DTOWN WHITEPAPER

This document exposes the concept, vision, use cases, and technology related to the DTOWN project. A decentralized and cross-platform Metaverse; including Desktop, Mobile, Augmented Reality (AR), and Virtual Reality (VR) devices currently in the market plus the ones yet to come. It is intended to empower the users with the necessary tools to create the worlds they want to see; therefore, DTOWN is meant to follow a community-driven roadmap.

Join us in the future of the Metaverse, owned by the community.

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INTRODUCTION

DTOWN represents the mixture between the virtual and the real world, where users can interact with each other by using the latest technologies within a deeply immersive environment. The platform exposes the next generation of interactive experiences, allowing people from multiple locations on the earth to create, explore, and share content in real-time.

However, nowadays it's common to wonder why Extended Reality technologies (XR) are not yet a thing of everyday life; even though the answer may not be trivial, it is a fact that most of the applications rely on the entertainment industry rather than research or economics. Hence, DTOWN tries to open the possibilities, highlighting that the platform itself can be a playground for immersive experiments in different scientific fields or even be considered a professional path as a result of the DTOWN's economic system, which includes sellings, buyings, and investments; turning this project into a **real-life changer** due to the possibility of **job generation** and tangible incomes for creators and visitors.

MISSION, BORDERLESS

DTOWN's mission is to make the worlds feel part of the same reality and create a decentralized Metaverse for everyone. That's why the interaction layer keeps things simple, intuitive, and inclusive. Enter from any device and from any location on earth.

VISION

Helping content creators to build the world they want to see and share it with the people who want to be part of it.

ARCHITECTURE OF DTOWN'S WORLD

Known as DWorld, can be described as the Interaction Layer where every event inside DTOWN is executed. Its surface holds a virtually unlimited length, however, the space is divided into two kinds of places or so-called DPlaces:

- MXDPlaces: Mixed-DPlaces keep a direct relationship with the physical reality, enabling geolocated interactions and looking to replicate the real scenery. These kinds are limited by the earth's surface (510.1 million km²), however, DTOWN avoids the uniform grid distribution by allowing the users to define the shape of the area; which can be owned, rented, or sold. Users can join an MXDPlace by going physically to the location or enabling the telepresence to enter remotely; physical visitors should find the access point, such as a QR-Code or precise GPS coordinates, meanwhile, remote visitors can select the MXDPlace from the virtual interface.

- VDPlaces: Virtual-DPlaces do not hold any relation with the physical reality, moreover than the inherent interaction between users, elements, and the possibility of IoT integrations. These kinds are usually inspired by Sci-fi novels, although the content relies on the community's interests. Users can join a VDPlace from anywhere in the world as long as they are connected to a stable Internet source with a compatible device.

Additionally, every DPlace is built on top of predefined templates; which include a specific structure in order to enable cross-platform compatibility and the main architecture of the environment such as 3D models, interactable elements, and certain behaviors. Furthermore, DTemplates can be offered in the marketplace as free or paid assets; usually made by the community or the development team.

Since privacy has become a fundamental part of virtual lives, the users have total control over their profiles; including DPlaces' settings that allow the owners to restrict access, modifying the role of visitors and friends.

DCOMMUNITY

As mentioned before, DPlaces can hold multiple kinds of users, building and enriching DCommunity; these are categorized as presented below:

CREATORS

Masters of the inventory, they are empowered with all the creative tools inside DTOWN and use their skills to build immersive experiences inside the DPlaces. Similar to the current social networks' influencers, they enrich the platform by creating content and making it a profession from which they can acquire stable incomes.

VISITORS

They dedicate their time to participate actively in the immersive experiences, exploring each DPlace they have access to. Sometimes they may need to pay for temporal access like tickets or similar, depending on the privacy settings of the target DPlace.

OWNERS

Usually, they are creators by default due to the inherent rights to modify their own DPlace; however, they can modify the collaborator rights, sell, and rent the DPlace.

INVESTORS

Inspired by the real-life economy, the investors can buy, sell and hold DPlaces or contributions that may have certain value; which can increase or decrease depending on the evolution of DTOWN's economic system. Additionally, the investors have the chance to offer grants or rewards in order to help DCommunity to grow and build better experiences.

CONTRIBUTIONS

The XR Inventory is presented as one of the core features inside DTOWN, which offers 3D Models, Images, and interactable items with predefined behaviors. These elements can be used to make contributions inside the DPlaces. The library can be extended by importing compatible files, a process that turns the elements into XR Interactables i.e. interactive pieces that can be manipulated with freedom inside DTOWN. After an interactable item is placed inside a DPlace, it becomes available for everyone to see it and becomes an NFT as well, acquiring value and giving value to the DPlace that holds it.

USE CASES

DPlace's owners and creators can build content aiming to lead the users' experience towards the next level of interaction, below are described some of the possible purposes:

EDUCATION

From scientific research to training, museums, and lessons that extend the classroom and bring students into different learning environments.

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Generate engagement with immersive interactions inside and outside hotels, restaurants, and coffee shops.

TOURISM

Allow the users to visit the locations remotely, connect and guide them through immersive experiences. Scan the physical environment and turn it into a digital tween in order to let the people interact with it remotely.

NAVIGATION

Use the geolocated content to help users get to a target place. Define access routes and update information in real-time.

RETAIL

In addition to exposing the creations inside the marketplace for users to buy them as NTF with crypto wallet, connections with real-life stores can be made as well; allowing the users to purchase elements from the virtual preview and receive the physical ones in their homes.

ENTERTAINMENT

Since one of the main goals of DTOWN is to bring the superpowers of the digital world into reality, the endless possibilities of entertainment stay open. Starting from minigames up to party events, concerts, and RPG-based quests.

SOCIAL

Nowadays, people use to gather in online forums, chat groups, or multiplayer games; clearly, DTOWN is not an exception. Voice communications and real-time interactions are fundamental features to lead the shared experiences into deep immersive levels.

CUSTOMER DEVELOPMENT

As DPlace owners, the users have the chance to obtain passive incomes from the paid advertisement; reaching the next immersive level in marketing campaigns by making use of static or interactive Ads.

Additionally, DTOWN offers a reward system that compensates the users based on their behavior and overall contributions to the platform; either by creating content or visiting new DPlaces.

TECHNOLOGY

DTOWN can be described as a decentralized metaverse that holds strict relation to the real world within a blockchain infrastructure, including NFT collectibles and its own economic system; which is aligned through crypto wallets' integration. It is presented as an Interaction Layer that merges virtual and physical worlds into the same reality by making use of Extended Reality technology.

In order to achieve the aforesaid objectives, the team has explored the devices that are currently available on the market, such as the Microsoft Hololens, NReal Glasses, and Oculus Quest helmets. Despite those ain't the perfect device, the fact of making the platform compatible is getting DTOWN some steps closer to the near future.

The development team has been taking care of the cross-platform requirements, knowing that a very inclusive environment must be reached; allowing everyone to be part of it by increasing the list of supported devices such as Desktop, AR smartphones, and VR helmets.

Moreover, the team has included a pipeline that allows users to scan real-world spaces or objects and bring them into the platform; making them available for everyone to use, share, or sell inside DTOWN. Eventually, the technology will permit the creators to scan elements by themselves and import the result straight into the Metaverse, pointing towards more immersive and realistic environments; where Photogrammetry, Volumetric Videos, and 360 Images become fundamental.

FOUNDERS

Andrey Sheshenin - Founder [Spain]:

- Economics Bachelor 2002, CS Bachelor 2008, MBA 2006, MSc in Cognitive Systems and Interactive media at Universitat Pompeu Fabra, Barcelona 2020, UA school Unreal Programing 2021, Valencia, Columbia business school Marketing 2022.
- 20 years in business. First CEO position 19 y.o. Generated revenue in 2007 of $1 M/year, Generated revenue in 2015 of $1,5 M/year. Developed a long-term competitive strategy and lead the company to become the Nº1 on the Russian market.

Luis M. Palacio - Founder [Spain]:

- CS Bachelor 2018, MSc in Cognitive Systems and Interactive media at Universitat Pompeu Fabra, Barcelona 2020. M.A in Visual Arts & Multimedia at Valencia Polytechnic University, Valencia 2021.
- +5 years as Innovation Developer (Unity3D, XR Developer, Full-Stack Developer).

SUMMARY

DTOWN is a cross-platform environment that aims to make the physical and digital worlds feel part of the same reality, building a decentralized Metaverse for everyone. It offers an interaction layer in order to keep things simple, intuitive, and inclusive. The project presents a decentralized Metaverse compatible with Desktop, Mobile, Augmented Reality (AR), and Virtual Reality (VR) devices. It is intended to empower the users with the necessary tools to create the worlds they want to see.

It presents a strong economic system linked to reality through the crypto ecosystem. Opening the possibilities since the platform itself can be a playground for immersive experiments in different scientific fields or even be considered a professional path for In-App sales, purchases, and investments; DTOWN project is a real-life changer due to the possibility of job generation.