YOUR MOBILE TRUST MACHINE

UPROOV

TM

World's First Real Time

Digital Media Authenticating Application

LEDGER ASSETS

Ledger Assets Pty Ltd

Ledger Assets is Australia's leading Blockchain science commercialisation company teaming up with experienced industry players in Medical, Power and Identity sectors. Currently developing the next generation of ground-breaking distributed ledger technology, designed to disrupt entrenched and obsolete business models. Ledger Assets provides the Blockchain technology to Australian peer-to-peer solar energy company, Power Ledger.

Ledger Assets is a Perth based company specializing in global verifiable digital technology, using what is known as the Blockchain Protocol. Ledger Assets has developed a world first Patent pending technology to authenticate image content, also providing time stamping and geo location verification, as well as watermarked tamper proof technology as BaaS (Blockchain as a Service). Ledger Assets have provided a world first in digital media authenticity using Blockchain technology in their Uproov.com mobile Application ("Uproov"). Ledger Assets has blockchain projects across many industries, like power,

About Uproov

Uproov is Ledger Assets' first product from their product line. Uproov was released globally to enterprise and retail consumers, and launched to investors in San Diego, California in December 2015. The Uproov App completed many weeks of extensive testing and was launched on the iTunes App Store in December 2015, where it is enjoying strong daily downloads.

The Uproov App can provide transparency in company processes across a number of key traditional industries such as legal, accounting, logistics, notary services and property. Uproov's technology is also growing into other industry service areas such as the rentals market and new emerging markets in the assets sharing economy (airbnb and Uber). It provides instant, indisputable, provable photographic evidence for reporting and indisputable verification of the associated time and geo location. It adds another layer of proof to important documents lessening the need and expense for constant notary and legal services.

Blockchain Technology

Uproov utilizes the innovative Blockchain technology to provide its encrypted verifiable data. In its essence the Blockchain is a digital global ledger that is constantly reconciled by mass collaboration. Once data is entered into the Blockchain it cannot be tampered with. This makes it a secure unhackable piece of technology, that has never been hacked since its inception in 2009. Despite it containing billions of dollars in value. This is the true innovative aspect of the Blockchain, an unhackable and public decentralized digital ledger reflecting the true state of digital information. An accurate and verifiable record of every transaction ever made on the Blockchain. The Economist referred to the Blockchain as "The Truth Machine". This makes Uproov a very powerful new digital media verification technology.

Uproov uses dynamic client side encryption and the Blockchain Protocol to secure data packets into the Blockchain, reflecting for example the genuine image, audio or video data. This means those submitted images cannot be altered, not even by one pixel, nor can any part of the file, image, video or audio be removed. Alteration of any of those aspects will cause the encryption key to no longer match what was entered into the Blockchain. Equally, a photo matching a data packet in the Blockchain is statistically unique and hence exactly proves the photo, each pixel in fact. The Blockchain as a public ledger allows any party to query for example the Uproov image, subject to your giving access, and instantly check if that Uproov image is genuine.

Uproov is a simple to use technological breakthrough system bringing to life a high level of verifiable proof using Blockchain technology and in *real time*. Ledger Assets is the first company internationally to create this product and is the leader in this market space, with patent pending technology.

Overview of the Uproov App

Media Types

Images, videos, audio files and pre-existing files can be Uproov'ed instantly. In the case of pre-existing files Uproov (version 2.0 and higher) allows any file from Dropbox, iCloud or other major cloud service provider to be accessed and Uproov'ed.

EzyID Verification

Uproov marks an EzyID on images if desired. This is a unique five digit code that allows easy reference to images, convenient for public or group viewing. This is designed so it can be use as a public reference, for example to link the verified image to a compliance report. All images are then either marked as having been created in "real time" or "pre-existing". A EzyID in green is for real time and a red one means it is pre-existing.

Uploading and Removal of Content

Any image taken on a smartphone device or tablet can be *optionally* uploaded. It remains strictly private on the user's device unless they chose to upload it. For the EzyID to be viewed on another device, the user can chose to upload it temporarily or permanent. Simple click of the Upload button and it will be uploaded. Click again and the image will be permanently removed from the Uproov's Swiss Servers.

Controlled Sharing Functionality

Uproov has a very advanced sharing functionality. The Share button allows the EzyID, Access Code or file itself to be instantly shared. The Access Code is designed to keep a file private, except to whom the Access Code is shared. While sharing an EzyID is designed for convenience of public or group sharing. Anyone to whom it has been shared to can instantly access the file, subject to the user electing to upload and allow public (EzyID) or private (Access Code) viewing.

Controlled Public or Private Viewing

Additional to the sharing functionality, you can switch on or off when a file can be viewed. The View button (eye open icon) makes the image viewable on Uproov.com, publically to those who have the EzyID and privately viewable on Uproov.com, only to those who have the private Access Code. The View button when pressed twice (eye closed icon) makes the image private and it cannot be publically viewed at all. This function can be toggled by the owner of the image on their device.

Function Options

The Uproov App contains many optional functions such as Watermarks, Geo location, Image Resolution, Video Cropping, EzyID and Timestamp. All of these functions can be set on or off in Uproov's settings.

When in Passport Mode Uproov locks the EzyID Stamping, Watermark and Timestamp. Passport mode is useful for identification verification, to prove identity at a given point in time on a photo. All photos must be live with a green EzyID when being used for identify verification, when locked in Passport mode it automatically does so.

Private Keys Certifying Content Ownership

There is private key for each image, that is unique and generated at the time of Uproov'ing. It is sent automatically as a certificate in an email to the user for their safekeeping, each time an image is Uproov'ed. It is not retained by Ledger Assets. This means only the user can claim or trade ownership of any image, as the instant provable copyright belongs only to the owner. The private keys (certificate) together with the public keys (EzyID or Access Code) will prove irrefutable ownership, of the verified content. The email also contains other information, such that if Uproov no longer existed, each image can still be proved on the Blockchain by the user themselves using simple utility files. This is fundamental and means the users do not rely on Uproov, but only on the Blockchain.

Privacy

Privacy is a major part of the Uproov system. The Uproov system itself has a very high level of protection against any potential threats, such as hackers, including the use of multi container systems separating all parts of the system. But the best protection comes from the fact that uploading an image is optional to the users. Users are in control and own their created content.

Uproov has servers only in Australia and Switzerland. Even then, any files optionally stored on the Uproov server are encrypted. Sensitive files do not need to be uploaded, but can stay on the user's phone and personal computer. Files are never uploaded to the Uproov servers without the specific consent of a user. The private key for each image is not retained by Uproov meaning the file belongs only with the user.

All users must consent to the privacy policy before they can use the system. This includes compliance with laws governing the cross border storage of media files. No personal information is stored by Uproov, other than a user email, needed to send users their private keys for a uproov'ed image.

Uproov Application

The Uproov App can be used in many ways for verification of authentic digital media. Some of the many useful applications:

- To verify photos taken as evidence for on-site audits are taken at a certain time, date and place. The content of the photos or videos cannot be edited, cut or changed at all. This eliminates reliance on the manipulatable timestamp of a camera phone photo or metadata such as location.

- To provide transparency for incident reporting. Reports can be given a unique timestamped EzyID and optionally shared only with a small group or certain limited parties (ie. MD, Safety Manager, those who need to see incident reporting).

- Provide photo evidence of condition of vehicles before and after maintenance, proving the vehicle was properly maintained in the event of an incident. Use of genuine parts inside equipment can be proved using video.

- Proof of condition for any lease/hire of equipment, before and after use, protecting deposits and/or liability.

- Proof of condition of vehicles for insurance claims.

- Proof of compliance with policies and procedures on the correct location and storage of equipments and hazardous products using geo location verification on photos.

- Immutable proof of on-road accidents at the time of incident, to protect against liability of accidents not caused by company drivers etc.

- Be your own notary service by time stamping of commercial contracts, negotiations or important documents, to verify when and where they were signed.

- Overall use as an effective compliance tool for internal and external audits providing the company with the control of flow of information, to show verifiable proof where necessary.

Ledger Assets has a thorough understanding and respect for privacy, intellectual property and circumstances where legal privilege may arise. Ledger Assets is very transparent about these crucial components putting the user in control and ownership of their content. Part of the design of Uproov's technology is that access to the verified content, is only granted to those persons holding the Access Code (private sharing) or EzyID (group or public sharing), that can be disclosed on a need to see basis.

Users can be as private or public with their provable images as they choose or as management seeks. The owner of the verified content can share publicly, keep privately or delete the content entirely. The owner has complete control and copyright of their content. This is an area that can be further tailored and designed to suit the company's needs by Ledger Assets' team if requested.

Ledger Assets can provide a corporate dashboard functionality to companies. A pilot has been developed for corporate client users. The dashboard acts as a master key providing access to content, created by any corporate singular user or users. The person given access to the master key can login as any user, to view or manage the verified content.

Implementation

There are many possible avenues to pursue in the implementation of Uproov's Enterprise App. The simplest method of implementation would be to provide the Enterprise with the product to use, as the Uproov App is designed so that it is simple and efficient for users. Upon review Ledger Assets can tailor, design, develop and implement the Uproov App to the Enterprise's needs.

Ledger Assets can provide a pilot Uproov Enterprise App for employees to download on their devices and use. For example for use in photographic evidence recording for audits, time stamping verification of contractual documents and incident reporting etc.

Ledger Assets can also provide their Compliance Officer to work closely with the Enterprise's IT, Risk, Safety, Compliance and/or Legal departments to develop and integrate the Uproov Enterprise App into pre-existing policy and procedures, or develop a new Compliance Program for the use of the Uproov Enterprise App.

Upon a three month initial review and six month full review, Ledger Assets can further tailor the functionality of the Uproov App according to Enterprise's needs. Support will be provided during the six month implementation trial phase.

Product Details

Uproov Consumer App

Uproov can be downloaded for free from the iTunes App Store on any Apple device or Android device via Google Play, inclusive of 20 free credits to use. Additional credits can be purchased in App once exhausted.

Uproov Consumer Pro App

Uproov Pro subscription is charged monthly or yearly and per device. Uproov Pro version additionally allows for instantaneous authentication of media content and longer videos etc. While the free version has a slight wait time for confirmation and videos are limited to a short duration. Additional credits can be purchased to verify more content than included in the subscription for heavy users.

Subscription prices:
Two months - US 5.99 USD*
Six months - US 16.99 USD*
One year - US 29.99 USD*
*Please note prices are in USD when purchasing direct from the iTunes App Store.

Uproov for Apple

Version: v2.2

Languages: English and Portuguese.

Compatible: iOS 8.4 with any iPhone, iPad and iPod Touch device.

Download: https://itunes.apple.com/us/app/uproov/id1050857785?mt=8

Available for free download on iTunes App Store with 20 included credits.

Uproov for Android

Version: v1.19

Languages: English and Portuguese

Compatible: 4.1 and above devices.

Download: https://itunes.apple.com/us/app/uproov/id1050857785

Available for free download on Google Play Store with 20 included credits.

Press Releases

The Examiner 'CES 2016 is Here'

Coin Desk 'New iOS Camera App Uproov Signals End to Fake Videos and Photos'

International Business Times 'Uproov Brings Bitcoin Notary Service to iTunes App Store'

Brave New Coin 'Ten Companies Using the Blockchain for Non Financial Innovation'

All Coin News 'Uproov First To Offer Mobile Proof on the Blockchain'

Nasdaq '8 Blockchain Applications that Could Help Your Business'

Business News 'App Tech Business of the Week Uproov'

CoinDesk 'New Uproov App Uses Blockchain Immutable Answering Machine'

See our website for more at Uproov.com

See our website for more at www.uproov.com

Contact

Please feel free to contact us at Ledger Assets, if you have any queries regarding Uproov.

Directors G van Ek and J Bulich

Ledger Assets Pty Ltd

Level 6, 218 St Georges Terrace Perth WA 6000

www.ledgerassets.com