DIGITAL CURRENCY AND DISTRIBUTED LEDGER TECHNOLOGY TERMINOLOGY
FLORIDA BAR DIGITAL CURRENCY TASKFORCE

By: Zachary L. Catanzaro, Esq.[1]

Digital Currency is money available in electronic form. Digital currencies originated in the 1990's in an effort to develop an instantaneous online payment system to replace the antiquated and slow check clearing system. **Virtual Currency** is a type of digital currency. Virtual currencies are **centralized**, meaning they are issued and controlled by a single entity. Common examples include digital coupons, point reward programs, and online gaming currencies. While virtual currency and digital currency are often used interchangeably, the terms are not synonymous.

Cryptocurrency is digital currency based on a distributed ledger. A **distributed ledger** is a computer database consisting of a network of several nodes of computing devices. Each node independently replicates and archives copies of the ledger records. The nodes communicate with each other and must concur on any change to the ledger for it to be binding (referred to as **consensus**). While all cryptocurrencies use distributed ledgers, not all distributed ledgers are cryptocurrencies. There are many important nonmonetary applications of distributed ledgers including record keeping applications for public and private entities and **smart contracts**, which are computer protocols that facilitate, verify, or enforce the negotiation or performance of contracts.

Cryptocurrencies take the form of a **Token** or **Coin** linked to a distributed ledger. Examples include Bitcoin, Ethereum, and Ripple. Some cryptocurrencies are centralized, like virtual currencies, but most are **decentralized**, meaning they are issued and controlled by a network of computer protocols. Virtual currencies and cryptocurrencies are legally classified as a commodity or asset (or both), and not as legal tender. Investment offerings in cryptocurrency (sometimes referred to as **Initial Coin Offerings or "ICO's"**) are governed by securities and commodities laws.

In exchange for performing the complex calculations needed to maintain a distributed ledger, miners are paid in cryptocurrency. **Mining** is the process by which miners are rewarded for running these calculations. Every cryptocurrency is considered deflationary in that the total of number of coins that can ever be created through mining (or other means) is unchangeable. An **exchange platform** allows consumers to trade traditional money, or another cryptocurrency, for cryptocurrency. Examples include Coinbase and Kraken. Cryptocurrency tokens can be stored electronically either with an exchange platform, on a **physical wallet** (*e.g.* on a flash drive), or an online **wallet platform**.

Blockchain is a type of distributed ledger technology. Many popular distributed ledgers use blockchain data such that data is grouped and organized into **blocks** of data which are protected using asymmetric cryptography (often discussed in the context of the **private key** and **public key** hashes used to access, change, and communicate messages on the ledger) used to reach consensus. This type of cryptography is **pseudo-anonymous**, in that the ledger does not contain identifying information other than the identity of the private key. This is analogous to a locked mail box with a mail slot. The mail box location and the mail slot are open to the public, but not the contents. We can, however, ascertain both the contents and mailings to and from a known mail box through computer forensics Not all distributed ledgers rely on blocks or blockchain technology to reach consensus in the same way. Put differently, every blockchain is a distributed ledger, but not every distributed ledger uses blockchain. While Blockchain is often used in media to describe "distributed ledger technologies," the terms are not synonymous.

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[1] Law Office of Zachary L. Catanzaro, P.A., 7999 N. Federal Highway, Suite 401, Boca Raton, Fl, 33487, zachary@brainstorm.law