

























## UTILITIES SECTOR MISSION STATEMENT

Our mission is to horizontally and vertically unite electric, gas, electric, gas, water and multi utilities, to include independent power and renewable energy producers on our NexGen Blockchain in order to DEMOCRATIZE the Utilities Experience for your HUMAN IDENTITY.

# UTILITIES SECTOR ROLE IN THE BLOCKCHAIN ECOSYSTEM AND HOW THE BUTTONWOOD AGREEMENT WILL HELP ACCELERATION OF THE INDUSTRY

The Global Industry Classification Standard used by Morgan Stanley defines the information sector as industry that includes utility companies such as electric, gas and water utilities. It also includes independent power producers & energy traders and companies that engage in the generation and distribution of electricity using renewable sources. All members of CrowdPoint's Blockchain Ecosystem will benefit from the transparency and security the Exchange offers. As trust grows between members, transactions will increase and the growth of the industry will accelerate.

#### UTILITIES SECTOR BLOCKCHAIN ECOSYSTEM ACCELERATION OF OPPORTUNITY

The global utilities market is expected to grow to \$1.68 trillion in 2021 at a compound annual growth rate (CAGR) of 7.2%. The market weight is underweight by 1% standing at 2.52%. When it comes to electricity, the major providers like Oncor, Commonwealth Edison, Florida P&L, Southern Cal Edison Co., and Pacific Gas & Electric Co. will dominate the industry. Using CrowdPoint's Blockchain Ecosystem, SMBs in this Sector can reduce costs and increase profits and increase their share(s) of the market.

#### TOTAL ADDRESSABLE MARKET

There are 1,141 utility providers in the US. Of these, 890 are SMBs. The top providers (22% of market) have market caps of \$228.55B. US Market Cap is \$653B.

The Total Addressable Market: \$424.45B

#### HOW OUR UTILITIES SECTOR EXCHANGE WILL ACCELERATE VALUE CREATION

The Utilities Exchange on the Blockchain Ecosystem connects member participants with shared business processes and relationships. In the US, a homeowner or business owner must go through an established power holding company like Duke Energy or deal with a reseller that buys from a big electricity company. There is little communication with the actual producer/provider of the power. With distributed ledger technology, members deal directly with other members through a secure smart contract which can minimize or eliminate the need for intermediaries.

Energy-saving technologies will be able to provide significant cost savings to homeowners while reducing the load on the electric grid. Decentralized energy generation platforms effectively allow people to generate, buy, and sell energy to their neighbors. By ensuring that all customers are given a decentralized ID on the CrowdPoint Blockchain Ecosystem, energy providers will be able to leverage both Smart Contracts & Transparency to their customer base and, ultimately, reward loyalty with NFTs to ensure stronger long-term relationships with their customers.

#### **BIG DATA ANALYTICS**

Big Data Analytics today are essential in a modern, technologically-centered world. Electrical producers/providers can easily monitor customer use down to how many minutes per day the energy use spikes. This information is formative in nature as the providers customize energy delivery programs for customers based on energy-use histories. TXU Energy offers seniors (over age 65) the half-and-half program: half off the bill for the 3 hottest months when energy use is highest, and half off for the 3 coldest months when energy use is again high. This program is a result of Big Data Analytics. In the Utilities Exchange, the members use Big Data to create a competitive edge and at the same time not divulge pertinent, personal information when transacting a smart contract. The data is democratized and the Human Identity is preserved.

Big Data can also indicate possible, predictive problems in a company's infrastructure. Where is energy transmission weak? Are lines damaged? Is a transformer not working properly? All of this information is stored in a Digital Ledger (DLT) along with contracts and the non-fungible customer Decentralized Identity (DiD). With member access to Big Data, the costs for energy are lowered, customer satisfaction increases, and the providers profits are expanded which means there are more funds to re-invest in the business.



### ARTIFICIAL INTELLIGENCE TECHNOLOGY

Al possesses tremendous potential to transform the Utilities sector. In combination with other technologies like Big Data and IoT, it can aid the active management Al Impact on Utilities Customer Service: The automation of electricity grids by balancing demand and supply.

Al Impact on Utilities Infrastructure: Using Al to aid in infrastructure inspections by using drones is a wellknown application of AI in the Utilities sector. This approach has the potential to identify equipment at risk of failure in a manner that is much faster and safer than a current method that relies on manual inspections.

Al Impact on Distributed Energy Storage: Al has the potential to manage the already large and accelerating influx of distributed energy resources like solar and battery storage, which has triggered a substantial increase in the bi-directional flow of energy. The growth of residents and businesses that generate electricity themselves and sell excess power to the local provider makes membership in

the Utilities Exchange even more viable.

that AI delivers to customer service can let a provider know when it needs to deliver more personal attention to an individual customer, a local neighborhood, or a region. Al helps identify patterns of emotion that indicate customer dissatisfaction by analyzing tone of voice, choice of words, and questions about energy usage. This enables intervention and remediation to reduce customer frustration, cancellation of service, and the possible development of concerns regarding the provider's reputation. The new Advanced Metering Infrastructure (AMI) allows for a real-time communication between the provider and customer. AMI supports demand response generation and distribution which allows customers to better manage usage thereby saving money. With the AMI there is more customer retention meaning more profits for the provider.

### COMPACTION TECHNOLOGY

Compaction allows for the transmission of vast amounts of data very quickly without compromising its quality or content. The 150 million customers and their providers produce massive amounts of data every day. Compaction breaks down the data and reorganizes it without compromising the end-user's Human Identity or the quality of the data. Compaction allows for data sharing between concerned, interested parties within the Exchange. Each member is only allowed to "see" the information that the other members' permit to be seen. This level of security is a prime feature of CrowdPoint's Exchange system.

### **BLOCKCHAIN TECHNOLOGY**

Distributed ledger technology (DLT) on the blockchain can minimize or eliminate the need for intermediaries. Providers deal directly with members of the Exchange who desire to contract with preferred providers. This form of communication leads to competitive pricing which leads to customer retention or acquisition. Providers may cut individual profits but make more profit through having more customers.

In the Utilities sector, poor customer loyalty and comparison websites have created an "All Change" mentality based purely on price reductions. By ensuring that all customers are given a decentralized ID on the CrowdPoint Blockchain Ecosystem, energy providers will be able to implement both Smart Contracts & Transparency to their customer base and, ultimately, reward loyalty with NFTs to ensure stronger long-term relationships with their customers.



CrowdPoint's Blockchain Ecosystem brings business, technology (A.I. & Compaction), and everyday people together on a single, one-of-a-kind Exchange platform

### UTILITIES SECTOR EXCHANGE SUMMARY OF ACCELERATION OPPORTUNITIES:

With more than 1400 utility providers and more than 150 million energy consumers there is ample opportunity for both to reap the rewards from membership in the Utilities Sector Blockchain Ecosystem. The members within the Exchange control Big Data; this control leads to better informed decision-making processes for both providers and customers. Through Al and machine-learning both providers and consumers can better monitor usage patterns and energy distribution so that both parties save money and/or reduce costs. The AMI allows for real-time communication between the provider and the consumer which creates a better customer experience leading to increased acquisition and retention, a boon to both parties.

From lowering costs by streamlining the supply chain model to increasing productivity, faster and safer infrastructure inspections and optimizing management of bi-directional distributed energy flow thanks to AI, and even enhanced customer experience and loyalty thanks to the blockchain, the benefits to the Utilities sector are clearly evident.

