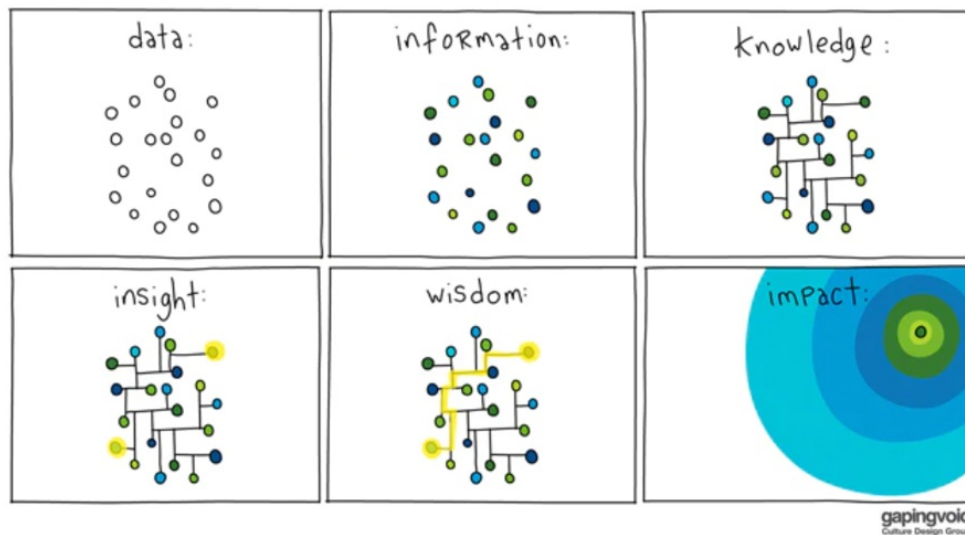


Welcome to Morgan Creek Digital's digital asset update. It is comprised of a thought piece from our team. We hope you find this content interesting. Please let us know if you have any comments or questions or if you would like to speak to a member of the [Morgan Creek Digital team](#).

Big Data is The New Oil: From Raw Resource to the Backbone of Web3



Introduction: In the realm of data, the analogy to oil as a raw resource is more than a metaphor; it's a profound insight into the intricate process of extraction, refinement, and utilization required for data to become impactful. This comparison, famously coined by Clive Humby in 2006, emphasizes that data, much like oil, is valuable only when refined and processed. Over the years, however, many industries have overlooked the true potential of data, and instead treated the resource as inherently valuable, amassing it as a commodity. In this newsletter, we delve into the world of Big Data, exploring its fundamental characteristics, historical timeline, and the intricate interplay between Artificial Intelligence (AI), Blockchain, and Computing Infrastructure that shapes the future of data.

Big Data, The Basics: Big Data is not merely about size; it's defined by a framework referred to as the "three Vs": *Volume, Velocity, and Variety*.

Volume refers to the sheer size of the data generated and collected. It delves into the magnitude of datasets, often ranging from terabytes to petabytes and beyond. Managing and processing such massive volumes necessitates distributed storage and parallel processing frameworks. Traditional relational databases struggle with the scale,

prompting the adoption of distributed storage solutions like Hadoop Distributed File System (HDFS) and cloud-based storage systems.

Velocity pertains to the speed at which data is generated, processed, and made available for analysis. It highlights the real-time or near-real-time nature of data streams. Systems must handle data streams dynamically and adapt to rapid changes in velocity. Technologies like Apache Kafka for stream processing and complex event processing (CEP) systems become integral. The focus shifts from batch processing to streaming architectures to accommodate high-velocity data streams.

Variety involves the diverse types and formats of data, encompassing structured, semi-structured, and unstructured data sources. Traditional relational databases excel in handling structured data but fall short when dealing with the variety presented by unstructured and semi-structured data. NoSQL databases, document stores, and columnar databases emerge as solutions capable of accommodating diverse data types. Additionally, schema-on-read approaches gain prominence, allowing for flexibility in data interpretation.

The sheer volume of data, its rapid generation, and the diverse formats pose challenges to traditional processing methods. From social media interactions to financial transactions, Big Data encompasses vast and complex datasets that require advanced analytics for meaningful insights.

A Brief Timeline: The evolution of Big Data has been marked by key milestones:

1970s: The emergence of Relational Databases, like Oracle and IBM's DB2, laid the foundation for structured data management.

1990s: Introduction of Data Warehousing and Online Analytical Processing (OLAP) technologies, enabling organizations to store and analyze large volumes of data, facilitating multidimensional analysis.

2003: MapReduce and the Birth of Hadoop: Google introduced MapReduce, a programming model for processing large datasets. Inspired by this, Apache Hadoop was born in 2005, an open-source framework for distributed storage and processing of Big Data.

2008: Apache Hadoop's Graduation, solidifying its position in the Big Data landscape. The framework gained widespread adoption for its scalability and fault tolerance.

2010: Introduction of Apache Spark, offering in-memory data processing for faster and more versatile analysis.

2015: Big Data goes mainstream, with technologies like Hadoop and Spark gaining widespread adoption.

2019: Quantum Computing Breakthroughs, hinting at potential impacts on complex algorithms in Big Data analytics.

Modern-Day Landscape, Synergies between Deep Tech and Big Data : The current era witnesses a symbiotic relationship between AI and Big Data, an integration of advanced analytics, machine learning, and AI-driven insights for data processing. Further, real-time analytics, edge computing, and continuous refinement of AI algorithms are shaping the data landscape. Examples abound, such as the active

utilization of Big Data and AI in addressing global challenges like the COVID-19 pandemic through predictive modeling, contact tracing, and vaccine distribution.

Morgan Creek Digital emphasizes the immense growth potential in companies developing Big Data analytics solutions. Sectors like healthcare, finance, and marketing leverage Big Data for personalized insights and efficient resource allocation. For example, in healthcare, Big Data aids personalized medicine and predictive analytics, and in finance, it optimizes trading strategies and fraud detection. Companies such as Amazon and Netflix leverage Big Data for targeted marketing campaigns and personalized recommendations. Further, with worldwide spending on the Internet of Things projected to surpass \$1 trillion in 2026,¹ we believe there is a substantial opportunity for startups offering innovative data solutions. Successful examples include Palantir and Cloudera. Looking ahead, our thesis is that the next generation of the internet, often referred to as Web3, will seek to combine AI, Blockchain, and Computing Infrastructure to unlock the true value of Big Data. While Big Data feeds AI algorithms for learning and predictions, blockchain ensures the security and transparency of data transactions. Advanced hardware solutions, including GPUs and TPUs, will continue to play a vital role in handling the complexity of Big Data, accelerating data processing, and expanding the possibilities in analytics. In the ongoing narrative of data evolution, the analogy of Big Data as the new oil gains depth and significance. From historical milestones to the current symbiosis of AI and Big Data, the journey illustrates how data, when properly refined and harnessed, becomes the driving force of innovation and progress.

Why Big Data is Described as the New Oil

[Click Here to listen to the latest episode of Digital Currents](#)



Podcast feed: subscribe to *Digital Currents* in your favorite podcast app, and follow us on [Apple Podcasts](#), or [Spotify](#)

Important Disclosures

The above information reflects the opinions of Morgan Creek Digital as of the time this is written and all such opinions are subject to change. No representation or warranty, express or implied, is given by Morgan Creek Digital as to the accuracy of such opinions, and no liability is accepted by such persons for the accuracy or completeness of any such opinions.

No Warranty

Neither Morgan Creek Capital Management, LLC nor Morgan Creek Digital warrants the accuracy, adequacy, completeness, timeliness, or availability of any information provided by non-Morgan Creek sources.

This information is neither an offer to sell nor a solicitation of an offer to buy interests in any investment fund managed by Morgan Creek Capital Management, LLC or its affiliates, nor shall there be any sale of securities in any state or jurisdiction in which such offer or solicitation or sale would be unlawful prior to registration or qualification under the laws of such state or jurisdiction. Alternative investments involve specific risks that may be greater than those associated with traditional investments.

Forward-Looking Statements

This presentation contains certain statements that may include "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical fact, included herein are "forward-looking statements." Included among "forward-looking statements" are, among other things, statements about our future outlook on opportunities based upon current market conditions. Although the company believes that the expectations reflected in these forward-looking statements are reasonable, they do reflect all assumptions, risks and uncertainties, and these expectations may prove to be incorrect. Actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors. One should not place undue reliance on these forward-looking statements, which speak only as of the date of this discussion. Other than as required by law, the company does not assume a duty to update these forward-looking statements. Past performance is no guarantee of future results. The illustrations are not intended to predict the performance of any specific investment or security.

General

This is neither an offer to sell nor a solicitation of an offer to buy interests in any investment fund managed by Morgan Creek Capital Management, LLC or its affiliates, nor shall there be any sale of securities in any state or jurisdiction in which such offer or solicitation or sale would be unlawful prior to registration or qualification under the laws of such state or jurisdiction. Any such offering can be made only at the time a qualified offeree receives a Confidential Private Offering Memorandum and other operative documents which contain significant details with respect to risks and should be carefully read. Neither the Securities and Exchange Commission nor any State securities administrator has passed on or endorsed the merits of any such offerings of these securities, nor is it intended that they will. This document is for informational purposes only and should not be distributed.

Risk Summary

Interests in the Morgan Creek Digital Fund IV, LP ("Fund") are speculative and involve a significant degree of risk. Cryptocurrencies and related businesses have limited performance histories, can be extremely volatile, and are not subject to many of the regulatory oversights over which other investable assets are subject. An investment in the Fund is suitable only for sophisticated investors and requires the financial ability and willingness to accept the high risks and limited liquidity inherent in the Units.

There can be no assurance that the Fund will be successful or that losses will not be incurred by the Fund. Each investor in the Fund must have the ability to bear the risk of loss of their entire investment and must be prepared to bear such risks for an extended period of time. Investors are strongly urged to consult with their professional advisors and to carefully review the risk prior to investing.

Performance Disclosures

There can be no assurance that the investment objectives of any fund managed by Morgan Creek Capital Management, LLC will be achieved. Past performance is not indicative of the performance that any fund managed by Morgan Creek will achieve in the future. Although Morgan Creek Capital Management, LLC has been presented with co-investment opportunities in the past, there can be no assurance that Morgan Creek will be presented with similar opportunities in the future. Further, there can be no assurance that co-investment opportunities will be available in the future.

Morgan Creek Capital Management | 301 W. Barbee Chapel Road, Suite 200, Chapel Hill, NC
27517

[Unsubscribe ljacob@morgancreekcap.com](mailto:ljacob@morgancreekcap.com)

[Constant Contact Data Notice](#)

Sent by mcdigital@morgancreekcap.com