

UBRICOIN

Blockchain Technology for Global Health *Ensuring Universal Health Access for You and Your Loved Ones*



**Ustawi Biomedical Research Innovation and Industrial Centers of Africa**

We are a life science and health production (LSHP) organization. We sponsor investments in

* life science comprising pharmaceuticals and medical devices,
* fully integrated health production by building sustainable one health communities involving people co-operating in a retail network combined with health delivery system, and
* specialized real estate for life science and global health production.

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# IMPORTANT NOTICE

The purpose of this whitepaper is to present a summary of Ubrica’s business model, value proposition and an introduction to Ubricoin to potential coin buyers in connection with the proposed coin sale. The information set forth below may be changed for any reason, may not be exhaustive and does not imply any elements of a contractual relationship. The sale and purchase of UBN coin is governed by the Terms of Saleavailable on Ubricoin website (ubricoin.ubrica.com). This whitepaper’s sole purpose is to provide relevant and reasonable information to you in order for you to determine whether to undertake a thorough analysis of Ubrica project and the company with the intent of acquiring Ubricoin.

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UBRICOIN

Blockchain Technology for Global Health *Ensuring Universal Health Access for You and Your Loved Ones*

# INTRODUCTION

We have developed Ubricoin on blockchain to serve as a platform devoted to improving quality of health for all. Ubricoin will help to achieve global health. We will use Ubricoin to develop global health industry and create market intelligence through a cryptocurrency reward system that will inspire positive contribution to health improvement around the world. We will use a smart review system to reward consumers for positive health behavior.

Educators at all levels of education, researchers, and practitioners at all levels, will also receive rewards for excellence, quality of work, and positive contribution to society. We believe in a future where everybody has access to best health products and services. We believe in great health that is easily accessible and affordable to all. We believe in a future of universal health access. We expect that Ubricoin will improve health related quality of life (QOL) and quality adjusted life years (QALY). In addition, we believe that Ubricoin will reduce the enormous burden of disease (BoD), particularly in the developing world, and eliminate years of life lost (YLL) due to disease.

## BLOCKCHAIN

Blockchain is a digital ledger in which transactions made in cryptocurrency are recorded publicly and chronologically. An electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers.

We define an electronic coin as a chain of digital signatures. Each owner transfers the coin to the next by digitally signing a hash of the previous transaction and the public key of the next owner and adding these to the end of the coin. A payee can verify the signatures to verify the chain of ownership.

The solution we propose begins with a timestamp server. A timestamp server works by taking a hash of a block of items to be time stamped and widely publishing the hash.

To implement a distributed timestamp server on a peer-to-peer basis, we will need to use a proofof-work system similar to Adam Back's Hashcash [6], rather than newspaper or Usenet posts. The proof-of-work involves scanning for a value that when hashed, such as with SHA-256, the hash begins with a number of zero bits. The average work required is exponential in the number of zero bits required and can be verified by executing a single hash. For our timestamp network, we implement the proof-of-work by incrementing a nonce in the block until a value is found that gives the block's hash the required zero bits. Once the CPU effort has been expended to make it satisfy the proof-of-work, the block cannot be changed without redoing the work. As later blocks are chained after it, the work to change the block would include redoing all the blocks after it.

The proof-of-work also solves the problem of determining representation in majority decision making. If the majority were based on one-IP-address-one-vote, it could be subverted by anyone able to allocate many IPs. Proof-of-work is essentially one-CPU-one-vote. The majority decision is represented by the longest chain, which has the greatest proof-of-work effort invested in it. If a majority of CPU power is controlled by honest nodes, the honest chain will grow the fastest and outpace any competing chains. To modify a past block, an attacker would have to redo the proof-of-work of the block and all blocks after it and then catch up with and surpass the work of the honest nodes.

The steps to run the network are as follows: 1) New transactions are broadcast to all nodes. 2) Each node collects new transactions into a block. 3) Each node works on finding a difficult proof-of-work for its block. 4) When a node finds a proof-of-work, it broadcasts the block to all nodes. 5) Nodes accept the block only if all transactions in it are valid and not already spent. 6) Nodes express their acceptance of the block by working on creating the next block in the chain, using the hash of the accepted block as the previous hash. Nodes always consider the longest chain to be the correct one and will keep working on extending it. If two nodes broadcast different versions of the next block simultaneously, some nodes may receive one or the other first. In that case, they work on the first one they received, but save the other branch in case it becomes longer. The tie will be broken when the next proofof-work is found and one branch becomes longer; the nodes that were working on the other branch will then switch to the longer one.

Every node in the network is coming to the same conclusion, each updating the record independently, with the most popular record becoming the de-facto official record. It runs on a trustless network of peers who are responsible for verifying the transactions. This means that we do no longer rely on a trusted third-party to approve transactions. Instead, we rely on one another to validate transactions from each other. Validation of trusted transactions is distributed among the peers in the network with each transaction being publicly announced by each participant. The transactions are updated on a continuous basis.

## WHY BLOCKCHAIN

A fully decentralized business needs both a decentralized infrastructure and a decentralized decision making. Every user in this network becomes the owner of the network too. Blockchain facilitate the inclusion of fringe stakeholders to position of salience at the core of decision making.

We will use blockchain to facilitate meaningful interactions among peers working together in Ubrica ecosystem. To start, Ubricoin will facilitate point of sale payment system for Ubrica’s e-commerce platform (sokojanja.com). Ubricoin will reduce friction of currency in the trade and facilitate real time transfer of cash. Ubricoin will also act as the escrow to protect its members from fraud by eliminating middlemen who usually do not provide value for money.

Blockchain aims at changing the external environment by including the distant voices from the fringe stakeholders who are most of times neglected in our societies. This will help us understand the concerns of distant and diverse stakeholders. Including the fringe stakeholders allows Ubrica to understand the complex and evolving issues that may potentially affect the basis of its future and addressing them. Ubricoin gives us an opportunity to build an incentive structure for goodwill and excellence. We will therefore focus on giving incentives to traditionally marginalized hardworking people who contribute knowledge for the betterment of humanity.

# UBRICOIN

Ubricoin is a blockchain built on Ethereum protocol. It is a peer-to-peer utility token that will give incentives to anyone in the world to facilitate global health. We will use Ubricoin to create platforms to support lifescience research and development, generic drugs manufacturing and health services delivery. Ubricoin will be the gateway to the biomedical world which comprises Soko Janja, health services delivery, science and technology parks and biomedical industrial city (Figure 2). Ubricoin will expand Ubrica’s capability to host future worthy lifescience and health blockchain projects and spinoffs.

|  |
| --- |
| **UBRICOIN** |
| FIGURE . USES OF UBRICOIN: LIFESCIENCE AND HEALTH PROJECTS BUILT ON UBRICOIN BLOCKCHAIN |

We created 10,000,000,000 (ten billion) Ubricoins (UBNs). UBN refers to one Ubricoin. The smallest unit of UBN is a Brevis. As an ERC20 token, a UBN is configured to be used globally by all individuals. A UBN derives value from the exchange with Ether. We intend to sell the 10 billion UBNs on Ethereum blockchain. The UBN will comply with the ERC20 standard and it will be transferable on Ethereum platform.

A UBN is a utility token that represent future access to Ubrica ecosystem. Ubricoin is not designed as investment instrument. There are two types of utility tokens: (a) digital coupons, and (b) tokens that provide users with access to its decentralized forum (i.e., Soko Janja). Ubrica will issue tokens for development of its projects and this allows the token holders to buy different Ubrica products or services in future. Participants in the Ubrican community can buy the token and use them to access Ubrica services, products and produce. The main purpose is to get access to the Ubrica ecosystem, but not to gain profits or dividends. Token holders will be enrolled on Soko Janja at no cost and get medical services at a URCC near them. The main value of the token is access to Ubrica’s proof of stake protocol tokenization platform.

## WHY UBRICOIN

We will use Ubricoin to support design, development and implementation of Ubrica project. Ubrica project involves building world class capability for **high qualitylife-science and health-production (LSHP) in the world**. We will build a model physical project in Kenya. Ubrica project in Kenya will create a node for highly advanced biomedical research and development, and highest quality health care services. The project will ensure sufficient support for discovery of solutions to most vexing health problems in the world, particularly those emerging from the African continent, and other developing parts of the world.

Ubricoin will help gather intelligent data about health, nutrition information and diseases. Artificial intelligence will facilitate the presence of global health. Data gathered will help us develop, smart community health decision support system, smart public health decision support system and smart clinical decision support systems.

The implication of artificial intelligence will include:

* Early disease detection algorithm built on International Classification of Diseases (ICD)
* Health and diseases monitoring
* Effect and impact evaluation of health programs
* Improved data security, accuracy and speed of diagnosis

With blockchain technology we will create cash incentive tokens for supporting development of scientific products and the commercialization of the products in the online marketing and retail platform called Soko Janja. We will use Ubricoin to create incentives for research and development and commercialization of complete research products. This involves building world-class capacity for health and clinical research in African countries. It also involves research reporting through peer-to-peer reviewed papers by creating incentive token to the authors. This will lead to more people taking part in developing scientific work in Africa.

## COIN DISTRIBUTION

We plan Ubricoin sales in the following manner:

* 1 billion (10%) UBNs for design, development, management and scaling of Soko Janja
* 2 billion (20%) UBNs for design, development, construction and management of Ubrica Retail Clinical Centers (URCCs)
* 2 billion (20%) UBNs for design, development, construction and management of Science and Technology Park (STPs)
* 3 billion (30%) UBNs for design, development, construction and management of Biomedical Industrial City (BMIC)
* 2 billion (20%) UBNs will be reserved for community development and Ubrica team.

FIGURE 2. UBRICOIN DISTRIBUTION PROGRAM

(Note. SJ = Soko Janja; URCC = Ubrica Retail Clinical Centers; STP = Science and Technology Parks; BMIC = Biomedical Industrial City; CD = Community Development and Team)

## DIRECT BENEFICIARIES

Ubricoin will benefit you, the consumer of health and other services. Consumers will receive Brevis airdrops from shopping on Soko Janja. Brevis airdrops are monetized loyalty points issuing from the point of sale platform on Soko Janja. Consumers will also give direct feedback to providers, through the rating systems. Providers receiving good ratings will be rewarded with Brevis airdrops. Consumers will experience increased access to health generating produce, products and services.

Providers of health accepting Ubricoin as payment at the point of sale will receive Brevis loyalty tokens, service quality tokens and direct feedback from consumers. Providers will also give direct feedback to consumers, such that consumers who adopt good health habits will be rewarded with Brevis. Payers of health using Ubricoin for payment transactions will experience dramatic reduction in payment fraud. Providers will be paid only for honest work. Payers will enjoy simplified payment system built on blockchain.

Suppliers of products and services to the health system will enjoy simplified payment system. They will receive Brevis airdrops and service quality token. They will also receive direct feedback from consumers, and in turn will give direct feedback to consumers.

Regulators of health services will create intelligent regulation based on real-time data. This will ensure good governance. They will receive Brevis airdrops and service quality token. They will also receive direct feedback from consumers, and in turn will give direct feedback to consumers.

Local and international non-governmental organization will enjoy simplified data gathering for needs assessments, project implementation evaluation, and post implementation evaluation. They will receive Brevis airdrops and service quality token. They will also receive direct feedback from consumers, and in turn will give direct feedback to consumers.

International development organizations concerned with global health will have a system for easy tracking of diseases of global health concern, detecting diseases before they become epidemics. They will also enjoy simplified data gathering for needs assessments, project implementation evaluation, and post implementation evaluation. They will receive Brevis airdrops and service quality token. They will also receive direct feedback from consumers, and in turn will give direct feedback to consumers.

# UBRICA GLOBAL HEALTH PROJECT

Ubrica is a global health project with three pillars: (a) smart contract pillar, (b) human engagement pillar, and (c) projects pillar. In this document we describe the phased implementation program for the three pillars.

FIGURE 3. THREE PILLARS OF THE UBRICA PROJECT—STRATEGY FOR FUNDING UNIVERSAL HEALTH ACCESS

## SMART CONTRACT

Smart contracts help exchange money, property, shares, or anything of value in a transparent, conflict-free way while avoiding the services of a middleman. Smart contracts not only define the rules and penalties around an agreement in the same way that a traditional contract does, but also automatically enforce those obligations.

Ubrica smart contracts will facilitate, verify, negotiate and conclude contracts between individuals and their contracting party. Due to these smart contracts holding value, individuals may participate or audit all Ubricoins smart contracts.

All smart contracts are connected to one another to form one pooled smart contract (PSC) such a pooled smart contract acts as a health risk pooling in traditional insurance.

### Smart reward

Using the smart contract we will create a crypto-currency program which involves creating incentive programs to reward excellence in education, research and practice. We shall also reward the use of Ubricoin for financial transactions in everyday practice. Buying from local suppliers and manufacturers on Soko Janja will attract rewards. Rewards will help create incentives for quality in education, research and practice in developing world. Quality of medical and health care will improve in turn

## HUMAN ENGAGEMENT

Briefly, our human engagement pillar involves engaging people at their basic level of existence to discover how we can work with them to create wealth. Members engaged will enter into a distributed autonomous organization (DAO) known as the Co-operative Society of Ubricans (CSU). We have created an online retail store known as Soko Janja (see, shop.ubrica.com) where members can buy and sell produce, products, and services.

## PROJECTS

Ubrica project comprises three distinct scientific real estate projects: a series of world class health centers, university science and technology parks, and a biomedical industrial city in Kenya. These projects will be the rationale for issuing of the UBNs. We will sell the coins project-wise with each project taking four phases: private sale, presale, crowdsale and an initial coin offering.

### Ubrica Retail Clinical Centers

We intend to construct at least 100 health centers that will be leased to qualifying health professionals on 20 year mortgage agreement.

### University Science and Technology Parks

We will facilitate design, development and implementation of 66 Science and Technology Parks (STPs) for universities.

### Biomedical Industrial City

We propose to implement Biomedical Industrial City in Kenya, known as Ubrica One. Ubrica one project is planned and designed to meet the full range of health needs, including curative and preventive services, of those residing and working in the Medical City as well as those visiting the Medical City for medical tourism and other purposes

# SMART REWARD (CRYPTOECONOMICS)

We have built, on blockchain technology, a model that will overcome shortage of financing for health, which has been the thorniest issue in global health. Lack of funding for health in many countries of the world has led to increased burden of disease, years of life lost due to illness, very poor quality of life, and very low quality adjusted life years.

We strive to create a health conscious community that rewards people who provide valuable contribution to knowledge in lifescience and health. Through a smart reward system, we will see a rise in emergence of new knowledge and solutions to most vexing issues in health. Ubricoin will reach a broad market for health production that will include billions of people in developing countries who have been excluded from health care and from financial systems.

Ubricoin on blockchain for global health is extremely powerful as it will build financial incentives for traditionally marginalized hardworking people who contribute knowledge for the betterment of humanity. For the first time in history of mankind, hundreds of millions of people who contribute good deeds to improvement of health related quality of life of human race will receive incentives for their good deeds.

This smart reward system will unlock unprecedented amount of funds to support advancement in knowledge in general, and in lifescience and health production in the world, in particular. Good teachers who care deeply about their students, good researchers who contribute to new knowledge, and good practitioners who strive to provide greatest quality of service will receive financial incentives for their good deeds.

Our crypto-currency program involves creating incentive programs to reward excellence in education, research and practice. We shall also reward the use of Ubricoin for financial transactions in everyday practice. Buying from local suppliers and manufacturers on Soko Janja will attract rewards. By doing so, quality of medical and health care will improve all over the world.

It is widely documented that people living in developing countries do not have access to good quality education, products of research, and professional services. Much worse, developing countries are not at the forefront of biomedical research, development, innovation, and commercialization of research knowledge into commercial products and services.

The enterprise for translation of science into products for everyday domestic use and clinical care does not exist in developing countries, because there is no incentive for creating such enterprises. Absence of biomedical and health care innovation has resulted in a huge burden of disease in developing countries. Innovation in biomedical and health ecosystems rely on good financial incentives. The global financial community has not created financial incentives for biomedical innovation and health production.

Lo (2016), explained that when financial innovation is absent in a particular field of science, large scale innovation in that field is not possible. By contrast, with financial innovation any level of innovation is possible in any field of science. According to Lo, when financial innovation in a field is present, large scale innovation is possible in that field. Lo adds that financial innovation is a necessary and sufficient condition for any other innovation to occur. Furthermore, the global financial system has enough financial resources to solve all global health problems. This means that we have enough money in the world to support best quality health care for everyone. We however have lacked the technology to organize it.

To overcome this problem, Ubricoin will build financial incentives that will ensure continuous throughput of scientific innovation in service of health production in the developing world. To be successful, Ubricoin will have to reward all stages of knowledge production, beginning with primary school education. Education excellence reward system will offer tokens to primary school teachers, secondary school teachers, university educators, researchers and post university practitioners (Table 1). Service quality smart reviews will provide community of users the power to incentivize quality and eliminate mediocrity in academia and industry. Ubricoin self-executing smart review contract will be the most powerful tool to improve service quality and establish loyal customer base.

TABLE 1. SMART CONSTRACT INCENTIVES FOR KNOWLEDGE AND PERFORMANCE EXCELLENCE

|  |  |  |
| --- | --- | --- |
| **Short Name** | **Program name** | **Qualifying criteria** |
| **PSTRP** | Primary school teachers reward program | Attendance to class  Quality of teaching  Engaging students in practical work  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **HSTRP** | High school teachers reward program | Attendance to class  Quality of teaching  Engaging students in practical work  Number of students qualifying to university  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **UTRP** | University teachers reward program | Attendance to class  Quality of teaching  Engaging students in practical work  Number of graduating students successfully placed to employment  Follow-up with former students to discover their performance in professional life  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **OARP** | Original academic research reward program | Accepted proposal by a peer-review process  Publication of original research in a peer-reviewed journal  Presentation of original research in an academic conference  Translation of original research into prototypes for the market  Commercialization of prototypes  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **PRP** | Practitioner reward program | Professional service quality  Continuing professional development  Accepted practice research proposal by a peer-review process  Publication of original research in a peer-reviewed journal  Presentation of original research in a professional conference  Translation of original research into prototypes for the market  Commercialization of prototypes  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **ORP** | Organizational reward program | Professional service quality  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |
| **CRP** | Consumer reward program | Consumer service quality  Use of Ubricoin for financial transactions  Buying locally produced products on Soko Janja |

### Incentives for high quality knowledge in primary and secondary schools

For primary school and high school teachers, we will create a rating system on blockchain to reward excellence in practice. We will issue Brevis to teachers who demonstrate commitment and dedication to student learning. The students will use the system to rate their teachers and the rating points will convert to brevis. The rating system will be embodied on teachers class attendance, quality of teaching and engaging students in practical work.

### Incentives for high quality knowledge in University

University lecturers/ professors will be rewarded for demonstrating quality knowledge transfer to their students. This will be done through the rating system where the students will rate their professors based on the knowledge gained and their satisfaction on the content delivered. Brevis will be issued based on a rating system, with those with good rating receiving the tokens.

We will also offer incentives for lecturers who will develop original proposal and peer reviewed papers. To encourage sharing of research work we will offer incentives to people who present their original research in conferences and commercialization their research. We will reward lecturers and professors who shows interest and commitment in reviewing of research papers and publishing and running journals on Ubrica Journal System.

### Incentives for professional practice

Professionals lacks incentives to do good in our society today. Using ubricoin, we will issue tokens to individuals who demonstrate good professional practice, work ethics and good customer service. We will create a rating system where professionals will be rated by peers and consumers. This will act to improve quality in all sectors and eliminate inadequacy.

### Incentives for Shopping on Soko Janja

To promote village level commerce we will offer tokens to people who buy things made from local manufacturers. To facilitate local economy we will issue rewards for user registration into on Soko janja platform. Consumers who will register and provide additional profile information will receive brevis. Purchasing and referring new users in soko janja will attract reward.

### Airdrops

We will offer Brevis to people who hold the Ubricoin on their wallets. We will also issue brevis to people who will use our coin to do transactions.

# HUMAN ENGAGEMENT

Our human engagement pillar involves engaging people at their basic level of existence to discover how we can work with them to create wealth. Members engaged will enter into a distributed autonomous organization (DAO) known as the Co-operative Society of Ubricans (CSU). We have created an online retail store known as Soko Janja (see shop.ubrica.com) where members can buy and sell produce, products, and services. We have started enrolling individuals onto Soko Janja. Enrolled individuals can post pictures of their produce or products to the online retail store. We will set aside a small fraction of proceeds of their sales into a health fund. We intend to enroll 14 million families in Kenya alone. Members of the CSU will use their wealth to finance health production for themselves and their loved ones.

## SOKO JANJA 1 BILLION UBNS

We will sell 1 billion UBNs to support our online retail store known as Soko Janja (see shop.ubrica.com) to help operationalize wealth creation by each individual in any given community. These 1 billion coins will be sold in four phases at $0.5 per UBN.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UBRICOIN (UBN)** | | | | |
| **Soko Janja** | **Timeline** | **Tokens**  **@$0.5/token** | **Phases** | **Uses** |
| June 1, 2018 | 100M Private Sale | Design | * Desktop and field research * Cash in fiat * Calling and registering manufacturers, clients, suppliers and customers |
| August 1, 2018 | 200M Pre-sale | Development | * Buy new laptops and computers * Networking capabilities * Raise money for energy, water and utilities * Money for salaries |
| October 1, 2018 | 300M Crowdsale | Management | * Strategic planning * Organizing teams * Coordinating * Controlling |
| December 1,2018 | 400M Initial Token Offering | Scaling | * 14 million households * Cash fiat for payment of 7,250 community workers * 47 counties, 210 sub counties, 1420 wards * Incentives |

### Phase 1. Private sale

We will releases 100 million coins at this stage 0n June 1, 2018. These funds will be used to design the platform. Funds will also be used for desktop and field research to assess the market for the local products, visiting manufacturers to sell the idea and register them on our platform and calling and listing manufacturers, clients, suppliers and customers.

### Phase 2. Presale

We will sell 200 million UBNs at this stage on August 1, 2018. These funds will be used for the development of Soko Janja. We will buy new computers to facilitate maintenance, updates and development of the platform. These funds will also cater to networking capabilities and paying salaries to people who will be working on the platform. We will also use a fraction of the funds raised to market our platform.

### Phase 3. Crowdsale

We will sell 300 million coins at this stage on October 1, 2018 for developing management capacity. This will include identifying, recruiting, training and retaining human resource for Soko Janja. These funds will be used for strategic planning to scale Soko Janja, organizing and upgrading teams into departments. In coordinating to make sure all the teams are working together in a synchronized version so that all the teams will work as a single whole. We will also create a team controlling financial resources including creating appropriate use of the Ubricoin, token distributions, airdrops and loyalty incentive programs.

### Phase 4. Initial Token Offering

We will sell 400 million coins on December 1, 2018 for scaling Soko Janja. These funds will be used to enroll 14 million households and to pay 7,250 community workers who will be recruited to register manufacturers and suppliers in the 47 counties, 210 sub-counties and 1,450 wards in Kenya. We will create an incentive program to reward customers who will be buying locally produced products from soko janja.

# UBRICA RETAIL CLINICAL CENTERS

We intend to support design, development and construction of at least 100 health centers that will be leased to qualifying health professionals on 20 year mortgage agreement. We will construct an average of two units per county in Kenya. Some counties with greater population may have more than two. Each center will have a fully furnished health center and a retail store. A center so designed is the Ubrica Retail Clinical Center (URCC). Individuals enrolled into the CSU form the consumer base of the URCC. Each URCC will serve a catchment population of about 300,000 people. Thus, 100 URCCs will serve at least 30 million people. The URCC project requires US$ 1 billion. We shall allocate 2 billion Ubricoins to fund design, development and implementation of 100 URCCs in Kenya.

## URCCS 2 BILLION UBN

We will sell 2 billion UBNs at $2 per Ubricoin to help in design, development, construction and management of the URCCs. We intend to construct at least 100 health centers average of two units per county. The 2 billion UBNs will be sold in four phases.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Timeline | Tokens  @$2/token | Phases | Uses |
| **Ubrica Retail Clinical Centers** | April 1, 2019 | 100M Private Sale | Design | * Desktop and field research * Doctors and other professionals who would become owners of URCCs * User research |
| June 1, 2019 | 300M Pre-sale | Development | * Consult professionals such as, architects, engineers, planners, construction, security personnel and IT professionals. |
| August 1, 2019 | 1B Crowdsale | Construction | * Land purchase and entitlement * Construction of 100 URCCs (2 per county) |
| October 1, 2019 | 600M Initial Token Offering | Management | * Mortgages * Incentives * Customer satisfaction |

### Phase 1. Private sale

In this phase we will sell 100 million UBNs. The funds raised will be used for the design of the URCCs. Desktop research will be carried out to determine the structure and requirements needed to construct the URCCs. Field research and visiting the sites will be done to determine suitable areas for constructing the URCCs. We will also do environmental studies and acquire permits.

We will also do marketing to create awareness and identify doctors who will be running the clinics. Public outreach and evaluation will be carried out to understand the scope of the project.

User’s research will also be done to determine our target audience and capacity for utilization of health services in each county. User’s studies will include consumers of care, providers of care and payers of care. This will help in determining the optimal number of clinics for each county. Counties with greater population may require more than two URCCs.

We will develop a program for quality training. This will help improve the quality of care that will be provided in the clinics. The identified doctors who will own the clinics will go through continuous professional development. A fraction of the funds raised in this phase, will be used for project planning i.e. getting proper legal document, permits and doing feasibility studies.

### Phase 2. Presale

We will sell 300 billion UBNs in this phase. These funds will be used for the development of URCCs. We will hire consultants, architects, engineers, planners, construction security personnel and IT professionals. This team will be responsible for planning and generating of construction documents for different counties.

### Phase 3. Crowdsale

In this phase, we will sell 1 billion UBNs on October 1, 2019. This will help us in acquisition of land and their title deeds thereof for the implementation of the URCCs project. This land will be sourced from different counties in Kenya. Our goal is to ensure that we at least have land in all the 47 counties so as to effectively start the construction of the URCCs. We will alsoe use these funds to purchase clinical equipment required in the clinics.

### Phase 4. Initial Token Offering

We will sell 600 million UBNs for management of the URCCs. The funds will support mortgages to the doctors who will own the URCCs. The mortgages will make it easy for fresh graduate to own clinics. Some of the funds raised will be used in an incentive program. We will reward health professionals with Brevis for provision of quality of care. We will also issue tokens to individual with good health seeking behaviors. These incentives are meant to improve the quality of care and as motivation to the doctors. Offering token to the patients will lead to early disease detection and prevention of diseases.

Funds raised from this phase will be used for continual growth and maintenance of the clinics and to set stage for long-term success. We will also hire technical teams which will be in charge of maintaining the equipment.

## UNIVERSAL HEALTH COVERAGE

We focus on our intent to build Sustainable One Health Communities (SOHCs) comprising six primary components shown in Figure below.

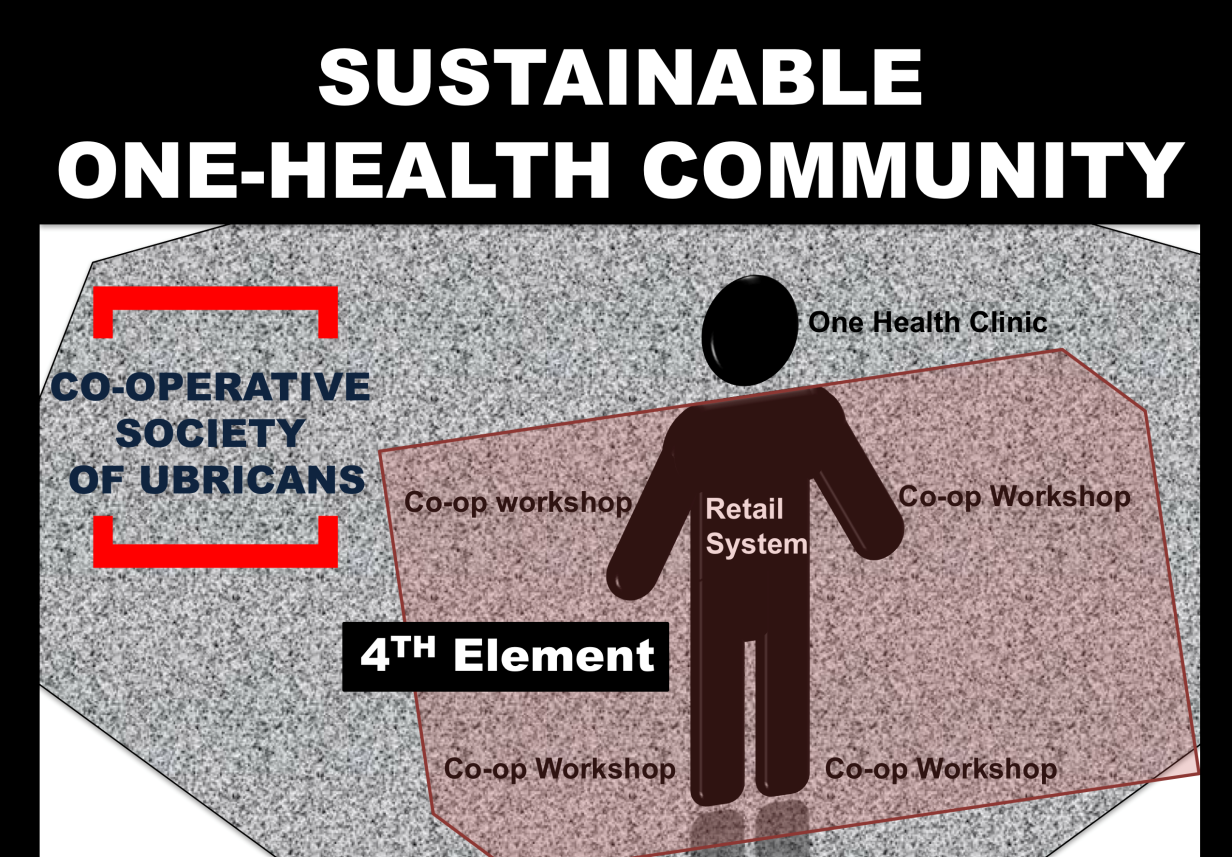


Figure 4. PHYSIOLOGICAL FEATURES OF A SUSTAINABLE ONE-HEALTH COMMUNITY

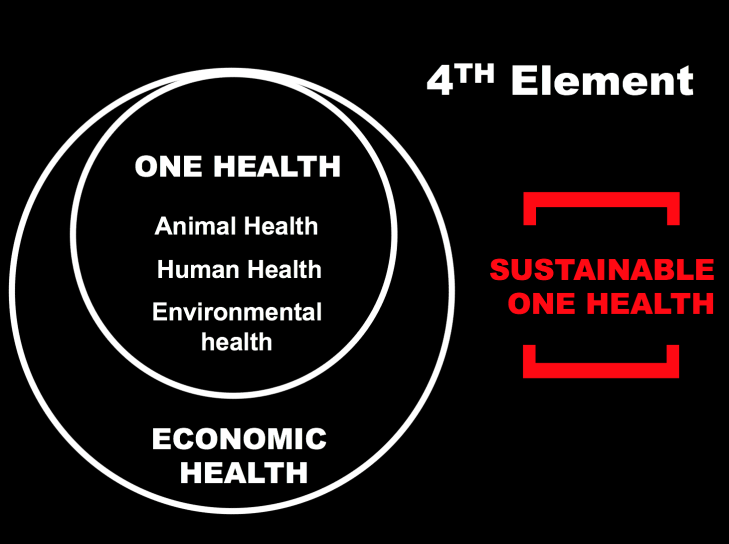
* A co-operative Society of Ubricans (CSU) constituted by our members drawing from local communities.
* Produce/product workshops for improving quality and packaging of things produced by our members.
* A retail store that serves as a market for produce and products by members of the CSU.
* A one-health clinic that provides clinical services to members of the CSU.
* A web/mobile platform (<http://shop.ubrica.com/>) for managing the commerce issuing from the retail system.
* A biomedical industrial city

The retail store, the one-health clinic, the co-operative workshop and e-commerce platform activates the 4th element of health production. We have designed SOHCs to overcome grand challenges in global health. We recognize the critical role of animals, environment, and economy in human health. We believe that sustainable health production in global health is a function of a system that integrates simultaneous operation of these four elements of human health, animal health, environmental health and economic health.

Our SOHCs are rooted in the conception that economic development is the most powerful means of health production. Economic development is the greatest cause of improvement in health. Economic health, the 4th element of health production, is the primary driver of sustainable one-health in any community in the world. It is common knowledge that compared to a wealthy person a poor person is more likely to get sick; more likely to develop complications of disease; more likely to succumb complications and to develop disability due to disease, and more likely to die from a disease. It is impossible to improve health of a poor person in the long term, without improving the wealth of the person in the long term.

## Common Notions

We know that a person becomes poor when he or she is unable to exchange his goods or services for currency. When a person cannot find market for his or her products, services or farm produce, he or she ends up being poor. Nearly 95% of people living in Kenya are unable to find market for more than 80% of their farm produce. Kenyan subsistent croppers and pastoralists living in rural areas are extremely impoverished because they cannot find market for their produce. The only available market comes to them in form of organized cartels who buy the farm produce and livestock at a throwaway price. Even at this throwaway price, cartels are only able to purchase less than 20% of all the produce. The rest goes to waste. Perishable produce such as fruits, vegetable, flowers, animal products are rotting away in the villages of Kenya. This extreme waste of produce of the land, kills all possibility of generating wealth for the local people, and multiplies, by several orders of magnitude, the rotting capital in the country (see e.g., de Soto, 2002).

* 1. The Quandary  
     Without anywhere to sell produce, a subsistent cropper or a livestock producer slides into extreme poverty. When sick, she is afraid to seek medical service until the disease advances, and becomes incapacitating. She is forced by worsening disease to seek medical care and arrives at a medical facility without enough money to pay for medical service. Her money does not cover for the medical service offered by the provider at the medical facility. The provider reduces the quality and quantity of service offering to match the little money available from the patient. The problem is that the provider of medical service receives hundreds of patients with advanced disease, but with little or no money. In most cases, the patient cannot pay anything at all. This severe lack of money to pay the providers in Kenya has led to a severe decline in the quality of medical service. Many owners of health facilities have to *cut-corners* just to *make ends meet*. Cutting corners by a medical provider means cutting a critical service, increased risk of worsening of disease, medical errors, or introduction of new diseases. Distressed medical providers in Kenya are offering the lowest quality experienced in the world. Low quality medical service is a serious health hazard to the people, which by itself results in death of health consumers in many instances. Health providers are seriously concerned by this problem. Without access to money however, and surrounded by masses of people with advanced disease, they are between a rock and a hard place. This is the quandary of health service.

## Fundamental Solution

Logical reasoning indicates that the fundamental solution to health production problem lies in a system that improves the economy of each individual. In line with this logic, we have created a system to help people find market for their produce, services and products. In order to help a person, he or she must first join and become a member of the Co-operative Society of Ubricans (CSU). Once joined, our community workers help the member to send to market whatever he or she is producing. Our co-operative society is responsible for finding market for the produce, products or services. It is the job of the members of the marketing team at the co-operative to contact buyers and internationally secure orders of the produce. When we strike a sale, we divide the proceeds of produce/product sale into three fractions. One fraction goes back to our member, in form of profit. Second fraction goes back to our co-operative to meet operations and administration needs. The third fraction sits in a health fund this is what is called health risk pooling. A member seeking care at a health facility is fully covered. The owners of health facility are happy because they are assured of payment of the quantity and quality of their service offering.

### Health risk pooling

Pooling refers to collecting money from many people in a group so that the money collected is then used to pay for health services for its members.  Pooling risks together allows the higher costs of the less healthy to be offset by the relatively lower costs of the healthy. Pooling ensures that the risk related to financing health is borne by all the members of the pool. Its main purpose is to share the financial risk associated with disease, disability and death for which there is uncertain need.

Four classes of risk pooling comprise (a) no risk pool, under which all cost lies with the individual; (b) unitary risk pool, under which all cost is transferred to a single national pool; (c) fragmented risk pools, under which a series of independent risk pools (such as local governments or employer-based pools) are used; and (d) integrated risk pools, under which fragmented risk pools are compensated for the variations in risk to which they are exposed. Small, fragmented risk pools, which are the norm in developing countries, have seriously adverse outcomes for the users of the health system and PSC will help overcome the problem.

### 6.2.2 Poled Smart Contract

Each individual holder of Ubricoin will receive a smart contract to use health services at a URCC at the time of need. The smart contract will cover preventive and curative services for the holder by the contract. Pooled smart contract will recreate a pooled smart contract (PSC) that will act as health risk pooling.

# UNIVERSITY SCIENCE AND TECHNOLOGY PARKS

A science and technology park, also known as a research park is a property based development that fosters the growth of tenant firms and affiliated with a higher institution of learning. The purpose is to facilitate sharing of knowledge, promote innovation and advance research to viable commercial products. Ubrica will facilitate design, development and implementation of 66 Science and Technology Parks (STPs) for Kenyan universities. We will also provide STP Development and Management Service through our Scientific Real Estate Development Division (SREDD). The Science and Technology Park Development and Management Service will involve setting out the strategy and objectives of the 66 new parks and deciding on the best model for implementation. SREDD will manage many complex processes and diverse relationships. We shall allocate 2 billion Ubricoins to fund design, development, implementation and management of 66 STPs in Kenya.

* 1. **How Science and Technology Parks Benefit the Local Community**

*Write prose.*

They provide locations that foster innovation and development and commercialization of technology and where government, universities and private companies may collaborate.

* Science parks may offer a number of shared resources such as incubators, program and collaboration activities, telecommunication hubs, reception, security, among others
* Science parks also aim to bring together people who assist the developers of technology to bring their work to commercial fruition.
* They can be attractive to university students who may interact with prospective employers.
* Apart from tenants, science parks create jobs for the local community for example they may be built with restaurants sports facilities, etc.
* Science parks catalyze community innovation.

## Translation and Commercialization of Science

We opened dialogue with several Universities in Africa for commercialization of science. We developed a Science and Technology Park Development and Management and Technology Transfer Services Agreement that will be used to guide our relationships with Universities. This science and technology park development and management, and technology transfer or knowledge conversion services agreement will be made with UBRICA as the “Manager” and the University as the “Institution.”

### Ubrica-University Science and Technology Park Management and Technology Transfer Services

In this agreement, Ubrica will provide two services to Universities, science park development and management services and technology transfer or knowledge conversion services.

### Knowledge Conversion/Technology Transfer Service

Ubrica will establish a University Technology Transfer Office to facilitate the commercialization of University intellectual property, including patents and copyrights. Ubrica’s Technology Transfer Office (UTTO) will work with researchers and students in every college to prepare new inventions for the patenting process and potential licensing opportunities.

UTTO’s job will be to create sustained focus on transferring cutting-edge research and innovation to the commercial marketplace, generating revenue and diversifying the economy. The UTTO will have knowledgeable and professional staff with specialized backgrounds. The UTTO staff will work in collaborative teams to create markets, execute patenting and licensing of new ideas, discoveries and innovations, to translate them into the commercial products and services. The UTTO will be responsible for the development, protection, and utilization of intellectual property rights. UTTO will serve as the liaison of cooperative ventures between University and industry.

### Start-Up Companies

UTTO will promote and facilitate business development and entrepreneurship by bringing researchers together with experienced entrepreneurs and investors to form companies for commercializing university technologies. The UTTO will create and foster new start-up companies that will create jobs and provide mutually beneficial relationships to advance technological innovations and to bring their services into the marketplace. UTTO will maintain an electronic database of start-ups based on university technology. The data base will be publicly available through Ubrica Website that people can view and invest directly.

* 1. **Incentive Structure for Science Parks**

We will create a reward system for the science park. Staff members who will work in collaborative teams to create markets, execute patenting and licensing of new ideas, discoveries and innovations will receive rewards. The reward system will also facilitate the translation of innovations into commercial products and services. Researchers and students who will work with Ubrica’s Technology Transfer Office (UTTO) will also receive incentive.

We will build a structure for incentivizing the university lecturers/professorswho provide quality education by showing good class attendance and engaging students in practical work which will result to a high number of skillful graduates placed to employment. In addition, the lecturers/professors will be rewarded for doing a follow up on the students’ performance in professional life. They will further get rewards for the use of Ubricoin in financial transactions and buying products on Soko Janja.

## STPS 2 BILLION UBNS

These coins will be sold in the year 2020 at US $5 per coin to support science and technology in developing countries. We will sell coins to facilitate the knowledge transfer from the universities to the industry. The 2 billion coins will be sold in four phases each phase raising funds to support different segment of this project.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Science and Technology Parks** | **Timeline** | **Tokens @$5/token** | **Phases** | **Uses** |
| April 1, 2020 | 100M Private Sale | Design | * Desktop and field research * Recruiting doctors and other professionals * User research |
| June 1, 2020 | 300M Pre-sale | Development | * Physical planning, geotechnical studies, suitability analysis, Architecture, Engineering, Economic planners, Construction planning, Security, Information technology. |
| August 1, 2020 | 1B Crowdsale | Construction | * Land purchase and entitlement * Construction of 66 STPs |
| October 1, 2020 | 600M Initial Token Offering | Management | * Mortgages * Incentives * Customer satisfaction |

### Phase 1. Private sale

We will sell 100 million UBNs to facilitate the design of the STPs. Setting out the strategy and deciding on the best model for implementation. We require a lot of desktop and field research to understand the STPs scope and relationships. This will be done by a team of professional we will therefore, sell these UBNs to support this stage of STP development.

### Phase 2. Presale

In this stage we will sell 300 million UBNs. This will be used for the development of STPs. We will identify and hire architects, engineers and planners who will be responsible for developing the project scope and planning the implementation of the STPs.

We will use the funds to support feasibility studies which will include physical planning, geotechnical studies, suitability analysis, architecture, engineering, economic planners, construction planning, security, information technology.

### Phase 3. Crowdsale

We will sell 1 billion UBNs to facilitate the construction of the STPs. We intend to construct 66 STPs in different Kenyan universities. These funds will be used to purchase land, entitlement and the construction material for this project. These funds will be used to monitor and evaluate the project

### Phase 4. Initial Token Offering

We will sell 600 million UBNs to support management of the STPs. We will use the funds to create a mortgage program to facilitate ownership of scientific real estate developed as innovation hubs. We will also create a reserve fund to support operation of innovation hubs within each STP, until breakeven. Operations of an innovation hub within an STP will be responsible for generating high quality research, idea innovation, translation/commercialization of knowledge into products and services that help solve local problems.

STPs will bridge the university with the industry and with the local community. To stimulate new innovation we will create a bounty programs to reward individuals or groups with new scientific ideas that will help provide solutions to our vexing problems. We will issue tokens to people who will

* do original research,
* publish the results of their original research,
* present the results of their research in scientific conferences locally and internationally,
* translate their research knowledge into commercial prototypes, and
* commercialize their prototypes into products of everyday use.

# UBRICA ONE BIOMEDICAL INDUSTRIAL CITY

We propose to implement Ubrica One Biomedical Industrial City in Kenya (“Ubrica One”). We will build Ubrica One on multiple disparate land parcels all aggregating to approximately 4,000-acres. The complete project will be multiple master-planned biomedical industrial parks with specialty hospitals fashioned as academic medical centers (“AMCs”), research facilities, residential areas, and specialized industrial zones.

## STRATEGY

Ubrica one will host a Children & Women’s AMC, a Heart & Lungs AMC, a Neuroscience & Rehabilitation AMC, a Trauma & Orthopedic AMC, an Eye & Ear AMC, a Cancer Hospital & Hospice Care AMC, a Tropical & Infectious Diseases AMC, a Renal & Urologic AMC, a Gastro-Intestinal Diseases AMC.

### Vision

Our vision is to create places that will be lead centers of excellence in global health in:

* discovery, development, and commercialization of cutting edge technologies in biomedicine
* world class services in health promotion, disease detection, disease prevention, and disease treatment.

### Mission

Our mission is to establish and sustain leadership in:

* Translational research in human biology, human physiology and human medicine
* Nano-science, biotechnology, molecular biology and human genetics
* Clinical medicine
* Organization of systems of delivery of care
* Information systems for health

### Theoretical Underpinning

Our project is underpinned by the theory of knowledge conversion continuum that explains that knowledge has to traverse five distinct stages to translate in products that people can use to solve problems of everyday life: EXPLORATION—RESEARCH—PUBLICATION—TRANSLATION—APPLICATION.

### Phenomenal Structure

The phenomenal structure of Ubrica One is grounded by four primary functions of a world class academic medical center: RESEARCH—EDUCATION—INNOVATION—PATIENT CARE. We propose to build Ubrica One as an all-inclusive development with multiple land uses to be located on an aggregate of 4,000-acre lot of land in Kenya. Upon completion, Ubrica One will be home to eight ultramodern academic specialty medical centers structured as world class HOSPITALS, centers for advanced science in biomedicine structured for advanced RESEARCH, and centers for biomedical translation and innovation structured for COMMERCIALIZATION and MANUFACTURING (Table 2).

TABLE 2. KEY FEATURES OF THE UBRICA ONE BIOMEDICAL INDUSTRIAL CITY

|  |  |
| --- | --- |
| Structure | Function |
| HOSPITALS | Eight ultramodern academic medical centers providing patient care and education. |
| RESEARCH | Centers for advanced biomedical research. |
| PRODUCT COMMERCIALIZATION and MANUFACTURE | Centers for advanced biomedical translation, innovation, and commercialization of knowledge into products and services for home and clinical use, and manufacture of products. |

The phenomenal structure of the Ubrica One is underpinned by the theory of advanced academic medical center that is built on the principle of integration to collocate the functions of advanced research in science technology and medicine [RESEARCH], world class medical and science education [TEACHING], translation of research knowledge products into commercial products for everyday use at home and in the clinical environments [INNOVATION], and delivery of care of the highest quality possible [PATIENT CARE] (Figure 4).



FIGURE 9. PHENOMENAL STRUCTURE OF UBRICA ONE DEPICTING FUNCTIONAL KINSHIP OF AN ADVANCED ACADEMIC MEDICAL CENTER THAT INTEGRATES RESEARCH, TEACHING AND INNOVATION WITH PATIENT CARE.

This proposal contains a brief description of the project, starting with the explanation of the background of the problem that the project is meant to solve. In addition, the proposal explains the purpose of Ubrica, the general approach to implementation, and the significance of implementation Ubrica One.

## STATEMENT OF INTENT

Our intent is to create in Kenya, centers of excellence for (a) discovery, development and commercialization of cutting edge technologies in biomedicine, and (b) world class health care services in health promotion, disease prevention, and treatment. Two major and closely interrelated problems motivate our intent:

* **The severe inadequate infrastructure for global health.** Health services in many countries of the world are unsafe, of low quality, and inaccessible to majority of the people. People, afraid to use health services locally, seek medical care in other countries. Indeed, healthcare consumers would be willing to pay more for better care that is of high value, of efficient supply of drugs, of better technical quality, of well-maintained health facilities, and of short wait times. The specific problem is that an entity that can produce comprehensive world-class medical service is lacking. Ubrica One will be home to five ultramodern academic specialty medical centers structured as world-class hospitals to deliver care of the highest quality possible.
* **The absence of health services and biomedical innovative research and development (R&D) capability**. Ubrica One is poised to create a world-class research facilities attached to the world-class hospitals. The research facilities will serve as centers for research excellence in Kenya. The centers will produce the best-in class researchers in health, medicine, and basic sciences. The research facilities will also serve as technology transfer organizations that will manage intellectual property, licensing, and commercialization of products of research, and industrial development to meet health needs of people.

## BACKGROUND OF THE PROBLEM

In this section we present the background of the problem addressed in this proposal from the framework of knowledge conversion. The section underpins knowledge conversion as the centerpiece of national development, emphasizing the central importance of comprehending knowledge conversion to comprehend development.

### Theoretical Underpinning: National Development a Function of Knowledge Conversion

Knowledge conversion is the work of discovering knowledge residing in the local environments and mastering the discovered knowledge to create products and services that people and organizations can use to advance themselves and to defend themselves from enemies. Knowledge converts in five steps starting from exploration, going to research, then to publication, then to translation and finally to application of knowledge (Figure 5).

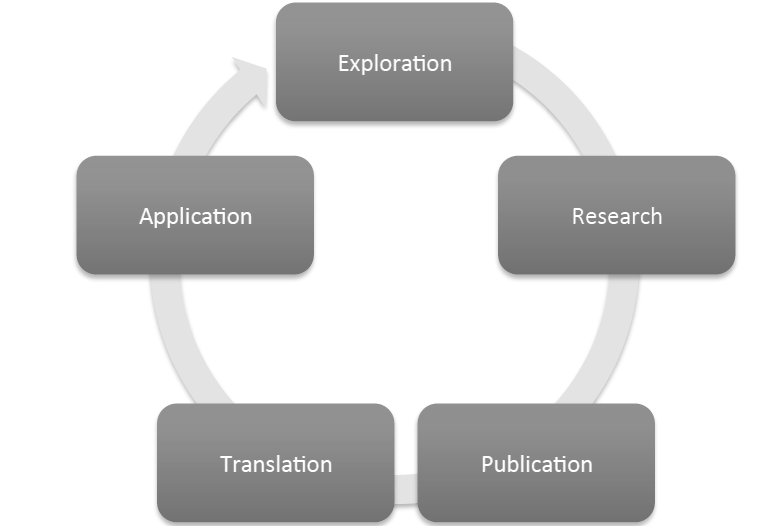


FIGURE 10. USTAWI STAGES OF KNOWLEDGE CONVERSION CONTINUUM

*Note.* From, Macharia Waruingi (2010*). Knowledge conversion by open innovation. Ustawi the knowledge conversion organization.* Minnetonka, MN: Ustawi. (Used with permission of author.)

Human development depends on capability of people residing in that nation, to muster all the five stages of knowledge conversion in all fields of knowledge. A developed nation in biomedicine, for example, is the one that has built a full-scale capability for exploratory work in biomedicine, biomedical research, publication and dissemination of biomedical knowledge, translation of published biomedical knowledge into products such as pharmaceuticals and medical devices and systems for delivery of health care services, and application of biomedical knowledge in health promotion, disease prevention, cure of disease, and education of present and future generations of care providers. Table 4 depicts the steps in the knowledge conversion continuum in biomedicine.

TABLE 3. STAGES OF THE KNOWLEDGE CONVERSION CONTINUUM, AND PRODUCTS ASSOCIATED TO EACH STAGE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
| Process | Exploration | Research | Publication | Translation | Application |
| Product | Discovery of facts, theories, and propositions, | Verification of facts, theories, and propositions | Journals  Thesis  Text books  Popular books  Art | Intellectual capital management, patents | Pharmaceuticals  Medical devices  Health delivery systems  Education systems |

Typically, underdeveloped nations lack the will to develop capability for exploration, research, and translation of knowledge. Because they lack the will to develop these capabilities, they rely for their existence, on application of products and services created from knowledge discovered in other countries. They rely on foreign facts, theories and propositions to implement their work programs in their nations. Facts, theories and propositions from foreign sources do not have working capacity in local situations because they do not fit. Because of this problem, nations that rely on theories developed from knowledge products generated for a foreign nation remain underdeveloped and subservient to the nations from where the theories originated.

### Relevance

For example, theories about approach to diseases developed from knowledge collected in Boston, Massachusetts in the United States is of little help to a clinician in Nyeri County dealing with medical conditions local to Nyeri Provicial General Hospital in Kenya; much less in a health center in Mukurweini, or Othaya in Kenya. Geography, culture, climate and other local forces have it that diseases that occur in Nyeri are different from the diseases that occur in Boston. Furthermore, the local environments (culture, diet, nutrition, climate, geography, economy) affect the human physiology in such manner that the physiology adapts to local conditions. Indeed, the local environment modifies human genetic expression, which in turn modifies the human physiology for adaptation to needs of the local environment.

### Relevance Paradox

Humans who live in hot climates are comfortable in high temperatures and do not tolerate the cold climates without a period of acclimatization. Similarly, humans who live in the lowlands with high oxygen tension do not tolerate low oxygen-tension highlands without a period of acclimatization. This physiological adaptation of individuals means that the human body tolerates medications differently according to local environment. Rather, factors in local environment determine the effectiveness of a medical treatment given to an individual. As such, medicines developed with knowledge gathered from Boston dwellers, may have lower effectiveness on Nyeri dwellers. Thus, use of knowledge from Boston to solve problems plaguing people in Nyeri leads to incomplete solutions, with attendant negative consequences.

### Exploration and Discovery

Theories and propositions about how to help people deal with medical problems in Nyeri must come from the work of discovery of such knowledge in Nyeri, and not Boston. Theories and propositions about health and disease in Nyeri must be verified through formal research about health and disease in Nyeri.

### 

### Intellectual Property Protection

The discovered theories, propositions, and their verifications must be protected with appropriate regulations and patents to safeguard loss of intellectual property. Unprotected intellectual property is open to exploitation by outsiders leading to tremendous loss.

### Publication

After appropriate protection, the discovered theories, propositions, and their verifications must be published in journals, books, thesis, monographs for dissemination to schools, universities, government organizations, non-governmental organizations, business organizations, and indeed to all interested individuals. The published knowledge is then available for creation of new products and services that have fit and working capacity in the local environment. Local companies can use the translated knowledge to create medicines, medical devices, health delivery systems, medical services systems, etc.

### Application

The glaring absence of medical manufacturing in African countries, and the extremely poor quality of medical services is the product of lack of attention to exploration, research, publication and translation of local knowledge. A country that has no local knowledge resembles a human being whose higher center of the brain is amputated.

### Knowledge Conversion in Biomedicine for Global Health

Developing countries lag behind in knowledge conversion in biomedicine. Many governments of developing countries allocate no investments on exploration of knowledge that would lead to discovery of bio-medical facts, theories and propositions. Furthermore, governments of developing countries invest very little in research that would lead to verification of facts, theories and propositions. They do not invest in discovery and verification for the benefit of the citizens of their nations. To overcome this problem, we must discover new ways of funding knowledge conversion in biomedicine for global health using blockchain.

### Private Sector and Knowledge Conversion in Biomedicine in the World

Private health care sector has historically played an important role in health services delivery in developing countries. The absence of a well-organized health insurance system and ambivalence in health care financing, however, limit the growth of the private health care. In recent years, several developing countries have rapidly re-emerged from grinding poverty, and business is springing back. The national leadership is supportive of the private health care enterprise, encouraging private investment in health care and medical facilities. The general problem is that health systems in developing countries, suffering long-term neglect and lack of investment, is indeed inadequate, with high rate of infection in hospitals and limited medical equipment.

Investment in world-class Ubrica One Biomedical Industrial City will help to overcome the problem of global health. Specifically, Ubrica One will be the beacon of hope for biomedical discovery and a source of excellence in bio-scientific publications. In addition, Ubrica One will lead to a new horizon of translational medicine, medical devices and pharmaceutical manufacturing for global health.

## BMIC 3 BILLION UBNS

We will sell 3 billion UBNs to fund biomedical industrial city. This sale will occur in 2024 at US $10 per coin. The fund raised will be used for design, development, construction and management of BMIC. We will issue coins to facilitate construction and post construction management of biomedical industrial city, to function as epicenter for discovery and development of medical innovations for global health. The 3 billion coins will be issued in four phases each phase raising funds to support different segments of this project.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Biomedical Industrial City** | **Timeline** | **Tokens**  **@$10/token** | **Phases** | **Uses** |
| April 1, 2024 | 200M Private Sale | Design | * Desktop and field research * Doctors and other professionals * User research |
| June 1, 2024 | 300M Pre-sale | Development | * Physical planning, geotechnical studies, suitability analysis, Architecture, Engineering, Economic planners, Construction planning, Security, Information technology. |
| August 1, 2024 | 1.5B Crowdsale | Construction | * Land purchase and entitlement * Government |
| October 1, 2024 | 1B Initial Token Offering | Management | * Mortgages * Incentives * Customer satisfaction * Excellence in education, clinical practice and performance in all fields |

### Phase 1. Private sale

We will issue 200 million UBNs to facilitate the design of the BMIC, setting out the strategy and deciding on the best model for implementation. We require a lot of desktop and field research to understand the BMIC scope. This will be done by a team of professionals.

### Phase 2. Presale

In this stage we will issue 300 million UBNs. This will be used for the development of BMIC. We will identify and hire architects, engineers and planners who will be responsible for developing the project scope and planning the implementation of the BMIC.

These funds will be used to do feasibility studies which will include Physical planning, geotechnical studies, suitability analysis, Architecture, Engineering, Economic planners, Construction planning, Security, Information technology.

### Phase 3. Crowdsale

We will issue 1.5 billion UBNs to facilitate the construction of the BMIC. We intend to construct BMIC in Kenya. These funds will be used to purchase land, entitlement and the construction mat

erial for this project. The raised funds will also be used to do monitoring and evaluation of the project.

### Phase 4. Initial Token Offering

We will issue 1 billion UBNs to support management of the BMIC. We will use the funds to create a mortgage program to facilitate ownership of medical and scientific real estate. We will also create a reserve fund to support operation of innovation hubs within the BMIC, until breakeven. Operations of an innovation within the BMIC will be responsible for generating high quality research, idea innovation, translation/commercialization of knowledge into products and services that help solve local problems. The BMIC will bridge the university with the industry and with the local community.

To stimulate new innovation we will create a bounty programs to reward individuals or groups with new scientific ideas that will help provide solutions to our vexing problems. We will issue tokens to people who will

* do original research,
* publish the results of their original research,
* present the results of their research in scientific conferences locally and internationally,
* translate their research knowledge into commercial prototypes, and
* commercialize their prototypes into products of everyday use.

# BUSINESS MODEL

We will implement several business models in the business-to-customer and customer-to-customer segments. Soko Janja will be the main Ubrica revenue driver. The portal will track transactions to which users will be redirected and Ubrica will receive a commission on purchases. This module is very popular amongst sellers, since they benefit through marketing, visibility, site visits and ultimately higher sales. It enables additional free marketing, until the purchase occurs. In addition, the seller will benefit from access to quality healthcare services.

We will create team of developers for Smart Reward program. We will then create a team of actuarial scientists, financial engineers, doctors and developers to construct the health insurance model.

## MARKET SCALING

We will launch the test phase for the product in Kenya, where we will connect to about 1,000 users a month. During this test phase, we will gather valuable data that will be key for further development of the platform. We will be able to estimate the precision of the discovery results and the possibility of finding a better deal on some of the unlisted manufacturers and suppliers.

## USER PROFILING

User profiling is a key to developing a strong artificial intelligence algorithm. We will use our main website (http://ubrica.com), Ubrica Global Journal System (http://jghcs.info), Ubrica website (http://ubrica.com) and Soko Janja (http://sokojanja.com) to gather data on user behavior. The Ubricoin platform itself will be gathering online behavioral data. We will use this data for the machine learning process to produce more precise user profiling in Ubrica. The data will help us tp launch initial global communication campaign for acquiring partners.

## ALLOCATION AND SUPPLY

There are two ways people can get involved with a crypto-currency:

* 1. purchase the crypto-currency
  2. work in proof of work or proof of stake

In both cases, you will be increasing the value of the currency. When you earn money by working for one another then you increase value through mutual exchange facilitated by a fair currency system. As a custom token and a solution, specially designed to ensure universal health access, Ubricoin has a highly promising future.

# ROADMAP

Our journey to build capability for high quality***life-science*** and ***health-production*****(LSHP)** in Africa started in 2014. We created the concept note, developed the business plan and registered the company. Since then we have been able achieve major milestones. Therefore, we have created a feasible roadmap based on the goals of the company.

# SUMMARY

Ubricoin on blockchain will serve as a platform devoted to improving quality of health for all. We will use Ubricoin to develop global health industry and create market intelligence through a cryptocurrency reward system that will inspire positive contribution to health improvement around the world. We will use a smart review system to reward consumers for positive health behavior.

We need Artificial intelligence for global health. Ubricoin will gather intelligent data about health, nutrition information and diseases. This data will help us develop smart community health decision support system, smart public health decision support system and smart clinical decision support systems. Ubricoin will generate artificial intelligence for early disease detection algorithm built on International Classification of Diseases (ICD), health and diseases monitoring, effect and impact evaluation of health programs, improved data security, accuracy and speed of diagnosis.

We will use Ubricoin to fund and create incentives for research, build world-class capacity for health and clinical research in developing countries and for research reporting through peer-to-peer reviewed papers by creating incentive token to the authors. This will lead to more people taking part in developing scientific papers. We will create incentives for research and new product development (R&D) with Brevis tokens for supporting development of scientific products. We will use Ubricoin to suport for manufacturing of biomedical products, and to facilitate commercialization of the products in the online marketing and retail platform called Soko Janja. Ubricoin will also support development and construction of scientific real estates in developing countries, including Ubrica Retail Clinical Centers (URCCs), Science and Technology Parks (STPs), a Biomedical Industrial City (BMIC).

Ubricoin will benefit you, the consumer of health and other services. Consumers will receive Brevis airdrops from shopping on Soko Janja. Providers of health accepting Ubricoin as payment at the point of sale will receive Brevise loyalty tokens, service quality tokens, direct feedback from consumers. Payers of health using Ubricoin for payment transaction will experience dramatic reduction in payment fraud. Suppliers of products and services to the health system will enjoy simplified payment system. Regulators of health services will create intelligent regulation based on real-time data. This will ensure good governance.

Local and international non-governmental organization will enjoy simplified data gathering for needs assessments, project implementation evaluation, and post implementation evaluation. International development organizations concerned with global health will have a system for easy tracking of diseases of global health concern, detecting diseases before they become epidemics.