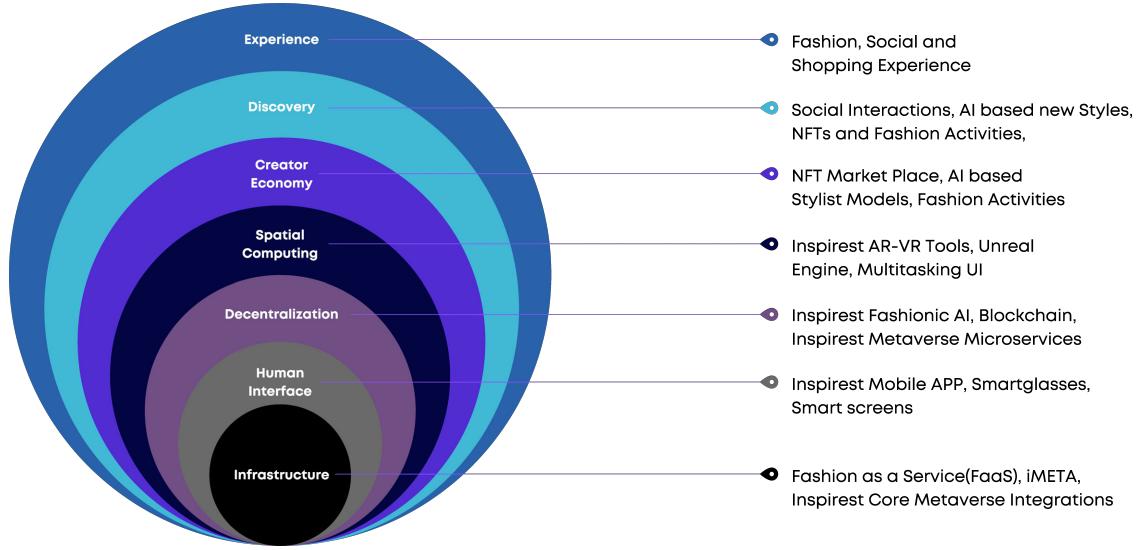

Figure 5: Seven-Layers Representation of Inspirest™ Fashion Metaverse (iMETA)

Augmented Reality (iAR): iAR technology, developed to provide a high level of user experience, brings fashion to the dimension that can be felt with all the senses in Inspirest™ Metaverse. An immersive fashion adventure is created with Augmented Reality (AR) in the Metaverse, which includes fashion events, fashion shows, unique designs, stores with artificial intelligence-based stylists.

Base Technologies

The summary outputs of the blockchain, artificial intelligence, and augmented reality technology research report to be used to construct the Inspirest™ Metaverse are given below.

Fashionic Artificial Intelligence (AI)

Data have become one of the most important and valuable assets for social progress and industrial innovations in today's world. Advancements in the Artificial Intelligence techniques used to interpret this massive amount of data have created significant opportunities for the business and social world. The fashion world is one of the most affected industries by these improvements. Especially improvements in Computer Vision have affected the fashion world dramatically. Deep Learning models which can learn from known images and categorize and predict unseen images are used for various tasks in fashion; clothing modeling, attributes recognition, image parsing, image retrieval, and styling recommendations. Fashionic AI has aimed to utilize recent progress in machine learning, computer vision, and artificial intelligence to carry the fashion world into the virtual world and bring a new perspective to the Fashion world. Fashionic AI primarily utilizes AI techniques of Computer Vision to learn from images and make accurate predictions using state-of-the-art machine learning models. Fashionic AI focuses on multiple fields.

Learning of Designer Styles

One of the most popular usages of Deep Learning is classification. Fashionic AI aims to learn legendary designers' styles and accurately predict whose style clothing belongs to. This will bring a whole new aspect to the Fashion world. Inspirest™ models on the metaverse by learning in-depth the decision, choice, thinking, and design characteristics of stylists, fashion designers, and artists living from the past to the present. Artificial intelligence models will enable the creation of designs that exceed the limits of imagination and the stylists to produce outside the laws of physics and independent of time. Fashionic AI will allow the pioneers of the fashion world to bring the Metaverse

to life. In the Inspirest™ Mobile App, users′ physical characteristics, tastes, and interactions are processed with stylists′ suggestions and fashion teachings, providing user-based style and product recommendation services.

There has been much study on classification in Fashion Analyzes. Classification clothing according to predefined styles using Deep Learning Models is one of the most popular methods. CNN(Convolutional Neural Network) or derived models are most commonly used in fashion style classification with images. Especially models like VGG, Xception, and Inception, which are proven to work successfully on Image Classification, are widely preferred. Style prediction using these models can reach 85% accuracy [14,15].
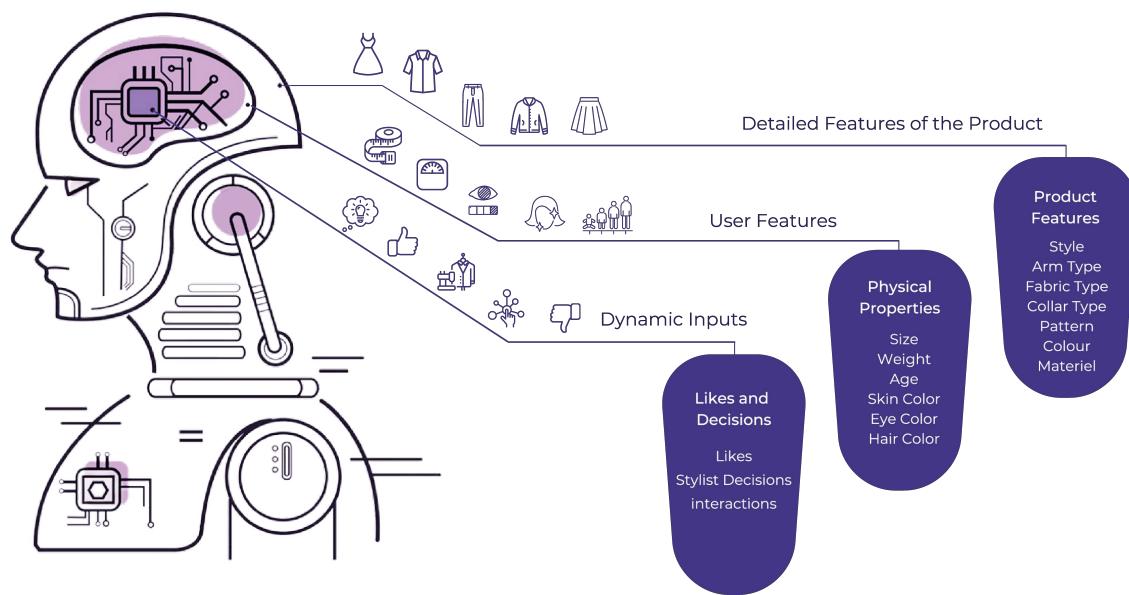
Figure 6: Representation of Fashionic AI

Another classification method is attribute classification. Items are classified according to predefined attributes, and attributes are each item′s characteristics and objective qualities. Each item can have multiple attributes; that is why it is usually a multi-label task. For example, a dress (category) can have color, pattern, material, price, texture, style, etc., as attributes. CNN and derived CNN models are primarily used in attribute classification with a prediction accuracy of 90% [16].

Classification via Designer Style is a novel area for AI. Fashionic AI will use the best style classification and attribute classification to classify Designer Styles accurately. In Fashionic AI for learning designers, multiple Deep Learning Models like CNN, VGG, Xception, Inception, ResNet will be tested and used to get the best accurate classification model.
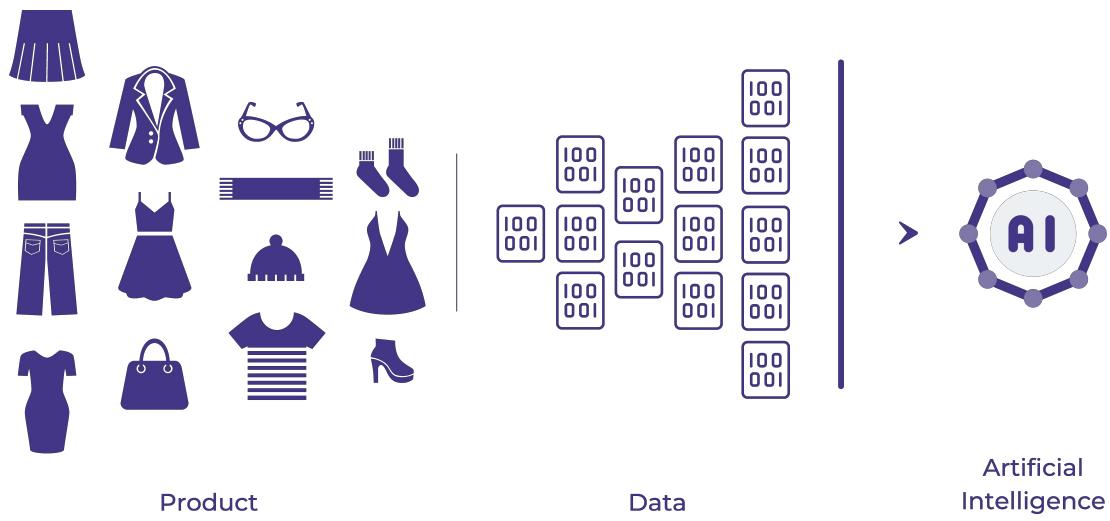

Figure 7: Clustering in Fashionic AI

Style Recommendation

Another popular area where AI is used for Fashion World is style recommendation. Since the significant data era, choosing what to wear has become complicated and time-consuming because of many choices. Thanks to advances in AI, the selection is made by AI, and AI can scan many items and choose the best matching items for us.

Recommender system study is a highly active research field, and recommenders are already used in many online shops, including Amazon, Google Shopping, and Shop It To Me. There is research for location-based style recommendations [17]. Most of these researches focus usage of CNN and derived models for advice [16].

Another research area related to style recommendation is fashion compatibility, and these systems predict whether different fashion items go together or not. Several tasks are at hand for this research area: recommending all clothing items given one thing or

recommending missing clothing provided multiple clothing items. For this application, again, CNN and derived models are mostly preferred. However, models like LSTM, which is used for sequential data, are also used with accuracy reaching up to 90% percentage [18,19].

Another research area of style recommendation is personal style recommendation. Personel Style Recommendation Models learn from unique style preferences and recommend new clothing or items for a set of items. This area is trendy because of its benefits fortis usage in shopping. CNN and derived models are the most popularly used models for this application, and their success rate goes up to 80% accuracy [20].

Fashionic AI aims to recommend style and clothing combinations according to occasion and environment, using its users' personal choices. Fashionic AI brings a novel style recommendation by combining these two separate recommendation systems.

Fashion Synthesis

One of the most recent and striking innovations in machine learning is GAN (Generative Adversarial Network). GANs are generative models: they create new data instances that resemble your training data. For example, GANs can create images that look like photographs of human faces, even though the faces don't belong to any actual person. GANs achieve this level of realism by pairing a generator, which learns to produce the target output, with a discriminator, which learns to distinguish accurate data from the outcome of the generator. The generator tries to fool the discriminator, and the discriminator tries to keep from being misled.

In Fashion, GAN is used to produce synthetic fashion items. Several types of research on using GAN to generate synthetic data with satisfying results [21].

Fashionic AI aims to use GAN to generate synthetic styles. With the help of Designer Style Classification, it can develop a new combination of clothes of a particular stylist or variety of stylists. It can also create its style as an AI Designer.
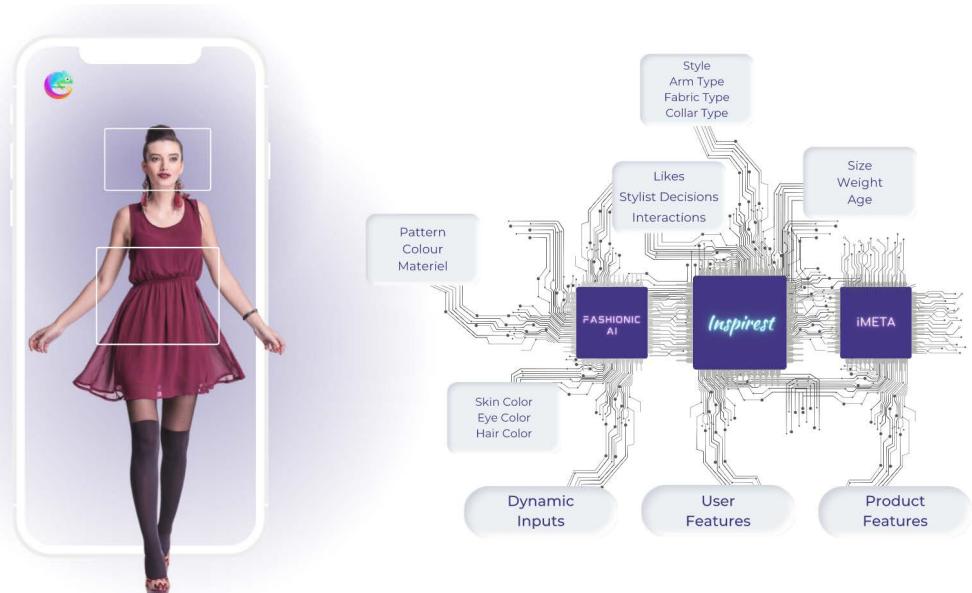
Figure 8: Inspirest™

Feature Engineering

Although Fashionic AI will be trained with standard datasets mentioned above, feature engineering data cleaning techniques will be applied to the dataset to reduce redundancy, mistakes, and unimportant data. This is called Data Preprocessing and is widely used in machine learning.

In AI researches about fashion, various feature engineering techniques are used like Color Histograms, Local Binary Patterns (LBP), Histogram of Oriented Gradients (HOG), Scale-Invariant Feature Transformation (SIFT) [27,28]. In addition to these techniques, Deep Learning Methods are used to learn fine-grained features from a dataset. Deep Learning Models are trained by cleaned but not preprocessed data, and the model learns feature sets that are important to predict the outcome. [29-31].

Fashionic AI aims to use Deep Learning Methods to extract features from datasets. However, other techniques will be applied and compared to measure how accurate the model is and how much further improvement can be made.

In summary, Fashionic AI represents the future of the Fashion World. With the help of the Deep Learning and data gathering environment of Inspirest™, Fashionic AI is one of the most promising Artificial Intelligence on Fashion Styling and Recommendation. Fashionic AI will evolve into a unified AI that combines Fashion and Artificial Intelligence.

Datasets

One of the most crucial prerequisites of machine learning is data. All machine learning models need data to be trained to predict, classify or generate synthetic information accurately. In addition, training datasets need to be annotated correctly. Fashionic AI will use a dataset that Inspirest™ causes. So that training data is correctly annotated.

In addition to its dataset, Fashionic AI will be trained by other standard datasets to increase the accuracy of the model [22-26].

Smart Contract

Blockchain is a decentralized, encrypted, immutable, and ever-growing distributed database. It can be used to transfer various types of assets between peers [32]. Essential features underlying the working principle of blockchain technology are being secure, anonymous, transparent, distributed, decentralized, and public, yet unbreakable and unhackable. Even if any of the nodes is lost, the information in the ledger is stored at other points in the network.

Each block timestamp in the blockchain contains the cryptographic hash function and transaction data of the previous block. The blocks holding the data are associated with the prior and subsequent blocks with cryptographic encryption. Associating blocks through a chain structure ensures data integrity and immutability. Consensus algorithms are used for the problems of reaching consensus and reaching consensus on the formation of blocks within the distributed system. The chain that starts with the first data entry has a structure that can go on forever.

The basic structure of the blockchain and the consensus algorithm ensures that the parties record the data in an unchangeable way and mutual agreement is formed. Different agreements and rules are needed for different parties on the blockchain. Smart contracts have been developed so that the parties can make various commitments over the blockchain without having to know each other or have mutual trust.

Acting similarly to a traditional contract but eliminating the need for a third party's involvement, smart contracts are programs that reside in decentralized blockchains and execute transactions according to triggered instructions [33].

Smart contracts ensure that transactions are carried out within the rules determined by the parties. Blockchain's basic block structure, consensus mechanism, and smart contract create a decentralized solution for end-to-end processes.

Avalanche for the Smart Contract

Avalanche is a high-performance, scalable, customizable, and secure blockchain platform. Avalanche is the fastest smart contracts platform in the blockchain industry, as measured by time-to-finality, and has the most validators securing its activity of any proof-of-stake protocol. The platform aims to enable developers to build decentralized applications (dApps), helping users manage their digital assets across cross-chains with less latency and higher capacity. Aiming at high scalability without sacrificing decentralization, the Avalanche Mainnet consists of three blockchains: Exchange Chain (X-Chain), Platform Chain (P-Chain and Contract Chain (C-Chain). All blockchains are validated and secured by the Primary Network. The Primary Network is a unique subnet, and all members of all custom subnets must also be a member of the Primary Network by staking. X-Chain is the default asset blockchain in the Avalanche ecosystem, enabling the creation of new assets, exchange between assets, and cross-subnet transfers. The P-Chain is the metadata blockchain on Avalanche and coordinates validators, keeps track of active subnets, and enables the creation of new subnets. The C-Chain allows for smart contracts using the C-Chain's API. It allows the creation of Ethereum-compatible smart contracts [34].

A significant difference between Avalanche and other decentralized networks is the consensus protocol, or how the network validates transactions [35]. There are multiple consensus mechanisms used in Avalanche, namely Avalanche and Snowman Consensus Mechanism. Avalanche is a consensus protocol that uses a metastable mechanism with random network sampling. The Avalanche consensus protocol runs all nodes in parallel, aiming to check other validators' transaction confirmations randomly. Snowman is a chain-optimized consensus system that is fast, orderly, and ideal for smart contracts. Both Platform Chain (P Chain) and Contract Chain (C Chain) implement the Snowman consensus protocol, while X Chain implements the Avalanche protocol [36].

Inspirest™, which connects the physical and virtual universe in the focus of fashion, has an infrastructure supported by high technology. The in-depth use of Artificial Intelligence (AI) and Augmented Reality (AR) technologies in Inspirest™ requires the ability of robust blockchain technology. As a result of detailed research activities carried out within the framework of the elements as ecosystem, speed, reliability, transparency, security, scalability, interoperability, and consensus mechanism mentioned above, the Inspirest™blockchain structure was built on Avalanche Platform.

Inspirest Metaverse Token

Infrastructure

Inspirest Metaverse Token (iREST) is a valid token in the Inspirest™ Ecosystem. It has a total fixed supply and is limited to 10,000,000,000 in total. The feature of Irest is that it is needed and has value within the Inspirest™ application. The token has the characteristic of deflation. The number of tokens cannot be changed or lost, and token holders have full rights over the assets they hold. Irest has been built on the Avalanche Platform.

Tokenomics

Whitelist Sales

The first iREST token sales will be available for purchase at $0.0015 price with the Whitelist. Tokens bought on the Whitelist will be unlocked in equal amounts every three months. The wallet IDs of all investors participating in this sale are recognized as first-class and enjoy special rights when the VR season, iNFT, and AI open for the public. Additional rights to be provided free of charge will be announced before activations. Unlocked tokens cannot be staked, sold, or used within the app.
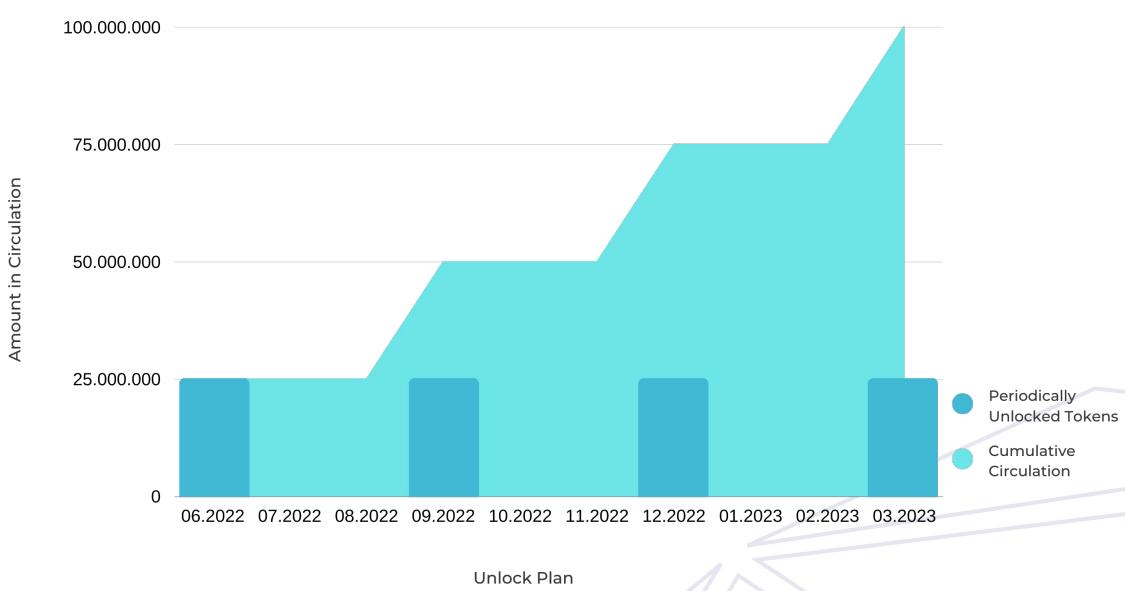

Figure 9: Token Circulation for Whitelist Sales

Public Sales

Investors participating in the second round sale will be referred to as Special Investors. The token sale unit price will be $0.0025. Tokens will be unlocked at linear rates in 12 months. All investors in this category will receive exclusive rights free of charge during the NFT season. Locked tokens cannot be staked, sold, or used within the app.
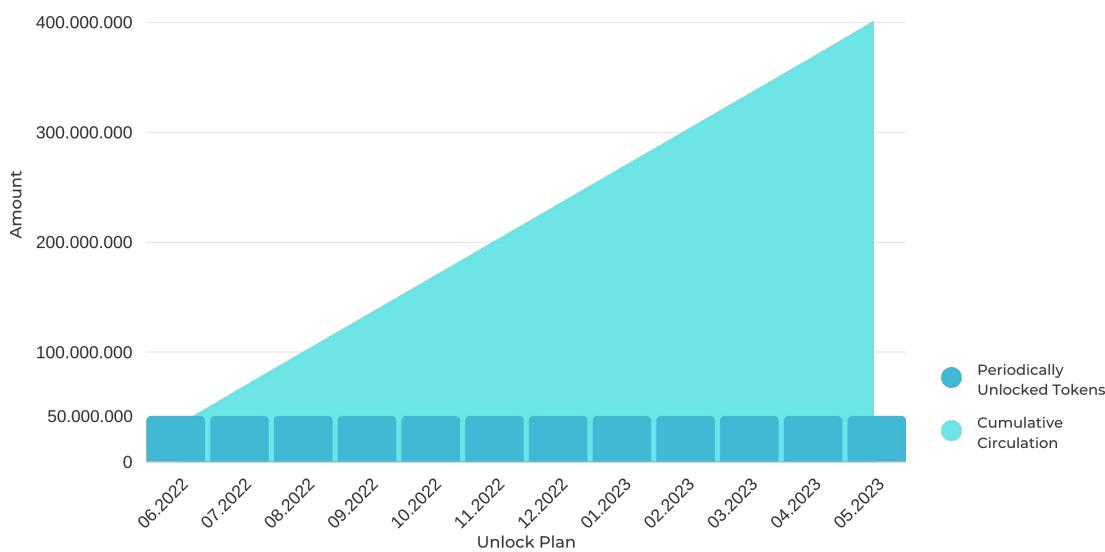

Figure 10: Token Circulation for Public Sales

Team

Team members within the project will keep their tokens locked until 2023 May. Monthly token unlocking rates will be 5,56% each month and will be spread over 18 months in total. It will be announced in a monthly financial report regularly.am members within the project will keep their tokens locked until 2023 January.

Liquidity & Burning

The liquidity and Burning category will be used for new cryptocurrency exchange market listings. Over time, it will be unlocked spread to prevent investors from buying/selling at levels far from the market price due to aggressive price movements.

Also, if the team decides, Inspirest has the right to buy back iREST from cryptocurrency exchange markets by using the liquidity pool. An announcement will be shared on the official accounts if this decision is made.

The initial purpose of the burning account will be to celebrate when the project completes vital milestones. When the Metaverse goes live, 100,000,000 tokens are planned to be burned. If the total number of users in Inspirest App reaches:

- 1,000 → 1,000,000 tokens
- 10,000 → 10,000,000 tokens
- 100,000 → 100,000,000 tokens
- 1,000,000 → 250,000,000 tokens will be burned from the listing & burning pools.

The second purpose of burning more tokens is to contribute positively the price of iREST in case of decreases that may occur in the crypto market. This move will be implemented when the team gives unanimous vote.

Strategic Sales & Marketing

Inspirest aims to be an application that is actively used on every continent. For this purpose, Inspirest may need to make special agreements with fashion companies, global investment firms and stylists. In all these steps, those who want to be involved in the project will need the iREST to take an active role in the application. At the same time, critical advertising deals can be made to reach larger audiences. In such cases, Strategic sales account will be used. Bilateral agreements will be kept confidential in company financials. Once the project will achieve the goals in future, the team has the right to burn the surplus token or transfer it to the rewards pool.

Rewards

When iREST token holders use the Inspirest Mobile App, they will regularly collect rewards from the pool. On logging into the application daily, users earn the reward iREST token. Voting on shared styles, sharing your style, every new member with your referral, and being a winner of fashion competitions are other ways to earn reward iREST tokens.

Investors can also stake iREST unlocked, reward tokens, or buy from cryptocurrency exchange markets. It will be available to determine the number of tokens allocated to the prize pool in our monthly reports. Every year from 2026 and beyond, 10% of the remaining token in the reward account of Inspirest will be reduced by distribution as a prize. The awards distributed before 2030 will reach 50% of the total award. iREST is a tool that users need to use Inspirest App effectively.

The Inspirest ecosystem is focused on spending iREST and rewards members who complete tasks or use the staking tool. A reward distribution system is established to balance the power between those who buy tokens from the market and those who actively use the application. We have a reward system formulation for our long-term goals that continues forever. That's why the prize pool has the highest share in the distribution.

Deflation

For each token transfer, 5% of the token volume will be deducted as an expense. Two-fifths of the deduction will be transferred to active users in the application, two-fifths will be transferred to the marketing budget, and the remaining one-fifth will be burned. This system will be activated on the blockchain at 2022-Q3.

Case Study

Table I: Case Study

| Reward System	01.2023	02.2023	03.2023	04.2023
Active Users's total score	22.000.000	22.000.000	44.000.000	15.000.000
Monthly Unlock	22.000.000	22.000.000	22.000.000	22.000.000
Cumulative Reward (incl. current month)	42.000.000	42.000.000	22.000.000	22.000.000
Roll over the next month	20.000.000	0	0	5.000.000
High demand ratio	-	-	1/2 reward per 1 score	-
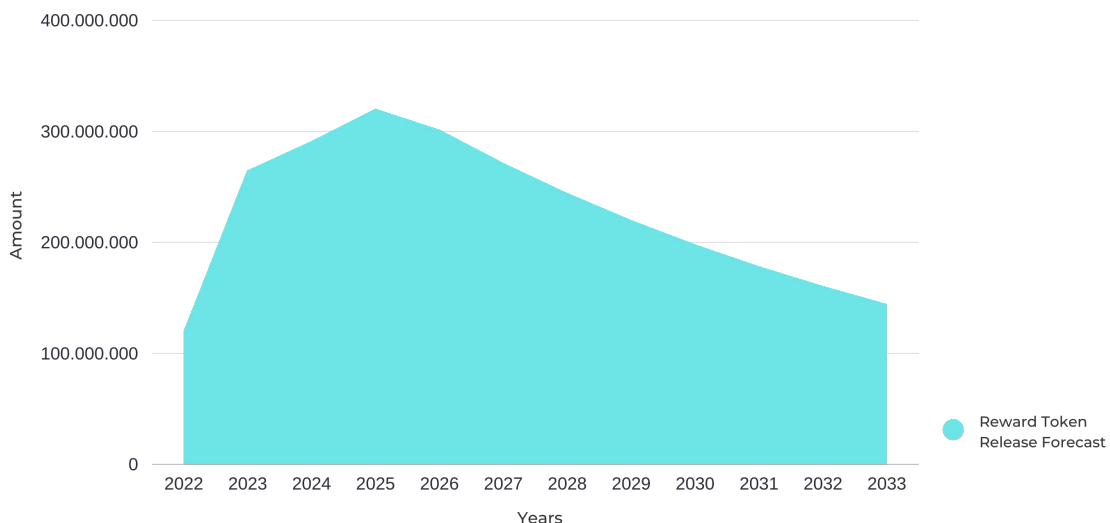
Figure 11: Token Circulation for Rewards

iREST from User's Point of View

- Payment Type
  - Character
  - Sticker
  - Clothing, Jewelry, and Accessories
  - Ticket for Style Competitions
  - NFT Trade
  - Live Fashion Shows
  - Metaverse Store (Buying, selling)
  - Request to Artificial Intelligence
  - Request to Stylists
- Income
  - Metaverse Store (Renting)
  - Staking
  - Holding within the app (Tokens from the prize pool will be distributed to active users who complete the tasks)

Summary

The basic details of unlocking the monthly short-term timeline as of May 2022 are below.
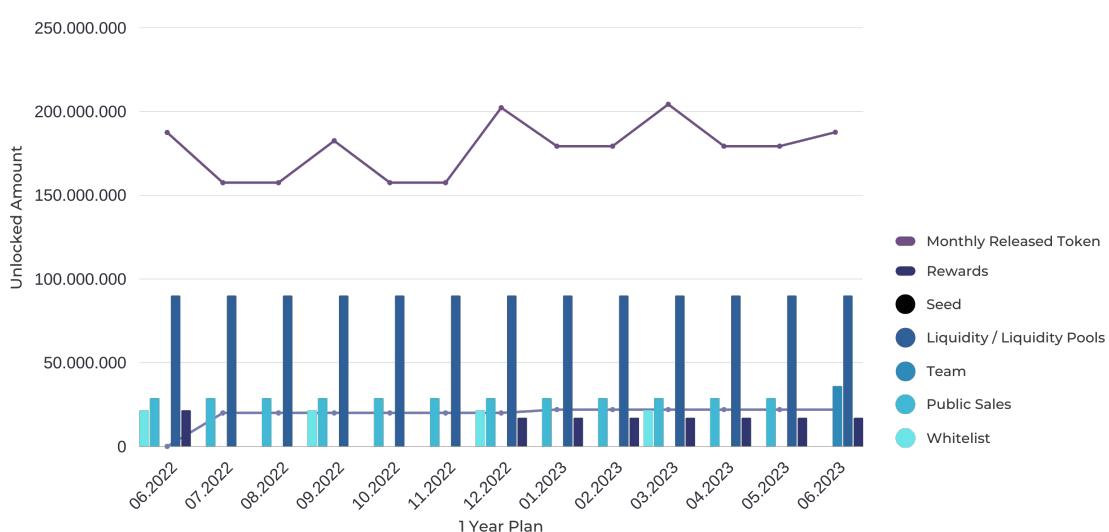
Figure 12: Unlocking iREST Token Circulation
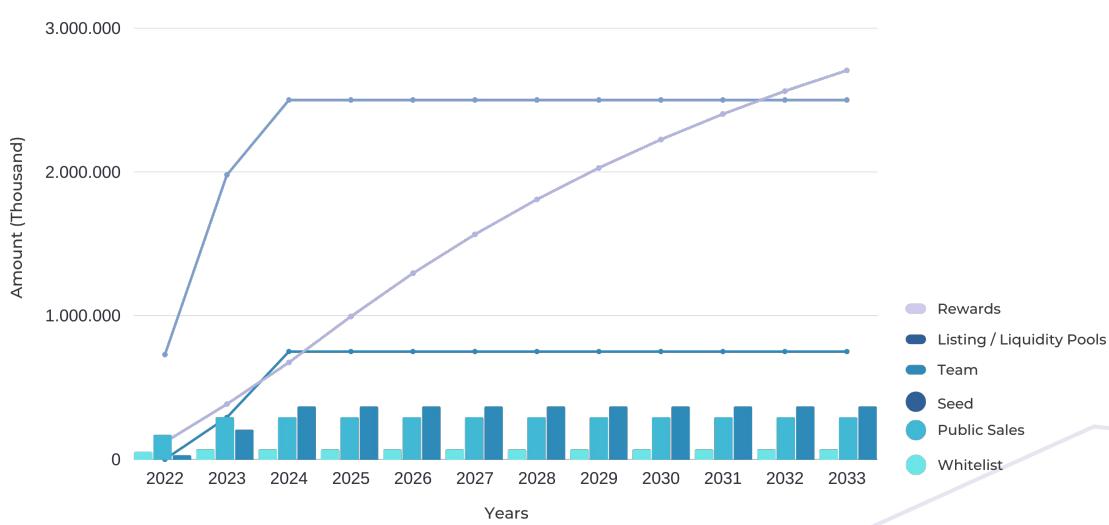
Figure 15: Total Circulation of iREST Token

You may also find the total iREST distribution and total circulation below.
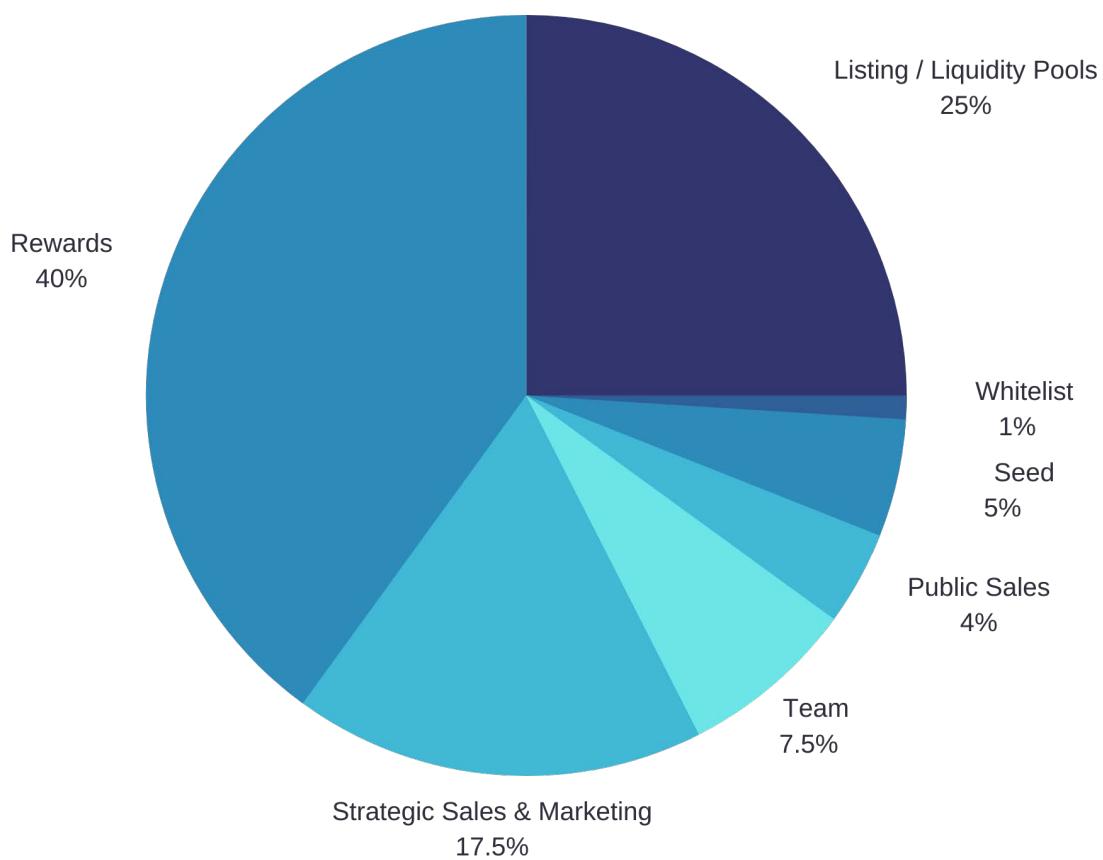

Figure 14: iREST Token Allocation

The Inspirest team will make an effort to establish and save the balance between the number of tokens in circulation and the tokens needed in the application.

Table II: iREST Token Vesting Process

CATEGORY	%	TGE SUPPLY	START	CLIFF	VESTING
Seed	5.0%	5%	TGE	6 Months	24 Months Liear Vesting (Daily)
Whitelist	1.0%	25%	TGE	3 Months	%25 Once in three months
Public Sales	4.0%	8.37%	TGE	1 Month	11 Months Liear Vesting (Daily)
Team	7.5%	0%	May-2023	12 Months	18 Months Linear Vesting (Daily)
Strategic Sales & Marketing	17.5%	0%	Sales Date	1 Month	8.37% unlocked + 11 Months Linear Vesting (Daily)
Liquidity & Liquidity Pools	25.0%	-	-	-	-
Reward	40.0%	0%	June-2022	-	The monthly earned reward will be distributed daily for the next month. (Whitepaper - Table I:Case Study, p.25)

Roadmap

Timeline	Work Package
2021 – Q4	✓ Market Research ✓ Litepaper Release ✓ Whitepaper Release ✓ Smart Contract Development (Token) ✓ Website Release ✓ Inspirest Mobile App Development ✓ Artificial Intelligence Research & Literature Review
2022 – Q1	✓ Whitelist Sales ✓ Inspirest Mobile App Development ✓ Announcement of Partners ✓ Smart Contract Development (NFT) ✓ Preliminary Tests on Open-Source AI Algorithms ✓ Establishment of Data Science Branch
2022 – Q2	✓ Pre-agreements with Brands, Stores, and Stylists ✓ Inspirest Mobile App Development ✓ FaaS - AI Concept Development ✓ Initiation of Inspirest Database ✓ Specifying AI Tasks in FaaS and Inspirest Applications ✓ Inspirest Digital Fashion House Concept Development
2022 – Q3	• Inspirest Mobile App Beta Version Release • Inspirest Mobile App TestNet • Inspirest Mobile App Bug Bounty Program • Agreements with Brands, Stores, and Stylists • Inspirest Digital Fashion House Launch • Staking System Development • FaaS - AI Algorithm Development - I • Public Pre-Sale • Swap Listing

2022 – Q4	• Inspirest Mobile App Launch • Inspirest Mobile App and AI Integration - I • FaaS - AI Algorithm Development - II • Exchange Listing • Inspirest Mobile App and AR Integration • Smart Contract Development (Metaverse) • Inspirest Metaverse Development • Staking System Launch
2023 – Q1	• Upgrade to Deflationary Token System • Establishing Fashionic AI R&D Hub with the University • Inspirest Mobile App and AI Integration – II • FaaS - AI Algorithm Development – III • FaaS - Visualization Concept Development • Inspirest Metaverse Development • Publishing an Academic Article on AI
2023 – Q2	• Inspirest Metaverse Stores Launch • Inspirest Mobile App and AI Integration – III • FaaS - AI Algorithm Development – IV • FaaS - Visualization System Development - I • Inspirest Metaverse Beta Version Release
2023 – Q3	• Inspirest Metaverse TestNet • Inspirest Metaverse Bug Bounty Program • FaaS - AI Algorithm Development – V • FaaS - Visualization System Development - II • Inspirest Web Application Development • Publishing an Academic Article on AI
2023 – Q4	• Inspirest Metaverse Launch • Inspirest Metaverse and AI Integration • First Fashion Event and Show on Inspirest Metaverse • Inspirest Web Application Launch • Visualization System Integration

2024 – Q1	• Inspirest Metaverse and VR Integration • Personalized Which One AI • FaaS - Integration of Inspirest AI Tools with Continuous Learning • Publishing an Academic Article on AI
2024 – Q2	• FaaS - Inspirest Metaverse Service • FaaS - Style Generation • Inspirest Mobile App and Metaverse Integration • Publishing an Academic Article on AI
Future	• FaaS - Inspirest Brain • Fashion Technology Center • Inspirest NFT's Game Integration • Publishing Academic Articles

References

[1]   Diffie, W., & Hellman, M. (1976). New directions in cryptography. IEEE Transactions on Information Theory, 22(6), 644–654. doi:10.1109/TIT.1976.1055638

[2]   McKinsey & Company. (2021). *State of Fashion 2022: An uneven recovery and new frontiers*. McKinsey & Company. Retrieved from https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion

[3]   Shahbandeh, M. (2021) *Topic: Apparel market worldwide*. Statista. Retrieved from https://www.statista.com/topics/5091/apparel-market-worldwide/

[4]   Debter, L. (2021). *Fashion and the metaverse: Why Ralph Lauren wants to sell you digital clothing*. Forbes. Retrieved from https://www.forbes.com/sites/laurendebter/2021/12/25/fashion-and-the-metaverse-why-ralph-lauren-wants-to-sell-you-digital-clothing/?sh=4784db52be89

[5]   Gonzalo, A., Harreis, H., Altable, C. S., & Villepelet, C. (2021). *Fashion's digital transformation: Now or never*. McKinsey & Company. Retrieved from https://www.mckinsey.com/industries/retail/our-insights/fashions-digital-transformation-now-or-never

[6]   Alsop, T. (2021). *VR/AR market size 2024*. Statista. Retrieved from https://www.statista.com/statistics/591181/global-augmented-virtual-reality-market-size/

[7]   Liu, S. (2021). *AI market size 2018-2025*. Statista. Retrieved from https://www.statista.com/statistics/607716/worldwide-artificial-intelligence-market-revenues/

[8]   Statista Research Department. (2021). *Artificial Intelligence in the global fashion market value 2027*. Statista. Retrieved from https://www.statista.com/statistics/1070736/global-artificial-intelligence-fashion-market-size/

[9]   Liu, S. (2021). *Global blockchain market size 2017-2027*. Statista. Retrieved from https://www.statista.com/statistics/1015362/worldwide-blockchain-technology-market-size/

[10]   Herrera, P. (2021). *2021 DAPP Industry Report*. DappRadar. Retrieved from https://dappradar.com/blog/2021-dapp-industry-report

[11]   Bloomberg Intelligence. (2021). Metaverse may be $800 billion market, next tech platform. Retrieved from https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/

[12]   PwC. (2021). *Why we believe VR/ar will boost global GDP by $1.5 trillion*. PricewaterhouseCoopers. Retrieved from https://www.pwc.co.uk/services/economics/insights/vr-ar-to-boost-global-gdp.html

[13] Antal, C., Cioara, T., Anghel, I., Antal, M., & Salomie, I. (2021). Distributed Ledger Technology Review and Decentralized Applications Development Guidelines. Future Internet, 13(3). doi:10.3390/fi13030062

[14] Dong, C. Y., Shi, Y. Q., & Tao, R. (2018). Convolutional Neural Networks for Clothing Image Style Recognition. DEStech Transactions on Computer Science and Engineering, cmsms. https://doi.org/10.12783/dtcse/cmsms2018/25262

[15] Takagi, M., Simo-Serra, E., Iizuka, S., & Ishikawa, H. (2017). What Makes a Style: Experimental Analysis of Fashion Prediction. 2017 IEEE International Conference on Computer Vision Workshops (ICCVW), 2247–2253. doi:10.1109/ICCVW.2017.263

[16] Verma, D., Gulati, K., & Shah, R. R. (2020). Addressing the Cold-Start Problem in Outfit Recommendation Using Visual Preference Modelling. 2020 IEEE Sixth International Conference on Multimedia Big Data (BigMM). doi:10.1109/bigmm50055.2020.00043

[17] Takahashi, S., Yamaguchi, K., & Watanabe, A. (2021). A Novel Approach to Analyze Fashion Digital Archive from Humanities. Opgehaal van http://arxiv.org/abs/2107.08351

[18] Sun, G. L., He, J. Y., Wu, X., Zhao, B., & Peng, Q. (2020). Learning fashion compatibility across categories with deep multimodal neural networks. Neurocomputing, 395, 237–246. https://doi.org/10.1016/j.neucom.2018.06.098

[19] Liu, X., Li, J., Wang, J., & Liu, Z. (2020). MMFashion: An Open-Source Toolbox for Visual Fashion Analysis. arXiv [cs.CV]. Opgehaal van http://arxiv.org/abs/2005.08847

[20] Tuinhof, H., Pirker, C., & Haltmeier, M. (2019). Image-Based Fashion Product Recommendation with Deep Learning. Lecture Notes in Computer Science, 472–481. doi:10.1007/978-3-030-13709-0_40

[21] Zhang, H., Sun, Y., Liu, L., Wang, X., Li, L., & Liu, W. (2020). ClothingOut: a category-supervised GAN model for clothing segmentation and retrieval. Neural Computing and Applications, 32, 4519–4530. doi:10.1007/s00521-018-3691-y/

[22] Yamaguchi, K., Kiapour, M. H., Ortiz, L. E., & Berg, T. L. (2012). Parsing clothing in fashion photographs. 2012 IEEE Conference on Computer Vision and Pattern Recognition, 3570–3577. doi:10.1109/CVPR.2012.6248101

[23] Bertiche, H., Madadi, M., & Escalera, S. (2020). CLOTH3D: Clothed 3D Humans. arXiv [cs.CV]. Opgehaal van http://arxiv.org/abs/1912.02792

[24] Zhu, H., Cao, Y., Jin, H., Chen, W., Du, D., Wang, Z., Han, X. (2020). Deep Fashion3D: A Dataset and Benchmark for 3D Garment Reconstruction from Single Images. Opgehaal van http://arxiv.org/abs/2003.12753

[25] Aggarwal, P. (2019). "Fashion Product Images Dataset, [Online], [Dataset]. Retrieved from https://www.kaggle.com/paramaggarwal/fashion-product-images-dataset

[26] Wu, H., Gao, Y., Guo, X., Al-Halah, Z., Rennie, S., Grauman, K., & Feris, R. (2020). Fashion IQ: A New Dataset Towards Retrieving Images by Natural Language Feedback. Opgehaal van http://arxiv.org/abs/1905.12794

[27]   Yang, M., & Yu, K. (2011). Real-time clothing recognition in surveillance videos. 2011 18th IEEE International Conference on Image Processing, 2937–2940. doi:10.1109/ICIP.2011.6116276

[28]   Aşiroğlu, B., Atalay, M. İ., Balkaya, A., Tüzünkan, E., Dağtekin, M., & Ensari, T. (2019). Smart Clothing Recommendation System with Deep Learning. 2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 1–4. doi:10.1109/ISMSIT.2019.8932738

[29]   Bracher, C., Heinz, S., & Vollgraf, R. (2016). Fashion DNA: Merging Content and Sales Data for Recommendation and Article Mapping. arXiv [cs.IR]. Opgehaal van http://arxiv.org/abs/1609.02489

[30]   Simo-Serra, E., & Ishikawa, H. (2016). Fashion Style in 128 Floats: Joint Ranking and Classification Using Weak Data for Feature Extraction. 2016 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 298–307. doi:10.1109/CVPR.2016.39

[31]   Lee, H., Seol, J., & Lee, S.-G. (2017). Style2Vec: Representation Learning for Fashion Items from Style Sets. arXiv [cs.CV]. Opgehaal van http://arxiv.org/abs/1708.04014

[32]   Nofer, M., Gomber, P., Hinz, O. (2017). Blockchain. Business & Information Systems Engineering 59, 183–187 https://doi.org/10.1007/s12599-017-0467-3

[33]   Sayeed, S., Marco-Gisbert, H., & Caira, T. (2020). Smart Contract: Attacks and Protections. IEEE Access, 8, 24416–24427. doi:10.1109/ACCESS.2020.2970495

[34]   Sekniqi, K., Laine, D., Buttolph, S., & Sirer, E. G. (2020). Avalanche platform. Retrieved from https://assets.website-files.com/5d80307810123f5ffbb34d6e/6008d7bbf8b10d1eb01e7e16_Avalanche%20Platform%20Whitepaper.pdf

[35]   Siller, C. (2021). Inside avalanche: The fastest smart contracts platform. NODE from Voyager. Retrieved from https://www.investvoyager.com/blog/inside-avalanche/#:~:text=One%20big%20difference%20between%20Avalanche,how%20the%20network%20validates%20transactions.&text=The%20network's%20protocol%20uses%20a,throughput%E2%80%94all%20without%20compromising%20decentralization

[36]   Sekniqi, K., Laine, D., Buttolph, S., & Sirer, E. G. (2020). Avalanche platform. Retrieved from https://assets.website-files.com/5d80307810123f5ffbb34d6e/6008d7bbf8b10d1eb01e7e16_Avalanche%20Platform%20Whitepaper.pdf

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