



OPU

WHITEPAPER

2019

NOTICES

NOTICE TO RESIDENTS OF THE UNITED STATES OF AMERICA

THE OFFER AND SALE OF THIS SECURITY INSTRUMENT HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THIS SECURITY MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT OR AN EXEMPTION THEREFROM.

NOTICE TO RESIDENTS OF CANADA

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE THE DATE THAT THE ISSUER BECOMES A REPORTING ISSUER IN ANY PROVINCE OR TERRITORY.

NOTICE TO RESIDENTS OF CHINA

THE RIGHTS ARE NOT BEING OFFERED OR SOLD AND MAY NOT BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, WITHIN THE PEOPLE'S REPUBLIC OF CHINA (FOR SUCH PURPOSES, NOT INCLUDING THE HONG KONG AND MACAU SPECIAL ADMINISTRATIVE REGIONS OR TAIWAN), EXCEPT AS PERMITTED BY THE SECURITIES AND OTHER LAWS AND REGULATIONS OF THE PEOPLE'S REPUBLIC OF CHINA.

NOTICE TO RESIDENTS OF THE UNITED KINGDOM

IN THE UNITED KINGDOM THIS DOCUMENT IS BEING DISTRIBUTED ONLY TO, AND IS DIRECTED ONLY AT (AND ANY INVESTMENT ACTIVITY TO WHICH IT RELATES WILL BE ENGAGED ONLY WITH): (i) INVESTMENT PROFESSIONALS (WITHIN THE MEANING OF ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005 AS AMENDED (THE "FPO")); (ii) PERSONS OR ENTITIES OF A KIND DESCRIBED IN ARTICLE 49 OF THE FPO; (iii) CERTIFIED SOPHISTICATED INVESTORS (WITHIN THE MEANING OF ARTICLE 50(1) OF THE FPO); AND (iv) OTHER PERSONS TO WHOM IT MAY OTHERWISE LAWFULLY BE COMMUNICATED (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS").

THIS DOCUMENT HAS NOT BEEN APPROVED BY AN AUTHORIZED PERSON. ANY INVESTMENT TO WHICH THIS DOCUMENT RELATES IS AVAILABLE ONLY TO (AND ANY INVESTMENT ACTIVITY TO WHICH IT RELATES WILL BE ENGAGED ONLY WITH) RELEVANT PERSONS. THIS DOCUMENT IS DIRECTED ONLY AT RELEVANT PERSONS AND PERSONS WHO ARE NOT RELEVANT PERSONS SHOULD NOT TAKE ANY ACTION BASED UPON THIS DOCUMENT AND SHOULD NOT RELY ON IT. IT IS A CONDITION OF YOU RECEIVING AND RETAINING THIS DOCUMENT THAT YOU WARRANT TO THE COMPANY, ITS DIRECTORS, AND ITS OFFICERS THAT YOU ARE A RELEVANT PERS

Introduction

Mission Statement

Opu: Tokenizing Skincare Intelligence

Opu aims to become the leading digital solutions provider for skincare measurement, management, and monitoring. We're committed to improving how the global skincare industry exchanges data, information, and rewards.

Current Problems

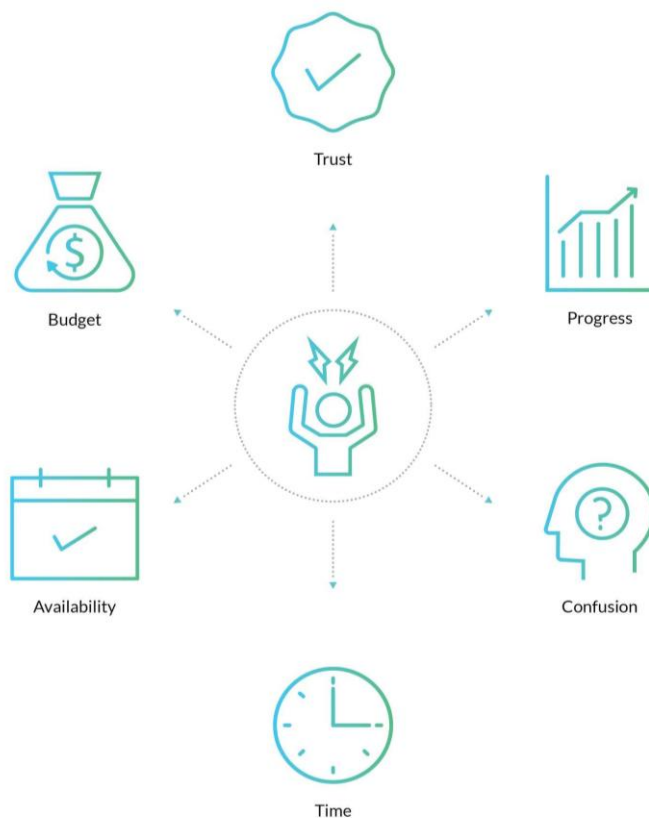
Everyone's skin is different, yet few consumers get their information from professional dermatologists. Instead, we rely on advice from social media, friends, shop assistants, and product marketers.

Dermatologists have limited time and lack the tools to personalize skincare advice to a mass audience.¹ In addition, there's no trusted solution for consumers to get objective data on the performance of skincare products.

To summarize, the current problems with skincare can be broken down into the following categories:

¹ <https://www.researchnester.com/reports/tele-dermatology-market-global-demand-analysis-opportunity-outlook-2021/151>

Figure – 1



- > **Trust** – Skincare advertisements with exaggerated and generalized claims have contributed to a lack of consumer confidence.²
- > **Progress** – It’s difficult to track the progress of skincare goals. Consumers are more likely to follow recommendations if they see evidence of continuous improvement.
- > **Confusion** – Consumers complain about the presence of too many products and services with multiple functions.
- > **Time** – Consumers typically spend 8-10 hours per month researching and evaluating skincare products. Those responding to skincare product

² <https://www.mediapost.com/publications/article/188836/why-women-hate-the-cosmetic-industry.html>

advertisements typically spend 5-10 days doing research online before making a purchase decision.

- > **Availability** – Consumers want solutions that do not require inconvenient and time-consuming visits to skincare services providers.
- > **Budget** – Consumers struggle to find cost-effective solutions.

Introducing Opu Labs

Opu Labs is creating a suite of trust-based online platforms; all designed to improve the quality, efficiency, and use of dermatological data for individuals and professionals alike:

- > **Opu AI** – Machine learning technology that analyzes, compares, and recommends treatment solutions.
- > **Opu Marketplace** – Provides treatment information from consumer skincare service providers and eCommerce partners.
- > **Opu Coin (OPU)** – our native currency (ERC-20 token) that act as a medium of exchange for our skincare marketplace and Opu loyalty programs.
- > **Opu Connect** – Enables brands and service providers to conduct market research.
- > **Opu CRM** – A customer support tool for doctors and advisors. Includes image mark-up and patient tracking tools.

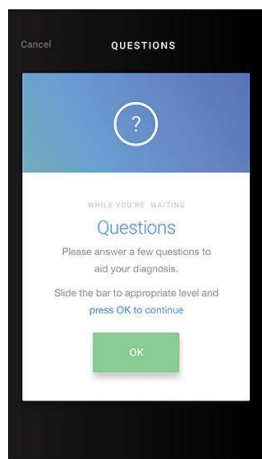
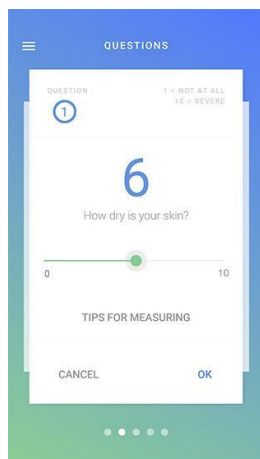
Through these platforms, we make it easier for individuals to analyze skin conditions, set improvement goals, monitor their progress, and achieve results with expert guidance from professionals and Opu's native intelligence.

Opu is a skin analysis platform providing free tools for consumers and professionals. Consumers benefit from recommended treatment solutions based on a comprehensive skincare product database and community of skincare professionals.

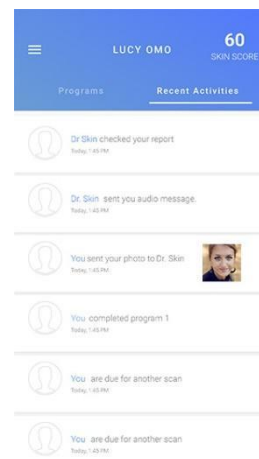
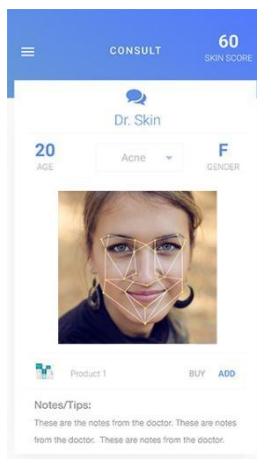
Opu can currently identify and measure hyperpigmentation, redness, acne, wrinkles and skin tone on a given facial image. It does this by creating a facial map, which is divided into four regions (brow, cheek, eye, middle) and then produces a skin condition score for each region.

Our AI utilizes a prediction engine to forecast skin quality after treatment, and our app allows users to measure their skincare treatment progress. When users reach their targets, they can earn Opu Coin rewards.

For Consumers



For Skincare Advisors



The solution will also include:

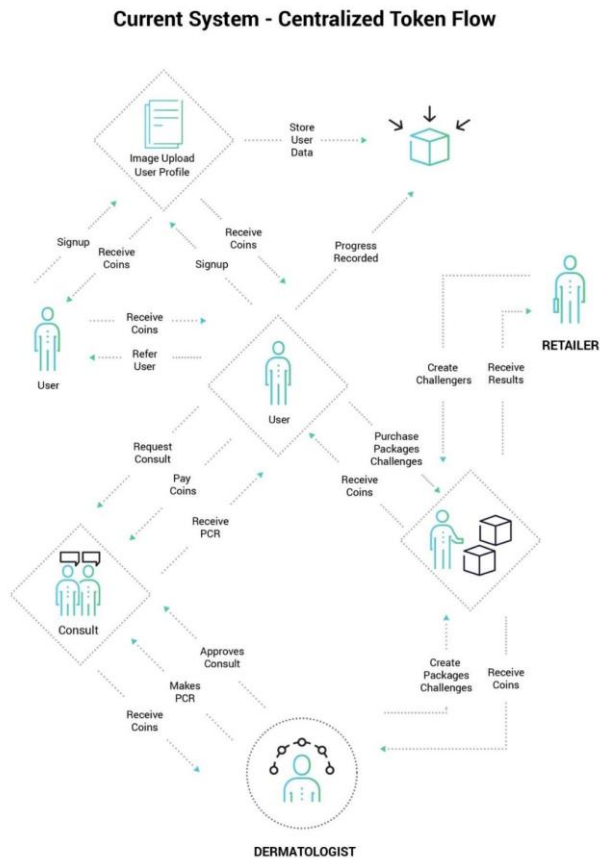
- > Virtual consultation with professionals
- > Community and social network to securely connect consumers with similar conditions to share experiences
- > Platform for managing scheduling, referrals and commissions

Token Economy

Our ecosystem is underpinned by a native ERC20 token – the Opu Coin (OPU). Opu Coin was created to:

- > Build a trust-based community through verified transactions
- > Purchase skincare products & services at a discount
- > Make research data more easily accessible for skincare service providers, product manufacturers, and researchers
- > Incentivize doctors and experts for training the neural network engine
- > Reward consumers for good skin health and community participation

Figure 13



Opu Marketplace

Opu Labs' platform will allow consumers the ability to earn rewards for making contributions to the platform through reviews, social sharing, completing treatment plans, purchasing products and services, and more, as in the following example:

An Opu user would like to join a three-month program with an online dermatologist. This user will pay for the program directly with Opu Coin. The user will also receive a reward (paid in Opu Coin) when the program is successfully completed.

Professionals will be incentivized to contribute their knowledge and expertise to the Opu Labs platform to earn Opu Coins, which they can in turn use to provide incentive programs to reward patients for good skin health behaviour and maintaining treatment plans.

A dermatologist would like to encourage a new patient to adopt healthy skincare habits. Opu Coins are used as an incentive to encourage the patient to schedule a follow up meeting.

Opu Labs will also function as a direct service provider – allowing research professionals to efficiently execute their studies on a decentralized platform. Opu Labs will act as the direct intermediary in which marketers will purchase Opu Coins in order to offer a predetermined OPU bounty or stake for participation in research programs.

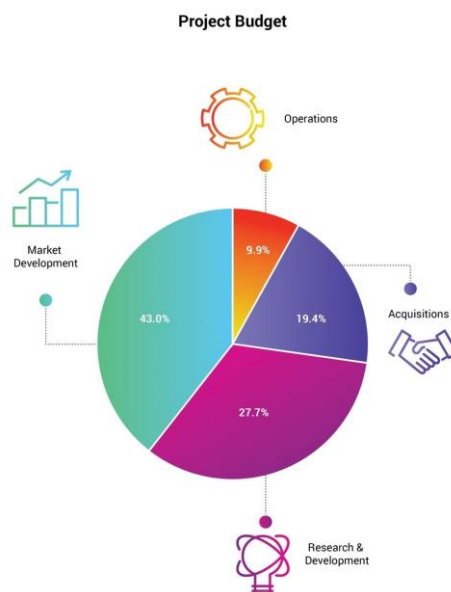
A brand wants to test a new product. The marketer will build their audience on the Opu Network and run surveys to gain organic feedback. The marketer will pay a fee in Opu Coin, which will be shared with the end user in exchange for completing the survey.

Token Distribution

Figure – 14

Segment	Percentage	OPU Coin	Issued (05/19)
Community Distribution	36.7%	550,000,000	14.3%
Team/Company	36.7%	550,000,000	82.4%*
Partners	11.6%	175,000,000	85.5%*
Rewards	10%	150,000,000	56.6%*
Cold Storage	7.5%	75,000,000	0%*
Total	100.0%	1,500,000,000	51.09% (766.375M)

* Indicates mandatory locks/vesting. Team/Company tokens are locked until Mar-2019 and vested monthly until Dec-20-2020. Partner tokens are locked until Dec-20-2019 and vested monthly until Dec-20-2020. Rewards are locked until Opu Marketplace utility is live (~Q3 2019). Cold storage tokens are locked until Dec-20-2020.



Market Analysis

The international skincare market is worth approximately \$112B³. It's forecast to increase to \$155B by 2022⁴. The market for beauty accessories and devices alone is valued at \$23B and is growing at a rate of around 14% per year⁵. This healthy growth is fueled by rising incomes in developing countries.

Despite the size of the market, a global skincare management solution provider has yet to emerge; mostly due to fragmentation and the lack of an integrated solution.

The market demands a highly scalable service which will help consumers understand their skin conditions and rapidly connect them to effective and affordable products and services – without any brand bias.

Target Market

- > 80% female and 20% male
- > Aged 18-35
- > Having internet access via a smartphone or tablet
- > Interested in skincare and personal care solutions
- > New mothers, pregnant women, office workers, and college students
- > Highly educated
- > Spending an average of \$75 per month on skincare products and services

³ <https://www.businesswire.com/news/home/20170927005526/en/130.7-Bn-Cosmetic-Skin-Care-Market-2017> See also: <https://journalhealthcare.com/21748/global-dermatology-treatment-devices-market-demand-trends-type-global-industry-analysis-and-forecast-2024/>

⁴ <https://www.statista.com/statistics/254612/global-skin-care-market-size/> See also: <https://blog.euromonitor.com/2017/05/reimagining-growth-in-the-global-beauty-industry.html>

⁵ <https://www.grandviewresearch.com/industry-analysis/skin-care-products-market> See also: https://www.cosmeticsbusiness.com/news/article_page/Skin_Care_Market_Report_How_can_brands_smooth_the_way_for_new_innovations_in_2017/125686

Skincare Stats

- > \$112 billion -- the size of the global skincare market
- > \$23 billion⁶ – the market for beauty accessories and devices
- > 600 million – Facebook users interested in skincare solutions
- > 360 million – monthly Google searches related to skincare
- > 60,000 – skincare products on Amazon

Figure – 7



⁶² <https://www.psmarketresearch.com/market-analysis/beauty-devices-market>

Go-To Market

Free Tools

Our AI powered image analysis and recommendation technologies will be accessible via a user-friendly mobile app – free of charge. We offer the ability to identify skin conditions and track treatment plans through daily, weekly, or monthly skin analyses.

Our image analysis service can be tailored to customer needs, reducing caseloads for overloaded dermatologists and skincare professionals. It offers the ability to add unique products to our recommendation engine and comprises a powerful CRM to support secure client communications. Professionals can use Opu Coin for referral marketing programs, customer rewards programs, and transactions.

Brand Building

We'll create a multi-channel marketing campaign targeting leading skincare influencers, early adopters, and publications through comprehensive search engine optimization (SEO) and app store optimization (ASO) programs. We incentivize leading dermatologists, influencers and brands to develop expert user-generated content with Opu Coin.

PR & Content Marketing

Ongoing PR exposure in local markets will stimulate user interest in the platform, creating demand for personal skincare treatment, while offering consumers the chance to earn rewards for sharing content within their personal networks. Leading skincare professionals will feature prominently in Opu's PR initiatives to establish

trust in the platform, stimulate awareness, and drive user acquisition. Content will be varied – both text-based and video material.

Market Research

- > 80% know what skin type they have
- > 87% want personalised product recommendations
- > 60% currently shop alone at bricks & mortar stores for their skincare

Marketing Strategy

User Experience - As part of the user acquisition campaigns, an emphasis will be placed on user testimonials and influencer support to demonstrate how easy and approachable the app is for everyday consumers to use regularly.

Community Engagement - Users will be incentivized to share their experiences by earning Opu Coin - stimulating user interaction and providing the community with verified reviews and comments.

Search Marketing - Our core search categories include skin app, beauty app, acne, acne products, anti-ageing, and wrinkle products. Peripheral categories include whitening, redness, blotchiness, rosacea, dryness, fine lines, and blackheads.

Why Blockchain?

- > Harness collective knowledge in a trusted ecosystem.
- > Allow users to own their own data
- > Ensure the secure and transparent exchange of data, advice, and value.
- > Offer cryptocurrency incentives to encourage participation.
- > Reward skincare professionals and consumers for completing activities that benefit the community.

Competition

While there are no direct competitors, there are several other skincare, beauty, telemedicine, and medical data storage solutions on the market.

Beauty Apps

Numerous companies offer the ability to analyze facial images to determine skin conditions, track results, recommend products, and showcase cosmetics – including Celltone, Olay Skin Advisor, L'Oréal's Make-up Genius.

Diagnostic Skincare

Skincare scanning and analysis continues to be a big growth area, with a number of companies offering this functionality: on and off the blockchain – including DermatologistOnCall, Philips Skincare Assessment Kit, MoleScop, TeleSkin.

Telemedicine/Service Platforms

There are several skincare-focused wellness platforms using blockchain technology. Some offer insights, others connect patients with professionals – including Bowhead, ClinicoIn, Doc.ai, Amwell, DocAdemic, Doctor On Demand.

Medical Data Storage

Several companies offer blockchain-enabled medical records/data storage – including Amchart, ARNA Genomics, NAM.

Roadmap

We began our research back in 2016, conducting skincare product marketing campaigns across multiple countries. We discovered that current advertising formats met with limited success in communicating skincare product efficacy. A live version of the system is available for evaluation at <http://opu.ai>

- > Q1 2018: Fully functioning scan and analysis
- > Q2 2018: Web version with training tools for doctors
- > Q3 2018: Opu Coin smart contract developed. Rewards program launched.
- > Q4 2018: Platform APIs
- > Q1 2019: Opu Marketplace Developed
- > Q2 2019: OPU live on Mainnet. Scan History & Secure Chat functionality
- > 2019 - Future: iOS and Android Apps, Public APIs

Conclusion

Opu Labs was born out of a desire to improve the way people select and use skincare products and services. Opu Labs is dedicated to developing digital tools that connect people all over the world to optimal skincare solutions – the kind usually only available to wealthy consumers. From our experience developing and selling health focused skincare products to consumers, we gathered extensive feedback on the challenges facing consumers and professionals, so we set out to build a digital solution for measuring and managing skincare.

Opu Labs will offer a full-service digital skincare consultation and treatment platform that provides personalized services for users' unique needs. The platform is also beneficial for skincare professionals who can provide advanced diagnosis and treatment services to anyone, anywhere.

At the center of our digital platform is the Opu Coin, our native Ethereum token which is being issued by Opu Labs Limited, a BVI incorporated limited liability company, whose registration number is 1978838. Opu Labs Limited is a 100% subsidiary of Opu

Labs Inc. which was founded in 2016 and whose headquarters is in Palo Alto, California, United States.

Should you have any other questions please visit us at:

Our Website: <https://opu.ai/>

Opu Coin Website: <http://www.opucoin.io>

Our Telegram: <https://t.me/opulabs>

Our LinkedIn: <https://www.linkedin.com/company/opu-labs-inc/>

Appendix

Opu AI Skin Analysis Platform

Neural Network

Neural network artificial intelligence takes a deep learning approach by making use of each node input to achieve optimal results.

This pattern recognition technique, which leverages a neural network to find features on a face, detects specific skin conditions in a given image.

Once a skin condition is successfully located within the image, the neural network can also rate the condition based on a multi-vector analysis of the area of the body associated with the skin condition.

Through training, the neural network will continue to be even more accurate in the diagnosis of skin conditions.

Figure – 1

All Process Overview

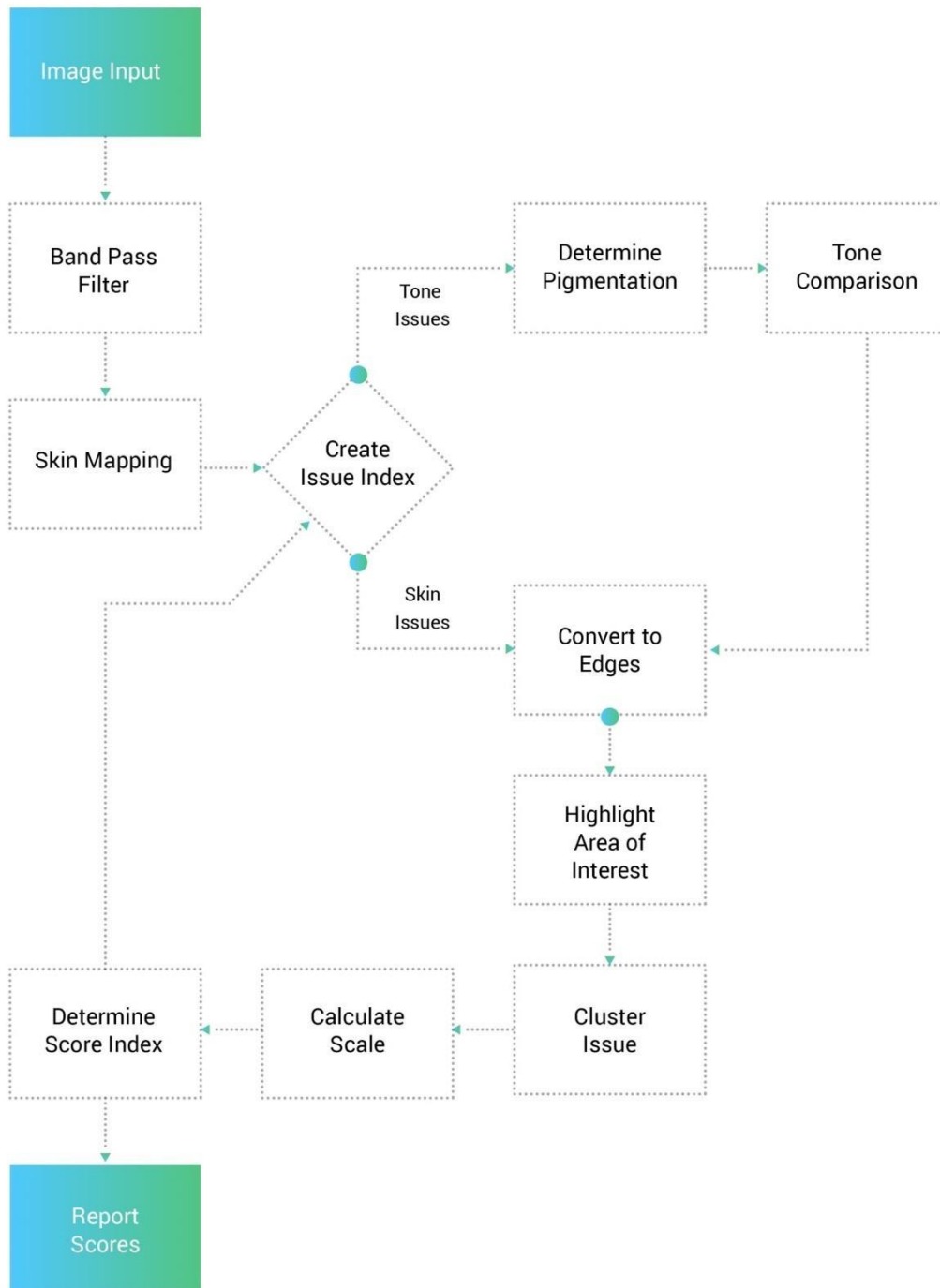
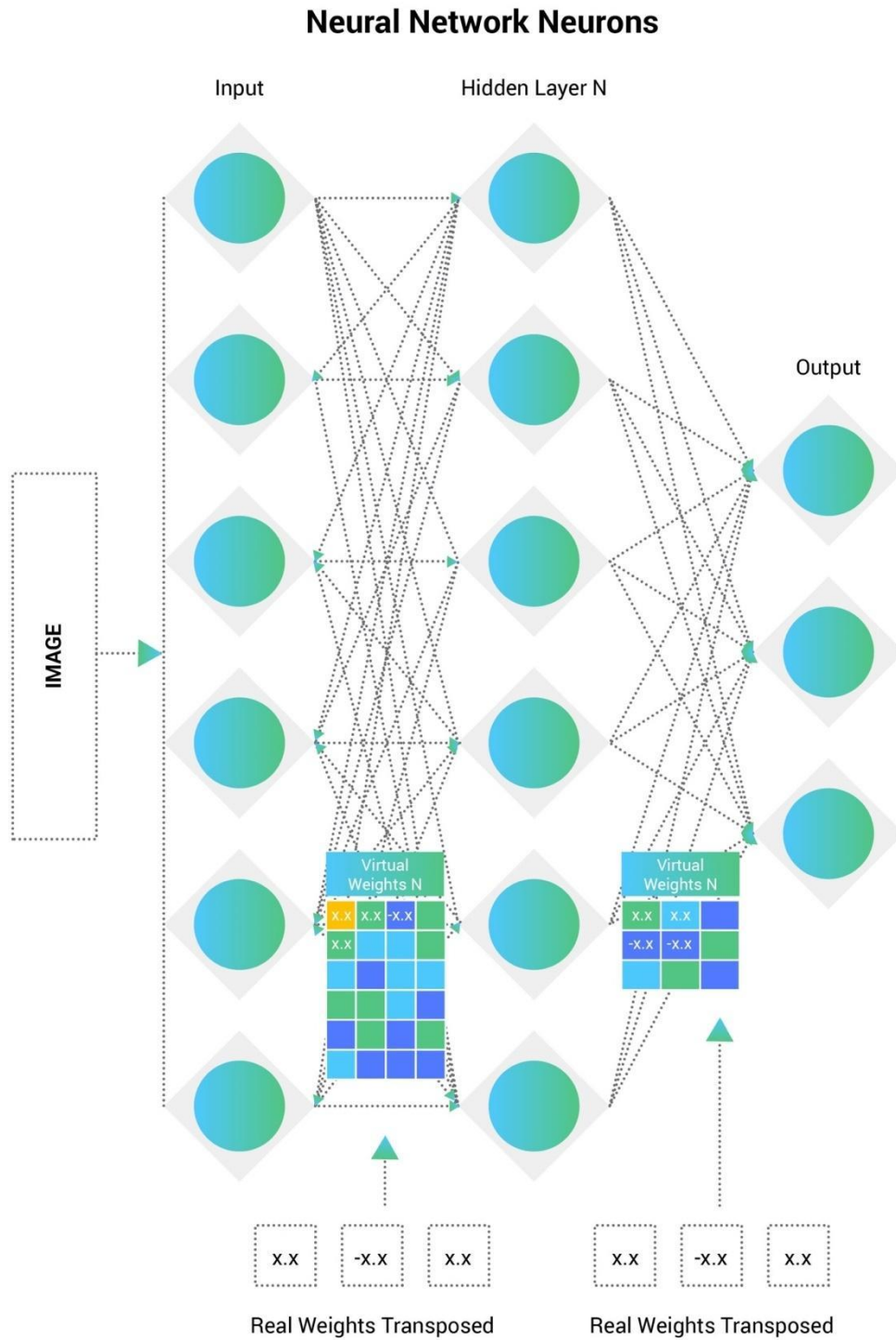


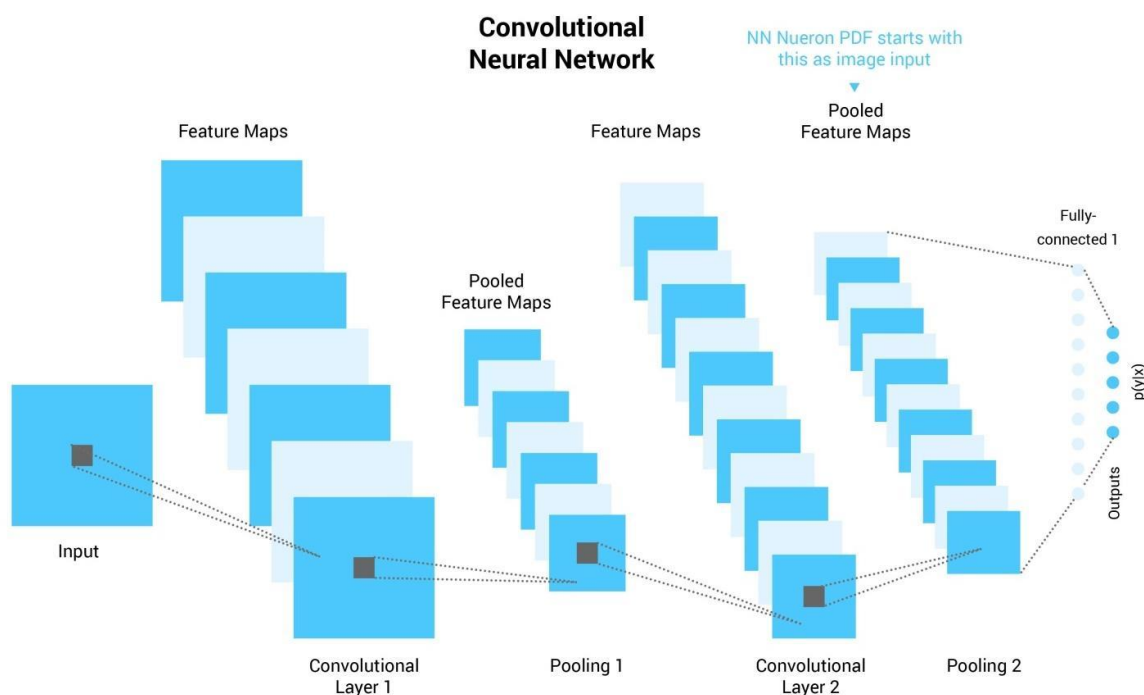
Figure – 2



Weights

The system will employ generated, or “control,” weights through a deep learning and neural network training platform for the base skin conditions. Generated weights will be critical to providing a basis for measuring the severity of skin conditions. Third-party developers making use of the platform will be able to generate their own unique weights system – to classify their own targeted skin conditions.

Figure – 3



Skin Conditions

The neural network can currently identify and measure severity of hyperpigmentation, redness, acne, wrinkles and skin tone on a given facial image.

It does so by creating a facial map, which is divided into four regions (brow, cheek, eye, middle), and then producing a skin condition score for each region. Deep neural network techniques will be used to enable analysis of additional conditions including, but not limited to, pores, freckles and moles.

Facial Map

Facial mapping is an integral part of Opu's deep neural network. When an image is submitted for analysis, the neural network will produce a 'landmark' image. This image will mark all the regions being processed by the neural network for the various skin conditions. The user will then be presented with a score for each region of their face, together with the percentage value of their score for the given region.

Severity Rating

Opu's neural network calculates a score for issues within a given skin condition category, in addition to learning and scoring the severity of these issues.

Image Pre-Processing

Facial detection uses a pre-existing neural network to detect a face within the image. (Future image processing versions will allow for skin scoring on other areas of the body.) Contrast algorithms analyze the entire image and create abstract sections to ensure that overall image skin tone is discernible by AI from other portions of the image.

Prediction Engine

Built on top of the neural network is a prediction engine that forecasts skin quality after treatment. The engine outputs several images to demonstrate the reduction in severity following any treatment received.

Opu Score

Using big data, data mining, pattern recognition and Opu's neural network, each facial image is given a unique Opu score. This score is the composite index of all the metrics produced within Opu and functions as an overall representation of skin health.

Goals

Users can measure their progress on their skincare goals. Regardless of the frequency of a skincare treatment program, the goals feature incorporates all data collected on the user to track the user's progress and provides an opportunity to the user to earn Opu Coin rewards while achieving healthier skin.