1.0 Introduction

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What is DIDO?

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The acronym DIDO stands for Distributed Immutable Data Object.

- It represents a class of concepts, activities and products that have become the trend
- Each word within the name is important
  - **Distributed** – the class is distributed across many computers
  - **Immutable** – the data it represents once written can not be changed (write once, read many times)
  - **Data** – at the core of the class is always the Data
  - **Object** – the data are encapsulated as objects with a uniform set of operations

Why a New Term?

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The widely used and generally accepted terms such as **Blockchain** and **Distributed Ledger Technologies** represent specific technologies that currently and popular.

Blockchain represents a chain of blocks with each block represented a collection of Transactions. The blocks are verified and validated using Consensus Algorithm concepts such as Proof of Work (PoW) or Proof of Stake (PoS). Recently, there is a concerted effort to start using Sidechain.

Distributed Ledger Technology (DLT) deemphasize the blockchain aspect of the technology, and highlight the journal aspects of the distributed systems. The proponents of the term DLT think of Blockchains as a subset of DLT. However, as the 'T' means technology, it is suffers from many of the same problems as most technologies … they age, go out of fashion and become legacy.

Directed Acyclic Graph (DAG) is another technology that is used to support distributed computing. DAG differs from Blockchain which is considered a is distributed ledger or database, replicated over all the nodes in the network that is uses a distributed ledger to form a linear chain of blocks of transactions in an unalterable, chronological order. While a DAG is a network of individual transactions linked to multiple other transactions.

None of these terms capture the file journaling done using the InterPlanetary File System (IPFS).

Therefore, the use of the DIDO. It is meant to be technology agnostic and more durable over time. The technologies underneath the concepts of DIDO remain constant while the technology changes.

An analogous problem occured in databases, in the 1970s a product called Ingres was synonymous with relational databases, Ingres has long gone by the roadside, but the term Relational DataBase Management System (RDBMS) has persisted.

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